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Colorado State Teacher's College
Bulletins
1922-23
Series 22
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Colorado State Teachers College Bulletin. Series 22. No.9. Published Monthly by State Teachers College, Greeley, CO.

Colorado State Teachers College Bulletin. Summer Quarter, June $12=$ August 23 . 1923. January. Series 22 , No. 10.

Colorado State Teachers College Bulletin. program of Courses for the Summer Quarter, 1923. Series 22, No.11.

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By teabelk Locke


## Colorado State Teachers College



## BULLETIN

STATE HIGH SCHOOL OF INDUSTRIAL ARTS

Secondary Training School of State Teachers College

## Summer Quarter <br> 1922

# STATE HIGH SCHOOL OF INDUSTRIAL ARTS <br> Secondary Training School of State Teachers College 



## Foreword

The Summer Quarter of the State High School of Industrial Arts is designed to serve two rather distinct classes of students. One group consists of adults whe have not completed their high school education. Many teachers who have been denied high school opportunities find in the School of Reviews an opportunity to go forward with high schqol work, and at the same time add to their proficiency as teachers. The other group consists of young people of high school age who desire to spend the summer vacation in profitable work counting toward their gra@uation.

## THE SCHOOL OF REVIEWS

The School of Reviews is a special feature of the State High School of Industrial Arts. It is the summer phase of the Ungraded School for Adults. The Ungraded School for Adults is a school which attempts to provide educational opportunity for people who have reached the age of maturity without having completed their high school education. For various causes young people often discontinue their high school work before they complete the four years course, and many of these people after their experience in fighting the battles of life discover that a high school education is very desirable for purposes of success and selfrealization. To such persons the Ungraded School for Adults is indeed a boon. They are admitted with deferred classification and when their ability has been demonstrated they may be allowed some credit for such life experience as appears to have been of educational value.

The following opportunities are to be found in the School of Reviews:

1. Opportunity to obtain credit toward high school graduation.
2. Opportunity to pursue review courses giving both a firmer grip on subject matter and an expanded view of the subjects of instruction.
3. An opportunity to receive instruction in improved methods of presentation of subject matter.
4. An opportunity to take some work along cultural lines, and to enjoy the cultural advantages of a collegiate institution.

Published Monthly by State Teachers College, Greeley, Colorado. Entered as Second-Class Matter at the Postoffice at

Greeley, Colorado, under Act of March 1, 1879

## THE COURSES

7:00-Methods-Primary
Civics Review
Art-Construction and Design for Upper Grades
School Management
8:00—Arithmetic Review
Methods-Intermediate Grade
Geography Methods
Art-Primary Methods in Construction
9:00-Principles of Teaching in Elementary Schools
Practical Projects for Primary Grades (1st half)
Art-Drawing for Upper Grades
Art-Primary Methods in Construction
10:00-Grammar Review
Drawing-Primary Methods
Teaching of Spelling (2nd half)
11:00-Art-Primary Methods in Drawing Story Telling, Games, and Literature for Primary Grades
12:00-Human Geography
Students in the School of Reviews may take any of the courses offered to regular high school students.

Only two methods courses will be allowed a student. In making up a program the student may select the courses from the regular high school courses.

The requirements for graduation from the School for Adults are as follows:

1. A total of 16 units is required.
2. At least two units of English.
3. Four additional units from the group consisting of English, Mathematics, History, and Science.
4. A total of nine academic units to be required.
5. Not more than four units of credit to be allowed for experience.
6. The intelligence test may be allowed to stand for not to exceed four units.
7. Credits in blocks of less than four hours will not be accepted beyond an aggregate of ten hours or two-thirds of a unit.
8. Regardless of the number of credits presented, residence work of one quarter will be required.
These requirements will apply to all who register for the first time during the summer quarter, 1922, and to those registering thereafter.

## THE REGULAR HIGH SCHOOL COURSES

During the summer regular high school work is maintained in most of the high school subjects. This gives an opportunity for those to study who prefer to use a part of their summer vacation for that purpose. It also gives an opportunity for those who have some deficiency in their high school work to make up such deficiency. The work will be of the same high quality that is required through the other quarters of the school year. Classes will be maintained in Mathematics, English, History, Science, Art, Commercial, Home Economics, Languages, Mechanical Drawing, and Manual Training. The State High School of Industrial Arts has a high standing as is shown by the fact that it is acceredited by the University of Colorado and by the North Central Association or Colleges.

## FEES AND OTHER EXPENSES

The fees for High School students and for the Summer School of Reviews students are as follows:


Students in attendance at the State High School of Industrial Arts during the school year 1921-22 will be charged the regular rate of $\$ 4.00$ per quarter.

Other expenses average as follows:
Room
$\$ 20.00$
Board.
50.00

Books 5.00

## SUMMER LECTURES

The State Teachers College secures for the Summer Quarter a number of the leading educational men of America. Some of these men give evening lectures, which are free to persons enrolled in the High School. These lectures deal with educational themes and other themes pertaining to community leadership and responsibilities. They are inspirational and helpful in concrete ways. These lectures therefore constitute an exceptional opportunity.

## RECREATION

A number of tennis courts are provided for those who like this form of pastime and recreation, and arrangements are made for other outdoor games, hikes, etc. And there are entertainments, musical and dramaticin fact, nothing is left undone to make the life of a student pleasant from every standpoint.

A very large number of the teachers attending the Summer Quarter at Colorado State Teachers College take advantage of the opportunity afforded each week-end for trips into Rocky Mountain National (Estes) Park. Automobiles leave the College Campus every Friday afternoon during the quarter for the Park, only fifty-five miles away. Right into the very heart of the snowy range - and on up to the peak, if one desires - go these teachers who take the auto trips every Friday. They spend Friday night, Saturday and Sunday there, at home in Colorado Teachers College Camp. A comfortable place is provided for sleeping and eating, and at a very small cost.

## THE SUMMER QUARTER CALENDAR

Registration begins on Monday, June 19. Classes begin Tuesday, June 20. The first half of the Summer Quarter closes Friday, July 21. The second half begins on Monday, July 24. The Summer Quarter closes on Friday, August 25.

For further information concerning the Summer Quarter write A. E. Brown, Principal State High School of Industrial Arts, Greeley, Colorado.

## COLORADO STATE TEACHERS COLLEGE

## BULLETIN

## CATALOG AND YEAR BOOK 1922-1923

GREELEY

## COLORADO STATE TEACHERS COLLEGE BULLETIN

Published monthly by Colorado State Teachers College, Greeley, Colorado. Entered as Second Class matter at the Postoffice at Greeley, Colorado, under the Act of August 24, 1912.
Current numbers of any of the College Publications may be had on application to the President of the College, Greeley, Colorado.

## CATALOG

and

## YEAR BOOK

## COLORADO STATE TEACHERS COLLEGE

1922-1923

GREELEY, COLORADO
PUBLISHED BY THE COLLEGE
MAY, 1922

## THE COLLEGE CALENDAR

1922


## IMPORTANT ANNOUNCEMENT

Certificates of High School Graduation.-Students enrolling for the first time in the College and those whose admission to the College has not yet been formally arranged must show a certificate of graduation from an acceptable high school. This certificate must cover at least fifteen units.

Students not high school graduates may be admitted conditionally upon presenting a certificate showing the completion of fourteen units. This condition must be removed during the first year by taking one unit of work in the Industrial High School.

Spectal Students-See page 20 for a statement concerning admission as unclassified students.

## TRUSTEES OF THE COLLEGE

Hon. H. V. Kepner, Denver Term Expires 1927
Hon. George D. Statler, Greeley Term Expires 1927
Hon. George A. Carlson, Denver Term Expires 1925
Hon. Rosepha C. Pulford, Durango ..... Term Expires 1925
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Hon. Katherine L. Craig, Denver Term Expires 1923
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Library: Mrs. Pulford, Miss Katherine Craig, Mr. Kepner. Buildings and Grounds: Mr. Kepner, Mr. Sullivan, Mr. Statler.
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The President, Colorado State Teachers College.
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Fleta Craig Stenographer
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Miss Mabel Mount ..... Stenographer
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## Director of Training Schools and Professor of Student Teaching

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B.S., M.S., University of Chicago; Graduate Scholarship in Geography, Sigma Xi, University of Chicago, Illinois; Department of Physiography, Joliet High School; Assistant Professor of Geography, Illinois State Normal University; Head of the Department of Geography, Colorado Springs High School; Teacher of Geology, Colorado College.

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LL.B., LaSalle Extension University, Chicago; Admitted to Oklahoma Bar; Instructor Normal Business College, Springfield, Missouri; Head of Commercial Department, Oklahoma A. \& M. College; Professor of Law, Summer Session, Oklahoma A. \& M. College.

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Student of William Walker, Art Binder of Edinburgh, Scotland; Head of Book Binding Department, B. F. Wade Printing Company, Toledo; Head of Stamping and Finishing Department, Kistler Stationery Company, Denver; Head of Binding Departments in Cleveland, Detroit, Asheville, Riverside and Los Angeles.

John H. Shaw

## Editor of Official Publications and Instructor of Journalism

Formerly Editor, Owner and Publisher, "The Sterling Enterprise." Sterling, "Colorado, Managing Editor and Editorial Writer, Pueblo, "Chieftan." Editor, Ft. Collins Express; Editor Sterling Evening, "Advocate." Railroad Editor and Assistant Financial Editor, "Philadelphia Press;" Railroad Editor Philadelphia "Public Ledger."

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Assistant in Library
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B.S., Western Normal College; A.B., Colorado State Teachers College; Graduate, Emerson College of Oratory, Boston; Student, Oxford University; member faculty, Emerson College of Oratory, Boston; Chair of English and Reading, Denver Normal School; Editor, Emerson College Magazine.

Training Teacher, Sixth Grade
Pd.B., Colorado State Teachers College; B.S. in Education, University of Missouri; Teacher, Rural School, Mayville, Missouri; Teacher, Grade School, Mayville, Missouri; Principal, Upper Grades, Como, Colorado; Teacher, High School, Hamilton, Missouri; Superintendent Schools, Union Star, Missouri; Teacher, High School, La Plata, Missouri; Superintendent, Intermediate Grade, Cape Girardeau, Missouri.
I. E. Varvel

Dental Examiner
Pd.B., Colorado State Teachers College; D.D.S., Colorado College Dental Surgery; Enlisted in the Medical Reserve Corps, January, 1918; Called to Active Service in October, 1919; Served in Active Service until January, 1920.

## Edith Gale Wiebking

Instructor, Household Art
Student, Laird's Seminary for Young Ladies, Philadelphia, Pennsylvania; A.B., Colorado State Teachers College; Student, Philadelphia School of Design; Teacher, Six Years, Greeley City Schools.

## Grace H. Wilson

Assistant to the Dean of Women
Pd.B., Colorado State Teachers College; A.B., Colorado College; Secretary, Young Women's Christian Association, Iowa State Teachers College.
$\checkmark$ Frank Lee Wright
Professor of Education
A.B., Kansas State Normal School; A.M., University of Wisconsin; Director Normal Training Work, Emporia High School; Superintendent of Schools, Bucklin, Kansas; Assistant in Education, University of Wisconsin; Professor of Education, State Teachers College, Huntsville, Texas.
M. Eva Wright

Piano and Pipe Organ
Student under the Artists and Masters, W. H. Sherwood, of Chicago; Samuel Fabian, of Washington, D. C.; Alfred G. Robyn, of St. Louis; Chas. Borjes, Interpreter of Spohr and Pupil of Zeiss, of New York; Sig. Mattioli, and W. H. Jones; Student, College of Music of Cincinnati; Organist and Director of Old Brunton Parish Church, Williamburg, Virginia; twelve years experience as Teacher in William Woods College, Bollenger Conservatory, Alfred University, and Norfolk, Virginia.
D. L. Zyve

## Professor of Physics

B.S., Gymnasium of Warsaw; M.S., University of Grenoble; Student, University of Warsaw; Higher Diploma, University of Paris; Graduate Student, University of Warsaw; Higher Diploma, University of Paris; Graduate Student, Columbia University; Instructor of Physics, The Veltin School, New York; Professor of Physics, College of Normandy, France; Professor of Physics, Cours St. Louis, Paris, France; Professor of Physics, Ecole Mariaud, France; Chemist with the British Commission during the Great War.

SUMMER QUARTER, 1922
Edward Howard Griggs, A.M., L.H.D., New York City.

Paul H. Hanus, LL.D., Former Professor of Education Harvard University, Santa Barbara, Calif.

Edward T. Devine, Ph.D., LL.D., New York City.
Edward A. Steiner, Ph.D., Professor of Social Science, Grinnell College, Grinnell, Iowa.

Jesse R. Newlon, Ph.D., Superintendent of Schools, Denver, Colo.

Emanuel Sternheim, D.D., Lecturer University of State of New York, and Extension Lecturer, University of Minnesota, Boston, Mass.

Henry H. Goddard, Ph.D., Director Ohio Bureau of Juvenile Research, Columbus, Ohio.

Alfred L. Hall-Quest, B.D., A.M., Professor of Secondary Education, Teachers College, University of Cincinnati, Cincinnati, Ohio.
G. W. Frasier, Ph.D., Director Department of Classification and Statistics, Denver Public Schools, Denver, Colo.

Roscoe Gilmore Stott, Litt.D., Associate Editor "Lyceum Magazine"; Franklin, Indiana.

Frederick E. Pierce, Ph.D., Professor of English, Yale University, New Haven, Conn.

Mrs. Cora Wilson Stewart, President Kentucky Illiteracy Commission, and Chairman N. E. A. Illiteracy Commission, Frankfort, Kentucky.

Lewis M. Terman, Ph.D., Professor of Education, Leland Stanford Junior University, California.

Marvin Foster Beeson, Ph.D., Director Colorado Cooperative Extension Service, Grand Junction, Colo.

Miss Elizabeth Cleveland, Supervisor of Girls' Activities, Detroit Public Schools, Detroit, Mich.

Lee L. Drfver, M.A., Director Department of Rural Education, Pennsylvania Bureau of Education, Harrisburg, Penna.

Edward C. Elliott, Ph.D., Chancellor of the University of Montana, and President-elect of Purdue University.

Miss Lida B. Earhart, Professor of Elementary Education, Teachers College, University of Nebraska, Lincoln, Neb.

Milton C. Potter, Ph.M., Litt.D., Superintendent of Public Schools, Milwaukee, Wis.

Thomas C. Trueblood, A.M., Head of the Department of Public Speaking, University of Michigan, Ann Arbor, Mich.

William Wirt, Ph D., Superintendent of Public Schools, Gary, Indiana.
Miss Emily Griffith, Principal of Opportunity School, Denver, Colo.
Perry Greeley Holden, M.S., Pd.M., Director Agricultural Extension Department, International Harvester Co., Chicago, Ill.
C. W. Richards, Superintendent of Schools, Ardmore, Oklahoma.

Miss Myrtle L. Kaufman, Supervisor of Elementary Schools, Logansport, Indiana.

Mrs. Louise B. Hill, Head of Department of History, Government and Economics, Bennett School of Liberal and Applied Arts, Millbrook, New York.
G. E. Brown, Superintendent of Schools, Greeley, Colorado.

## COMMITTEES OF THE FACULTY

Note-The President of the College is ex-officio a member of all committees.

Faculty Council: Mr. Barker, Mr. McCracken, Miss Tobin, Mr. Wright, Mr. Armentrout. Ex-officio-Mr. Cross, Dean of the College.

Clerk of the Faculty: Mr. A. O. Colvin.
Committee on Committees: Mr. Smith, Mr. Finley, Mr. Boardman, Miss Roudebush, Mr. Kendel. Ex-officio, the Dean of the College.

Admission and Credits: Dean Cross, Mr. Smith, Mr. McCracken, Mr. Burrows.

Alumni: Mr. A. F. Carter, Mr. Foulk, Mr. Hadden, Mr. Kendel, Mrs. Wiebking, Mr. Hunt, Mr. Bell.

Arts-Crafts: Mr. Hill, Miss Baker, Mr. Schaefer, Mrs. Wiebking.
Assembly: Miss Davis, Mr. Kendel, Miss Tobey, Mr. Bowers.
Calendar: Mr. Long, Miss Tobey, Mrs. Gilpin-Brown.
Course of Study: The President of the College; Dean of the College, Dean of the Graduate School, Mr. Armentrout, Miss Baker, Mr. Barker, Mr. Boardman, Mr. Bowers, Mr. Burrows, Mr. Colvin, Mr. DuPoncet, Mr. Finley, Mr. Hadden, Mr. Wright, Mr. Hargrove, Mr. Heilman, Mr. Howerth, Mr. Jean, Mr. Kendel, Mr. Long, Miss Roudebush, Mr. Smith, Mr. Zyve.

Museum: Mr. Hadden, Mr. Barker, Mr. Jean.
Official Publications: The Dean of the College and Mr. Shaw.
Research: Mr. Heilman, Mr. Boardman, Mr. Jean, Mr. Smith, Mr. Reed, Mr. Zyve.

Religious Organizations: Mr. Finley, Mr. Bishop, Dr. Bryson, Miss Wilson.

Scholarships: Mr. McCracken, Mr. Bell, Mr. Brown, Miss Orndorff.
Student Program: Mr. Heilman, Mr. Burrows, Mr. Reed, Mr. Wright.
Estes Park Outing: Mr. Bishop, Mr. Bell, Mr. Hargrove.
Faculty Club: Mr. Howerth, Mrs. Gilpin-Brown, Mrs. Wiebking, Mr. Hunt, Miss Lyford, Mrs. Sibley, Miss Lowe, Miss Wirt.

Federal Aid: Mr. McCracken, Mr. Hargrove, Miss Roudebush, Mr. Hadden, Mr. Long.

Loan Fund: Mr. Wright, Mr. McCracken, Mr. Brown, Miss Hawes, Mr. Colvin, Mr. McMurdo, Secretary to the Board of Trustees.

Student Reception: Mr. Kendel, Miss Baker, Mr. Laux, Miss Roudebush, Miss Smelser, Miss Metsker.

Survey: Mr. Wright, Mr. Armentrout, Mr. Howerth.
Teachers' Bureau: Director of the Training School, Mr. Brown, Mr. Bell, Mr. Carter.

Text-Books: The Librarian, Dean of the College, Manager of the Bookroom (Secretary), Mr. Mallory, Mr. Reed.

Visual Education: Mr. Burrows, Mr. Barker, Mr. Long, Mr. Zyve.
Women's Buildings: The Dean of Women, Miss McCowen, Miss Peake.

## PART I

ADMISSION TO THE COLLEGE—GRADUATION
—GENERAL INFORMATION

## COLORADO STATE TEACHERS COLLEGE

Location-Colorado State Teachers College is located at Greeley, in Weld County, Colorado, on the Union Pacific and the Colorado \& Southern Railways, fifty-two miles north of Denver. This city is in the valley of the Cache la Poudre River, one of the richest agricultural portions of the state. The altitude is 4567 feet above sea level. The streets are lined with trees, forming beautiful avenues. The elevation and distance from the mountains render the climate mild and healthful. The city is one of Christian homes and contains churches of all the leading denominations. There are 14,000 inhabitants.

Function-The purpose of the College is to train teachers for public school service. Being supported by public taxation of all the property of the State of Colorado, the College aims first to prepare teachers for all the kinds of public schools maintained within the State of Colorado. This includes rural schools, kindergartens, primary, intermediate grade, upper grade, junior high schools, and high schools. The College also accepts the responsibility of training supervisors for rural schools, principals, superintendents, teachers of home economics, industrial arts, fine and applied arts, critic teachers, teachers of defective and atypical children, teachers for adult night schools, etc.

While the College is supported for the training of Colorado teachers, it welcomes students from any state or country and sends its teachers anywhere that they may be called. Students come to Colorado State Teachers College from many states, and its graduates go in large numbers into the neighboring states and in smaller numbers into distant states and countries.

The College recognizes as its plain duty and accepts as its function the training of students to become teachers in every type of school at present supported by the state, to meet actually all the demands of the best in the public school system of the present, to forecast those improvements and reforms which the evolution of public systems of education is to bring about in the immediate future, and to train teachers to be ready to serve in and direct the new schools which are in the process of being evolved.

## ADMISSION AND GRADUATION

formal notice of change of policy to go into effect september 1, 1923
On September 1, 1923, Colorado State Teachers College will put into practice the following regulations concerning admission and graduation.

## I. Admission

1. Graduates of high schools accredited by the North Central Association will be required to present a transcript showing the completion of three units of English, and twelve or more units chosen from at least four of the following groups.
a. The social sciences (History, Civics, etc.)
b. Foreign Languages (Not less than two units in any one language to be accepted.)
c. Mathematics.
d. The Physical Sciences (Physics, Chemistry, Biology, Botany, Zoology, Physical Geography, Physiology, Hygiene, and Agriculture.)
e. Music and Art.
f. Commercial subjects.
g. Home Economics and Manual Arts.
2. Graduates of non-accredited high schools will be required to meet the same conditions except that a standard college entrance test will be required in addition to the transcript.
3. Conditional admission will be granted to students who can present only 14 units in the groups indicated. But these students will be limited
to a 12 -hour college program and required to carry one unit in the high school until the deficiency is removed.
4. Adult students 20 years of age or over may be admitted to the College upon passing an English test and the standard college entrance test provided the score is sufficiently high to assure the College that the student has the ability to carry on college work, even though he may have had no high school training or only a partial high school course.
II. Graduation

Students coming up for graduation after September 1, 1923, will be required to meet standard requirements for the certificate or degree no matter what the requirements might have been at the time the student first enrolled in the College. This will mean that the student must meet the entrance requirements outlined in sections $1,2,3$, or 4 above. It will also mean cutting off credit for life experience, teaching experience; penmanship, art, and music certificates; private lessons in art, music, etc.; and cutting down excessive credit for a quarter's work and especially the excessive credit formerly given for the summer term of six weeks.

Until that date the College will continue to grant the two year certificate under the conditions which prevaled at the time a student entered the College, or the A. B. degree under the conditions prevalent at the time the student entered the senior college, or the A. M. degree under the conditions current at the time the student was admitted to the graduate school, provided that this regulation shall not obligate the College to extend the time farther back than four years for the completion of the Junior College work and another four years for the completion of the Senior College.

Students who entered the College October 1, 1921, may have until October 1, 1924 (instead of 1923), to complete their work under the conditions which prevailed at the time of their matriculation.

Unclassified Students-Any student who can meet the entrance requirements may enroll in the College and take any subjects he may elect without taking the prescribed subjects in any of the outlined courses of study. This provision makes it possible for students whose interests are in other types of work than teaching to live at home and get one year or more of general college work before going away to college. Such general academic work is accepted by the leading colleges of the country and applied upon the various courses which they offer.

Advanced Standing-Students who come to the College after having done work in another college, normal school, or university, will be granted advanced standing for all such work which is of college grade, provided that the college or normal school in question has required high school graduation as a condition for admission. Those who receive advanced standing are required to take here all the prescribed subjects in the course they select, unless these prescribed subjects or their substantial equivalents have been taken already in the normal school or college from which the students come. Only the heads of the departments involved have the power to excuse students from taking these prescribed subjects. No advanced standing is granted for additional units above the usual sixteen earned in the four-year high school course. If first or second year college subjects have been studied in a fifth year in a high school, such credit as these subjects deserve will be allowed.

The Unit of College Credit-All credit toward graduation is calculated in quarter-hours. The term quarter-hour means a subject given one day a week through a quarter of a year, approximately twelve weeks. Most of the college courses call for four recitations a week. These are called four-hour courses. A student usually selects sixteen quarter-hours, the equivalent of four courses, each meeting four times a week, as his regular work.

Forty-eight quarter-hours are a student's regular work for the usual school year of nine months, or three quarters.

Maximum and Minimum Hours of Credit-A student registers usually for fifteen or sixteen hours each quarter. If the work is to count as resident work, the student must carry at least twelve quarter-hours.

A student who wishes to take a larger program than sixteen hours must take one of the standard mental tests. Following the test, the Student Program Committee will grant the request to carry seventeen or eighteen hours, if the student's score is high enough to warrant that amount. . In no case will the committee allow more than eighteen hours.

Minimum Residence Requirement-The College does not grant any certificate or diploma for less than three full quarters of resident study, during which time the student must have earned at least forty-eight quarter hours of credit. Students who have already taken the two-year diploma must spend in residence at least one quarter out of each year required for the three-year or four-year courses. Extension group classes, conducted by members of the College faculty, are considered as resident work and may be counted as such to the extent of one quarter out of each three resident quarters required for the student's graduation.

The Grading System-A student who takes a four-hour course may earn a little more than four hours of credit by doing unusually good work. On the other hand, less than four hours will be granted for work of poorer quality than a reasonable expectation. The system is as follows:

The mark AA for a course gives 20 per cent above the number of hours indicated as normal for the course.

A gives 10 per cent above normal.
$B$ gives the normal credit.
C gives 10 per cent below normal.
D gives 20 per cent below normal.
F indicates failure.
For example:
4B on a student's permanent record means that a student has taken a four-hour course and made a normal credit in it.

4AA would indicate most excellent work in a four-hour course and would carry 4.8 hours credit.

4 A gives 4.4 hours credit on a four-hour course.
4B gives 4 hours credit on a four-hour course.
4 C gives 3.6 hours credit on a four-hour course.
4D gives 3.2 hours credit on a four-hour course.
These marks, both figure and letter, go on the student's permanent record for later reference to indicate the quality of the work done.

Late Registration-Except by special permission of the Dean of the College, no student, after his first quarter of school work during any given school year, who registers after the first day of the quarter shall under any consideration be allowed to take more than sixteen hours of work and no additional credit for A's or AA's will be allowed such student for the work of the quarter in which he has registered late. If the student is more than three days late the total number of hours on his program will be reduced in proportion to the time lost.

Any student absent from class on the last day of the quarter will have his quarter report for that class turned in as incomplete unless he has a written permit from the President or Dean to leave before the close of the quarter. No teacher has authority to excuse a student from one of his courses before the close of the quarter.

The School Year-The school year is divided into four quarters of approximately twelve weeks each. These are:

1. The Fall Quarter.
2. The Winter Quarter.
3. The Spring Quarter.
4. The Summer Quarter.

This division of the year is especially well suited to a teachers college, for it gives teachers in active service an opportunity equal to any of securing a complete education while actually teaching.

Shortening the College Course-The Quarter Plan, the Extension Work, and the grading system make it possible for students who are physically strong enough to stay in school with only short vacations to complete a college course in a shorter time than that usually required in the colleges. Ninety-six quarter-hours constitute the usual two-year college course, and one hundred and ninety-two quarter-hours make up the four-year course required for the A.B. degree. By carrying an average of seventeen hours a quarter and making an average grade of "A," a strong student can earn 18.7 hours each quarter. At this rate he could complete the course for a two-year life certificate in five quarters, from the middle of June of one year to the end of August of the next. Or such a student could complete the course for the A.B. degree in two and a half years-ten quarters. By doing some work in Extension courses through the school year while teaching, it is possible to reduce the time still further.

Student Teaching-Teachers who have had less than two years of college training take their student teaching in the Elementary School. Those who have had two years of college training may choose between the Elementary School and the High School according to their own personal needs and interests. Students are required to do two quarters of student teaching before being granted the two-year diploma and life certificate. Students in the third and fourth years are expected to take one quarter of student teaching in each year. Ed. 105 takes the place of one quarter of student teaching for those who are to teach in high schools.

The State Board of Examiners-Every student before being granted a life certificate must be approved by the State Board of Examiners.

## THE SUMMER QUARTER

The Summer Quarter of 1923 will in general follow the plans begun in 1918. Each instructor will include all the material in his courses that he regularly uses and will give full time to each topic. A student will carry sixteen hours of work the same as in other quarters.

The policy of bringing in from other institutions, not only lecturers, but class-room teachers as well will be continued and extended. Twentyfive lecturers and teachers from other educational institutions will be in Greeley to give the best they have to the summer school students.

The Summer School of Colorado State Teachers College began its work in 1905 with a small faculty group and about two hundred students. In 1910 practically the whole faculty, exclusive of the training school and high school teachers, remained to teach through the six weeks of the summer school. In that year there were 443 students. In 1918 the summer term was placed upon an academic level with the other quarters of the college year. The term was lengthened to a quarter and the credits were made equal in value with those of the college year. With this step the college entered upon the four-quarter year. Today the teachers, not only of Colorado, but of neighboring and distant states as well, recognize the fact that the College is doing a large service to the profession of teaching by making it possible for active teachers to keep up with the development of modern educational practice and to continue their professional education without losing time from their teaching. More than two thousand teachers now avail themselves of the opportunity.

Admission to the College at other times is limited to those who have fifteen units of high school work. The strict observance of this rule during the summer would make it impossible for hundreds of experienced
teachers, who are not high school graduates, to get into touch with all the new movements in education which the College faculty and visiting instructors are presenting to the summer quarter students. The College opens the summer classes to all who may profit by the instruction offered.

Any student twenty years of age or over may be enrolled in Colorado State Teachers College for the Summer Quarter without reference to meeting the College requirement for admission. The College believes it can render a valuable service to the teachers of Colorado and surrounding states by allowing any mature man or woman who is teaching or expecting to teach, but who has not graduated from a high school, to enroll in the College for the Summer Quarter and take such work as he or she may be able to carry.

No college credit will be recorded, however, for any student until the requirements for college entrance have been fully met. A record of attendance and work will be kept. This may later be transferred to the permanent records and counted toward graduation when the entrance requirements have been complied with.

## Teachers College Co-Operation With St. John's College

St. John's College is a theological school maintained in Greeley by the Episcopal Church. Students in St. John's College are required to complete a course for the degree of Bachelor of Arts before that college will grant the degree of Bachelor of Divinity. Theological students take all their theological courses in St. John's College and their academic and teachers' professional courses in Colorado State Teachers College. Such students take all the required "core subjects" of the four-year course in Teachers College and count their St. John's courses as electives in the Teachers College curriculum. A total of 192 hours is required for the A.B. degree. For the requirements of the B.D. degree and for other details concerning the theological school and its requirements, address The Reverend B. W. Bonell, Dean of St. John's College, Greeley, Colorado.

## HISTORY OF THE COLLEGE

The State Normal School of Colorado was established by an act of the Legislature of 1889. The first school year began October 6, 1890.

At the beginning of the second year the school was reorganized and the course extended to four years. This course admitted grammar school graduates to its freshman year, and others to such classes as their ability and attainment would allow.

At a meeting of the Board of Trustees, June 2, 1897, a resolution was passed admitting only high school graduates or those who have an equivalent preparation, and practical teachers. This policy made the institution a professional school in the strictest sense.

The Eighteenth General Assembly passed an act making the State Normal School at Greeley, Colorado, also the State Teachers College of Colorado. In the catalog and in all the official publications hereafter the title, "Colorado State Teachers College" will be used.

## EQUIPMENT

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museums, and a school garden. The library has 53,000 volumes. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library wherein a student may learn how to conduct a library. The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

## THE GREELEY WATER

The water supply of Greeley is obtained from the canon of the Cache la Poudre, forty miles from Greeley, in the mountains. The water is passed through settling basins and filters until all foreign matter is removed. The supply is clear, pure, and ample for all the needs of the city. The system was constructed at an expense of $\$ 400,000$ and is owned by the city.

## BUILDINGS

The buildings which are completed at the present time consist of those described below.

The Administration Building-The main, or administration building, is 240 feet long and 80 feet wide. It has in it executive offices, classrooms and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art, which makes them very pleasing.

The Library-The Library is a beautiful building. The first floor is entirely occupied by the library, consisting of fifty-five thousand volumes. The furniture in the library is of light oak and harmonizes with the room in a very pleasing manner. The basement is occupied by committee rooms, text-book department, taxidermy shop, wild animal museum, and the department of agriculture.

The Training School-The Training School is a commodious building of red pressed brick similar in style to the Administration building. In its construction no pains or expense have been spared to make it sanitary, fireproof, and in every possible way an ideal building for a complete graded school from the kindergarten to the high school, inclusive.

Industrial Arts Building--The Simon Guggenheim Hall of Industrial Arts is a beautiful structure in the classic style of architecture. It is constructed of gray pressed brick. It accommodates the departments of Manual Training and Art, including every branch of hand work and art training applicable to the highest type of public school of the present and immediate future. This building is a gift to the College from Senator Simon Guggenheim.

The President's House-The President's House is on the campus among the trees. In this beautiful home are held many social gatherings for faculty and students during the school year.

The Club and Model Cottage-During the year 1915-1916, two new buildings were completed and opened. The first of these is a model cottage of five rooms for demonstrations in house furnishings and housekeeping for the department of Home Economics. The second is the club house for women students. This beautiful building is used for student social gatherings.

The Gymnasium-Auditorium-A temporary wooden structure was completed to take care during the war period of the needs for a modern gymnasium and auditorium. The money was available and plans drawn for the permanent gymnasium and auditorium, but for patriotic reasons, the conservation of labor, materials, and money, these plans were put aside for the present and a large, airy, light wooden building was constructed at small cost to provide a suitable floor for athletic games and an auditorium for the Summer Quarter lectures.

The Household Abts Building-After the signing of the armistice and the consequent release of building materials, work was actively pursued on the new Home Economics building, the foundation for which had been already completed. This is a structure similar in construction, color, material and architectural design to the Industrial Arts Building. It is three stories high and contains ample room for all the class rooms, laboratories, kitchens, dining rooms and work rooms for a well organized department of Household Arts in a teachers college,
including both Household Arts and Household Science. A well arranged cafeteria is maintained to provide meals for students.

The Dormitories-Three new cottage dormitories were opened in the Fall Quarter, 1921. Each houses from thirty to fifty students. The small houses make it possible to maintain the atmosphere and customs of a well-ordered home. The rooms are airy and well furnished. Each is provided with two single couch beds, two closets, and with hot and cold running water. Each house has a large and delightful living room, a kitchenette, and facilities in the basement for washing and ironing. No meals are cooked in the houses. The kitchenettes are for social purposes and for emergency cooking only.

Each student living in the College dormitories is expected to care for her room and to provide the following articles:

Two pairs of sheets for a single bed. Three pillow cases of 42 inch tubing.
Three bath towels.
Three face towels.
Three wash cloths.
Two blankets and one comforter.
In addition to these each student may bring her own sofa cushions, pictures, pennants, and other articles for decoration and personal comfort.

Rooms rent at $\$ 18.00, \$ 22.00, \$ 23.00$ and $\$ 24.00$ per quarter, per student, with two students in each room.

Students who make application for a room in the dormitories will deposit $\$ 3.00$. This deposit will be refunded when the student leaves at the close of the quarter or at the close of the year. Rent will be paid in advance for each quarter. In no case will rooms be rented except upon the quarterly plan. Students desiring rooms in the dormitories are requested to write to the Dean of Women at their earliest convenience, in order that their names may be placed upon the waiting list.

Other Buildings-Other service buildings, such as an ample heating plant, a greenhouse, stables, garages, automobile repair shop, etc., are maintained.

## A NEW BUILDING PROGRAM

The Legislature of 1916-17 provided a millage tax for building purposes for all the state educational institutions. This taxation extends over a period of ten years and gives to Colorado State Teachers College approximately $\$ 100,000$ a year for that period-a total of a million dollars for building.

None of this money was used until the war ended. The College then began to use the available funds and plans were made to provide the needed new buildings as rapidly as possible. Work was immediately resumed on the Home Economics Building, and that structure was completed. The Dormitories were started next and three of the proposed group of seven cottages were erected, and they are now being used. Within the ten years the campus will be covered with all the buildings needed by a complete teachers' training college, including a new gymnasium, an auditorium, ample class room expansion, science laboratories, an anlarged library, a completed training school unit, kindergarten, elementary school, junior high school, and senior high school, and additional dormitories for the housing of a large part of the students whose homes are outside of Greeley.

## THE CAMPUS

Surrounding the buildings is a beautiful campus of forty acres. It is covered with trees and grass, and dotted here and there with shrubs and flowers.

In the rear of the buildings is a large play ground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which can be secured from a grand stand which will accommodate more than a thousand spectators. On the portion of the grounds adjacent to the buildings there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

## SCHOOL GARDEN

One of the pleasing features of the Spring, Summer and Fall Quarters of the school is the school garden. This garden occupies several acres of ground and is divided into four units-the conservatory, the formal garden, the vegetable garden, and the nursery. From the conservatory the student passes into the large formal garden, where all kinds of flowers, old and new, abound. Here may be found the first snowdrop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in the garden and nursery the student may dig and plant, sow and reap, the while gathering that knowledge, that handicraft, that is essential in the teaching of a most fascinating subject of the up-to-date school-gardening.

The greenhouse is one of the best equipped of its kind in the United States. After a hard day's work it is a rest and an inspiration to visit this beautiful conservatory. Here hundreds of varieties of flowers are kept blooming all winter, and the early spring flowers and vegetables are started for the spring planting.

## FEES AND EXPENSES

The expense of attending Colorado State Teachers College is as low as can be made possible by careful management. The total expense may be estimated by taking into account the three largest items: board, room, and college fees.

Board and Room-Table board costs an average of $\$ 5.50$ per week in the college cafeteria, where meals are supplied at cost to the student. In private boarding houses the cost is usually a little more. Rooms rent by the month for from $\$ 12.00$ to $\$ 16.00$, for one in a room; $\$ 14.00$ to $\$ 16.00$ for two in a room. Rooms equipped for light housekeeping cost from $\$ 6.00$ to $\$ 10.00$ a month, for each student.
$\begin{array}{ll}\text { Board . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } & 800\end{array}$
Total for a quarter (12 weeks)............................ $\$ 93.00$
Add to this your own estimate for travel, clothes, laundry, books, amusement, etc.

Tuition-1. Tuition is free to Colorado students.
2. Tuition to non-Colorado students is $\$ 5.00$ per quarter.

Fees-The incidental fee (except in the Summer Quarter) is $\$ 8.00$ per quarter. This includes matriculation, enrollment, graduation, diploma, library, gymnasium and physical education fees. This fee is paid by all and is never refunded. After the opening day, late comers pay $\$ 2.00$ extra fee.

Fees for individual lessons in Piano, Organ, Violin and other musical instruments, and Voice are extra in the College Conservatory of Music.

The regular courses for the training of teachers in public school music, supervision of music, etc., are free.

Text Boons-Students may secure the regular text-books at the College Book Room at a reduction from the publisher's list prices. These books will be bought back from the student if in good condition, and still regularly used as text-books when returned.

## MAINTENANCE OF THE COLLEGE

The maintenance of the College comes from a state mill tax and from special appropriations made by the Legislature.

## GOVERNMENT

That government of a school which brings about self-control is the highest and truest type. Discipline consists in transforming objective authority into subjective authority. Students who cannot conform to the government of the College, and who cannot have a respectful bearing toward the school, will, after due trial and effort on the part of the faculty to have them conform, be quietly asked to withdraw. All matters of discipline and the management of student activities are in the hands of the Student Association.

All students who come from abroad, boarding in homes other than their own, are under the control of the institution while they are members of the College. Their place of boarding must be approved by the faculty, and their conduct in the town and elsewhere must always be such as to be above criticism.

Discipline-Moral and Spiritual Influence-While the school is absolutely free from denominational or sectarian influence, the aim is to develop a high moral sense and Christian spirit. As an individual who is weak physically or mentally lacks symmetry of development, so does one who has not his moral and spiritual nature quickened and developed. One who is being trained to stand in the presence of little children, and to lead, stimulate, and inspire them to higher and nobler lives, should not neglect the training of his higher nature. God has immortalized us with His divinity, and it is our duty to respond by continuously aspiring to a higher life.

Conduct and Health-The conduct and health of the women students while in this College will be very carefully supervised by the Dean of Women and her assistant. It is earnestly desired that a friendly feeling of co-operation may exist between the women students and their advisers, so as to make possible the best conditions for efficiency during the years in residence.

While it is not the intention of those in authority to ha.nper the student with too many rules and regulations, it is necessary to emphasize the fact that the general conduct of young women studexts while in College is the greatest factor in influencing the decision of the authorities as to their suitability for the teaching profession; therefore, students are expected to conform to the rules recognized in good society in order that their conduct may not be questioned, either in College or in outside circles.

Entertainments attended by College students, but not given by the College, must be approved by the College authorities. Rules as to the frequency of these affairs will be strictly enforced, so that the student's health may not be impaired, and in order to conserve the proper number of her outside hours for regular study.

The rooming accommodations are looked into and must be approved by the Dean of Women. Certain requirements, such as quiet, cleanliness, suitable provision for heat, light, hot water, etc., are expected of the hostesses. Quiet behavior, consideration, prompt payment of bills, and, in a word, conduct becoming a future teacher of children, are expected of the women students in the rooming houses.

Finally, the parents and guardians of our young women are urged to unite with the Dean of Women in the endeavor to make college life for the students such that health, good behavior, and efficiency may be maintained.

A series of lectures will be given to the women students during the year by the Dean of Women. The women students are cordially invited
to consult her at any time, in regard to their moral and physical wellbeing.

## THE STANDARD OF THE SCHOOL

It is the purpose of the trustees and faculty of Colorado State Teachers College to maintain a high standard of scholarship and professional training. Those who are graduated are to be thoroughly prepared and worthy of all for which their diplomas stand. It is the policy of the school, by making all gradutes "worthy of their hire," to protect those who employ them, for in so doing we protect no less the graduates and the children whom they teach.

## DEPARTMENTAL MUSEUMS

The museums of Colorado State Teachers College are as fully developed for actual use as any in the whole country. Each department maintains a well-arranged museum. The objects in the museums are such as may be used by way of illustrating lessons.

## BUREAU OF RECOMMENDATIONS

The Bureau of Recommendations of Colorado State Teachers College endeavors to act as a clearing house seeking well-equipped teachers, and teachers seeking positions. It assists its graduates who desire to teach in securing positions and at the same time it is of service to superintendents and boards which may be in need of competent instructors.

The Bureau is prepared practically at all time to recommend persons who are well qualified for positions in the elementary, secondary and teacher training institutions; superintendents, high school principals and teachers, junior high school teachers, supervisors and principals, kindergarten teachers and supervisors, primary teachers and supervisors, intermediate teachers and supervisors, consolidated, rural and village teachers, supervisors in art, music, domestic science, domestic art, commercial subjects, industrial arts and physical education.

In making recommendations great care is exercised. Special qualifications of various teachers for the particular position are in every case fully considered. Records are kept of every detail of the student's qualification for teaching; the estimate of the college professors, of the scholarship, personality, strength of character and general adaptability of the candidate; critical estimates of the student's teaching ability indicated by her student-teaching in the elementary or secondary training schools; the estimate of superintendents and supervisors under whom the student may have taught.

The Bureau urges superintendents and school administrators to come to Greeley in person whenever possible, so that personal conferences with the College instructors and the conditions for teaching may insure mutual satisfaction and be a guarantee of effective service.

## THE CHRISTIAN ASSOCIATIONS

Y. W. C. A. and Y. M. C. A.-Realizing the necessity for religious and social culture in the school, and believing that much good comes of Christian association, a large number of interested students have organized themselves into the Young Women's Christian Association and the Young Men's Christian Association. Meetings are held at various times, and persons who have given considerable thought to the life and aspirations of young people are invited to address the meetings.

The Newman Club-The Catholic students of the College are organized into the Newman Club, the work of which is similar to that of the other Christian organizations. This club has a membership of active
young people. All three of the organizations have been co-operative in forwarding the religious work and welfare of the College.

## BIBLE STUDY-"The Greeley Plan"

Unusual opportunities for Bible Study are offered to students thru a system of co-operation between the churches of Greeley and Teachers College. Perhaps Colorado State Teachers College is more widely known nationally for this plan of Bible Study than for any single thing which it is doing. A number of magazine articles have been written about it, and there has been published, by the World Book Company, a book, "Bible Study in Schools and Colleges," by Judge Walter A. Wood of the New York Appellate Court, dealing with this plan and its adaptation and extension into more than half the states in the United States. It is a material advantage to a student to get into touch with this work in some one of the churches, Protestant or Catholic, and know at first hand what is being done here in progressive, modern Bible Study. One who knows this work is distinctly more valuable to the community where she teaches than she would be without it. Bible courses of college grade are maintained in all the larger churches. Under specified conditions, students may receive college credit for the work done in these classes. The credit given for this course is one hour for each quarter.

## COMMUNITY CO-OPERATION PLAN

The College has instituted a plan in which provision is made for allowing students to go out to various organizations in the community to assist them in their undertakings. This plan is known as the Community Co-Operation Plan. It was agreed to allow students regular college credit for acting as teachers, leaders, or directors of such groups as Boy Scouts, Girls' Camp Fire, Boys' Clubs, Girls' Clubs, Sunday School Classes, Junior Christian Endeavor Societies, Junior Epworth Leagues, Sodalities, Children's Choir or Orchestra, Modern Language Classes, Civic Training Classes for the Adult Alien, Business Efficiency Classes, Story Telling Groups and similar organizations.

The College was willing to inaugurate the plan because of its promise of usefulness both to the community and to the prospective teacher. The plan will benefit the community by bringing to organizations the assistance of well-trained college students. The plan will be of vital aid to the student who is preparing to be a teacher. It will give him an opportunity to study children at close range outside of the school room. He will have a richer understanding of social problems and be better able to take a place of leadership in his community. All this will make a greater success possible for him and will extend his influence for good wherever he enters upon the work of teaching.

## STUDENT LOAN FUNDS

There are numerous loan funds, aggregating more than $\$ 7,000$, designed to help worthy students to complete courses in Colorado State Teachers College. It not infrequently happens that a promising student meets with an unexpected loss, through sickness or other causes, which compel him either to leave school or to continue his work at the risk of low scholarship and overtaxed body and mind; unless he is able to borrow some money. It is for the purpose of meeting just such emergencies that these loan funds have been established.

Applications for loans are made to the Student Loan Committee, which is composed of members of the faculty of the College. This committee carefully investigates the record of the applicant, and grants his petition only in case it is satisfied that he is worthy of such help, will be in a position to repay the loan within a reasonable time, and will be a credit to Colorado State Teachers College after graduation. The secretary of the Board of Trustees of the College is custodian of the funds.

The student furnishes a note acceptable to the committee and makes arrangement for its payment when due.

The following are some of the loan funds:
Normal Students Loan Fund-The money constituting this fund consists of contributions from persons, classes and organizations disposed to help in the work, and of the interest derived from loans. The freshman and sophomore classes of the College quite often contribute money left after meeting class expenditures to this fund. The freshman class of 1921-22 contributed more than $\$ 200$ to this fund. The fund is intended particularly for those students who need some financial assistance in completing the first two years of work.

Senior College Loan Fund-This fund is an accumulation of money, contributed by four-year graduates and others who may be interested in creating a fund for those who desire to pursue a curriculum leading to the A.B. degree. Already it has helped many worthy students to continue to the end of their four year course.
Y. W. C. A. Student Aid Fund-The Young Women's Christian Association has a fund of several hundred dollars which is kept to aid students who need small sums to enable them to finish a term or a course. The fund is in charge of a committee comprised of the treasurer of the society, two members of its Advisory Board and a member of the faculty. Loans are made without reference to membership in the society.

The William Porter Herrick Memorial Fund-This Fund, the gift of Mrs. Ursula D. Herrick, in memory of her husband, the late William Porter Herrick, consists of the principal sum of $\$ 5,000$. The proceeds or income of said fund are to be paid over and expended by the Board of Trustees of Colorado State Teachers College of Colorado in aid of such worthy and promising under-graduate students of the College, of either sex, as the President of said College may from time to time designate; provided, however, that no student who uses tobacco in any form or who uses intoxicating liquors of any kind as a beverage shall participate in the benefits of this fund. The sum or sums, income or proceeds so expended by the said Trustees shall be considered in the nature of a loan or loans to such students as may receive the same, and each of said recipients shall execute a note or notes promising to repay to said Trustees the amount or amounts so received within five years after graduation or quitting College, without interest; but it is the desire of said donor that no student shall be pressed for the payments of said note or notes when the same shall become due and payable, so long as the Board of Trustees shall be satisfied that the recipient is making every reasonable effort, according to his abilities, to repay the same and is not endeavoring to repudiate the obligation.

The Ben Hur Scholarship-The Tribe of Ben Hur, a fraternal benefit order with headquarters at Crawfordsville, Ind., has designated Colorado State Teachers College as an institution to which it will assign one or more of its educational scholarships of $\$ 500$ a year. These scholarships are awarded to members of the order, both men and women, and must be applied for directly by the members. A blank form for the application may be had by addressing the Supreme Tribe of Ben Hur, Crawfordsville, Indiana.

Graduate Loans and Scholarships-There are a number of loans and scholarships for graduate students only. The two loan funds for graduate students have been contributed by the Sigma Upsilon Sorority of the College and the two chapters of P. E. O. of Greeley, respectively. Further information concerning these loans and scholarships will be found under the heading "The Graduate School." (See page 42.)

## GIFTS TO THE COLLEGE

From the beginning of the life of the College, friends and organizations have been generous in making gifts of land, money, books, museum
specimens, and other articles of value. The authorities of the College gratefully acknowledge their obligation to all these donors, and invite any who may feel inclined to make similar donations.

## HONORARY FRATERNITIES

## Kappa Delta Pi

Kappa Delta Pi is the international honor fraternity in education. It was founded at the University of Illinois in June, 1911, by Dr. William Chandler Bagley, now of Teachers College, Columbia University. Theta Chapter was established at Colorado State Teachers on February 28, 1920, as the eighth chapter of the fraternity and the first chapter in a teachers college.

In keeping with the purpose of the fraternity-"to foster fellowship, scholarship, and achievement in educational work"-membership in Kappa Delta Pi is open by invitation to students who fulfill certain conditions. The requirements demand that students shall have credit for ten hours in Education, shall belong to one of the upper classes, shall have been in residence for three quarters, shall have an average of 90 per cent in all subjects, and shall possess qualities of co-operation, leadership and character.

## Pi Kappa Delta

Honorary Debating Fraternity-The national honorary fraternity Pi Kappa Delta was the first honorary society to be installed in Colorado State Teachers College. It was installed in the College in the spring of 1918. The purpose of the organization is the encouragement of intercollegiate debate and oratory. Membership is limited to those who have taken part in recognized intercollegiate debates or oratorical contests, or are actively engaged in coaching such students.

## EXTENSION DEPARTMENT

The purpose of an Extension Department in a teachers college may be expressed from several points of view.

Primarily, it is a standing offer of the College's resources to public school leaders for the purpose of promoting their plans for public school improvement.

## TRAINING DURING SERVICE

As a result of constant supervision of the work of teachers, city and county superintendents of schools gather a valuable fund of information concerning the deficiencies of teachers and their need of special study and training. On the basis of such classified information about recurring needs superintendents frame their general programs for the cumulative improvement of the work of their teachers. At this point the College thru the Extension Department offers its service to superintendents. In consultation with the superintendent the College offers courses of instruction designed to meet the ascertained needs of the teachers, and provides an instructor to meet the teachers regularly in their own town. From this point of view the Extension Department exists to co-operate with superintendents in the work of giving training during service.

## DISCOVERING THE NEEDS OF SCHOOLS

As a result of the tendency to adopt scientific methods of working out the problems of Education, public school leaders are applying to their schools a familiar practice of the business world-the inventory. In Education this practice is called the survey. It consists in taking stock of the entire educational situation as a means of discovering the phases of the work which especially need attention. Thru the Extension Department the College offers its services to superintendents who wish as the starting point of their campaign of improvements the complete perspective which an educational survey provides. From this point of
view also, the Extension Department exists for the purpose of co-operating with school superintendents in the task of giving training in servicebecause the survey discloses, among other things, the specific needs of training for teachers.

## PROMOTING THE PERSONAL GROWTH OF TEACHERS

Secondarily, the Extension Department is a standing offer of the resources of the College to ambitious teachers who can not at the time attend College.

The thoughtful teacher discovers his needs by the difficulties he meets in his daily work, by the suggestions of his superintendent, by comparison of his work with that of other teachers, and the like. The teacher with scholarly tendencies craves opportunity to follow up some interesting subject for the study of which he needs the direction of a specialist. The teacher with a penchant for research work in his field finds that he needs help in blocking out his problem and devising fruitful lines of attack, and so on. Or the teacher in line for promotion feels that he needs to be ready to teach a new subject next year.

To all such teachers the College offers thru the Extension Department a wide variety of courses in many fields of culture, and as much counsel upon the specific problems as may be desired.

## THE WARRANT FOR EXTENSION SERVICE

In short, the Extension Department of Colorado State Teachers College is organized to co-operate with public school leaders in their effort to give training during service; and to provide timely help to individual teachers in improving their mastery of their craft. It is the College's practical recognition of the fact that no vocational school can anticipate in its resident curricula all the problems that will arise in the work of its graduates under the varied conditions of life in the world of affairs. Schools of medicine and nursing, schools of philanthropy, schools of commerce and agriculture can not do it. Neither can schools for teachers. The period of school life is too short; the initial equipment of students is too uneven; and the social and economic conditions of the communities to which graduates go are too unequal to admit of more than partial success even in the attempt to equip students to meet the characteristic responsibilities of their occupations. Consequently, for the teacher as for the doctor, the nurse, the social worker, the business man, and the farmer, the progressive higher school must provide an extraschool service directed at the exigencies that arise in practice. Beyond this the Extension Department is the College's recognition of the fact that teaching is an occupation which may in many communities be entered with little preparation, and which oftentimes must be pursued with but little timely help.

Consequently, as a result of both sets of conditions, training during service, properly and inevitably constitutes a very important part of the program of both superintendents and teacher-training schools. The course described in this bulletin, and the special courses asked for by the superintendents and given in various forms under the group plan of instruction (see below) are a part of this College's contribution to the solution of the superintendents' problem of giving training during service.

There are two general schemes of instruction. In the following paragraphs each is described.

## THE GROUP PLAN OF INSTRUCTION

1. Instruction by Members of the College Faculty: In centers close enough to the College to make such procedure possible, members of the College faculty will conduct courses for teachers. Realizing that the superintendent of schools is in a position to know better than anybody else the characteristic needs of his teachers, the College prefers
that the superintendent should take the initiative in determining what courses ought to be offered at any given time in his town. Ordinarily such classes meet once a week in towns within 100 miles of Greeley. In towns farther away than this fortnightly meetings are usually necessary unless the class be exceptionally large.

Courses under the group plan are conducted as nearly as possible in the way in which they would be conducted in residence at the College. The periods are of course longer, and the meetings are necessarily less frequent-important variations which require definite adjustments from the instructor, both for the sake of the students and in the interest of the College standards of work.
2. Instruction by Local Representatives of the College-In centers too remote from the College to admit of sending members of the faculty for regular class work, it is frequently feasible to appoint a resident of the community to represent the College for a particular line of instruction. A person, usually a school man, who possesses at least the degree of A. B., and who has had professional training and experience that would justify his appointment as a member of the College faculty, may be appointed an Extension Instructor. Under the general direction of the College he gives the course agreed upon with the Extension Department, observing the same regulations as govern the group instruction conducted by members of the College faculty. He assumes full responsibility for the organization of the class, the keeping of the necessary records, the transmission of the initial and final reports to the Extension Department and the like. He transmits to the Extension Department the total fees collected from his class, and receives from the College for his services a percentage of these fees. Courses given under this plan are announced at the beginning of each semester in the towns where they are offered, and enrollment is accomplished as in the classes conducted by members of the faculty.

## INDIVIDUAL CORRESPONDENCE COURSES

How to Enroll-The process of enrollment for correspondence study is simple. The student chooses from the handbook the course which he wishes to study. If it is a credit course, he notes how many hours of credit it carries. He reads the sections on Fees. He then writes to the Extension Department, Colorado State Teachers College, Greeley, Colorado, enclosing a check, draft, or money order for the fees, stating clearly what course he wishes to take, explaining what his previous training and experiences have been, and mentioning the work he is now doing. Correspondence study may be begun at any time, but under a regulation of the business office of the College, no enrollment can be made until the necessary fees have been paid.

Upon receipt of the fees the secretary of the Extension Department enrolls the student for the course chosen and sends him the material he needs.

The Nature of Correspondence Courses-Each correspondence course consists of (1) a set of "study units" containing questions such as might be asked in class, assignments such as might be made in residence study, and explanatory sections corresponding to the explanations which instructors often make in classes; (2) a "material sheet" which informs the student fully in regard to all the books and other material needed for the course, with what study units each book will be needed, and so on; and (3) a sheet of "general directions" for preparing recitation papers. For a full description of how correspondence courses are conducted, see Handbook of the Extension Department.

## THE TRAINING SCHOOLS

The training schools have a two-fold function. First, to train college students in the art of teaching. Second, to maintain as nearly as possible an ideal elementary and secondary organization.

The fundamental purpose of a training school is not to serve as a research laboratory, but rather to serve as a laboratory in which the student verifies his educational theory and principles. The training school, as a laboratory, is a teaching and testing laboratory rather than a research laboratory. It provides an opportunity for student teachers, who have a sufficient knowledge of subject matter and the theory and principles of education, to receive practice in the solution of the daily problems and management under the supervision of expert training teachers. New methods that save time, new schemes for better preparing the children for life, new curricula and courses of study are continually considered by this school and tried out, provided they are sound educationally. The aim is not to develop a school that is entirely different from the elementary and secondary schools of the state but to reveal conditions as they are and as they should be. The training schools strive to be the leader in the state in all that is new and modern. Effort is made to maintain such standards of excellence in the work that it may at all times be offered as a demonstration of good teaching under conditions as nearly normal as possible in all respects. Untrained and unskilled teachers do not practice on the pupils. This problem is solved by having in each grade or subject a trained teacher, one chosen with the greatest care, whose personality, native intelligence and training all fit her for the double duty of teaching student teachers to teach and teaching children. The training teacher is at all times responsible for the entire work of her grade or subject. The training schools are being built on the theory that the best interests of student teachers and the best interests of the elementary and secondary pupils can be made to harmonize. Whatever interferes with the proper development of one interferes with the proper development of the other.

The training schools maintain a complete elementary and secondary school system from the kindergarten to the eighth grade and four years high school. Every student is required to spend one hour per day for two quarters for student teaching in the elementary training school sometime during her second year in Colorado State Teachers College. A third quarter of teaching may be elected and in most cases is very advisable. A student receiving a diploma at the completion of her first two years in college will have at least two quarters of teaching. With the completion of four years of college work she will receive the degree of A. B. and will have had at least three quarters of teaching. Student teaching in the Senior College may be taken in either the elementary or secondary training school.

Student teaching in the training schools includes conferences, observations, supervision, lesson plans, and teaching on the part of the college students.

## ELEMENTARY TRAINING SCHOOL

The Elementary Training School is a complete elementary school unit containing Kindergarten, First, Second, Third, Fourth and Fifth grades. The Sixth, Seventh and Eighth grades are organized on the departmental plan for the purpose of exploring and diagnosing earlier than usual the interests, attitudes, and abilities of pupils and at the same time provide better for individual differences. This organization affords a splendid opportunity for studying Junior High School problems. The school is so organized that pupils may advance as rapidly as they are able 20 do the advanced work.

A small tuition fee of fifty cents per quarter is charged for the first four grades and one dollar per quarter is charged for each of the remaining grades.

In addition to the regular school subjects the pupils of the Elementary Training School have the opportunity of electing special work from the following subjects: typewriting, bookbinding, wood-working; home economics, including cooking, sewing, hygiene and sanitation; music, elementary science; physical education; French, Spanish, and automobile repairing.

In the Elementary Training School the training teacher spends approximately one-half of her time teaching and the other half observing the student teacher. In this way inexperienced students are not allowed to disturb the advancement of children. During the first week or ten days of each term the training teacher does all of the classroom teaching in order to put the school in a good working attitude. The class organization is perfected and the technique of classroom management well established. During this time of adjustment the student teachers are observing the training teacher while she is getting the school well started and organized. During this period of observation the student teacher writes up lesson plans from the lessons observed and determines from her observation how the training teacher puts into actual practice the principles of teaching. Student teachers will form standards for classroom work and definite ideas for applying these standards to class room instructions. This period gives the student teacher an opportunity to learn the names of the pupils so she can easily identify each one; the individual differences among the pupils, facts about attendance records, and reports. Gradually the teaching will be placed in the hands of student teachers as their success seems to warrant. However, no student will continue teaching any considerable period of time when the class is losing ground under her instruction. Under close supervision during the first part of her teaching the student teacher will not be permitted to go far astray or form bad habits in teaching and children will not suffer under her instructions.

Every student is expected to teach a number of different subjects. As a rule it is thought best that she have experience in three grades, in either the primary, intermediate, or upper grade groups. All assignments for teaching are made by the heads of departments and the director of the Training School in conference with the student. All student teaching in the Elementary Training School is preceded by the course "Principles of Teaching and Observations," in which the student is required to do a definite amount of systematic observation together with a study of the technique of teaching in the elementary school.

## SECONDARY TRAINING SCHOOL

The primary function of the Secondary Training School is to train that group of teachers who expect to enter the field of secondary education. A minimum of four hours of student teaching is required of all students in the Senior College who expect to take their A. B. degree. It is ad visable for students who have had no experience in high school teaching to take at least eight hours of student teaching. Three years of college training is prerequisite to student teaching in the high school. In the Secondary Training School the student spends over two-fifths of his time in teaching and the remainder in observation. When not teaching the student teacher is held responsible for preparation and participation in the discussion of the recitation just as any other members of the class.

The State High School of Industrial Arts (The Secondary Training School of Colorado State Teachers College) is being built upon the theory that the highest interests of the student teachers and the highest interests of the high school pupils can be made to harmonize.

In addition to its excellent teaching force, the school has the use of the splendid equipment of the College. The library, the museums, the collections of fine arts and the laboratories are all available to high school students. The courses are vital and practical and are intended to meet the needs of boys and girls of the present age.

Students will select the subjects they teach upon the recommendation of the head of the department in which they are majoring and the director of the training schools. The first quarter of teaching will be a subject from the student's major and the second quarter will be in another subject. A course in "The Principles of Teaching in the High School" precedes the student teaching. This course consists of a series of systematic observations together with a study of the technique and principles of teaching in high schools.

Students in the State High School of Industrial Arts pay a fee of four dollars per quarter.

## THE SCHOOL OF ADULTS

It often happens that for economic reasons boys and girls are compelled to leave school in the grades or in the early years of high school. Upon reaching maturity they realize the value of an education and are anxious to obtain one, but are unwilling to enter classes with children. The purpose of the School of Adults is to open the door of opportunity to such students. It appreciates the value, in terms of character and intelligence, of the services rendered by the individual to the community, and gives a reasonable amount of credit for the same. No one can enter the School of Adults who has not reached the age of twenty years.

PART II.

THE GRADUATE SCHOOL

## THE GRADUATE SCHOOL

The Graduate School offers advanced instruction leading to the degree of Master of Arts in Education. The principal aim of graduate study is the development of power of independent work and the promotion of the spirit of research. The various departments of the College which offer graduate courses are willing to offer not only the courses regularly scheduled but others of research and advanced nature which the candidate wishes to pursue. Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work.

Persons holding the degree of Bachelor of Arts, Philosophy, Science, or other four-year degree, from a reputable institution authorized by law to confer these degrees and approved by this institution, may be admitted as graduate students in Colorado State Teachers College upon the presentation of official credentials, including transcript of records of undergraduate work.

The prospective student should obtain the blank "Application for Admission" and send it to the Committee on Advanced Standing for its approval before the opening of the quarter. Such blanks may be secured by addressing Colorado State Teachers College, Greeley, Colorado. Original credentials should be submitted with the application for admission.

## General Plan of Work for the Degree of Master of Arts in Education

Residence-Three quarters of residence at the College is required in addition to the requirements for the A. B. degree. This is three quarters of work beyond a four-year college course.

Units of Work-A year's work shall be interpreted as forty-eight quarter-hours. Thirty-eight hours credit will be given for graduate courses pursued and ten hours for the Master's thesis which is required. Sixteen hours credit a quarter is the maximum, inclusive of the research involved in the thesis requirement.

Admission to Candidacy for Degree-Admission to the Graduate School does not guarantee admission to candidacy for the M. A. degree. The student shall not be admitted to candidacy for the degree earlier than the close of his first quarter's work (completion of sixteen credit hours). Such admission shall be determined by a committee consisting of the President of the College, the Dean of the College, the Dean of the Graduate School, the head of the department in which the student is majoring, and two professors with whom the student has had work, these to be chosen by the Dean of the Graduate School. The merits of each student shall be the basis for the decision of this committee; personal fitness, the ability to use good English, both oral and written, and the ability to do superior work in the field of specialization are among the important things to be considered by the committee.

## The Nature of Graduate Work

Specialization-In keeping with the function of a teachers college, graduate work shall be confined largely to professional lines of work. It shall represent specialization and intensive work. As soon after enrollment as possible, the graduate student shall focus attention upon some specific problem which shall serve as the center for the organization of his year's work, including courses to be taken and special investigations to be conducted. No graduate credit will be given for scattered and unrelated courses.

Thesis-Research work culminating in the writing of a thesis upon some vital problem of education shall be an integral part of the work for the Master's degree.

Breadth and Range of Professional Outlook-In addition to the intensive and specialized work which is required of candidates for the Master's degree, they are expected to know the fundamentals of professional education.

Final Examination Upon the Whole Course-There shall be a final examination, oral or written, upon the whole course. An oral examination of two hours duration is customary. This examination will cover the following ground: (a) The field of the thesis and special research, including topics closely related thereto; (b) The fields covered by the courses taken by the candidate; (c) The general fields of Psychology, Sociology, Biology, and Education.

## General Information

1. All courses taken by graduate students must be approved in advance by the Dean of the Graduate School.
2. No graduate student may enroll for more than sixteen hours of work in any quarter. This regulation is essential to the maintenance of the standard of intensive work for the Master's degree. In determining the maximum amount of work permitted, research upon the thesis topic must be included within the limit stated. To this end, the student doing research work upon his thesis topic must enroll for the same.
3. Twelve hours shall be the minimum number of hours considered as a term in residence. If for any reason a student cannot carry more than twelve hours a quarter, the remaining hours may be taken in extension when approved in advance by the Dean of the Graduate School.
4. In order that the standard of intensive and specialized work for the Master's degree may be maintained, no graduate credit will be given for elementary courses, for scattered and unrelated courses, for public platform lectures or public platform lecture courses, or for courses in which the element of routine is large as compared with the theoretical and professional aspects.
5. Excess A. B. work may be applied toward the M. A. degree only when arrangement is made in advance with the Dean of the Graduate School so that he may see that the work is of M. A. standard, and that it is in line with the specialization necessary for the M. A. degree. Such credit will be granted only to students in their fourth year who do not need all their time for the completion of their undergraduate work.
6. The courses which may be taken for graduate credit must be of an advanced character, requiring intensive study and specialization. Certain approved undergraduate courses may be pursued for graduate credit; but, when so taken, the character of the work done and the amount of ground to be covered must be judged by a higher standard than that which applies to the regular undergraduate student. The standard of intensive work set for the graduate student must be maintained even if special additional assignments have to be made to the graduate student who works side by side with the undergraduate.
7. Satisfactory teaching experience shall be regarded as a prerequisite to graduation with the Master's degree. Student teaching in some department of the College or its training schools may, under certain conditions, be included in the graduate work of candidates for the Master of Arts degree. Routine teaching will not be recognized for graduate credit. When graduate credit is given for student teaching, this work must be of an advanced character, so organized, controlled, and supervised as to insure some decided growth of the teacher in the scholarship of the subject or professional insight into its value and problems.
8. Sixteen hours of credit toward the M. A. degree shall be the maximum amount allowed to be earned in a regular school year by any one
who is employed on full time, except upon the recommendation of the Dean of the Graduate School.
9. Before the M. A. degree may be conferred a student must have had at least seventy-two hours of college work in his major and not less than thirty-two hours of professional work in Education and related fields which is acceptable in the various states as requirements for certification.
10. All work for the M. A. degree shall be done with distinction; work barely passed (marks of D and C under the present marking system) shall not be considered worthy of such an advanced degree. The student making one or more low marks is subject to rejection as a candidate for the higher degree.
11. The thesis subject of the graduate student must be approved in advance by the Dean of the Graduate School and by the head of the department concerned. Before the degree is conferred the thesis, as a whole, and in detail, must be approved by the head of the department or the instructor under whose direction the thesis work has been done and also by the Dean of the Graduate School. Two typewritten copies of the thesis must be placed on file with the Dean of the Graduate School, both of which he shall place in the library for permanent reference.
12. Before the candidate for the Master of Arts degree is admitted to final examination the thesis requirements must be met in full, and the thesis must be in such a state of readiness at least three weeks previous to final examination, that only minor reconstructions need to be made, which will not delay its being put in final typewritten form for filing before the end of the quarter in which graduation falls.
13. The final examination will be presided over by the Dean of the Graduate School and conducted by the head of the department in which the candidate has done the main part of his work. Other members of the faculty may be given an opportunity to participate in the examination. An official visitor, or official visitors, from outside the department in which the candidate has specialized shall be appointed to attend the examination.

## Directions as to Form of the Thesis

Students submitting theses should present them in typewritten form, upon paper of good quality, of customary size ( $81 / 2 \times 11$ ), leaving a margin at the left adequate for binding-fifteen points by the typewriter, twenty if the manuscript is thick.

A title page should be prepared, containing in neat lettering at the top. the name of the institution, THE STATE TEACHERS COLLEGE OF COLORADO; below this at some distance the title of the thesis; about the middle of the page the statement: A THESIS SUBMITTED IN CANDIDACY FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION; at a lower level of the page the author's name, and at the bottom the address, and the year.

All theses should contain a brief analysis or table of contents at the beginning; should give footnote references to literature quoted by author, title of book or article, and exact page; and should contain at the end a bibliography of the literature of the subject. In giving bibliographical material, the customary form of publishing houses should be used, which is quite uniformly that of the author first, followed by title, publisher and copyright date, and in case of magazine references, title of magazine, volume or date and page.

Fees for Graduate Courses
Fees for graduate students in the Summer Quarter and in the regular school year will be on the same basis as fees for all other students.

## GRADUATE SCHOLARSHIPS FOR 1922-1923

## The Henry Strong Graduate Scholarships*

Scholarships are offered by the Henry Strong Educational Foundation for the school year 1922-23.

These are open either to young men or young women not more than twenty-five years of age who desire to continue college work and to prepare more thoroughly for the work of a teacher. The A. B. or other baccalaureate degree of equivalent value must be held by the candidate since the scholarship is open only to graduate students. The scholarships are designed primarily to assist students who are not financially able to continue college work but scholarship and ability will be taken into consideration in the selection of candidates.

## The Presbyterian Church Graduate Scholarship*

The First Presbyterian Church of Greeley aided by the General Board of Education offers to a member of the Graduate School a scholarship with a $\$ 600$ stipend for the school year 1922-23.

This is open to any graduate student who is qualified by natural ability and Christian experience as well as scholarship to assist the local church, particularly as it endeavors to keep in touch with the Presbyterian students in the College and maintain classes in training for Christian leadership. The position in the church is to be The Director of Religious Education and half of the student's time is to be given to it.

## Weld County Savings Bank Graduate Scholarship *

The Weld County Savings Bank offers to a member of the Graduate School a scholarship with a stipend of $\$ 100$ for the school year 1922-23. This is open to any young man or woman who wishes to pursue advanced study in preparation for teaching. The scholarship is designed primarily to assist a student who is not financially able to continue college work, but scholarship and ability will be taken into consideration in the selection of the candidate.

## Graduate Scholarship*

A scholarship with a stipend of $\$ 450$ is offered for the school year 1922-23 to a graduate student who desires to continue advanced study in preparation for the teaching profession. It is open either to a young man or woman. Approximately six hours of teaching will be required in return for the stipend. The remainder of the student's time may be spent in advanced work in his major and allied studies looking toward the Master of Arts degree.

## Delta Phi Omega Graduate Scholarship*

The Delta Phi Omega Sorority offers a graduate scholarship with a stipend of $\$ 150$ for the school year 1922-23. This is open to any student who wishes to pursue advanced study in preparation for teaching. First preference will be given to a member of said sorority. The scholarship is designed primarily to assist a student who is not financially able to continue college work, but scholarship and ability will be taken into consideration in the selection of the candidate.

[^1]
## Sigma Upsilon Graduate Loan Fund

The Sigma Upsilon Sorority has established a Graduate Loan Fund to be used in helping advanced students remain in college for the Master of Arts degree. This fund is available to all students whether members of said sorority or not.

## P. E. O. Sisterhood Graduate Loan Fund

Greeley Chapters I and B. E. of the P. E. O. Sisterhood have established a Graduate Loan Fund to be used in helping advanced students remain in college for the Master of Arts degree. This fund is available to any young man or young woman in need of financial assistance.

All applications for loans should be made to the Dean of the Graduate School.

PART III.
THE COURSE OF STUDY

# THE COURSE OF STUDY 

## (For Undergraduates)

Throughout this catalog courses numbered 1 to 99 are primarily first and second year subjects; 100 to 199 are third and fourth year. Those numbered 200 and above are Graduate School.

Colorado State Teachers College is a technical school. Its business is to train teachers for all types of schools maintained by the state. The College has abandoned the idea that there is a possibility of training teachers for the various kinds of teaching thru the medium of a single course of study or a scattered elective course.

Two-year and four-year courses of study for teachers are provided by the following departments:

Agriculture (2 yrs. only)
Biology.
Chemistry.
Commercial Arts.
Education.
Superintendents, H. S. Prin-
cipals and Teachers
Kindergarten.
Primary.
Intermediate.
Junior High School.
County Schools.
Educational Psychology.

Fine and Applied Arts.
Geology, Physiography and Geography.
History and Political Science.
Home Economics.
Hygiene and Physical Education.
Industrial Arts.
Literature and English.
Mathematics.
Music.
Physics.
Romance Languages and Latin.
Social Sciences.

Each student selects a department in which he expects to specialize. The head of the department selected becomes the student's permanent adviser thruout his college course. The choice of a course may be made at the opening of the student's first college quarter. But if the student is undecided, he may register for one quarter as unclassified and defer the selection of his major subject until the beginning of his second quarter.

Length of Course-Each course is planned to occupy twelve quarters. A quarter is approximately twelve weeks in length. Upon the completion of the course the degree of Bachelor of Arts in Education will be granted. The diploma is a Colorado life certificate. Each course is so arranged that it may be divided in the middle. The first part of the course may be completed in six quarters. The student who chooses to be graduated at the end of the two-year course receives the Colorado life certificate, but no degree. Students who come to the college with advanced standing, and those who gain time by doing work of exceptional quality, may shorten the course somewhat.

The Professional Core-Each of the courses differs somewhat from the others in the subjects required by the department, but each course contains the following subjects:

First Year: Biology 2, English 4 (unless excused for proficiency), Hygiene 7, Ethics 1 (for women), Sociology 3, Education 1, Education 8, and a Physical exercise course each quarter.

Second Year: Psychology 2a and 2b, Education 2a and 2b (practice teaching), Education 10, and a Physical exercise course each quarter.

Summary-Core subjects 42 hours. Departmental requirements 30 hours. Free elective 24 hours. Total 96 hours.

Third and Fourth Years: (For majors in elementary school work, supervision, etc.) Education 102 (practice teaching), Education 111, Hygiene 108, Psychology 104 and 108a, and Sociology 105.

Third and Fourth Years: (For majors expecting to become high school teachers, supervisors, and principals) Education 101, 103 (practice teaching), and 111, Hygiene 108, Psychology 105 and 108b, Sociology 105, and Ed. 116.

SUMMARY-Core subjects 23 or 27 hours. Departmental requirements 49 or 45 hours. Free electives 24 hours. Total 96 hours.

Summary for the Four Years-Core subjects 65 or 69 hours. Departmental requirements 79 or 75 hours. Free electives 48 hours.

Use of Free Electives-The student is urged to use his free electives to broaden his education so as to acquaint himself somewhat with one or two fields outside his major interest. He is at liberty, however, to use a part or even all of his free electives in his major department.

## REQUIREMENTS FOR GRADUATION

The Two-year Course-A student must do full work in residence during at least three quarters before being granted a certificate of graduation from the two-year course. Thus, at least forty-eight of his ninety-six hours may be granted on advanced standing or for extension courses. Applications for graduation must be filed with the registrar at least 30 days before the close of the quarter in which the diploma is to be granted.

Group Courses-Each student is required to select one of the group courses given in detail under the departments of the College. If a student has taken courses elsewhere similar to those specified in his group course, he may, with the consent of the head of the department in which he is taking his course, be allowed to substitute the work he has already had for Colorado State Teachers College work. The student may not, however, be excused from the "core required subjects" except by the heads of the departments giving those courses.

Diploma-The diploma granted upon the completion of the two-year course is a life certificate to teach in any kind of school in Colorado, and is honored in most of the other states.

The Three-year Course-A student who comes to the College with two years of advanced standing from another college or normal school may secure the Colorado Life Certificate by doing three quarters of residence work and meeting the requirements of the group course in which he or she is specializing.

The Four-year Course-At least three quarters of residence study is required for the A. B. degree. For gradutes of the two-year course in this College, two quarters of additional residence study is required.

The Fifth-year Course-See the Graduate School, pages 39-43.
Diploma and Degree-At the end of the fourth year of study, and upon completion of 192 quarter hours of credit, the degree of Bachelor of Arts (A. B.) in Education will be conferred, and a diploma, which is a life license to teach in the public schools of Colorado, will be granted to all students who have completed the requirements of the course they are pursuing.

Time Limits for Completing a Course-A student is allowed four years after beginning resident work on a two-year course in which to complete that course, and another four years to complete the work of the third and fourth years after having enrolled in the third year of one of the group courses. This extension of time is made to take care of those who must teach between the years of resident work. Thus, a student selecting the General Course in September, 1916, would have until the end of the Summer Quarter of 1920 to complete the two-year course thus selected. Failing to complete the course within that time he or she would be required to complete one of the courses of study in effect in the Year Book current at the time of his or her application for graduation. If such a student completed the two-year course on or before September, 1920, then he or she would be required to elect one of the senior college courses of the year 1920-21 and complete all requirements of the course thus selected for the A. B. degree. This course
would have to be completed within another four years (that is, September, 1924).
-Transfer of Credits from Other Colleges-Since Colorado State Teachers College is a college for training teachers, its courses of study are technical courses. Those who come from universities or liberal arts colleges with one, two or three years of advanced credits may find that some of these will not apply upon the course of study they may select here. Colorado State Teachers College accepts all credits from standard colleges at face value to apply as electives in its courses of study, but does not guarantee that a student having had a year's work in another school will be able to complete a two-year course here in three more quarters. Many students are able to apply their previous work upon the courses selected here without loss of time, but often students find it necessary to remain in Colorado State Teachers College somewhat longer than they had expected because of the number of required technical courses in a given curriculum.

Regulation Concerning Overlapping of A. B. and A. M. Work-No student will be granted the A. B. degree who has not completed 48 or more hours (three full quarters) in residence in the College. Twelve or more hours done in the group courses conducted in Denver, Pueblo and other neighboring cities by the resident faculty of the College may be counted as one (but only one) of the resident quarters. Three additional quarters in residence are required for the A. M. degree, with the same provision concerning outside group courses.

To prevent overlapping of time and consequent misunderstanding the Advanced Standing Committee grants advanced standing never in excess of 144 hours to applicants who fall short of admission to the graduate school. Students transferring to Colorado State Teachers College when they are within one or two quarters of the A. B. degree must expect to lose some time by making the transfer.

## AGRICULTURE

The aim of the Department of Agriculture is to prepare teachers in rural, consolidated, and village schools.

Students majoring in this department will not only be prepared to teach the Agriculture course in the above classes of schools, but will be given a general knowledge of rural life problems, such as will enable them to make the work in such communities function to the best advantage possible.

## Course of Study

Two years for majors in Agriculture.
In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: Agriculture 1a, 4, 5, Chemistry 1, and Botany 1.
Second Year: Agriculture 6, 10a, 10b, 12, 13, and 3.
1a. Animal Husbandry. Types and Market Classes of Live Stock -Four hours.

A general survey of the development of the livestock industry and present conditions. The fundamentals of livestock judging and its relation to production. This work covers cattle, hogs, sheep, horses and mules.

1b. Animal Husbandry. Types and Market Classes of Live Stock -Four hours.

A continuation of 1 a .

## 3. Methods in Gardening and Truck Crops-Four hours.

A study of the general subject dealing with the production of vegetables for the home as well as for the market. Lectures, demonstrations, reference reading, and practice work in gardening.

## 4. Farm Crops-Four hours.

An introductory course dealing with the most important farm crops with special reference to Colorado conditions.
5. Soil Physics and Soil Fertility-Four hours.

A study of the physical and chemical properties of the soil and their relation to soil management.
6. Elements of Datrying-Four hours.

The lectures take up the composition of milk; the Babcock test; handling of milk and making of butter on the farm. The laboratory work includes testing milk, operating separator, and making butter.

## 9. Forage Crops-Four hours.

This course deals with the principal forage and pasture crops, with special reference to their economic value in the production of beef, pork, and mutton.

10a. Poultry Raising-Three hours.
Deals with the principles of poultry house construction, and a study of the characteristics of the more common breeds and varieties.

10b. Poultry Raising-Two hours.
Feeding and general care; common diseases of poultry; incubating, brooding, and handling of farm poultry.

## 11. Feeds and Feeding-Four hours.

A study of the most successful and economical methods of feeding farm animals. Growth of the young animal is emphasized. Results of various experiment stations are compared.

## 12. Farm Management-Three hours.

A course in selecting the farm, planning the rotation, locating the fields, lots and buildings, and keeping the farm accounts. Farming is considered as a big business, and the need of a thoughtful plan in making it a success is carefully considered.

## 13. Agricultural Education and Teaching-Three hours.

This course deals with the educational aims in teaching Agriculture. Special attention is given to selection of material and subject matter that will correlate the work of the school life with life in the community and rural life institutions in view of modern demands.

## 14. Breeds of Live Stock-Three hours.

This course deals with the history, development and characteristics of the leading breeds of live stock; pedigree and performances of superior individuals among horses, cattle, sheep and swine.

## 41. Beef Production-Three hours.

A discussion of practical methods of beef production, including a consideration of successful practices in feeding for market, fitting for shows, and general care and management of beef cattle.
42. Dairy Feeding-Two hours.

This course applies the principles of animal nutrition to the special problems of feeding dairy cattle.

## 50. Grain Judging-Three hours.

A study of the important varieties of corn, oats, wheat, barley, and other cereals, and the commercial grading and marketing of grains.

## BIOLOGY

The biological department prepares teachers for the grades and high schools. It also endeavors to give a biological setting for the educational studies and for the activities of life.

The courses in zoology and botany are planned to combine laboratory and field work wherever this is possible, so that these studies of the laboratory may be correlated with the ecology, habits, and life histories of Colorado forms.

## Course of Study

Two years or four years for majors in Biology. In addition to the free electives, and to the core subjects included in all the curricula as shown on page 47, the department of Biology requires:

## Zoology the Major Interest

First Year: Physics 1, Nature Study 1, Zoology 1, Biology 2, Zoology 2, Library Science 1, and Art 13.

Second Year: Chemistry 1 and 2, Botany 1, 2 and 3, and Physics 4.
Third Year: Chemistry 108 and 109, Zoology 107, Physics 2, Biotics 101, Zoology 4.

Fourth Year: Geography 8, Zoology 108, and Botany 4, Chemistry 7, Bacteriology 101, and Zoology 3 and 101.

## Botany the Major Interest

First Year: Botany 1 and 2, Physics 16, Botany 3, Art 13, Biology 2.
Second Year: Chemistry 1, Geography 8, Physics 4, Zoology 3, Nature Study 1.

Third Year: Physics 1 and 2, Chemistry 108 and 109, Zoology 1 and 2, Bacteriology 1, and Botany 101.

Fourth Year: Geography 8, Zoology 108, and Botany 4, Chemistry 7, Botany 4, Biotics 101, Botany 103.

## Biology

2. Bionomics-Four hours. Each Quarter. Required of first year students.

A study of some of the fundamental facts and laws of biology that have a bearing on education. It forms a basis for the intelligent study of other educational subjects. It considers: Mendel's Law, heredity, eugenics, evolution and civic biology.

## Zoology

- 1. Invertebrate Zoology-Four hours. Two-hour periods. Fall Quarter.

Morphology and natural history of the invertebrates with particular reference to the Protozoa, Porifera, and Coelenterates.
2. Vertebrate Zoology-Four hours. Two-hour periods. Winter Quarter.

Vertebrate Morphology, starting with the proctocordates, and including the comparative work on the higher vertebrates. Lectures and discussions.
3. Bird Study-Four hours. Summer Quarter.

A study of Colorado birds. Consists or work in the field, combined with the laboratory and museum. The course is not a scientific study of biras, but rather, as the name implies, a study that should enable the student to identify the common birds and know something of their life histories, ecology, habits and economic importance. Students in this course may expect to use Saturday for some of the excursions that require time.
4. Mammals-Three hours. By appointment.

The systematic positions of the mammals' life histories, evolution, and geographical distribution.
101. Zoology Technic-One hour. Winter Quarter.

Work in making microscopic slides, preparation and preservation of specimens for class and museum use.
107. Animal Behavior-Two hours. By appointment.

A study of the behavior of various animals, in response to natural and artificial conditions and stimuli. Forms a basis for the study of instinct, intelligence, memory and the learning process. Given by appointment. Laboratory course. Two-hour periods.
108. Problems in Zoology-Four hours. By appointment.

A discussion of present day problems in zoology. For majors.

## Botany

1. General Botany. Four hours. Fall Quarter.

A study of type forms representative of the plant kingdom. Their relation to man is given emphasis.
2. General Botany-Four hours. Winter Quarter.

Treats of the morphology, the simple physiological functions and the economic importance of flowering plants.
3. Systematic Botany-Four hours. Spring Quarter.

Prerequisite, some course in botany.
4. Plant Physiology-Four hours. Winter Quarter. By appointment.

Prerequisite, Botany 1 and 2. An elementary course designed to give the student a working knowledge of the physiological functions of plants.
101. Advanced Systematic Botany-Four hours. Spring and Summer Quarters.

Treats of the morphological relations of plants and their classification.
102. Botanical Technic-One hour. Winter Quarter.

A laboratory course in the preparation of botanical slides; methods of preservation, collecting, etc.
103. Plant Ecology-Three hours. By appointment.

Deals with the effects of environmental changes on plants. Offered once every other year. Begins 1921. Spring Quarter.

## Bacteriology

1. Bacteria, Yeasts and Molds-Four hours. Winter Quarter.

Morphology, classification, cultivation, observation, fermentative processes and pathogenicity of micro-organisms. Special attention is given to the needs of Household Science Majors.

## Nature Study

1. Nature Study-Four hours. Fall, Spring and Summer Quarters.

Aims and methods of nature work. Planning of courses and outlines. Laboratory and field work on nature topics.
2. Nature Study-Four hours. Spring and Summer Quarters.

Nature work of the spring, with laboratory and field work.

## Biotics

101. Biotics-Heredity and Eugenics. Three hours. Winter and Summer Quarters.

This course deals with the physical basis of inheritance and an application of the laws of heredity to man.

## CHEMISTRY

It is the aim of this department to offer a schedule of courses which will fill the needs of the following classes of students:
A. Students taking chemistry as a requirement of the Home Eco-
nomics Department. Such students will find the chemistry requirements outlined under their department.
B. Students desiring to specialize in chemistry in order to enter the chemical industries or the teaching profession. They will follow the program outlined below.
C. Students taking the new Science Course with chemistry as a minor subject. They will find the requirements in chemistry outlined under the Department of Physics or the Department of Biology.

In these courses the high school chemistry will not be allowed in lieu of General College Chemistry, as the latter course is more intensive and extensive than is the high school course.

## Course of Study

Two years or four years for majors in chemistry. In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: Nature Study 1, Physics 1, 2 and 3, and Chemistry 4, 5 and 6.

Second Year: Botany 2, and Chemistry 110, 111 and 7.
Third Year: Zoology 1 and 2, Chemistry 114, 114b and 113.
Fourth Year: Chemistry 115, 116, 115b and 117.

1. General Chemistry-Three hours. Fall Quarter. Fee, $\$ 3.00$.

Two lectures and one laboratory period on the theory of chemistry and nonmetals.
2. General Chemistry-Three hours. Winter Quarter. Fee, $\$ 3.00$. Two lectures and one laboratory period. A continuation of Course 1.
3. General Chemistry-Three hours. Spring Quarter. Fee, $\$ 3.00$.

Two lectures and one laboratory period on the chemistry of metals. A continuation of Course 2.

3b. Household Chemistry-Three hours. Spring Quarter. Fee, $\$ 3.00$.

Two lectures and one laboratory period on chemistry in the home.
4. General Chemistry--Four hours. Fall Quarter. Fee, $\$ 4.00$.

This course covers the same text book work as Course 1 does, but requires more laboratory work. Two lectures and two laboratory periods.
5. General Chemistry-Four hours. Winter Quarter. Fee, $\$ 4.00$.

A more extensive course than Course 2. Two lectures and two laboratory periods. Continuation of Course 4.
6. General Chemistry-Four hours. Spring Quarter. Fee, $\$ 4.00$.

A continuation of Course 5. Two lectures and two laboratory periods. Courses 4, 5, and 6 are required of all science students (except those specializing in biology, who may elect 1,2 and 3 instead; and Home Economics students).
7. Qualitative Analysis-Two to eight hours. Any Quarter. Fee, $\$ 4.00$.

A laboratory and consultation course on the separation and identification of the common elements. Prerequisite, course 1, 2 and 3, or 4, 5 and 6.
108. Organic Chemistry-Three hours. Fall Quarter. Fee, $\$ 3.00$.

Two lectures and one laboratory period. A study of the hydrocarbons and their derivatives.
109. Organic Chemistry-Three hours. Winter Quarter. Fee, $\$ 3.00$.

Two lectures and one laboratory period. A continuation of Course 108. A study of the carbohydrates, proteins, and benzine derivatives.

[^2]113. Food Chemistry-Four hours. Spring Quarter. Fee, $\$ 4.00$.

A more comprehensive course than 112. Prerequisites, 4, 5, 6, 110, 111.
114 and 114B. Quantitative Analysis-Four or eight hours. Any Quarter. Fee, $\$ 4.00$.

Gravimetric and volumetric analysis. A laboratory and consultation course. Eight or sixteen hours attendence. Prerequisites, Courses 4, 5, 6, 7.

115 and 115B. Industrial Chemistry-Four or eight hours. Any Quarter. Fee, \$4.00.

In this course the student may enter upon a study of any one or more of the following chemical industries: Steel, oil, coal, water, gas, fertilizers, cement, dyes, etc. A laboratory and consultation course. Prerequisites, Courses $4,5,6,7,114$.
116. Agricultural Chemistry-Four hours. Any Quarter. Fee, $\$ 4.00$.

An application of the principles of chemistry to soils, fertilizers, etc. Prerequisites, $1,2,3$ and 7 , or $4,5,6$ and 7.
117. Teaching of Chemistry-Three hours. Any Quarter. Fee, $\$ 3.00$

Discussion and reports on the teaching of high school chemistry, and practice in setting up demonstration apparatus.
201. Advanced Inorganic Chemistry-Three hours. Any Quarter. Fee, $\$ 3.00$.

Recitations and lectures on the most recent theories of Chemistry.

## EDUCATION

The aim of the Department of Education is to acquaint the student with the principles which underlie the science and art of education. Even though the courses must necessarily deal largely with the fundamental theories underlying educative processes, every course is so planned that the student should be able to make the application of these theories to actual practice in the school room. Several of the courses are offered for the purpose of meeting particular needs of teachers of practical experience.

## Course of Study

In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

FOR SUPERINTENDENTS, HIGH SCHOOL PRINCIPALS, SUPERVISORS AND TEACHERS Two Years
First Year: Ed. 32, Ed. 12, Ed. 33, Libr. Sci. 1, Psych. 3. Second Year: Ed. 15.

FOR KINDERGARTEN TEACHERS
Two Years
First Year: Ed. 51, Ed. 52, Music 2a, Libr. Sci. 1, Art 2, Ind. Arts 1, Nat. Study 1.

Second Year: None.

FOR PRIMARY TEACHERS
Two Years
First Year: Ed. 3, Ed. 51, Nat. Stdy. 1, Ind. Arts 1, Music 2a, Lib. Sci. 1, Eng. 15, Art 2.

Second Year: Art 13.

FOR INTERMEDIATE TEACHERS
Two Years
First year: Ed. 4, Eng. 1, Nat. Stdy. 1, Music 2b, Eng. 13, Lib. Sci. 1, Art 14, Geog. 12.

Second Year: Ed. 33, Math. 8, Eng. 15.

FOR JUNIOR HIGH SCHOOL TEACHERS
Two Years
First Year: Lib. Sci. 1, Eng. 15, Method Courses, 4 hours; Eng. 2.
Second Year: Ed. 113, Ed. 15, Method Courses, 4 hours.
FOR TEACHERS AND SUPERVISORS in CONSOLIdATED, village and rural schools
First year: Ed. 21, Ed. 26a and 26b, Agri. 4, Music 1, Eng. 13 and Eng. 15, Ind. Arts 1.

Second Year: Ed. 25, Ed. 22 (substituted for Ed. 2b), Ed. 15, Sociology 18.
for all third and fourth year students in education
Third Year: Ed. 142, Ed. 108 or 114, Ed. 101, Ed. 135, Psych. 107.
Fourth Year: Ed. 229, Biol. 102, Ed, Electives, 4 hours (for elementary teachers).

1. Principles of Teaching and Observation-Three hours. Every Quarter. A study of the theory and practice of proper classroom procedure; a study of the making of lesson plans, their aims and functions; analysis of the various types of classroom procedure; the deductive and inductive lesson, the object lesson, the assignment lesson, the appreciation lesson, review and drill exercises, the socialized recitations and the project method. These various types of lessons are demonstrated by actual recitations in the elementary training school. This course requires from sixteen to eighteen systematic observations of the training teachers in which a careful study is made of each recitation in individual conference with the training teacher observed.

This course is prerequisite to student teaching in the elementary training school.
2. Student Teaching in the Elementary Training School-Hours according to schedule. Required of all Junior College Students. Second year.

This course will include conferences, observation and teaching.
3. Primary Grade Methods-Four hours. Fall and Spring Quarters. This course should be taken previous to student teaching.

In this course the needs of the child entering school for the first time will receive special attention. The latest and most scientific articles on primary methods will be read and discussed, and a resume of methods and materials for all primary work will be included. Observation of classes.
4. Intermediate Grade Methods - Four hours. Fall and Spring Quarters. This course should be taken previous to student teaching.

This course will deal with problems of instruction in intermediate grades. The best material and devices for the teaching of Arithmetic, Geography, History, Writing, Reading, Composition, and Spelling will be considered. Recent books and magazine articles will be discussed in class. Demonstration classes.
7. Practical Projects in Primary Grades-Three hours. Three days a week. Spring Quarter.

This course will deal with practical projects in the work of the primary grades.
8. Educational Values-Three hours. Every Quarter. Required of all students first year.

The purpose of this course is to give the student a critical attitude toward the material presented in the various school subjects. Each subject of the elementary school will be considered as to the reason it has for a place in the curriculum today; how it has been justified in the past; and how it may be presented now so as to be more fully justified. Recent magazine articles and text-books will be studied with a view of developing the attitude of looking for the material which is of greatest educational value to the child.
10. The Elementary School Curriculum-Three hours. Three times a week. Every Quarter. Required of all students, second year. (Ed. 26a or b may be substituted.)

This course will deal with the aims, materials and methods of the elementary school. The course should make the student intelligently critical of programs of study in the elementary school.
12. Current Movements in Social Education-Three hours. Fall Quarter.

The purpose of this course is to acquaint the student with some of the recent movements in the field of education. This course will include a discussion of such subjects as the following: The school as a social center; open-air schools; school credit for industrial work in the home; and other subjects of current interest.
13. The Teaching of Spelling-Two hours (Offered on demand.)

The purpose of this course is to present the most reliable and certain facts in teaching of spelling and to present them in their relation in the practical problems which the teacher has to face every day in the class room. The following problems will be discussed: The selection and classification of words; testing for word difficulty; a psychological basis of spelling; the presentation of words; the prevention and treatment of errors; the measurement of spelling ability factors affecting spelling ability.

## 15. Vocational Guidance-Two hours. Spring Quarter.

This course will deal with the place of vocational guidance in public school systems. Among other subjects it will treat of the need and value of the study of occupations, vocational analysis, opportunities for vocational education, opportunities for employment, the work of placement and vocational bureaus and various guidance agencies in this and other countries.

## 16. Girls' Camp Fire Work-One hour. Every Quarter.

This course is intended for those who wish to become Camp Fire Guardians. Groups will be organized into regular camp fires and do the work usually required of girls in such groups.
17. Boy Scout Work-One hour. Every Quarter.

This course is intended for those who wish to become Boy Scout Masters.
21. School Problems-Three hours. Every quarter.

This course considers the essentials of good teaching, classroom management, the organization of daily programs, daily assignments and the study
lesson. The problems of co-operation of the teacher, the school board, and the community.

## 22. Student Teaching in Demonstration Schools-Four hours.

 Every Quarter.The Ault Consolidated School and several county schools near Greeley are being used for the special training of teachers. Students who plan teaching in a one-teacher school should take one month of teaching in the county schools; those who plan to teach in consolidated schools or in junior high school work should take their month of teaching in the Ault school. Student teachers live at the teachers' cottages while teaching and can arrange to carry on their other studies in absentia while so teaching. The same credit is given for this work as for a term of teaching in the Training School.

## 24. School Management-Three hours.

This course will deal with school and class room management and the school law of Colorado. This course is designed to meet the needs of supervisors and class-room teachers. Problems peculiar to villages and small cities will be given most consideration.

## 25. Administration of Consolidated and Village Schools-Three hours. Fall Quarter.

This course is a study of the history of county school organization, consolidation and administration. It aims to meet the needs of county superintendents, rural supervisors, teachers, principals of consolidated schools and others interested in special problems of country life. It will include studies and special researches in the redirection of village and community life, and a discussion of forward movements in legislation as they affect the education of children outside of large cities.

26*. (a and b.) The County School Curriculum-Three hours. Every Quarter.

The first term of work is a study of the general principles underlying the curriculum. An inquiry into the study factors contributing to vital, vocational, avocational, civic, and moral efficiency. The second term is more largely a study of methods and materials used to vitalize the so called common school branches, such as the project method, the excursion, school clubs. The Colorado state course of study with its special problems will be considered.
32. History of Education in Ancient and Medieval and Renaissance Times-Three hours. Fall Quarter.

This course will consist of a brief study of primitive Hebrew, Greek, Roman, and early Christian Education showing the trend of educational thought, the types of schools which grew up, and the relation of Christian thought and Christian schools to pagan learning. The Renaissance will be studied with special reference to the fundamental changes that took place in educational ideas and aims and in religious thought; the effect of these upon the curriculum and upon educational institutions, and the problems which the Renaissance movement created for modern education.
33. History of Modern Education-Three hours. Winter Quarter.

This course will be introduced by a brief review of the Education of the Renaissance to furnish the setting for the study of the trend of modern education. The main part of the course will be devoted to such subjects as the development of the vernacular schools, the early religious basis of elementary and secondary schools, and the transition to a secular basis, together with the educational philosophy of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbart and Froebel.

## 44. Social Education-One hour. Every Quarter.

This course is intended as a clearing house for students who elect to carry on club and class work in connection with the Community Co-operation Plan. A study will be made of educational problems involved in club and class organization and management.

## 45. Community Co-operatton-One hours. Every Quarter.

All students engaged in work under the Community Co-operation Plan will enroll under this catalog number in order to allow proper record in the office.
51. Story Telling, Songs and Games for Kindergarten and Primary Children-Four hours. Fall and Spring Quarters.

A study and classification of the different types of stories, songs and games, according to their fitness for various ages and purposes.

## 52. Kindergarten Curriculum and Use of Materials-Four hours. Fall Quarter.

A study of the growth of the kindergarten, its relation to the first grade and the best material selected in order to meet the various needs of the child.

## 101. Principles of Teaching in High School-Four hours. Winter Quarter.

This is a course in methodology as the subject relates itself to the curriculum of secondary schools. Every phase of the work that is being done in the Secondary Training School is discussed in the more recent lights and development of secondary education. This course is an integral part of the plan for training high school teachers and is a prerequisite to student teaching in the Secondary Training School.

## 102. Advanced Student Teaching in Elementary Training School -Four hours. Every Quarter.

102a. Student Supervision in Elementary Training School-Four hours. Every Quarter.

## 103. Student Teaching in Secondary Training School-Four hours.

 Every Quarter.Student teaching in the Secondary Training School consists of teaching, observation, supervision, lesson planning, assigned readings, and individual conferences with the training teacher and general conferences with the principal of the High School and the director of the Training Schools. Student teachers spend approximately one-half of their time in actual teaching under the supervision of the training teacher and the remainder in observing the training teacher and in taking part in the recitation as a member of the class. Teaching is to be assigned in terms of problems or units, each problem or unit to occupy at least five consecutive recitations or as many more as the training teacher may think necessary.
104. The Project Method of Teaching-Three hours. Offered on demand.

The purpose of this course is to study and define the project and project method from a critical point of view and to discuss the reorganization of the curriculum on the project basis. A study and criticism of current definitions of a project will be made. Since a knowledge of the historical background is necessary to a proper understanding of the term, the history of the project will be developed.
106. Methods of Improving Instruction in the Primary GradesFour hours. Spring Quarter.

This course deals with methods of improving instruction in the primary grades. Emphasis is placed on arithmetic, silent reading, language, oral reading, and nature study. Prerequisite, Ed. 3.
108. Educational Supervision-Four hours. Winter Quarter.

This course will deal with problems of supervision in school systems. It will be of especial value to those who expect to become superintendents or supervisors.

## 109. High School Supervision-Hours to be arranged. On demand.

Persons who have shown an unusually high degree of efficiency in high school teaching may be allowed to assist in the supervision of the high school work. This training will afford them a more comprehensive view of the work and practice in the supervision of the training of younger teachers. This experience is intended primarily for those who are preparing themselves for principals and superintendents or to fill other positions of responsibility in public school work.
110. Supervised Study-Two hours. Twice a week. On demand.

This course will deal with the entire field of supervised study.
111. Philosophy of Education-Four hours. Spring Quarter. Senior College required.

This course is designed to set forth the underlying principles of educational theory. It treats of the theory of instruction and training with the child as the concrete basis; the aim and meaning of education; educational values; the theory of management and control; and the technic of practice. Some of these are discussed very briefly as they form the basis of other courses. Practical applications of theory are constantly made.

## 112. School House Construction-Two hours. Twice a week.

(Not offered in 1922-23.)
This course will deal with practical problems in the planning and building of school houses.
113. Organization and Administration of the Junior High School -Three hours. Fall Quarter.

In this course the following points will be considered: Organization; standards for judging junior high schools; historical development; the program of studies; the daily schedule of classes; courses of study for the various subjects; the qualification of teachers, etc. After many representative junior high schools of the United States have been considered from the above mentioned standpoints, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.

## 114. Primary Supervision-Two hours. On demand.

This course is intended to meet the needs of kindergarten and primary supervisors.
116. The High School Curriculum-Four hours. Winter Quarter. Required fourth year of those majoring in Secondary Education.

In this course a practical study of the curricula of various small high schools and junior high schools of this and other states will be made. Educational values and the needs of the community will be considered in the course. A detailed course of study for both the junior and the senior high school will be outlined by each student.
125. Education for the Physically Handicapped-Two hours. Spring Quarter. Every other year. (Not offered in 1922-23.)

A study of the instruction and methods employed in the education of the physically handicapped, especially the deaf, dumb, blind and crippled.

## 130. County School Supervision-Three hours. Winter Quarter.

A course intended primarily to give a comprehensive grasp of American rural history, and a brief study of the rural educational system of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the school, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country.

## 131. Visual Education-Three hours. Spring Quarter.

The purpose of this course is to offer definite information and practice in methods in visual instruction and their adaptation to school use. Among the topics studied are the principles and practice of visual instruction; sources of material; preparation and use of school exhibits; the preparation and use of photographs, lantern slides, and motion pictures. Laboratory practice will comprise about one-third of the course.

## 135. Educational Classics-Four hours. Spring Quarter.

Such classics as Plato's "Republic," Rousseau's "Emile," Pestalozzi's "Leonard and Gertrude," and Spencer's "Education" will be considered (a) as interpretations of educational practices of the various periods of history represented and (b) as representations of theory related to present day education.

## 142. Educational Administration-Four hours. Fall Quarter.

This course is designed primarily for students preparing themselves as principals, superintendents and supervisors. After making a survey of the field of educational administration, the student may select the line of administration in which he is most interested for study and research.
143. The Federal Government in Education-Four hours. Winter Quarter.

This course treats of the efforts of the Federal Government to aid the states in education.
147. Educational Surveys-Three hours. Fall Quarter.

In this course an opportunity will be given to study the technique of conducting surveys, the surveys which have been made, and the application of these surveys to educational thought and practice.
152. Principles underlying the Education of Children in the Kindergarten and Primary Grades-Three hours. Winter Quarter.

This course is intended to be of help to kindergarten and primary teachers and supervisors.
153. Kindergarten Matertals. (A continuation of Ed. 52.)-Four hours. On demand.

A study of the instincts and interests of children and how to meet and use these instincts and interests in the Kindergarten and Primary Grades.
154. Kindergarten Seminar-On demand.

A study by each student of some one activity in the Kindergarten.
217. Vocational Education-Three hours. Winter Quarter.

A discussion of the main factors essential in vocational education.
(a) Demands and needs interpreted in the social life of the people.
(b) The ability of the public school to meet these demands by means of public school education.
(c) Local attempts being made to meet these demands.
223. Research in Education-Hours dependent upon amount of work done. Every Quarter.

This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him and carry on his studies in any phase of education, provided sufficient opportunity is at hand for original investigation. The results of such research are usually embodied in a thesis. Conference course at hours convenient to instructor and student.
228. Comparative School Systems-Four hours. Winter Quarter. Every other year.

This course will include a study of European systems of education, particularly the German, French and English, for the sake of a comparative basis and the suggestions that they furnish for the solution of current problems in American administration.
229. Current Educational Thought-Four hours. Spring Quarter.

This course will consist of reviews and discussions of recent books in the various fields of education.
246. Educational Problems-Four hours. Fall Quarter. Every other year.

This course is intended for advanced students who wish to study in detail such subjects as the following: The school as an institution; learning by doing; flexibility of promotion; the place of method in the school room; the school as a unit of supervision; practical correlation of school and community work.

## EDUCATIONAL PSYCHOLOGY

The courses of this department have been arranged with the general purpose of making the student familiar with the important contributions which psychology has made to such phases of education as school organization and administration, the aims of education, and the best means and methods of realizing these aims. The whole public school system is viewed from the standpoint of the nature and needs of the child. An attempt is made to point out what the schools should be in order to preserve the child's physical and mental health, respect his native capacities and tendencies, secure his normal development,
utilize his most natural modes of learning, and promote and check up the efficiency of his responses. More specific statements of the purposes of the department are given below in the descriptions of the courses.

The department offers two curricula, the one in Psychology and the other in Special Schools and Classes. The first prepares the student to teach psychology in normal schools and high schools and to fill such positions in clinical psychology and tests and measurements as are developing in connection with public school systems. The second prepares the student to take charge of special schools and classes, especially such as are designed for backward and feeble-minded children. Students who elect either of these curricula are advised to take at least six courses of the curriculum of some other department.

## Course of Study

## Four Years for Majors in Psychology

In addition to free electives, and the core subjects listed on page 47, this department requires:

First Year: Library Science 1, and Psychology 1 and 110.
Second Year: Psychology 3.
Third Year: Psychology, 104, 105, 106, 107 and 109, Biotics 102 or 103.

Fourth Year: Psychology 108a, 108b, 111, 212 and 109.
Students who wish to major in the curriculum for teachers of special schools and classes will take Psychology 112, a course in eugenics and a course in construction work in place of psychology 105, 108b and 212. They will also be held for some practice teaching in special classes.

Students who wish to specialize in the department, but find it impossible to remain at school four years, will be permitted to elect advanced courses.

1. Child Hygiene-First Year. Three hours. Required of students who specialize in any of the curricula of the Training School.

The main purposes of this course are: (a) to point out how the child's school progress and mental and physical development are arrested, and how his health and behavior are impaired by the physical defects which are very prevalent among school children: (b) to discuss the causes of defects, the methods of preventing and detecting them, and the measures which are required for an effective amelioration or cure.

The following topics will be treated: educational and economic values of health; the need of health conservation; deformities and faulty postures; air requirements; malnutrition and school feeding; hygiene of the mouth; enlarged adenoids and diseased tonsils; defective hearing; defective vision.

## 2. Educational Psychology-

a. Three hours credit, four hours recitation. Required of all students. Second year.

The purposes of this course are: (a) to make the student familiar with the child's capacities, tendencies and native responses and to show him how they, and the nature and order of their development, are involved in the process of educating the child; (b) to discuss such conditions of the school room and school activities as will avoid fatigue and promote work.

The following topics will be treated: The child's native equipment; mental work and fatigue.
b. Three hours credit, four hours recitation. Required of all students. Second year.

Purposes of the course: (a) to acquaint the student with the various modes of learning and the conditions which facilitate learning; (b) to discuss
the nature of individual differences and point out their significance for instruction and the arrangement of school work.

General topics: The psychology of learning; individual differences.

## 3. Child Development-Second year. Four hours. Spring Quarter.

The purposes of this course are: (a) to point out the child's requirements during the different stages of his physical development; (b) to describe the nature of the child's mental development and discuss the kind of school work which is adapted to him in any stage of development.

The following topics will be treated: Purposes and methods; anthropometrical measurements and growth; the development of attention and senseperception; instruction in observation; the development of memory, imagination and thinking; the psychology of lying; the growth of feelings and ideas; volition, suggestion and interest.

## 104. Psychology of Elementary School Subjects-Third year.

 Four hours. Required. Winter Quarter.The purposes of this course are (a) to make an analysis of the school subjects with the object of determining what mental processes, and modes and conditions of learning are involved in studying them; (b) to review the results of experimental studies on the methods of teaching and learning the school subjects; (c) to discuss the necessity of varying the methods of teaching, and learning the school subjects with the progress made and with individual differences in children; (d) to criticise methods of instruction in the light of individual requirements, the result of experimental studies, and the mental processes involved in a given subject.

Topics treated: The elementary school subjects.
105. Psychology of the High School Subjects-Third year. Four hours. Required of students preparing to teach in the high school in lieu of Course 104. Winter Quarter.

The purposes of this course are: (a) the same as those enumerated in Course 104; (b) to familiarize the student with educational tests which are designed to measure the level of the child's performance in the high school subjects.

Topics treated: The high school subjects.

## 106. Clinical Psychology-Four hours. Winter Quarter.

The purposes of the course are: (a) to teach the student how to determine the mental status of a child through first-hand observations, tests and experiments and thru the collection of hereditary, developmental and environmental data pertaining to the child; (b) to show how we may learn about the child's mental status from the effects of a prescribed course of treatment; (c) to show the social, racial and educational significance of varying degrees of mentality.

The following topics are treated: Methods and purposes of clinical psychology; mental classification of children; pathological classification of the feeble-minded; the treatment of special classes of children; social, racial and educational aspects of feeble-mindedness; mental characteristics of the feebleminded.

## 107. Mental Tests-Four hours. Fall Quarter.

The purposes of the course are: (a) to make the student familiar with the means and methods which are employed to determine the child's general intelligence and the efficiency of his individual mental processes; (b) to point out the social, educational, psychological, and vocational significance of tests.

Topics treated: Various forms of individual tests, such as the Binet series and its modifications; various forms of group tests, such as the Army, Otis, National, and Pressey tests; tests of perception, memory, imagination, thinking, attention, psycho-motor control, and various combinations of mental processes.

108a. Educational Tests and Measurements-Four hours. Fourth year. Required. Fall Quarter.

Chief purpose of the course: (a) to give the student a working knowledge of the best instruments for measuring the child's school progress and his performance level in the school subjects; (b) to discuss the methods of using the educational tests and tabulating the results; (c) to point out their educational significance in all of its phases.

Topics treated: Tests and standards of reading, writing, spelling, arithmetic, geography, and all the other elementary school subjects,

108b. Educational Tests and Measurements-Four hours. Fourth year. Required of students who will teach in the Senior High School.

The purposes of this course are the same as those for 108a. The topics treated will be tests and standards of the high school subjects.
109. Psycho-clinical Practice-Two or more hours. Fall and Spring Quarter.

The purpose of this course is to give the student practice in determining the mental and physical status of children by means of tests, examinations, and the collection of other data. In this course an opportunity is given to put into practice much of the knowledge obtained in Courses 1, 106 and 107.

## 110. General Psychology-Four hours. Any Quarter.

Purposes of the course: (a) to make the student acquainted with psychological theories and concepts; (b) to discuss the nature of the mental processes; (c) to show what relations they bear to each other, due to the nervous system, to the stimuli of the external world, and to the various forms of mental and physical behavior.

Topics: Those which are listed in the text books on general psychology, such as the nervous system and its functions, sensations and images, attention, perception, memory, reasoning, instinct, feeling, emotion, and volition.

## 111. Speech Defects-Two hours. Winter Quarter.

Purposes: (a) to make the student acquainted with such speech defects as aphasia, stuttering and lisping; (b) to show how these defects handicap the child in school and in life; (c) to discuss and demonstrate the methods of remedial and curative treatment.

## 112. History of Auxiliary Education-Two hours.

Purposes: To make the student familiar with the nature, origin, causes and development of the schools for backward and feeble-minded children.

## 113. Vocational Psychology-Four hours. Spring Quarter.

The purpose of this course is to make the student acquainted with employment psychology, personal work in industry and the application of psychology to industry and the vocations in general.
212. Psychological and Statistical Methods Applied to Education -Four hours. Spring Quarter.

Purposes: (a) to give school officials the technique necessary for the solution of educational problems involving the accurate measurement of mental processes; (b) to present the statistical methods employed in the treatment of educational data.
213. Conference, Seminar, and Laboratory Courses-Hours depending upon the amount of work.

Purposes: To make possible more extensive and exhaustive work by the student on problems of special interest to him.

Topics: Formal discipline; sex hygiene; retardation; mental tests; learning; retinal sensations, space perception, etc.: practice in giving educational tests and working up the results in the most useful way, etc.
214. Advanced Educational Psychology-Three hours. Fall, Winter and Spring Quarters. A year's course primarily for graduate students.

The purpose of this course is to give the student (1) a first hand acquaintance with the experimental literature on selected topics on Educational Psychology; (2) an appreciation of psychological methods and experimental technique. The topics to be studied are as follows: Fall quarter, curves of learning, the higher processes in learning, the transfer of training; Winter Quarter, psychological methods, fatigue, curve of work; Spring Quarter, sex differences, heredity, other individual differences.

## ETHICS

In the courses given below it is hoped that two essentials in the training of a teacher-Character and Personality-may be fostered and improved. The young woman who starts out upon her teaching career
with a good ethical foundation, and the advantage of a character, developed through right ideals of conduct and appreciation, has assets which are invaluable.

1. Exhics-Personal Talks on Right Living-Two Periods. One hour credit. Every Quarter.

In this course it is the aim of the Dean of Women to get in touch with the personal side of each student. Living conditions will be taken up, and all matters pertaining to conduct will be open to friendly discussion.
2. Ethics-Ethical Culture. Two Hours, Every Quarter.

A course designed for instruction in the etiquette of every day life; a general appreciation of culture and its necessity in the training of a teacher. Lectures, book and magazine articles, reviews and reports.

## FINE AND APPLIED ARTS

The Department of Fine and Applied Arts aims to prepare teachers to meet all the demands made upon regular grade teachers in public and private schools from the kindergarten up through the high school in all branches of art, and to train special students to act as departmental teachers and supervisors. The courses are open as electives to all students of the College.

The department is well equipped. In addition to the regular equipment there is a museum of ceramics, original paintings, reproductions, and copies of masterpieces, bronzes and tapestries. The Museum of Ceramics is a rare collection of pottery, containing ancient and modern specimens from different countries, including Japan, Austria, Holland, France, England and America.

## Course of Study

Two or four year course in Fine and Applied Arts.
In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: Art 1, 2, 3, 4a, 14, 16 and Industrial Arts 10.
Second Year: Art 4b, 5, 6, 7, 9, 11, 12, 13 and Industrial Arts 5.
Third Year: Art 8, 100, 101, 102, 104 and four hours of art to be selected by the student.

Fourth Year: Art 104a, 105, 201 and six hours of art to be selected by the student.

1. Public School Methods-Four hours. Fall and Winter Quarters. Fee, 50c.

Freehand drawing, perspective, color, composition and design adapted to the needs of intermediate grades and junior high school. Mediums: pencil, charcoal, water, colored chalk.

Principles of teaching in connection with each unit of work.
2. Primary Grade Methods-Four hours. Fall and Spring Quarters. Fee, 50c.

Freehand drawing, perspective, color, composition and design, adapted to the needs of the first four grades. Principles of teaching in connection with each unit of work.
3. FREEHAND DRAWING-Four hours. Each Quarter.

Drawing in charcoal, pencil and colored chalk from nature and from still life. Principles of perspective.

4a. Applied Design-Four hours. Fall Quarter.
Principles of design. Creative design with relation to textiles. Processes of stitchery, block printing, tie-dying and batik.
grades of instruction; testing results; school problems related to history, such as, the place of history in the curriculum, and the relation of history to other subjects.

## 16. Spanish American History-Four hours

A course designed to show the growing relations between the United States and the republics of the south. In tracing the experience of the Spanish American people, attention will be given to the work of Spain in establishing the Empire, the movement for independence, the social, political and economic growth, international relations and the Monroe Doctrine, Panama and the purchase of the Danish West Indies, and the new Pan-Americanism.

## 20. American Political Theories-Four hours.

Early political theory; development of political thinking in America from the colonial period to the present, including the theories of the Revolution, the Constitution, the Jeffersonian and Jacksonian democracies, the slavery controversies, states' rights, and the modern tendencies; internationalism, pacifism, militarism, interpretations of democracy.

## 22. Local Government-Four hours.

Municipal, county, and state government in the United States. The government of Colorado will be given special attention.
25. Comparative Government-Four hours.

The federal government will be studied in comparison with the governments of other important countries.

## 26. The Teaching of Civics in the Elementary School-Two hours.

The development of civics instruction from the study of the Constitution to the present community civics; the value of civics in education for citizenship; the purpose of instruction in government; courses of study; methods and materials for the several grades of instruction.

## 27. Contemporary History-Three hours.

The course is concerned with current interests in this and other countries; their growth and interpretation. It includes the reading of periodicals and recent publications, and class discussion.

## 28. Ancient Social History-Four hours.

This is a survey of the development of society among the early peoples, with emphasis on the social and economic phases.

## 107. Modern England and the British Empire-Four hours.

A course dealing with the political, social and institutional history of the English people since 1660.
112. American Constitutional Development-Four hours.

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This course deals with the origin and growth of the Constitution. The fluence of the interpretation of the document on the government and the eat cases which have grown out of the interpretation receive attention.
$i$ 113. The Literature of American History-Four hours.
I A survey of American History with reference to the materials and problems for use in schools.
117. The Teaching of History and Civics in High Schools-Three hours.

The development of instruction in these subjects in high school; their place in the high school program; aims and values of instruction; problems connected with the teaching of these subjects; the relation between history and civics teaching.
118. Financial History of the United States-Four hours.

The origin and growth of the currency, banking and revenue systems of the United States, with special emphasis on the tariff and currency systems; the recent achievements in the financial system as expressed in the federal reserve law, the farm loan law, financing of the war, and the reconstructive programs.
123. International Relations-Four hours.

A study of the basic principles of international relations; the development and application of these principles in recent European relations; American international ideals as expressed in American diplomacy; the Monroe Doctrine, Pan-Americanism, the League of Nations, and disarmament.

## 124. History of Far East-Four hours.

This is a study of the modern history of India, China, Japan, and the adjacent islands, with special reference to their relations with Europe and the United States.

## 215. Research in History.

Students doing graduate work in History and Political Science may arrange work as desired. The course is intended for advanced students who wish to investigate problems which arise in the teaching of History and Civics.

## HOME ECONOMICS

The Home Economics Course not only trains teachers of Home Economics, but also trains homemakers in the selection, use and care of materials for the home. It has as an ideal the establishment of sane standards of living, including the economic, social and esthetic sides of life.

It is the policy of the Home Economics Department to recommend as teachers of the subject only those students who have completed the four years course.

## Course of Study*

In order to meet the requirements of the Federal Board for Vocational Education under the Smith-Hughes Act a special arrangement of the course of study for Home Economics students has been made as follows:

Fall Quarter $\quad$\begin{tabular}{l}
Winter Quarter

$\quad$

Spring Quarter
\end{tabular}

Physical Education is required each quarter of the first and second years, with or without credit.

## SECOND YEAR

| Fall Quarter |  |
| :---: | :---: |
| Biol. |  |
| Eng. |  |
| H. A |  |
| Chem | . 108 .................. 3 hrs |
| Elect | tive ..................... 3 hrs |


| Quarter |  |  |
| :---: | :---: | :---: |
| Ind | . Arts | 4 |
| Eng. 16. |  |  |
| ${ }_{\text {Chem. }}{ }^{\text {A. }}{ }^{\text {a }}$ |  |  |
|  |  |  |
| ectiv |  |  |




Spring Quarter
Soc. 105 ......................... 4 hrs H. A. 109 .................... 4 hrs
 Elective ........................ 4 hrs

## FOURTH YEAR



| Winter Quarter <br> H. A. 112 <br> Teaching $\qquad$ <br> H. S. 107 $\qquad$ |
| :---: |
|  |  |
|  |  |
|  |  |


| Spring |
| :---: |
| Teaching |
| H. S. 108 |
|  |

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## Household Arts

## 1. Textiles-Four hours. Fall Quarter and Spring.

This course includes the history and development of textiles, the study of fibers, the identification and economic use of fabrics.

## 2. Design-Four hours. Winter Quarter.

This is a fundamental course in theory and practice of design, the study of elements and principles of design.

## 3. Garment Making-Four hours. Fall and Spring.

This course teaches the fundamentals of plain, hand and machine sewing as applied to simple garments for adults and children; the use of commercial patterns and the operation and care of machines.

## 4. Millinery-Four hours. Fall and Spring Quarters.

This course includes a discussion of practical and artistic principles of millinery; designing and modeling hats of various types in paper and crinoline; making wire buckram and frames and the use of velvet, silk and straw in hat making.

## 5. Drafting and Pattern Making-Four hours. Winter Quarter.

This course teaches the making of patterns by drafting, modeling and designing. All foundation patterns are drafted to measurements of individual and fitted. From these, other patterns are made to be used in H. A. 6.
6. Elementary Dressmaking-Four hours. Spring Quarter.

Patterns designed and made in H. A. 5 are used for garments made in this course. This course establishes the fundamental principles in dressmaking and gives practice in the selection and purchase of appropriate materials and the application of the principles of design.

## 107. Costume Design-Four hours. Fall Quarter.

A course offering opportunity for solution of a great variety of problems in dress design; as design for various elements of dress, for different types of personality, for formal and informal occasions, for hats and accessories, etc.
108. Costume Design 2-Four hours. Winter Quarter.

A continuation of Costume Design 107. Designs draped in paper, cheesecloth, cambric and various effective materials.
109. Advanced Dressmaking-Four hours. Spring Quarter.

This course includes work in tailoring as applied to women's and children's garments; the making of an afternoon and evening gown. Draped designs made in Costume Design 108 used as patterns in this course.
110. Advanced Textiles-Four hours. Winter Quarter.

This course deals with the chemical properties of textiles; the methods of cleansing fabrics; the study of dyes and dying of different types of fibers.
111. Home Economics-Four hours. Fall Quarter.

A lecture course on the history and growth of Home Economics; the relation of Home Economics subjects to education; the place these subjects should hold in the curriculum and the methods employed in teaching them.
112. House Plans and Interior Decoration-Four hours. Winter Quarter.

This course is a non-technical course in the construction of the house, but includes a study of plans, specifications, building materials; the planning of a house for a family which actually exists.

The instruction in interior decoration aims to give the student a thorough knowledge of theory and practice of the application of principles of design and color to interior decorations. House planned in H. A. 112, decorated in this course.

## Household Science

1. Food and Cookery-Four hours. Fall Quarter. Fee $\$ 3.00$.

A general survey of the principles of cookery and study of foods.
2. Foods and Cookery-Four hours. Winter Quarter. Fee $\$ 3.00$. Continuation and completion of H. S. 1.
3. Cookery and Table Service-Four hours. Spring Quarter.

Planning, preparation and serving of various types of meals. Special attention is given to care of dining room and table service.
103. Dietetics-Four hours. Winter Quarter. Fee, $\$ 3.00$.

Study of food values, cost and adaptation to individuals and families.
104. Catering-Planning and Serving Functions-Spring Quarter.
105. Child Care-Four hours. Spring Quarter. Parental care, child hygiene, care and feeding.
106. Home Nursing-Four hours. Fall Quarter.

Care of sickroom, care of patient in the home, first aid.
107. Home Management-Four hours. Every Quarter.

Sanitation and care of house. Living in practice cottage.
108. Home Management-Four hours. Spring and Summer Quarters,

Care of family, family budget, relation of home to school, church and state.

## HYGIENE AND PHYSICAL EDUCATION

Functions of the Department.
An immediate, and also an ultimate aim of Education is vigorous, aggressive health. This department's function in the institution is to assist in the realization of this aim through:
(1) Health examinations of all students and specific hygienic instruction based on the findings in each case.
(2) Personal health conferences with Medical Advisers for the purpose of assisting students to form wise health habits.
(3) Promotion of health through directed physical activity, and through instruction in informational hygiene.
(4) Sanitary supervision of the environment of the student group.

In addition to the above, the Department outlines a major course for those preparing for positions as teachers, or as supervisors of physical education in the public schools, or as playground directors. As more than one-half of all the states have recently passed compulsory physical education laws requiring a definite program of physical education for all school children, the demand for trained teachers in this field exceeds the present supply.

## Equipment

The department is equipped with the necessary examination and class rooms, instructional apparatus, gymnasia, athletic fields and playgrounds to accomplish the functions outlined above.

## Required Work

All first and second year students are required to take an active (exercise) course each quarter in residence. Where physical disability makes it inadvisable for a student to participate in the regularly organized class activities, work in a corrective class, or other special regimen, depending on the needs of the student, is prescribed. No one is excused from this requirement.

## Gymnasium Dress

An approved gymnasium uniform is required in all activity courses. Satisfactory work cannot be done in regular street or school clothes.

## Health Examinations

A thorough health examination is required of each student as soon as practicable after registration. Matriculation is not completed until this examination has been made and recorded. The Medical Advisers keep regular office hours for free consultation with students concerning personal health problems. These examinations and conferences have for their object the prevention of illness and the promotion of vigorous health.

## Course of Study

Two and four year courses for majors in Physical Education are outlined. The four-year course is recommended as best preparing students to enter this field of education.

In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: Hygiene and Physical Education 1, 2, 5, 7, 103, 103a, 107a, and Library Science 1.

Second Year: Hygiene and Physical Education 3, 4, 8, 12, 108a, 112a, 114a.

Third Year: Hygiene and Physical Education 11, 104, 109, 113a, Educational Psychology 106 or 107, and one or more activity courses each quarter.

Fourth Year: Hygiene and Physical Education 6, 117, and Educational Psychology 109.

The courses offered by the department are divided into two classes as follows:

## 1. Informational Courses.

Hygiene and Physical Education 7, is required of all students in the Junior College. Hygiene and Physical Education 108, is required of all Senior College Students.

## II. Practical or Activity Courses.

To comply with the college physical education requirement, the general student should select courses in the second group. Courses in the first group are intended primarily for major students, but may be elected by those in other departments. The technical courses for major students are listed in the second group and are open to other students only by permission.

## I. Informational Courses

1. Phystology and Hygiene of Exercise-Spring Quarter. First Year. Three periods. Three hours.

Iectures, demonstrations, recitations. A course for major students, but open to all.
2. Anatomy and Kinesiology-Fall Quarter. First Year. Three periods. Three hours.

Lectures, demonstrations, recitations. Use is made of skeleton, mannikin, charts and anatomical atlases in connection with text book assignments.
3. Anthropometry and Physical Examinations-Fall Quarter. Second year. Four periods. Four hours.

A lecture, recitation practice course. Principles and methods of making physical measurements; the determination of norms for different age groups; applications of principles to physical education problems; the detection and correction of common physical defects. Required of Physical Education majors the second year. Open to others who have had Biology.
4. Play in Education--Spring Quarter. Second year. Three periods. Three hours

A discussion, reference, recitation course. Theories and applications of play in modern education; the place of play in the daily school program; play and athletics as training for citizenship; the practical administration of play and athletics from an educational viewpoint, are some of the topics considered. A second year major course.
5. History of Physical Training-Winter Quarter. First year. Two periods. Two hours.

The place given to Physical Education in the life of different nations, Beginnings of modern physical education; recent rise of play and recreation movement; effect of the World War on development of physical education in the United States and other countries, are among the topics considered.

## 6. Research in Physical Education.

Qualified Senior College and Graduate students may select a subject for research in Physical Education. Fourth year majors are required to write a thesis on a selected subject. Credit hours depend on quality and amount of work accomplished.
7. General Hygiene-Each Quarter. Three periods. Three hours. Junior College required.

A lecture, discussion course on general hygiene. Many lectures are illustrated. Consideration is given to: (a) mortality statistics as a basis for effective hygiene; (b) agents injurious to health; (c) carriers of disease; (d) causes of poor health; (e) defenses of health; (f) producers of health; (g) methods of teaching hygiene.
108. Individual Hygiene-Fall and Spring Quarters. Three periods. Two hours. Senior College required.

An informational course on the essentials of individual health conservation and improvement.
9. Child and School Hygiene-Four periods. Four hours. 1).
10. Occupational Hygiene-Fall Quarter. Two periods. Two hours.

A course dealing with Occupational Hygiene. Gives chief consideration to the health hazards of different occupations and the means of prevention. Has informational and practical value to the teacher who desires to be informed on health subjects. Not given 1921-22.
11. Public Health-Spring Quarter. Three periods. Three hours.

This course deals with community, state, national, and international health organizations and problems. An informational course of importance to all teachers. Required of Physical Education majors during third year.
12. First Aid-Winter Quarter. Two periods. Two hours.

A course covering the usual subject matter on the right thing to do in cases of emergency or injury.

## II. Practical or Exercise Courses

(General students should select activity courses from this group)
101. Light Gymnastics-(Women) - Winter Quarter. Three periods. One hour.
102. Gymnastics-(Men) -Winter Quarter. Three periods. One hour.
103. Gymnastics-Fall Quarter. Three double periods. Three hours.

A major course for the first year.

103a. Gymnastics-Winter Quarter. Three double periods. Three hours.

A continuation of No. 103. For major students in Physical Education.
104. Apparatus. Fencing. Archery-(Women)—Spring Quarter. Three double periods. Third year. Three hours.

For major students in Physical Education.
105. Personal Combat Games, Heavy Apparatus and Tumbling-(Men)-Spring Quarter. Three periods. One hour.

Boxing, fencing and wrestling. Tumbling and apparatus work.
105a. Personal Combat Games, Heavy Apparatus and Tumbling(Men) -Three double periods. Three hours. For majors.

A continuation of No. 105. Advanced work.
106. Singing Games and Elementary Folk Dances-Winter Quarter. Three periods. One hour.

A course giving play material for the Elementary Grades.
107. Folk and National Dances-Winter and Spring Quarters. Three periods. One hour.

A selected list of folk and national dances suitable for school and playground use. This course is intended to give material for the upper grade and high school groups.

107a. Folk and National Dances-First year. Spring Quarter. Three double periods. Three hours.

A course for Physical Education majors. Others admitted only by special permission.

A selected list of folk and national dances suitable for school and playground use. Note book and reference requirements and practice in teaching the dances is required.
109. Classical Dancing-Winter Quarter. Three periods. One hour.

Advanced technic and classical dances. Prerequisite Course 119 or 119a.
110. Interpretative Dancing-Spring Quarter. Three periods. One hour.

A continuation of No. 109.
111. School Gymnastics-Spring Quarter. Three periods. One hour.

Daily programs for different grades, principles of selection and arrangement of exercises; class organization and conduct form the principal divisions of the course.
112. Plays and Games-Fall and Spring Quarters. Three periods. One hour.

A selected list of plays and games for the intermediate grades.
112a. Plays and Games-Fall Quarter. Three double periods. Three hours.

Second year major course. A selected list of games suitable for intermediate grades and the vacation playground.
113. Playground Organization and Supervision-Spring Quarter. Three periods. Three hours. Third year.

Third year major course, but open to other third or fourth year students who are qualified. Lectures, and practice on playground in contact with actual playground problems.
114. Athletics for Women-Every Quarter. Three periods. One hour.

A course in group and team games. Material suitable for upper grades and high school is presented.

114a. Athletics-Spring Quarter. A second year course for majors in Physical Education.

This course will deal with the rules, development of skill, and the teaching of sports and games suitable for upper grade and high school girls. A second year course. Five periods. Three hours.
115. Recreation Course-Summer Quarter. Four periods-half quarter. One hour.
116. Athletic Games-(Men)-Each Quarter. Three periods. One hour.

Football, basketball, baseball, and track athletics depending on season.
117. Athletic Coaching-Fall, Winter and Spring Quarters. Four periods. Third year. Three hours.

A major course for those preparing for the physical education field. Advanced students will be assigned to coach groups in one or more athletic team games. By arrangement. This course may be repeated.

## 118. Corrective Gymnastics.

A course for those who are not able to take the regular class work. A special regimen, depending on the disability, is worked out for each individual case.
119. Esthetic Dancing-Fall and Winter Quarters. Three periods. One hour.

Technic of the dance, and the development of bodily coordination are the aims of the course.

119a. Esthetic Dancing-A major course. Second year. Winter Quarter. Five periods. Three hours.

Technic and history of the dance. This course deals with this subject from the standpoint of the teacher of physical education.

## INDUSTRIAL ARTS

The Industrial Division includes industrial arts, fine and applied arts, and commercial arts. The courses are varied and are organized especially along lines dealing with the technical phases of practical arts education, opportunity being given for study along historical, practical and theoretical lines. An excellent training department, housed in the Training School Building, gives full opportunity to put into practice in a teaching way the ideas presented in the various courses. This gives an opportunity for the individual students not only to become acquainted with the underlying principles in the work, but also the added advantage of teaching these branches in the Training School under expert supervision.

The Woodworking, Drafting, Printing and Bookbinding Departments of Colorado State Teachers College are the most modern departments to be found in the Middle West. The departments occupy the first and second floors of the Guggenheim Hall of Industrial Arts. The rooms are large, well ventilated and well lighted. The students in these departments are never crowded for room or hindered in their work for lack of equipment. All equipment is of the latest and best type and is always kept in first-class working condition. It is the aim of the departments to employ methods in woodworking, drafting, printing and bookbinding as thorough and practical as are to be found in the regular commercial shops.

## Course of Study

Two, three or four years for majors in Industrial Arts.
In addition to the core subjects and free electives included in all the curricula as listed on page 47, this department requires:

First Year: Industrial Arts 1, 2, 3, 8, 10, 12, and Art 3.

Second Year: Industrial Arts 5, 11, 13, 14, 19, and Art 11.
Third Year: Industrial Arts 105, 109, 118, 120.
Fourth Year: Industrial Arts 104, 121, 116 and eight hours in Industrial Arts to be selected by the student,

1. Elementary Woodwork-Four hours. Fee, $\$ 2.00$. Every Quarter.

This course is arranged for those who have had no experience in woodworking and is designed to give the student a starting knowledge of the different woodworking tools, their care and use. The construction of simple pieces of furniture is made the basis of this course.
2. Intermediate Woodwork-Four hours. Fee, \$2.00. Every Quarter.

This course is a continuation of Course 1 and is designed for those who wish to continue the work, and deals with more advanced phases of woodworking.
3. Woodworking for Elementary Schools-Four hours. Fall and Spring Quarters.

This is a methods course and deals with such topics as equipment, materials used, where and what to buy, kinds of work to be undertaken in the different grades, the preparation and presentation of projects, the making of suitable drawings, and the proper mathematics to be used in woodworking.

## 4. Toy Construction-Four hours.

The purpose of this course is to train the teacher in the construction of toys, bird houses, etc. The making of original designs will be emphasized.

This course should appeal to those taking kindergarten and grade work.
5. Vocational Education-Three hours. Fall and Spring Quarters.

The course deals with the historical development and the fundamentals of teaching practical arts subjects in their relations to other subjects of the school curriculum and their application in future activities that the child will enter.

## 6. Repair and Equipment Construction-Four hours. On demand.

This course has for its base the building of various types of equipment and the use of power machines in working out these problems. This is an especially valuable course for those who wish to emphasize the large phases of vocational education.

8a. Art Metal-Four hours. Fee, $\$ 2.00$. Fall and Winter Quarters.
This course has in mind the designing and creation of simple, artistic forms in copper, brass and German silver.

8b. Art Metal-Four hours. Winter and Spring Quarters.
A continuation of 8 a . The course in general includes the designing and executing of simple, artistic jewelry pieces, such as monograms, simple settings of precious stones, and the development of advanced artistic forms in copper.
10. Elementary Mechanical Drawing-Four hours. Fall and Spring Quarters.

This course is designed to give a knowledge of the use of drawing equipment and materials. Problems presented include geometrical drawing, elements of projection, development of surface, isometric and oblique projections, simple working drawings and lettering.
11. Projections-Four hours. Winter Quarter.

The purpose of this course is to give a student a working knowledge of the fundamentals of orthographic projection as applied to points, lines, planes, solids and shadow and applications.
12. Elementary Architectural Drawing-Four hours. Winter Quarter.

This course includes the making of complete designs of simple one-story cottages together with details and specifications of same.
13. Intermediate Architectural Drawing-Four hours. Fall Quarter.

This course is a continuation of Course 12 and deals with the drawing of plans of cement, brick and stone structures, culminating in complete plans and specifications for resident and public buildings.
14. Care and Management-Three hours. On demand.

This course is designed to train students to care for, repair and adjust hand and power tools of the woodworking department.
19. Wood Turning-Four hours. Fee, $\$ 2.00$. Winter Quarter.

The aim of this course is to give the student a fair knowledge of the woodworking lathe, its care, use and possibilities. Different types of problems will be worked out, such as cylindrical work, working to scale, turning duplicate parts, turning and assembling, the making of handles and attaching them to the proper tools. Special attention will be given to the making of drawings such as are used in ordinary wood turning.

## 104. Pre-vocational Education-Two hours. Spring Quarter.

The course is divided into two definite sections: First the fundamental basis for pre-vocational work, the movement from the standpoint of special governmental and state schools, rural schools, state movements and vocational clubs, with suggestions for furthering the movement from state and community standpoints; second, the course of study and special plans for organization of pre-vocational work in public education.
105. Advanced Architectural Drawing-Four hours. Spring Quarter.

This course is designed to give the student a simple working knowledge of the great historic material such as columns, capitals, pediments, etc., in their application to modern buildings such as churches, schools, and other public buildings.

Each student will be expected to design a public, or semi-public building as a part of this course.

109a. Art Metal-Four hours. Fee, $\$ 2.00$. Spring Quarter.
The base for this course is the designing, making and finishing of artistic jewelry in semi-precious and precious metals; also simple artistic jewelry, with all the steps that are fundamental in stone setting and finishing.

## 109b. Art Metal-Four Hours. Winter and Spring Quarters.

A continuation of 109A, with applications in teaching of jewelry work in the public schools. Advanced problems in design as applied to set metal, wire work, chasing and repousse.

## 117. Elementary Machine Design-Four hours. Fall Quarter.

This course includes sketches, drawings and tracings of simple parts, such as collars, face plates, screw center, clamps, brackets, couplings, simple bearings and pulleys. Standardized proportions are used in all drawings.
118. Advanced Machine Design-Four hours. Spring Quarter.

A study is made of the transmission of motion by belts, pulleys, gears and cams. Sketches, details and assembled drawings are made of valves, vises, lathes, band saws, motors and gas or steam engines.
120. Pattern Making-Four hours. On demand.

The topics emphasized in this course will include woods best suited for various work, glue, varnish, shellac, dowels, draft, shrinkage and finish. The practical work will consist of patterns for hollow castings, building up and segment work.

## 121. Advanced Cabinet Making-Four hours. On demand.

The course is planned to cover advanced phases of cabinet work, including paneling, dovetailing, secret nailing and key joining. These technical processes will be worked out on individual projects.

## 124. Machine Work-Four hours. On demand.

This course is designed to give the student a general knowledge of the care and operation of woodworking machinery. The setting of cutters and their manipulation embraces the general basis of this course.

## 201. Seminar-Four hours.

Individual research work in the field of practical arts. Problems to be selected upon consultation.

This is a conference course. Conference hours will be arranged to meet the demands of students in the course. For other courses in Industrial Education, see the Department of Education, Senior and Graduate College.

## Printing

## 1. Elementary Printing-Four hours. Every Quarter.

The aim of this course is to acquaint the student with the various tools and materials of a print shop and to teach him the fundamentals of plain type-composition. He will carry simple jobs thru the various stages from composition to making ready and printing on the press.

1b. Elementary Printing-Four hours.
A continuation of Printing 1.
1c. Elementary Printing-Four hours.
A continuation of Printing 1b.
2. Intermediate Printing-Four hours. Every Quarter.

A continuation of elementary printing with a view to making the student more proficient in fundamentals of the art. The principles of typographic designs will be studied in the designing and composing of letterheads, tickets, programs, etc. Color study in selection of papers and inks.

2b. Intermediate Printing-Four hours.
A continuation of Printing 2.
2c. Intermediate Printing-Four hours.
A continuation of Printing 2b.

## 3. Advanced Printing-Four hours. Every Quarter.

A continuation of the study of typographic design in the laying out and composition of menus, title and cover pages, advertisèments, etc. Imposition of four and eight-page forms, advanced presswork and a study of plate and paper making will be given.

3b. Advanced Printing-Four hours.
A continuation of Printing 3.
3c. Advanced Printing-Four hours.
A continuation of Printing 3b.
4. Practical Newspaper Work-Four hours.

The various processes incident to the printing of a newspaper will be performed by the student in this course.

4b. Practical Newspaper Work-Four hours.
A continuation of Printing 4.
4c. Practical Newspaper Work-Four hours.
A continuation of Printing 4 b .
5. Shop Management-Four hours.

Organization of the various forces of the shop to maintain production with efficiency. Planning for the mechanical processes of printed product. Planning and selection of equipment. Maintenance of equipment.
6. Shop Accounting-Four hours.

Keeping of shop records and accounts. Purchase of printing materials.

## 7. Cost Accounting-Four hours.

Advanced work growing out of shop accounting, dealing with estimating, production records and the costs of printing.

## Binding Art and Leather Craft

1a. Elementary Bookbinding-Four hours.
This course includes the following: tools, machines, materials, and their uses, collating and preparing their sheets for sewing, sewing on tape and cord,
preparing of end sheets, trimming, glueing, rounding and backing, head-binding, binding and preparing backs for covers, selecting cover materials, planning and making of covers and all steps necessary for the binding of full cloth, buckram and paper bindings, having spring or loose backs; also, the binding of onequarter loose and tight back leather bindings with plain and fancy edges. The making of small boxes, writing pads, memoranda books, leather cases, cloth portfolios and kodak albums.

## 1b. Elementary Bookbinding-Four hours. <br> A continuation of Bookbinding 1a.

1c. Elementary Bookbinding-Four hours.
A continuation of Bookbinding 1b.
2a. Intermediate Bookbinding-Four hours.
This course includes the binding of books in half leather, half morocco, cowhide, calf, sheep, and fancy leathers; also the planning and making of full leather travelers' writing cases, music cases, and art leather work.

2b. Intermediate Bookbinding-Four hours.
A continuation of Bookbinding 2a.
2c. Intermediate Bookbinding-Four hours.
A continuation of Bookbinding 2 b .
3a. Advanced Bookbinding-Four hours.
This course is a review of both of the other courses in higher grade work and construction. Full leather bindings with raised panels is given in this course. Gilt edging, fancy edges including starch and agate edges.

Finishing in antique and gold, hand lettering in all its phases, tooling in gold and antique, stamping on stamping machines, of cloth, leather, and other materials in blind, gold and other metals and foils.

3b. Advanced Bookbinding-Four hours.
A continuation of Bookbinding 3a.
3c. Advanced Bookbinding-Four hours.
A continuation of Bookbinding 3b.

## 4. Shop Management-Four hours.

The organization of the various forces of the shop to maintain production and efficiency in the work. Planning of the mechanical work of binding. Laying out and selection of materials and methods of equipment.
5. Shop Accounting-Four hours.

Keeping of shop records and accounts. Purchasing and selection of materials such as tapes, papers, buckram, leathers, etc.

## 6. Cost Accounting-Four hours.

Advanced work growing out of shop management, shop accounting and equipment, dealing with the factors that enter into the estimating of production costs, such as materials and general shop expenses, etc.

## COMMERCIAL ARTS

There is a constantly growing demand for well trained Commercial Teachers. This demand comes from the vocational and technical schools, high schools, normal schools and colleges. It is the purpose of the Commercial Department to meet this demand by offering first-class instruction in practical up-to-date courses that will prepare teachers for this line of teaching.

A four-year course carrying with it the A. B. degree is outlined below. This course may be taken in units of two, three or four years. If the stenographic course is elected, the student will follow the outline below for the third and fourth years with core subjects as outlined on page 47 for the first and second years. The usual two-year teacher's certificate will be issued upon completion of two years work. Students who have
had previous commercial training either in school or in offices will be allowed to enter advanced classes. Advance credit will be allowed for work done in creditable schools.

## Course of Study

Two years or four years for majors in Commercial Arts.
In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: Commercial Arts 50, 51, 52, 53, 56 and Industrial Arts 5.
Second Year: Commercial Arts 54, 150, 151, 153 and Geography 7.
Third Year: Commercial Arts 1, 2, 11, 12, 13 and 40.
Fourth Year: Commercial Arts 3, 4, 6 and 17.

1. Principles of Shorthand-Required of majors in Commercial Arts. Four hours. Fall Quarter.

A study of the first ten lessons in Gregg Shorthand with supplementary exercises.
2. Principles of Shorthand-Required of majors in Commercial Arts. Four hours. Winter Quarter.

A study of the last ten lessons of Gregg Shorthand with supplementary exercises. This course completes the study of the principles of shorthand.
3. Dictation-Required of majors in Commercial Arts. Four hours. Spring Quarter.

A brief review of word signs, phrasing and the vocabulary of the Gregg Manual, after which brief dictation will be given of both familiar and unfamiliar matter. Enough work will be given in this course to make one proficient in taking accurately ordinary dictated correspondence.
4. Speed Dictation-Required of majors in Commercial Arts. Four hours. Winter Quarter.

In this course more stress will be placed upon speed in shorthand, with the idea in mind that a student finishing this course should be able to take any dictated matter. The use of the Dictaphone will be given in this course.
6. Methods in Commercial Education-Required of majors in Commercial Arts. Three hours. Spring Quarter.

The entire commercial field will be included in this study; equipment; the course of study; special methods; equipment of teacher; relation of business school to the community.
11. Elementary Typewritivg-Required of majors in Commercial Arts. Four hours. Every Quarter.

Beginning work in touch typewriting, covering position at machine, memorizing keyboard, proper touch and correct fingering, with instruction in care of machine.
12. Intermediate Typewriting-Required of majors in Commercial Arts. Four hours. Every Quarter.

Study of approved forms and circular letters, addressing envelopes, manifolding and tabulating.
13. Advanced Typewriting-Required of majors in Commercial Arts.. Three hours. Spring Quarter.
17. Office Practice-Required of majors in Commercial Arts. Twelve hours. Every Quarter.

This course consists of intensive practice in a "Model Office." Students are required to do five hours of continnous work daily, five days per week, taking dictation and transcribing. This course also includes the operation and use of modern office appliances such as the mimeograph, mimeoscope, dictaphone, adding machine, filing system, etc. This work is very carefully syste-
matized and consists of actual correspondence. This comes from the president's office, the deans, and heads of departments. Outside work from churches and charitable institutions is solicited also.

## 40. Business English-Four hours. Fall Quarter.

The elementary principles involved in writing correct English. The sentence, the paragraph, grammatical correctness, effectiveness, clearness, and punctuation.
50. Elementary Accounting-Required of Commercial majors. Four hours. Fall Quarter.

A general introduction, giving the historical background of the subject and a brief statement of the profession. The foundations of double entry bookkeeping. Assets, liabilities, proprietorship, the balance sheet, income, expenses, profit and loss statement. The entire class period is given to discussion and an average of one hour daily is required for laboratory work.
51. Intermediate Accounting-Required of Commercial majors. Four hours. Winter Quarter.

Partnerships, introduction to corporation accounting, and many miscellaneous accounting and business methods. Two complete sets of books are written up in this course, one illustrating a partnership and another some feature of corporation accounting.
52. Advanced Accounting-Required of Commercial majors. Four hours. Spring Quarter.

This course includes more advanced principles of accounting, treating special corporation accounts and introducing accounting problems. The work involves both class discussion and laboratory work.
53. Commercial Arithmetic-Required of Commercial majors. Three hours. Winter Quarter.

A thoro treatment of arithmetic from the modern commercial point of view.
54. Commercial Law-Required of commercial majors. Four hours. Spring Quarter.

A treatment of the general principles of common law as applied to business, together with a study of the Colorado statutes and decisions bearing on commercial interests.
56. Penmanship-Required of majors in Commercial Arts. Four hours. Fall Quarter.

Drill in rapid, arm-movement, business writing. The Palmer system will be used.
57. Penmanship-Elective. Winter Quarter.

Continuation of Course 56.
142. Advertising-Elective.

The origin and development of the art of advertising. Special attention is given to the psychology involved in modern advertising and a careful study of the technic of good and bad advertisements.
150. Bank Accounting-Required of majors in Commercial Arts. Four hours. Winter Quarter.

This includes a study of state and national banking laws, loans, discounts, commercial paper, methods and principles of banking and saving accounts. A set of books illustrating several days of business will be written. Burroughs bookkeeping machines are used in connection with this course.
151. Cost Accounting-Required of majors in Commercial Arts. Four hours. Fall Quarter.

A study of material cost, labor cost, overhead expense, distribution of expense and managing expense. A set of books on manufacturing costs will be written.
153. Salesmanship and Business Efficiency-Three hours. Required of majors in Commercial Arts.

A study of the underlying principles of salesmanship; the psychology of the making of a sale. This course also includes a careful study of retailing.
211. Business Administration-Elective.

The principles of industrial management and the organization of the modern office. Various types of organization, the labor force, payment of the worker, records of raw material and unfinished goods, etc.

## 220. Seminar-Any Quarter.

An opportunity will be given for research work on problems in the commercial field. Problems to be selected in conference with the head of the department. This course is planned as a conference course.

## THE LIBRARY

The main library of the College contains about fifty-five thousand volumes, with several thousand pamphlets, a large picture collection, stereopticon slides and other equipment. The building is centrally located on the campus, constructed and equipped in the most approved style. It is well lighted with ceiling and table lamps, and with its architectural and other artistic features is well suited to provide a comfortable and attractive environment for readers. The library shelves are open to all, and no restrictions are placed upon the use of the books, except such as are necessary to give all readers an equal opportunity and to provide for a reasonable and proper care of the books and equipment. All the principal standard works of reference are to be found here, with the many indexes and aids for the efficient and ready use of the library.

There are also many rare and valuable works, such as Audubon's "Birds of America," including the large plates; Audubon's "Quadrupeds of North America;" Sargent's "Sylva of North America;" Gould's "Humming Birds;" the works of Buffon, Nuttall, and Michaux, Linnæus, Cuvier, Jardine, Brehm, Kirby and Spence and many other equally noted writers.

In addition to the main library there is a children's branch in the Training School consisting of about 4,000 well selected books for the use of the Training School pupils.

1. Elementary Library Course-One hour. Fall Quarter. Each term. Winter and Spring Quarters, first term. No credit given except to first year students.

An introductory course intended to familiarize the student with the arrangement of the books and general classification scheme of the library. A brief study is made of the catalogs and various indexes; also the standard books of reference, dictionaries, encyclopedias, etc., the purpose being to acquaint the student with the most ready means of using the library.

## 2. Receipt and Preparation of Books-Three hours.

This course includes checking bills, collating, mechanical preparation of books for the shelves, care of books, physical make-up of the book, paper, binding, illustrating, aids and methods in book selection, etc. A good form of library handwriting must be attained in this course.

## 3. Classification and Cataloging-Five hours. Fall Quarter.

A study of the principles of classification. The Decimal System particularly. Classification of books, pamphlets, pictures, and the varied items that may be obtained for the school library. The dictionary catalog, alphabetizing, Library of Congress cards, shelf lists, arrangement of books on shelves.

## 4. Reference Work-Five hours. Winter Quarter.

The subject covers a study of the standard works of reference, such as the principal encyclopedias, dictionaries, atlases, and reference manuals of various kinds. Bibliographies and reading lists, indexes and aids, public documents. Practical questions and problems assigned.

## 5. Periodicals and Binding-Three hours.

Selection and purchase, checking in, relation to printed indexes, filing. Periodicals for certain definite lines. Methods of acquiring in schools. Usecurrent and bound. Collating. Selection and preparation for bindery.

## 6. School Libraries-Three hours.

Organization, relation between the public library and the school. The field of each. Story telling, evaluation of children's literature. Illustrating. Traveling libraries, county libraries.
7. Practical Work in the Library-Five hours. Time required, two hours a day, plus optional work by the student. This is allowed only to those who have taken courses 2,3 , and 4, and calls for certain responsibility on the part of the student.

> Electives suggested:
> Elementary Bookbinding, 1a, 1b, 1 c .
> Elementary typewriting, 11, 12.
> Art, 4b, 6, 9.
> Language, 12 hours, French, German or Latin.

## LITERATURE AND ENGLISH

The English courses in a teachers college should be complete and sufficient for all the needs of public school teachers. Students who expect to become high school teachers of English will find in Colorado State Teachers College all the courses they need in the field of English.

Courses found in university catalogs which have no function in a high school English teacher's training, such as Anglo-Saxon and courses in philology, are omitted.

Courses in composition, oral and written, in oral English and public speaking and dramatic literature, in the teaching of English in the elementary school, in grammar and the teaching of grammar, in etymology, and in the cultural phases of literature, are offered as electives for students who expect to become grade teachers or who are pursuing some other group course than English and wish to elect these from the English Department.

## Course of Study

Two years or four years for majors in Literature and English.
In addition to the core subjects and free electives included in all the curricula as listed on page 47, this department requires:

First Year: Library Science 1, and English 3, 4, 8, 9, 10 and 11.
Second Year: English 1, 2, 6, and 16.
Third Year: Twelve hours of English selected by the student.
Fourth Year: Twelve hours of English selected by the student.

## 1. Material and Methods in Reading and Literature-Four hours.

A survey of children's literature and a study of motivation in the field of reading, oral and silent, for children; the consideration of principles governing the choice of literature in the grades; practice in the organization and presentation of type units, including dramatization and other vitalizing exercises. A somewhat flexible course, affording opportunity for intensive work within the scope of any grade or grades, according to the individual need or preference.

## 2. The Teaching of Written English-Four hours.

This course takes up the problems of teaching formal English, both spoken and written, in the intermediate grades, and the junior high school. The functional teaching of grammar is included.
3. Public Speaking and Oral Composition-Three hours.

The endeavor of this course is to establish the student in habits of accurate in discourse of varied types, including exposition, description, narrative, oratory, argumentation, free dramatization.
4. Speaking and Writing English-Required of all students unless excused by the head of the English department. Three hours. Every Quarter.

Grammar, and oral and written English, from the point of view of their function in guiding the student in the correct use of English in speaking and writing. Practice in sentence making, sentence analysis, recognition of speech faults, and the means of correcting them; and practice in both oral and written composition.

## 5. Speaking and Writing English (continued)-No credit. Every

 Quarter.Oral and written composition. A course planned for those who do not pass English 4. No. credit is given, but the grade made in this course will apply to English 4 previously taken. Designed to give additional practice to those students who do not get sufficient work in English 4 to enable them to use correct English with ease and directness.

## 6. American Literature-Four hours. Spring Quarter.

A course in American literature following the plan of Courses 8, 9, and 10 in English literature.

## 7. The Epic-Four hours. Fall Quarter.

This course consists of a study of the two great Greek epics, The Iliad and speech, and to encourage fluency, vigor and logical marshaling of his thought the Odyssey, in English translations, and outlines of study covering other national epics. The purpose of the course is to furnish teachers in the elementary schools with the materials for story-telling and literary studies embracing the hero tales from Greek and other literature.
8. The History of English Literature-Four hours. Fall Quarter.

A reading course following the development of our literature from 670 to 1625.
9. The History of English Literature-Four hours. Winter Quarter.

A reading course following the development of our literature from 1625 to 1798.

## 10. The History of English Literature-Four hours.

A reading course following the development of our literature from 1798 to 1900 .

## 11. A Study of English Words-Four hours.

No greater help in speaking and writing can be offered a student than a course in English etymologies, word origins, connotations, etc. The study of Latin formerly offered this information to students. Now that only a few study Latin, the English department recommends this course to all students who wish to use exact meanings of words with assurance and accuracy.

## 12. Voice Culture-Four hours. Spring Quarter.

Technical drill for freedom, flexibility and expressiveness of voice. Exercises for clear-cut, accurate articulation. Interpretation of units of literature adapted, by their range of thought, and feeling to develop modulation, color and variety of vocal response.

None of this drill is mechanical; even the technical exercise is controlled by a variety of concepts embodying the qualities sought.
13. The Art of Story Telling-Three hours. Winter and Spring Quarters.

The study of the main types of narrative, with emphasis upon the diction and manner suitable for each. Practice in the art of story telling.

## 14. Dramatic Art-Four hours. Winter Quarter.

The technic of the drama. The analysis and group interpretation of plays. The content of the course varies from year to year. Open only to students who have taken Course 3 .

## 15. Types of Literature-Three hours.

A reading course looking toward an appreciation of literature and covering all the types of literature that can be made interesting to young people and to contribute to the formation of good taste in reading. This would include English, American, and Foreign literature which has become classic.

But no matter how "classic" it is, it still must be attractive. The types covered will be lyric, narrative, and epic poetry, drama, essay, story, novel, letters and biography.

## 16. Contemporary Literature-Three hours.

A second appreciation course similar to Course 15, but dealing with the literature of not more than ten years back. Most teachers of literature leave the impression that literature must age like fiddles and wine before it is fit for human consumption. Such is not the case. Much good literature is being produced every year. After students leave school it is just this current literature that they will be reading, if they read at all. We want to help them form a discriminating taste for reading, and to acquire a liking for reading so that they will be alive to what the world is thinking, feeling, doing and saying after they leave the school.
17. Comedy: A Literary Type-Five hours. Summer Quarter.

The consideration of comedy as a type of drama, with intensive and comparative study of a Shakespearean comedy. The group interpretation of a Shakespearean comedy on the campus. Sometimes, when the class is large, other programs of standard plays are also given.

## 18. Debating-One hour. Fall and Winter Quarters.

A practice course in debating open to any student interested in interclass and inter-collegiate debating. The teams for the inter-college debates are chosen from the students enrolled in this group.

## 20. Intermediate Composition-Three hours. Winter and Spring

 Quarters.This course is planned for students who have passed English 4 and wish to get further practice in the usual forms of composition and do not care to go into the newspaper writing provided for in the courses numbered 100, 101 and 102.

## 21. Intermediate Composition-Three hours. Spring Quarter.

A continuation of English 20.

## 31. The Short Story-Four hours. Fall Quarter.

A study of fifty typical modern short stories to observe the technical methods of modern short story writers and the themes they have embodied in the magazine fiction of the present. The course is based upon Mr. Cross' book, "The Short Story," supplemented by O'Brien's "The Best Short Stories of 1915 and 1916." and other recent volumes on the Short Story. Current magazine stories are also used.
100. Advanced English Composition-Three hours. Fall Quarter.

A course in composition, primarily Senior College, planned for English students and others who desire more practice in writing than they have had in Eng. 4. Students not majoring in English who want to be able to write for print in the school paper, or for professional magazines, should take this course. Department editors of the student weekly paper are selected from students taking this course.

## 101. Journalistic Writing-Three hours. Winter Quarter.

A continuation of Eng. 100. A course in advanced English composition based upon newspaper and magazine work. Every type of composition used in practical news and journalistic writing is used in the course.
102. Journalistic Writing-Three hours. Spring Quarter.

A continuation of Eng. 101.
The editor of the student weekly paper must be a student taking this course, or one who has taken it.

## 103. Advanced Public Speaking-Three hours.

A senior college course for students who wish to get more practice under direction than is given in English 3. Open only to those students who have had elementary public speaking in this college or elsewhere.
105. Oral English in the High School - Two hours. Winter Quarter.

The discussion of practical problems concerning the direction of Oral English in the secondary school; oral composition, literary society and debating activities, festivals, dramatics.
106. The Teaching of English in the High School-Three hours. Spring Quarter.

Principles for the selection of literature for senior high school pupils considered critically; illustrative studies in the treatment of selected pieces; study of type of composition work for high schools, with illustrative practice in writing.

## 107. General Literature-Greek and Latin.

The course concerns itself chiefly with Greek drama, but touches upon Latin literature at the close. Courses 107, 108 and 109 are all readings of English translations of the classic pieces in other literature. These courses are given in collaboration with the Department of Foreign Languages.
108. General Literature-Italian, Spanish and French - Five hours. Winter Quarter.

Readings in English translation of the classic pieces-Italian, Spanish and French literature.
109. General Literature-German, Scandinavian, and RussianFive hours. Spring Quarter.

Readings in the classics of German, Scandinavian and Russian literature similar to those given in Courses 107 and 108.

## 116. The Festival-Three hours. Spring Quarter.

A study of historical or racial festival, its origin, forms and various elements. Research and original work in outlining unified festival plans for schools or communities, reflecting some significant event or idea, or some phase of civilization.

## 120. Lyric Poetry-Four hours. Fall Quarter.

A preliminary study of the technic of poetry, an examination of a number of typical poems to determine form and theme, and finally the application of the knowledge of technic to the reading of English lyric poetry from the cavalier poets thru Dryden and Burns to Wordsworth.
121. Nineteenth Century Poetry-Four hours. Winter Quarter.

A study of English poetry from Wordsworth to Tennyson, including Coleridge, Byron, Shelly, Keats, and the lesser writers from 1798, to 1832.
122. Victorian Poetry-Four hours. Spring Quarter.

Tennyson and Browning, and the general choir of English poets from 1832 to 1900 .
123. Contemporary Lyric Verse-Three hours. Winter Quarter.

An attempt to estimate the significance of current tendencies in poetry, English and American; supplemented by sufficient reference to current verse of other literatures to afford comparison or analogy.
125. Nineteenth Century Prose-Four hours. Fall Quarter.
126. The Informal Essay-Four hours. Spring Quarter.

A study of the familiar essay for the purpose of determining the nature and form of this delightful phase of literary composition. The method in this course is similar to that pursued in the short story; namely, a reading of a number of typical essays as laboratory material for a study of technic and theme.
127. Selected Plays of Shakespeare-Four hours. Fall Quarter.

The life of Shakespeare and a literary study of the plays which are appropriate for high school use, with a proper amount of attention to the method of teaching Shakespeare in high schools. Some account of the theatre in Shakespeare's time.
128. Shakespeare's Plays-Four hours. Winter Quarter.

Thirteen or more plays of Shakespeare. The three courses running thru an entire year take up the whole of Shakespeare's work. It is imperative that students expecting to become high school teachers should have course 127, and desirable that they should have all three.
129. Shakespeare's Plays-Four hours. Spring Quarter.

The remaining twelve plays and poems. This course completes the series of Shakespearean studies.
130. Elizabethan Drama Exclusive of Shakespeare-Four hours. Spring Quarter.

A knowledge of the dramatic literature of the early seventeenth century is incomplete without an acquaintance with the contemporaries and successors of Shakespeare from about 1585 to the closing of the theatres in 1642 . The chief of these dramatists, with one or more of the typical plays of each, are studied in this course.
132. The Development of the Novel-Four hours. Winter Quarter.

The development, technic and significance of the novel.
133. The Recent Novel-Four hours. Spring Quarter.

The reading of ten typical novels of the past five years for the purpose of observing the trend of serious fiction to study the social, educational and life problems with which the novelists are dealing.
134. Modern Plays-Four hours. Winter Quarter.

Reading and class discussion of thirty plays that best represent the characteristics, thought-currents and the dramatic structure of our time.

## 230. Research in English.

This is a graduate seminar provided to take up problems in the teaching of English such as require investigation by graduate students working upon theses in the department of Literature and English. The amount of credit depends upon the work successfully completed.

## MATHEMATICS

All courses in the department are given with a keen appreciation of the modern demand for vitalization of school work. In consequence, the material is presented in such a way as to furnish as many points of contact with real life as possible, and to give the student a comprehensive grasp of the principles of the subject under consideration.

## Course of Study

Two years or four years for majors in Mathematics.
In addition to the free electives, and the core subjects, included in all the curricula as listed on page 47, this department requires:

First Year: Mathematics 2, 5 and 6.
Second Year: Mathematics 7 and 8 or 9.
Third Year: Geography 113, Mathematics 101, 102 and 100.
Fourth Year: Sixteen hours of Mathematics, selected by the student.

1. Solid Geometry-Four hours. Summer Quarter.

The ordinary propositions and exercises of this subject are given. Special attention is given to practical applications.
2. Plane Trigonometry-Four hours. Fall and Summer Quarters.

The solution of the right triangle with numerous practical applications secured by the use of surveyors' instruments in the field; the development of the formulas leading up to the solution of the oblique triangle.
4. Surveying-Four hours. Spring Quarter.

In this course the student becomes familiar with the ordinary instruments of the surveyor: the transit, the compass, the level, etc. He takes up such practical problems as running a line of levels for an irrigation ditch, establishing a sidewalk grade and measuring land.

## 5. College Algebra-Four hours. Winter Quarter.

This course opens with a thoro review of Elementary Algebra with a view to giving a clear knowledge of the principles of the subject. It continues with permutations and combinations, the progressions, and the function and its graph.

## 6. College Algebra-Four hours. Spring Quarter.

A continuation of Course 5 dealing with logarithms, variables and limits, theory of equations, and infinite series. Thruout the needs of the prospective teacher are constantly kept in view.

## 7. Analytic Geometry-Four hours. Fall and Summer Quarters.

This course opens up to the student, in a small way, the great field of higher mathematics. It also connects closely with the subject of graphs in Algebra and forms the basis for the work in the Calculus.
8. The Teaching of Arithmetic-Two hours. Fall, Spring and Summer Quarters.

This course deals primarily with the modern movements and methods in the teaching of Arithmetic. A brief history of the development of the subject and of the methods used in the past is given. The real problems of the classroom are taken up and discussed with a view to giving the student something definite that she can use when she gets into a school of her own.
9. The Teachivg of Arithmetic-Four hours. Winter Quarter.

This course will follow the same lines as Course 8 but in greater detail. It will also give more attention to the development of the principles of the Arithmetic itself.

## 100. The Teaching of Secondary Mathematics-Two hours. Spring

 and Summer Quarters.This course is designed to place before the prospective teacher the best educational thought of the day relating to High School Algebra, Geometry and Trigonometry. Consideration is given to the educational value of these subjects, to the recent improvements in teaching them and to all problems arising in the work of the modern teacher of secondary mathematics.
101. Differential Calculus-Four hours. Winter Quarter.

An introduction to the powerful subject of the Calculus. While care is taken to see that the formal side of the subject is mastered, many problems of a practical nature are introduced from the realms of Geometry, Physics and Mechanics.

## 102. Integral Calculus-Four hours. Spring Quarter.

This course takes up the ordinary formulas for integration and the commoner applications of the Integral Calculus.

## 103. Theory of Equations-Four hours. Fall Quarter.

The course deals with the graph, complex number, cubic and quartic equations, symmetric functions and determinants.
106. Descriptive Astronomy-Four hours. Winter and Summer Quarters.

This course gives an introduction to the fascinating study of Astronomy. It gives the idea of the principles, methods, and results of the science; shows the steps by which the remarkable achievements in it have been attained; and covers the recent investigations respecting the origin and development of the solar system.
200. Advanced Differential Calculus-Four hours. Fall Quarter.

A continuation of the preceding course given over largely to applications of the Calculus.

## 201. Differential Equations-Four hours. On demand.

A discussion of problems which lead to differential equations and of the standard methods of their solution.
202. Advanced Integral Calculus-Four hours. On demand.

In this course the work of the preceding course in integral calculus is rounded out and extended.

## MUSIC

The courses offered by the department are of two kinds: (a) Courses which are elementary and methodical in their nature and are meant to provide comprehensive training for teachers who teach vocal music in the public schools.
(b) Courses which treat of the professional, historical, 1iterary and esthetic side of music, or for those who wish to become supervisors or professional teachers of vocal and instrumental music.

## Private Instruction

The conservatory offers instruction in Voice, Piano, Violin, Orchestral and Band Instruments. Send for special Music Bulletin.

In the Conservatory Department monthly student recitals are given, which provide the students an opportunity to appear in public recital. Two operas are produced annually by the students under the direction of the director of the department.

The Philharmonic Orchestra is a Symphony Orchestra of forty members, comprised of talent from the school and community, which gives bi-monthly concerts. The standard symphonic and concert compositions are studied and played. Advanced students capable of playing the music used by the organization are eligible to join upon invitation of the director.

The college orchestra and band offers excellent training for those interested.

The annual May Music Festival gives the students opportunity to hear one of the world's greatest orchestras and study one of the standard oratorios presented at that time.

The Teachers College Choral Union presents programs during the year, its closing program being the Oratorio given during the Spring Music Festival. All pupils registered in the Conservatory of Music are eligible to the Chorus.

## Course of Study

Two years or four years for majors in Public School Music, Vocal and Instrumental Music.

In addition to the free electives, and the core subjects, included in all the curricula as listed on page 47, this department, for a major in Public School Music, requires:

First Year: Music 1 (unless excused by examination), 2a, 2b, 2c, $7,8 \mathrm{a}, 8 \mathrm{~b}, 8 \mathrm{c}, 10,17,12,13$ and 15 (unless excused by examination).

Second Year: Music 9, 100, 102, 5, 119, 120.
Third Year: Twelve hours of Music selected by the student.
Fourth Year: Twelve hours of Music, selected by the student.
All public school majors are required to become members of the College chorus or orchestra. This may be taken with or without credit.

The courses in Instrumental and Vocal Music will be arranged to suit each individual student in consultation with the director.

1. Sight Reading-Three hours. Fall Quarter.

Notation, theory, sight reading. Designed especially for teachers desiring to make sure of their knowledge of the rudiments of music so that they may be able to teach music in the public schools more efficiently.

2a. Methods for Primary Grades-Four hours. Fall and Spring Quarters.

The work of the Sensory period including the first three grades is intensively studied. The teaching of rote songs. The development and care of the child voice. The first steps in technique.

2b. Music for the Intermediate Grades - Four hours. Winter Quarter.

An intensive study of the grades included in the Associative period. Sight reading, interval study, signatures of keys (major and minor). Care of the voice. All problems of these grades considered and practical solutions offered.

## 2c. Junior High School Methods-Four hours. Spring Quarter.

The adolescent period. Material and methods for this crucial period in the musical life of the child. The changing boy voice. Intensive study of part singing. Musical appreciation for these grades. A practical course to meet the needs of the teacher.
5. Methods for Spectal Students-Three hours. Spring Quarter.

A review in methods for special music students who are looking forward to a major. Conducting, suggestions for assigning work to pupil and teacher in the public schools. A preliminary for the Supervisor's Course,

## 6. Chorus Singing-One hour. Every Quarter.

Worth-while music and standard choruses are studied and prepared to present in concert.
7. History of Ancient and Medieval Music-Two hours. Fall Quarter.

A literary course which does not require technical skill. Open to all students who wish to study music from a cultural standpoint. From earliest music to Bach.

## 8a. Harmony-Three hours. Fall and Winter Quarters.

Beginning harmony. The work consists of written exercises on bases (both figured and unfigured) and the harmonization of melodies in four voices. These are corrected and subsequently discussed with the students individually. Work completed to the harmonization of dominant discords and their inversions.

## 8b and 8c.-Six hours. Winter and Spring Quarters.

Harmonization of all discords. The circle of chords completed, modulation, etc. The harmony courses continue throughout the year, and the work is planned to meet the individual needs of the class.
9. Advanced Harmony-Three hours. Fall Quarter.

A continuation of Courses $8 \mathrm{a}, 8 \mathrm{~b}$, and 8 c .
10. Methods in Appreclation-Two hours. Winter Quarter.

This course is planned to prepare teachers to present more intelligently the work in Appreciation of Music, for which there is a growing demand in all our schools. A carefully graded course suitable for each grade is given. The lives and compositions of the composers from Bach to Wagner are studied.

## 12. Individual Vocal Lessons-Every Quarter.

Correct tone production, refined diction and intelligent interpretation of songs from classical and modern composers. To make arrangements for this work, consult the director of the department.

## 13. Individual Piano Lessons-Every Quarter.

Piano work is arranged to suit the needs and ability of the individual. From beginning work to artistic solo performance. To arrange work, consult the director.

## 14. Individual Violin Lessons-Every Quarter.

The work will be outlined according to the ability of the student. To arrange work, consult the director.

## 15. Individual Pipe Organ Lessons-Every Quarter.

The work will be outlined according to the ability of the student. The work presupposes some knowledge of the piano. To arrange work, consult the director.

## 17. Modern Composers-Two hours. Spring Quarter.

The lives of musicians from Wagner to the present day are studied. Programs of their music are given by members of the class, the talking machines and player piano. The work is planned to show the modern trend of music and to make the students familiar with the composition of modern writers.

## 100. Advanced Harmony and Counterpoint-Three hours. Winter Quarter. <br> A continuation of Course 9 .

101. Composition and Analysis-Three hours. Spring Quarter.

Primary forms, including the minuet, scherzo, march, etc. Simple and elaborate accompaniments. Analysis of compositions of primary forms principally from Mendelssohn and Beethoven.
102. Orchestration-Three hours. Spring Quarter.

The instruments of the orchestra. Practical arranging for various combinations and full orchestra.
103. Advanced Orchestration-Four hours.

A continuation of Course 102. By arrangement.
105. Supervisors' Course-Four hours. Spring Quarter.

The material used in the grades and high school is taken up and studied from a supervisor's standpoint. Actual practice in conducting works of a practical nature will be offered those interested in this course.

## 106. Choral and Orchestral Conducting-Four hours.

Methods of conducting chorus and orchestra. Practical experience conducting both the choral society and orchestra. By arrangement.
112. Advanced Vocal Individual Instruction-Every Quarter.

The individual work in voice may be carried thru the four-year course for those wishing to prepare as specialists in that field.
113. Advanced Piano Individual Instruction-Every Quarter.

Individual work in piano may be carried thru the entire four-year course for those wishing to prepare as specialists in that field.
116. School Entertainments-Four hours. Spring Quarter. Practical programs for all occasions. Thanksgiving, Christmas and Arbor Day. Patriotic programs. Programs of songs of all nations. The term concludes with some opera suitable for use in the grades.
119. Interpretations and Study of Standard Operas-Two hours. Fall Quarter.

Operas of the classical and modern schools are studied, thru the use of the talking machine, and their structure and music made familiar to the class.
120. Interpretations and Study of Standard Oratorios and Sym-PHoNies-Two hours. Winter Quarter.

The standard oratorios are studied. The best known solos and choruses are presented by members of the class or talking machines. The content of the work is studied with the hope of catching the spirit of the composer. The symphonies of Haydn, Mozart, Beethoven, Schumann, Schubert and other writers of the classical and modern schools are presented to the class.

## 121. Research-Four hours. Winter Quarter.

A comparative study of the work done in the public schools in cities of different classes. A similar study is made of the work done in the normal schools and teackers colleges of the various states.

## PHYSICS

The various courses to be given by the Physics Department have a double purpose in view; first, to give the students an adequate knowledge of theoretical and applied physics; second, to develop in close cooperation with the students more efficient methods of teaching this subject in secondary school and college. Although the former is essential, the latter constitutes the problem proper in a teachers college.

In our century of intense industrialism, the role of physical science has become of such importance that its place in the public school curri-
culum ought to be carefully reconsidered. The Physics Department of Colorado State Teachers College is, therefore, facing the two-sided problem:

1. What ought to be the purpose and organization of physics teaching in a progressive school?
2. What ought to be the best organization of physics teaching under existing conditions?
These two sides of the problem will constantly be kept in view in all courses given by the Physics Department. In these courses topic, problem, and project methods will be combined in such a way as to allow the classroom to be organically absorbed by the laboratory. . Then only will the motivation become natural; the students will then find a motive where they used to fine a text book. Moreover, the students will be placed in the atmosphere of actual teaching in full co-operation with the Physics Department. "Red-letter" lessons will be both practiced and observed by the students. This will force them to lead, so to speak, a treble existence: that of a college student, that of a high school pupil, and that of a teacher.

Such is our purpose, our main problem, to which will be subordinated all other purposes, however interesting or useful in themselves.

The two sides of the problem, if correctly approached, will give ample opportunity to the initiative and originality of the students in organizing their own work.

The problem of teaching physics, if correctly solved, will put into their hands a powerful instrumentality for imparting to their own pupils "the methods of experimental inquiry and testing, which give intellectual integrity, sincerity and power in all fields of human activity"; it will, moreover, enable them to arouse the somewhat slow enthusiasm of the high school pupil for this master science of our century.

## Course of Study

Two years or four years for majors in Physics.
In addition to the free electives, and the core subjects, included in all the curricula as listed on page 47, the department of Physics requires:

First Year: Physics 1, 2 and 3.
Second Year: Physics 4, 14, 15, 107, 108.
Third Year: Physics, 101, 102, 103, 111, 121.
Fourth Year: Physics 201, 202, 203.

1. Electricity, Magnetism and Electromagnetics-Four hours. Fall Quarter.

This course provides an adequate information concerning electrical and magnetic laws illustrated by problems based upon practical applications of electrostatics and magnetism. It presents out of the immense mass of electrical and magnetic phenomena only those which have a direct bearing upon the teaching of physics in elementary and secondary schools.
2. Electrodynamics-Four hours. Winter Quarter.

This course is a continuation of Physics 1. The laws of electrodynamics will be illustrated by experiments and projects on various electrical apparatus and machinery including telephone, telegraph and wireless.
3. Mechanics (including Hydrostatics and Hydraulics)-Four hours. Spring Quarter.

This course is intended both for prospective elementary and high school teachers. Its primary aim, besides a clear understanding of general laws, is a firm grasp of the principles underlying the most fundamental mechanisms and some of our modern machines. The scope and content of the course will
be so arranged as to reduce considerations of a purely analytical value to a minimum. Experiments and projects will be taken mostly from the immediate environment.

## 10. Household Physics (For household Students)-Four hours.

 Winter Quarter.Physical laws applied to the needs of the household or to the life of the community at large will be emphasized in a series of topics and projects taken from the immediate environment.

## 11. The Study of Heat-Four hours. Fall Quarter.

This course will include a simple exposition of different theories of the nature of heat, its effect upon matter, its physiological and climatic effects; its relation to other forms of energy, and, finally, the application of a few fundamental principles of thermodynamics to gas and steam engines.

## 14. The Study of Sound-Two or four hours. Winter Quarter.

This course will deal with the nature of sound, the laws of its propagation, reflection, interference and re-enforcement as well as their application to musical and technical instruments.

## 15. The Study of Light.

An elementary exposition of Huyghens' theory of light will make the light phenomena more intelligible. The study of mirrors, lenses and prisms will lead toward experiments and projects on such instruments as the microscope, telescope, spectroscope, as well as to the study of photography and color photography.
101. The Study of Heat and Thermodynamics-Four hours. Fall Quarter.

Mechanical theory of heat. Effect of heat upon properties of matter. Liquefaction of air and other gases. Digression on Energy. Perpetual motion. various forms of energy and their transmutations. Sources of energy. Principle of equivalence. Carnot-Clausius principle. Dissipation of energy. Experiments and projects on various applications of heat. (Steam engines, gas engines, etc.)

## 102. The Study of Light-Four hours. Winter Quarter.

This course will begin with a general review (in the form mostly of problems and projects) of Course 15. The course will be based entirely upon Huyghens' wave theory. The study of interference, diffraction, polarization and double refraction will give ample material for a series of experiments and projects.
103. Electricity and Electromagnetics-Four hours. Spring Quarter.

This course is a more advanced development of Course 1 and 2 (pre-requisite). It will give a more thorough treatment of the fundamental laws of Electrostatics, Electrodynamics and Electromagnetics. This course will include the electromagnetic theory of Light and the Electron Theory.
107. The History of Epoch-making Discoveries in Physics-Two hours. Winter Quarter.

The purpose of this course is to bring out the historical conditions under which the great discoveries were accomplished. The struggle that the natural philosophers have had to carry out in all ages against their contemporaries, imbued either with traditional superstition or with prejudice, their unyielding and often heroic determination to vanquish and subdue the forces of Nature for the benefit of mankind ought to form one of the cornerstones in the teaching of history in the public schools.
108. Methods of Teaching Physics in Elementary and High Schools. Four hours. Spring Quarter.

This course is intended for teachers of both Physics and General Science. Its main purpose is the organization of projects, experiments, and "red letter"; lessons in elementary physics.
109. Physics of Every Day Life. On demand.

This course altho thoroughly practical, will be based upon an adequate knowledge of general physics (Pre-requisite: Physics 1, 2, 3, 11, 15). Experiments and projects will include photography, telephone, lighting and heating apparatus, electric and gas motors, etc. Hours to be arranged.
111. Projects Based upon the Study of the Automobile-Four hours. Winter Quarter.

This course although practical, will not enter into the narrow technicalities of a trade school course. The reason why this course is given, lies primarily not in the importance acquired by the automobile in our every day life but in the multiplicity of physical principles involved in the gasoline engine upon which many interesting experiments and projects can be organized.
121. Projects based upon the study of Direct and Alternating Currents-(Prerequisite: Physics 2 and 103). Two or four hours. Spring Quarter.

This course will enable the prospective teacher not only to understand the working of electrical instruments and machinery, but to organize electrical experiments which will act most stimulatingly upon the imagination of the young. The course will be accompanied by problems, experiments and projects on D. C. and A. C. generators, motors, telephone, telegraph, wireless, etc.
201. The New Rays-Two or four hours. Fall Quarter.

This course will include the study of rays of the invisible spectrum of cathode rays, X-rays, canal rays, as well as the study of radioactivity of Alpha, beta and gamma rays, etc.
202. The Evolution of Modern Physical Theories-Two or four hours. Winter Quarter.

This course will begin with the Newtonian concept of the universe and follows the evolution of theories of light, heat and electricity. It will include elements of the electro-magnetic theory of light, the electron theory and radioactivity as well as an outline of the theory of relativity.
203. Organization of Projects in High School Physics-(For Seniors only). Two or four hours. Spring Quarter.

## ROMANCE LANGUAGES AND LATIN

Five years work in both French and Spanish, one year of College Latin and one year of Italian will be offered during the year 1922-23. No credit will be given for less than 10 hours in the first year's work in French and Spanish.

## Course of Study

Two years or four years for majors in Romance Languages.
In addition to the free electives, and the core subjects included in all the curricula as listed on page 47, this department requires:

First Year: French 1, 2, 3, Spanish 5, 6, 7, or Spanish 1, 2, 3, French 5, 6, 7.

Second Year: French 10, 11, 12, Spanish 10, 11, 12.
Third Year: Nine hours of French, or 9 hours of Spanish.
Fourth Year: Nine hours of French or 9 hours of Spanish.

## French

1. Grammar and Pronunciation-Four hours. Fall Quarter. The completion of 25 lessons in Maloubier and Moore's French grammar.
2. Grammar and Reader-Four hours. Winter Quarter. Completion of the French grammar and reading of easy texts.
3. Reading and Conversation-Four hours. Spring Quarter. The reading of three easy texts and much drill in conversation and dictation.
4. Elements of French Literature-Three hours. Fall Quarter. Devoted to Halevy's L'Abbe Constantin and Dumas' La Tulipe Noire.
5. Easy French Plays-Three hours. Winter Quarter. Three comedies by La Biche and exercises in composition and conversation.
6. French Fiction-Three hours. Spring Quarter.

Daudet's Tartarin de Tarascon, De la Brete's Mon Oncle et Mon Cure. Composition and sight work based on About's Le Roi des Montagnes.
10. The Romantic Movement-Three hours. Fall Quarter.

Three dramas of Hugo; Le Rois' Amuse, Hernani, and Ruy Blas.
11. Women in French Literature-Three hours. Winter Quarter.

Georges Sand, Madame de Lafayette and Madame de Sevigne.
12. Frencif Prose-Three hours. Spring Quarter.

De Vigny, Gautier, and Merimee. Selected works and a special study of French prose as compared with English and Spanish masters.
105. Short Story Writers-Three hours. Fall Quarter.

De Maupassant, Merimee, Daudet and others.
106. The Teaching of French in Secondary Schools-Three hours. Winter Quarter.

A summary of methods, devices and choice of texts to be used during a two and four years course in high schools.
107. The Classic Writers-Three hours. Spring Quarter.

Corneille, Racine and Moliere. Selected dramas.
210. Recent French Literature-Three hours. Fall Quarter.

The works of Georges Clemenceau and selected works written since 1918.
211. Old French-Three hours. Winter Quarter.

A reading course in Old French Prose. Aucassin et Nicollette.
212. French Prose Composition-Three hours. Spring Quarter.

A course in the translation of difficult English prose into French. Also original French composition.

## Spanish

1. Grammar and Pronunctation-Four hours. Fall Quarter.

The completion of 25 lessons in Moreno-Lacalle's Spanish Grammar.
2. Grammar and Reader-Four hours. Winter Quarter. Completion of grammar and reading of El Primo Libro de Lectura.
3. Reading and Conversation-Four hours. Spring Quarter. The reading of short stories and conversational exercises.
5. Elements of Spanish Literature-Three hours. Fall Quarter. The short stories of Pedro de Alarcon.
6. Easy Spanish Plays-Three hours. Winter Quarter. Three plays of Martinez Sierra and two of Benavente.
7. Spanish Fiction-Three hours. Spring Quarter.

Selected works of Ibanez, Galdos and Valdes.
10. The Literature of Old Mexico-Three hours. Fall Quarter.

Leyendas Mejicanas, La Navidad en Las Montanas and others.
11. The Literature of South America - Three hours. Winter Quarter.

Marmol's Amayala, Phipp's Paginas de Sud-America and Ibanez's Paginas Sud-Americanas.
12. Contemporary Spanish Literature-Three hours. Spring Quarter. Sierra, Benavente, and Ibanez.
105. Nineteenth Century Dramatic Literature-Three hours. Fall Quarter.

Devoted to Tamayo y Baus, Jose Echagaray and others.
106. The Golden Age of Spanish Literature-Three hours. Winter Quarter.

The dramas of Lopa de Vega and Calderon.
107. Early Spanish Fiction-Three hours. Spring Quarter.

Devoted to three or more selected works of Cervantes, including portions of Don Quijote.
210. Industrial Spanish-Three hours. Fall Quarter.
211. Commercial Spanish-Three hours. Winter Quarter.
212. The Teaching of Spanish-Three hours. Spring Quarter.

Including work in Old Spanish Readings.

## Italian

No courses in Italian will be offered during the year 1922-23, unless ten or more students request such a course.

## Latin

10. Freshman College Latin-Three hours. Fall Quarter. Cicero or Vergil.
11. Freshman College Latin-Three hours. Winter Quarter.

Livy or Horace.

## 12. Freshman College Latin-Three hours. Spring Quarter.

The following courses covering the first year's work will be offered, but not for College credit:

1. First Year Latin-Five hours. Fall Quarter.

Elements of Grammar and Easy Reading.
2. First Year Latin-Five hours. Winter Quarter.

Continuation of First Year's book.
3. First Year Latin-Five hours. Spring Quarter.

Completion of First Year book.
Latin 105. Plautus Advanced-Three hours. Fall Quarter.
Latin 106. Juvenal Advanced-Three hours. Spring Quarter.
Latin 107. Seneca Advanced-Three hours. Winter Quarter.
Other advanced courses will be offered if there is sufficient demand.

## SOCIOLOGY

This department offers a series of courses in Sociology, Anthropology, and Economics. While designed primarily to meet the practical needs of elementary and high school teachers, supervisors, administrators, and social workers, the courses are so arranged as to provide a special preparation for the teaching of the subjects named, and for a liberal training in the field of social thought. An unusually fine collection of anthropological and sociological material is available for the use of classes. A full four-year course is offered.

## 1. Anthropology-Four hours.

Primitive people, their physical characteristics, beliefs, customs, arts, industries, forms of government, religions, etc. This course is illustrated by concrete material. It is an introduction to, and a preparation for, the courses that follow.
3. Educational Sociology-Three hours. Required of all first year students.

This course presents the sociological conception of education with certain sociological principles and their application in education. Text or syllabus and special readings.

## 18. Rural Sociology-Four hours.

A constructive study of country life, economic activities, social organizations, schools, clubs, churches, social centers, and modern efforts and successes in rural progress; intended primarily for rural teachers, but is of value to all students of rural social conditions and needs.
105. The Principles of Sociology-Four hours. Required of third year students.

This course is a study of the scope and history of sociology, sketches of the leading contributors to this science, and an exposition of its main principles as set forth systematically in a selected text. Lectures, readings and reports.
130. Social Psychology-Two hours.

A study of suggestion and imitation, crowds, mobs, fads, fashion, crazes, booms, crises, conventionality, custom, conflict, public opinion, etc. Text, Ross' Social Phychology.

## 132. The Family-Three hours.

A study of the evolution of the family with emphasis on the modern situation. Particular attention will be paid to the relationship of the family to education, industry and ethics.
209. Seminar in Sociology-Four hours.

Only graduate students, or those capable of doing graduate work, will be admitted to this course. The exact nature of the work will be determined after consultation with the class, but it will probably be a study of the means, methods and possibilities of the conscious improvement of society.
110. Economics-Three hours.

A course based on Seager's "Principles of Economics" and covering, in addition to the Principles of Economics, the subjects of the Industrial Revolution in England, the Industrial Expansion of the United States, Tariff, Monopolies, Railroads, Profit Sharing, Trusts, Taxation, the Labor Movement and Legislation, Social Insurance, and Socialism.

## 37. Labor and Society-Four hours.

A study of the laboring classes, their development, place, privileges, and rights in society; and the relation of workers to systems of industrial administration. Specially commended to teachers of industrial education, and to students of economics.

PART IV

DIRECTORY OF STUDENTS

## DIRECTORY OF STUDENTS

## SCHOOL YEAR 1921-1922

COLORADO STATE TEACHERS COLLEGE
FALL, WINTER AND SPRING QUARTERS






Hall, Elberta
Ft. Collins, Colo.
Hall, Merle
Woodburn, Oregon





McCutcheon, Jane
Greeley, Coio.
McLonald, Ruth
Greeley, Colo.
McDonald, F'auline Sheridan, Colo.
McEwen, Louise
Holyoke, Colo.
McGlenn, Mildred $-(-)^{-}$
McGovern, Margaret .............................................................................................Denver, Colo.
McGrew, Andy -

McIntosh, C. A. Greeley, Colo.
McIntosh, Mrs. L. E. ...
McIntyre, Myrtle




| Gladys $\qquad$ Lamar, Colo |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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McLoughlin, Eunice … - - - - - -


McWhorter, Irene ............................................................................................. Denver, Colo.

Mackin, Mrs. Ellen ....................................................................................................... Kenton, Okla.
Malin, Marcia
Malm, Marcia L. -a-
Maltas, Katherine .............................................................................................. Colo.
Markley, Anna Delta, Colo.
Marshal, George P.......


Martin, Leona $-\cdots-{ }_{\text {Mas }}^{\text {Lo }}$ -
Mason, Zelpha
Pine, Ill
Mason, Luthera F . $-\cdots$ -
Matchett, Edward …
Mater, Lois Denver, Colo.
Mathews, Litha
Segundo, Colo.
Maxville, Anne Paonia, Colo.
Maus, Alyce .. Denver, Colo.
May, Prudence
Salyersville, Ky.
Meacham, Rena G. ................................................................................... Salida, Colo.


Meh1, Martha .................................................................................................................Padroní, Colo.
Mellor, Hilda Greeley, Colo.
Melvin, Margurite Greenfield, Ill.
Merriman, Pearl Greeley, Colo.
 Greeley, Colo.
Miles, Florence
Miller, Waldo L. Brighton, Colo.

Miller, Mildred
Waltham, Colo.
Milley, Harriet M.
Milligan, Floy
Berthoud, Colo.
Milner, Eva
..Greeley, Colo.
Miner, Eva Florence, Colo.
Miner, Geo.
Mischke, Lydia
Loveland, Colo.

Mitchell, Ethel Greeley, Colo.
Mitchell, Margaret Greeley, Colo.
Mitchell, Maud Florence, Colo.
Miyamota, D .... .-a-
Moline, Nell ..............
Moon, Edith Ruth ...................-
Morgan, Ida
Monticello, Ky.
Morris, Everett Greeley, Colo.
Morris, Lola E.
Simla, Colo.
Morris, Jessie
$\qquad$
Chivington, Colo.
Morrison, Mrs. W. F............-

Moss, Madonna Greeley, Colo.
Mott, Geo. E. Greeley, Colo.
Mount, Lula B.
LaJara, Colo.
Muckler, Marian
Arriba, Colo.

Mulford, Charles F. $\quad$| Greeley, Colo. |
| :---: |
| Murhison, Mina |

Murphy, Elizabeth






Yates, Bonnie J.

## SUMMER QUARTER <br> 1922



Babb, Bertha M. .... ${ }^{\text {Cole }}$ Colo
Babcock, Carrie Rose ...
Bachman, Rosa E. ..- $\geq \geq \geq \geq \geq \geq \geq$ Akron, Colo.
Backman, Hetty.$\geq \geq \geq \geq \geq$ Holdrege, Nebr.

Baerresen, Bertha I. .aru $\geq \geq \geq \geq \geq \geq \geq$ Denver, Colo.


Bailey, Velma

Baker, Lucille Jeanette

Baker, Zula I. $+\geq$ T
Baldwin, Laura $-\geq \geq \geq \geq \geq \geq \geq \geq \geq$ Hudson, Colo.
Bales, Elena
Ball, Gladys
Greeley, Colo.
Rall The Longmont, Colo
Ball, Katherine Alice Denver, Colo. Nacona, Texas
Ballow, Cleo
La Junta, Colo.
Balmer, Averil
Pierce, Colo.

Banks, Mrs. Gladys Holt
Bannister, Chas. A. M.
Barbieri, R Jennie

Barkmann, Eda
Junction City, Colo.
Barnard, Gladys $\qquad$
Barnes, Mrs. Abbie L.
Barnett, Alma V. $\qquad$ orence, Colo.

Barrett, Camilla $\qquad$ Bluffs, Iowa Calcite, Colo.


Barton, Mayme.
Okmulgee, Okla.

Bartley, Daisy B. .............
Bashor, Esta M. .-.
Bass, Mrs. Vesper ……
Bassett, Emma Lou ....-
Bates, Nell ..................
Baughman, Mildred
Todypole, Nebr.
Beahm Teslie Le Roy $-\cdots$ - $\quad$ -
Beaird, Alice ....
Beals, Daisy Malcolm
Beals, Mildred P.
$\qquad$
Barger, Mrs. Edith F.
Bean, Estella $\qquad$ .
Bean, Olivia
aldine
Beardsley, Geraldine
Beattie, Alva
Bechtoll, Nora
$\qquad$

Bechtoll, Nora

Beer, Olive M.
Beers, Coral J.
Behne, Maude Minard
Beiler, Ruth E.
.
Belin, Virgil
Bell, Garnett
strong, Colo
Bellwood, Tom O.
Bench, Ruth
Bench, Ruth Bengtson, Grances $_{-\boldsymbol{o l}^{\prime}}$
Benham, Katherine C. ....
Bennett, Lura
Bennett, T. Ralph


Bent, Laura E.
Bentley, Eleanore $\qquad$
Berwind, Colo
Berg, Eva Matilda
Berkowitz, Rose
Bertagnolli, (Mrs.) Mae B
Berninger, Marie E. .....-
Berwick, Beatrice Marion ... $-\square-\square-\quad$ Colorado Springs, Colo
Best, Mary Denver, Colo.
Betts, Grace Pueblo, Colo.
Biles, Edith

Binder, Marie
Milliken, Colo.

Bishop, Hazel J. --a.-

Black, Hazel ……

Blakeman, Mrs. Isa Joy S.
Guthrie, Okla.
Bliss, Alice
Block, Sister Marie Carmel
Greeley, Colo.

Block, Margaret
Greeley, Colo.

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Blue, Harold G.
Bohn, Nellie A.

|  |  |
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Greeley, Colo.
Bohlender, Rachel
Bollinger, Roy
Roy
Denver, Colo.


Bond, Dorothy

Booth, Leah E. .-.
Booth, Maree Sterling, Colo.
Borell, Albert J
Denver, Colo.
Boren, Mildred
Bosley, Bertha M
Post, Texas
Bosley, Ruth I.
Bosworth, Nellie
Loveland, Colo.
Dexter, N. M.
Denver, Colo.
East St. Louis, Ill.
Fairmount, N. Dak.
Wheeling, $W_{\dot{*}}$ Va.
Atchinson, Kans.
Nunn, Colo.
Longmont, Colo.
..Sutherland, Nebr.
Ft. Collins, Colo.
..Alta, Iowa
Taos, N. M.
Greeley, Colo. Greeley, Colo.

Dolores, Colo.
Berwind, Colo. aterloo, Iowa
Pueblo, Colo.
Pueblo, Colo
Denver, Colo

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Dobbins, Joseph
Worcester, Mass.
Dodson, Dorothy
Dodson, Katherine …



Donelson, Eva
Walden, Colo.
Donley, Bess M.
...Camp Point, Ill.
Donley, Fremont Brush, Colo.

Doonen, Eva .on Arvada, Colo.
Doran, Maude -an Macksville, Kans.

Doty, Elda Milanan Hoyt, Colo.


Draper, Gladys ............................................................................................................en, Colo.
Dressor, Mary
Duell 'Effie C
Duke, Annie .-.
Dulaney, Bernice ....- - -


Dunckley, Edith V. .ow Dor Dunckley, Colo.

Dunlap, Dorothy M.
Dunn, Sister Mary Adrian
Dunning, Mrs. Inice
Alliance, Nebr.

Duysen, Carrie T. ...........
Dycus, Mrs. Alice
Memphis, Texas
Eager, Ruth K. (Mrs.)


Eaton, Bardwell Anna
Eaton, Eula ...-

Eckhart, Elizabeth ...........................................................................................
Eddy, Grace

Edquist, Lily Edwards, C.
Louisville, Colo.
Edwards, Elizabeth

Edwards, Mary C. ..... $\quad$ Youngstown, Ohio
Edwards, Ruth

Elam, Fern
Elder, Mary M. ..................-
Elder, Media
Quincy, Ill.
Eldridge, Jessie
Elivian, Joan M. .....- - - - -


Ellermeier, Alma M. .-.
Elliott, Mina A. ......-a-

Ellis, Bethel M. ..-........... Greele Colo.
Ellis, Crystal
Ellis, Doris
Ellis, Minnie Greeley, Colo. Pierce, Colo.

Elmore, Irene ,

Elsesser, Henry .....
Elswick, Julia $\quad$ Lamar, Colo.

Embry, Josephine .-.-a-
Emmerling, Irene .................................................................................

Engleman, Bonnie Wade ............................................................................................ Colo.
English, Dorothy ....or
Ennes, Harold …) Greeley, Colo.
Epperly, Lulu
Tallula, III.

Ericson, Anna
Hawarden, Iowa
Ericson, Della J.
Ermel, Freeda
J.

Hawarden, Iowa
Fountain, Kans.


Evans, Ola Lillian
Wellington, Kans. Greeley, Colo.
Evans, Dave ...Farmington, Mo.
Evans, O. K. ..........
...Julesburg, Colo.

Chalmers, Ewing, Jr. Greeley, Colo.

Fabrizio, Frank
Louisville, Colo.
Fagan, Margaret
Reading, Kans.
Fahnestock, Nellie Macedonia, Iowa
.Tulsa, Okla.
Fairchild, Ethel M. .Warrensburg, Mo.
Fairchild, Laura Pueblo, Colo.
Falkerstein, Elizabeth

Fallis, Edwina
Campbell, Calif.

Greeley, Colo.
Farmer, Reatha
Karval, Colo.
Farney, Christine Greeley, Colo.
Farnsworth, Maude (Mrs.)
Flagler, Colo.
Farquhar, Lulu
Farquhar, Marie
Flagler, Colo.
Farrell, Hazel
Farris, Earl O.
....- Madison, Mo.
Feeney, Mary $\qquad$ Humboldt, Kans.
Felgar, Nellie
Ft. Madison, Iowa
Fender, Grace
Filbin, Addie Mae
.Steamboat Springs, Colo.
Filkins, Grace C.
Greeley, Colo.
Greeley, Colo.

Fincher, R. O.
Ft. Worth, Texas
Finley, Grace W. Greeley, Colo.
Fischer, Doris
Fischer. Margareta
Fish, Florence
Fisher, Bess M.
Fisher, G. N
Fisher, Laura E. Quincy, III.

Fisher, Sara …
Denver, Colo.
Greeley, Colo.

Fisher, Sara .
Fitzgerel, John H.
Ft. Worth, Texas
Ft. Worth, Texas Denver, Colo. Walnut, Ill. Rockland, Mo.

Fitzmorris, Mary (Mrs.) -
Fitzmorris, Ray S. ...........-


Flitner, Geraldine ……-
Flood, Agnes ...an
Flotree, Anna $A$....



Foley, Hazel
Foote, Edna M.
Force, Jessie
Valley Center, Kans.
$\cdots$ -


Forester, Leah Greeley, Colo.
Fortune, Ruby Keota, Colo.
Foss, Mrs. Lena C. .........
Foster, Arabelle
Marshfield, Mo.
Fowler, Florence
Fox, Gladys Denver, Colo.


Franchs, Amelia .-.

Frazy, Irma
Fredericksen, Dagmar ................-

Freeburg, Minnie
....Reagan, okla.
French, Charlotte B. ............................................................................................ Colo.
French, Edith


French, Ethel
Frike, Anna A.
Frisbie, Maude
Frisbie, Opal
Humboldt, Kans.
Ft. Morgan, Colo.
Frisbie, Opha
Ft. Morgan, Colo.
Fruits, Flossie
Ft. Morgan, Colo.

Fullis, Mary A. Greeley, Colo.

Fulton, Anna Ria
Paris, Mo.
Fuqua, Mrs. S. Elizabeth Greeley, Colo.


Guillet, Lucille ..............................................................................................................................................
Guiraud, Emma ...
Gum, Carl D. Clarkton, Mo.
Gurtner, Mrs. . Denver, Colo.
Gurtner, Ivy-Dell Denver, Colo.

Hachtel, Esther C.
Dundee, Ohio
Hadley, H. H. .an


Halbert, Myrtle

Han, Grace Emily …
Hall, Jessie M. ...






Handorf, Stella ............................................................................................................ Dumont, Iowa
Haney, Mary ...


Hannen, Frank S. Greeley, Colo.
Hannum, Minnie Lee ...
Hansen, Clara $\square+\square \square \square \square$ Manitou, Colo.

Hansen, Katherine
Harbert, Lily E. ...... + Brush, Colo.
Hardin, Nellie ................. Hardtner, Kans.
Harding, Mrs. Ruth K. .-anan.
Harlin, Carolyn D. .... Con Creeley, Colo.
Harlin, Ressionell Purcell, Colo
Harman, Claude N. ...............-
Harmon, Ruby


Harper, Jeb Harper, J. Meryl
Harper, Mrs. J. M. ..........-

Harrington, Abbie ....



Harris, Hazel $\ldots-\infty$
Harris, Salome …..................................................................................................
Harrison, Caroline ............................................................................................ Pueblo, Colo.

Harrison, Mary J. .-.


Hartwick, Alta
Fountain, Colo
Sligo, Colo.
Harvey, Fried
Hastings, Mary Louise
Colorado Springs, Colo.








Hays, Ruth

Heabler, Grace Denver, Colo.
Hearn, Helen
Mabank, Texas
Heath, Georgia Galt Denver, Colo.
Hedden, Miranda
Hedges, Curtis M.
.Scott City, Kans.
Hein, Viola Edna ....-



Kahler, Wilhelmina
Milford, Nebr.
Kalseim, Vivian
Kalseim, Vivian ...- Marguerite
Kappel, Elsie
Glasco, Kans.
Kapson, Glendora
Holyoke, Colo.
Karlson, Ruth Gothenburg, Nebr. Nelson, Nebr.
Kavich, Ruby
Keating, Elsa
Fremont, Nebr.
Keena, E. E.
Kehmeier, Marie
Keith, Bernice
Phillipsburg, Kans.
Hugo, Colo.
Keith,
Keller, Frnice
Fellum
Ben
$\qquad$
$\qquad$ Grover, Colo.

Kellum, Belle
Council Bluffs, Iowa
Kelly, Bernice
St. Francis, Kans.
Kelly, Terrence
Kendall, Phyllis Lee ...…..........-
Kennedy, Dorothy …an ana


Kennedy, Mrs. Rosa Thomas L. $\cdot$ -

Kent, Allen R. … .-
Kerr, Evelyn
Kerr, E. Isabel
Kessler, Leota D. .-an
Kessler, Leola E. ....................-
Keyser, Edna
Keyser, Helen

Kidder, Ethel M.
Alliance, Nebr.

Kiker, Stella Raton, N . M.


Kimble, Florence
Kimbley, Lonnie R. ....
Kiner, Irma L. $\qquad$ Marseilles, Ill.
King, Adelaide $\qquad$

Junction City, Kans.



Kirwan
Klassen, Marie
Greeley, Colo.


Kleinknecht, Gertrude M. ..-.


Knight, Hazel ....-an.
Knox, Ethel ...and
Knouff, Marie Piqua, Ohio
Kobes, Gertye


Krantz, Mary . Kewanee, Ill
Krebs, Ingrid Denver, Colo.



Kurtz, Chas. .ay a


Kyle, Blanche
Evans, Colo.


Lacey, Mollie C. ... Par Pueblo, Colo.
Lambert, Frances Dallas, Texas

Lance, Alice
Kersey, Colo.


Lane, Nellie
Indiana
Lantz, Ethel
La Junta, Colo.
Lanvermeyer, Dorothea E. ..................


Larson, Ruth
La Shier, Virginia
Logan, Lappin, Ma Grand Junction, Colo. Rocky Ford, Colo.

Pueblo, Colo.
Latson, Irma Rocky Ford, Colo.
Latta, Kathryn Washington, Iowa
Laurentine, Sister
Law, Frances Pueblo, Colo.

Law, Harriet Elkdale, Colo.

Lawless, Tessie ...-



|  |
| :---: |
|  |  | Dallas, Texas


Lawrence, Effie L. .-.
Lawrence, Helen .-a

Lawson, Florence .-.-a-
Lawrence, Eunice M. ...................................................................................... Mankato, Kans.
Leach, Vineta .................... Loveland, Colo.
Leachy, Anna


Leavy, Anna Greeley, Colo.

| Lee, Mar |  |  |
| :---: | :---: | :---: |
|  |  |  |

Lee, Teressa
La Junta, Colo.
Legband, Dora



Lemons, Lottie Marie .-....-

Lester, Inez
Levine, Ruth
Lewis, Iva L.
Lind, Jennie
Line, Eva (Mrs.)

|  |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Chickasha, Okla

Eva (Mrs.)

Link, Isa





Lobdell, Gertrude
Lawrence, Kans.



Loesch, Louise .... -




Lomax, Gladys .................
Loney, Effie
St. Joseph, Mo.
C
Long, Mary

Loughery, Hazel
Loughran, Loretto
Trinidad, Colo.
...Denver, Colo.
Love, Madelon Ni Wot, Colo.
Lowder, Edith A.
Lowe, Anna F.
Lowe, Katharyne
Stoneham, Colo,
$\square \longrightarrow \square \longrightarrow$ Denver, Colo.

Lowman, LaGreta
Kansas City, Mo.

Loyd, Elma (Mrs.)
Walsenburg, Colo. Mulberry, Ind.

Lucas, Meda Frances Denver, Colo.

Lucke, Gladys shland, Kans.


Lunn, Bona .Tulsa, Okla.




Nichols, Alma
..Wichita, Kans.
Nightingale, Hazel Wheaton, Kans.
Nims, Eleanor -

| , Mary Eliza |  |
| :---: | :---: |

Noce, Lillian zabeth Cedar Falls, Iowa
Noce, Lillian Denver, Colo.
Nolte, Esther
Nori is ${ }^{2}$.
Norris, Lillian G. ........-
Denver, Colo.





Queen, Mary Pearl
Quinby, A. W
Denver, Colo.
Quirk, Anna
Greeley, Colo.
Denver, Colo.

Raabe, Rosa B.
Boise, Idaho
Rackley, Belle Jane
Alva, Okla.
Rackley, Clara G. ...Alva, Okla.
Rackerby, Sue Henry Kansas City, Mo.

Ralph, Lucy M. Quincy, III.
Ralston, Irene Eaton, Colo.
Rambo, Myrtle (Mrs.) - $\quad$ St Joseph, Mo.
Ramey, Dorcas
Brighton, Colo.
Ramey, Lydia
Brighton, Colo.
Ramey, Maude E.
Ramsey, Carrie B.
Spring Hill, Kans
Randle, Mattie Mai
Breckenridge, Mo.
Ratekin, John Alva
Hartman, Colo.
Ratekin, Mrs. J. A.
Delta, Colo.
Rathebun, Hazel
Ray, Ethel
Greeley, Colo.
Raymond, Anna $-\quad$ Manzanola, Col-
Raymond, J. Walker ...-
Rea, Gretchen Manzanola, Colo.
Rea, Inez G.
Lucerne, Colo.
Red, Carrie
Homewood, Kans.
Read, Faye .Pueblo, Colo.
Read, Hazel V. Pueblo, Colo.
Ream, Mary L.
Ream, Mary L.
Reathaford, Kate
Row





Talbott, Mina C.
Kansas City, Mo.
Topley, Mildred M.
Tate, Anna E.
Sac City, Iowa
Tate, Emma C. Coal Creek, Colo.

Taylor, Archibald
..Coal Creek, Colo.
Taylor, Beulah L Longmont, Colo.

Taylor, Dorothy...- Nay Ne-
Omaha, Nebr.

Tedford, Hazel ..-an -a-
Teter, Grayce
Pana, Ill.
Thomas, Frieda M. -an Morrill, Nebr.

Thomason, Emma ....


Thompson, Fae D. .....................................................................................Valley Center, Kans.
Thompson, Gladys .- Amity, Mo.
Thompson, Josephine -
Thompson, La Rue ........................-

Thompson, Louisa ....
Thompson, Mary
Thompson, Petra
Deport, Texas
Thompson, Maude
Valley Center, Kans.
Thornhill, Margaret
Coleman, Texas





Young, Rachel
Youngclaus, Emma
Central City, Nebr.
Youngheim, Zella
Denver, Colo. Mitchell, Nebr.
Yoxall, Edna M. Atwood, Colo.

Zapf, Frieda B. $\qquad$ Greeley, Colo.
Zelley, Eleanor Mitchell, Nebr.
Zeltman, Wm. Ralph Strasburg, Ohio
Ziegler, Edith Allen (Mrs.)
Zimmerman, Ruth Vroman, Colo

## Zoller, Sister Rose Cecilia

 Denver, ColoZuircher, Clara T.
Mt. Washington, Mo. Newton, Kans.

## EXTENSION ENROLLMENT

GROUP PLAN
















## EXTENSION ENROLLMENT

INDIVIDUAL PLAN-COLLEGE


Babb, Bertha
Babbitt, Mrs. Bailey, Iva M.
Baker, Jessie L. $\qquad$ Baker, W. E. $\qquad$ Weatherford, Okla.
Ballenback, Kate $\qquad$ Denver, Colo.
Baldwin, Ruth M. Ball, Katherine
Bailey, Mildred
Barkman, Clara
Barnard, Gladys
Barkman, Eda
Barnes, Abbie C.
 Florence, Colo.
Junction City, Kans Johnstown, Colo.
Barnard, Virginia R.
Barrett, Mary (Mill)
Barham, Della $\qquad$



Bassler, Helen
Beatty, Mrs. Edith C.
Beattie, Alva
Beckl, Wm. L.
Bellwood, Tom O.


Bennett, L. H.
Berkowitz, Rose $\qquad$ Clinton, Okla.

Bench, Ruth Pueblo, Colo.

Blancnard, Lois
Biddle, Miss Ruth
Bird, Ruby
Wellington, Colo.
Longmont, Colo.
Bishop, Grace I. ..........-
Bivens, Belva. Maysville, Mo.
Boge, Mabel E.
Boge, Ethel
$\qquad$ Denver, Colo.



Bower, Emma ...







Bryson, Josephine
Bryson, Gertrude
Buchert, Louise Eaton, Colo.

Buchert, Louis
Buddin, Celia $\qquad$ Eaton, Colo.

Burbank, Fern C. ……

Bushey, A. H
Bushey, Clifford A.
Mangonola, Colo.
Mongonola, Colo.
Bushey, Mrs. Clifford A.
Mongonola, Colo



Edwards, C. J.
Edwards, Elizabeth
Louisville, Colo.
Eiswerth. Mrs. Katherine
Dallas. Texas
Woodland Park, Colo.
Elmer, Colgate $-\cdots$-an
Embree, Gertrude ....



Evans, Eliza
Faddin, Julia L.
Jerome, Idaho
Fakeen, Estella Denver, Colo.
Farthing, Miss Dorothy St. Joseph, Mo.
Filbin, Addie Mae ...Towner, Colo.

Fitzmorris, A. E. ....-
Fleming, A. I. Greeley, Colo.



Gammill, F. C. $\qquad$ ..Grand Junction, Colo.
Gardiner, Katheryn .-an - Colorado Springs, Colo.
Garnies, Theo R
Garnett, Genevieve Cook
Gates, Virginia
a Denver, C

Gibson, Annetta
B.

Giffen, Eva J.
Gill, Maida V.
Gleason, Belle Goodlett, Nellie
Goodman, Hazel
Goodman, K. C.
Graham, Aoph
$\qquad$
$\qquad$
$\qquad$ Tahlequah, Okla.

Greseking, Edna
Griffin, J. $\qquad$ Kimball, Nebr.

Griffith, Lucy C. $\qquad$ Wo Springs, Colo.
Griswold, Ruth Wheatridge, Colo.

Griz, Mary B.
Hakes, Stella M.

Halahan, Josephine
Colorado Springs, Colo.





Harmon, Dan A.
Hardy, Joe E.
Harrington. Nora
$\qquad$ ....Dallas, Texas Duncanville, Texas Windsor, Colo.

Hawthorne, Bessie M. .-.
Hay, Geo. A. F. Junction City, Kans.
Hay, Mary L.
Junction City, Kans.
Hempin,

Hicks, Mrs. Mattie Greeley, Colo.

Hildebrand, Etta Ordway, Colo.
Denver, Colo.
Hill, Gwendolyn Antonio, Colo.
Hill, Jennie Beloit, Kans.
Hinds. A. W.
 Kit Carson, Colo.
Hobert, Lily E.
Hogue, Juanita S
S.

Hook, Ruth D. ${ }^{\text {Hooper, Mrs. Bertha }}$
Hopkins, Helen Paris, Texas

- Greeley, Colo.

Howard. Martha B. Greeley, Colo.

Hubbard. Gladys
Huck, Kathryn
$\qquad$ Longmont, Colo .

Hughell, S. L. Littleton, Colo.

Hughston, Carrie Meridan, Idaho

Humberd, I. A. .. $\qquad$ Plano, Texas
Hunter, Francis Rolla, Kans.

Hunt, Adeline Greeley, Colo.

Ingersoll, Edna Greeley, Colo.

Ingersoll Ruth
Las Animas, Colo. Greeley, Colo.
Irwin, Mrs. J. H.
Ft. Collins, Colo.
Isbell, Mary Denver, Colo.


Schafmayer, Ruth

...Rockford, Ill.Schneider, Marie Schuler, Dorothy $\qquad$ Oak Creek, Colo

Schwaden, Anna

L-averan Loveland Colo.
Schwass, Stella Scone, Blanch MLafayette, Colo.
$\qquad$ Laramie, Wyo. Rockford, Ill.
Scott, Grace
Rockvale, Colo.

## Scott, Lettie

$\qquad$ Greeley, Colo.


Sell, Mrs. N. F.
Seip, Katherine $\qquad$ t.
Senson, Frances
St. Joseph, Mo.
Shane, Lillie
Shaw, Edna L.
Shay, Verna ..... $\qquad$
Lafayette, Colo.
Rocky Ford, Colo.
Sherlock, Norma - Frances
Glenwo.......Denver, Colo.
Shewmaker, Letha D. $\quad$ -
Sinclaire, Myra
Singleton, Inez

Smith, Helen M. ..-
Smith, Helen R. .-- Flor Franc Colo
Smith, Kate E. ..o.
Smith, Lewis A.


Spahr, Elsie .........
Springsteen, Frank G.
$\square$ H $\qquad$ Salt L...Golden, Colo.

Staub, Isabella T.


Stidham, Cleta ........
Stockdale, Martha C. .--------
Stolt, Edna B

Stratton, Eva


Taylor, Edna R. $\qquad$ Loveland, Colo.
Thaxton, Ruth
Otis, Colo.
Thomas, Harry
Thompson, Josephine $\quad-\quad$ Richfield, Idaho
Thornberry, Mrs. A. D. .-a-

Tilson, Vera

Triem, Emma E C Kers Colo
Trovinger, Mary C. .--.-a-

Tubbs, Myrtle L. .--
Tynan, Elizabeth ............-
Tyson, Ivernia Pueblo, Colo.
Underwood, Goldie

Vona, Colo.
Vallat, Genevieve
Van Eps, Ethel Omaha, Nebr.
Van Vorhis, Elizabeth ..................................................................................................... Colo.
Vickens, Edith M. Arvada, Colo.
Victor, Kranz heyenne, Wyo.
Vizzetti, Antoinette
Rockvale, Colo.


INDIVIDUAL PLAN-HIGH SCHOOL

| Students | No. Courses | Address |
| :---: | :---: | :---: |
| Ameter, Josephine .-... |  | Cheyenne, Wyo., Box 992 |
| Benson, Marie. $\qquad$ <br> Benson, Philomena <br> Boyer, Eva <br> Bridge, Ruth $\qquad$ | $\begin{aligned} & 3 \\ & 2 \end{aligned}$ | Elizabeth, Colo. <br> Elizabeth, Colo. <br> Dover, Colo. <br> Campo, Colo. |
| Colins, Mary Ella Crisler, Lewis | ${ }_{2}^{2}$ | Silver Plume, Colo Deora, Colo. |
| Denney, Mahala <br> Dutcher, Emma |  | Seymour, Mo. Guthrie, Okla. |
| Elliott, Alice |  | Campo, Colo. |
| Ferguson, Mabel | 3 | Benld, Ill |
| Graff, Wanda M. $\qquad$ Goodwin, Helen $\qquad$ | 2 | Severance, Colo. <br> Eaton, Colo., Box 503 |
| Hadley, H. H. $\qquad$ <br> Handy, Zona T. $\qquad$ <br> Herrmann, L. S. $\qquad$ | 4 | Yoder, Colo. <br> Deora, Colo. <br> Denver, 2456 W. 28th Ave. |
| Johnson, Hazel <br> Johnston, Elma $\qquad$ <br> Jones, Sallie Lee $\qquad$ | $\begin{aligned} & 3 \\ & 3 \\ & \hline \end{aligned}$ | Arriba, Colo. <br> Hudson Colo., c/o A. J. Oster Wellington, Colo. |
| McCallum, R. C. <br> McCallum, Addie $\qquad$ $\qquad$ <br> MacFarland, Barbara <br> Magil, Dashia <br> Meade, Pauline L. $\qquad$ $\qquad$ | $\begin{aligned} & 2 \\ & { }_{3}^{2} \end{aligned}$ | Pine, Colo. Arriba, Colo. Greeley, Colo. Arriba, Colo. Bellvue, Colo. |
| Parker, Mrs. Irene $\qquad$ <br> Pressler, Florence $\qquad$ | 2 | Coal View, Colo. Eskadle, Colo. |
| Robbins, Dora |  | R. 2 B by 9 Windsor, Colo. |
| Sawhill, A. L. ..- |  | Siebert, Colo. |
| Whitney, Frank A. <br> Whitney, Mrs. Maybelle <br> Wiley, Lula <br> Wilfley, Ida K. <br> Wood, Elizabeth | $\begin{aligned} & 3 \\ & 2 \\ & 6 \end{aligned}$ | 501 Prospect St.. Trinidad, Colo. 749 E. Kowa., Colo. Sprs., Colo. Bardeen, Colo. <br> Lamar, Colo., c/o G. L. Penley |

# STATE HIGH SCHOOL OF INDUSTRIAL ARTS 

FALL, WINTER AND SPRING QUARTERS
1921-1922

## NINTH GRADE

Adams, John
Adams, Harvey
Ahlstrand, Carol
Alkire, Faye
Allison, Hazel
Anderson, Floyd
Axom, Ethel
Barber, Mary
Barnard, Edan
Beesely, Evelyn
Bickel, Eloise
Bloder, Agnes
Brugh, Pauline
Buchanan, Gilbert
Bull, Ruth
Burrows, Winifred
Carbin, Flora
Carlson, Carl
Carlson, Stanley
Carter, Emma
Carter, Nettie
Chesnut, Byron
Collins, Marion
Couch, Frances
Crawford, Alice
Culbertson, Grant
Danford, Ellen
Davis, Susie
Deaver, Emery Donner, Earl Draper, Paul Eaton, Bourne Field, Martin Ellis, Virginia Flynn, John
Emel, Ruth
Enders Euginia
Enright, Howard
Galland, Alva
Gillespie, Stella
Glendenning, Earl
Hadden, Margaret
Hall, Harold
Harrington, Manuel
Henderson, Madge
Holloway, Cecil
Holmes, Charles
Holmes, Clarence
Howell, James
Humphrey, Walter
Hunter, Edith
Irvin, Joe H.
Jarrett, John
Johnson, Coil
Johnson Josephine
Johnson, Marion
Johnson, Thelma
Kessinger, Cecil Fay
Koehler, Daniel

Kinsey, Max
Larson, Fordia
Latham, Florence Belle
Layton, Vera
Long, Leland
Lundquist, Alphild
Lundquist, Ethel
Luper, Faye
McCaleb, Dorothy
McCandless, John
Messinger, Fred
Mellor, Dick
Meyers, Harold
Meyers, Loyal
Miller, Russell
Mitchell, Delphine
Morse, Mabel
Mossberg, Clarence
Norcross, Lyle
Nesbitt, Laura
Odel, Alma
Palmer, Ruth
Peterson, Eleanor
Potter, Verda
Regester, Willis
Rhody, Paul
Romann, Mary
Salberg, Arthur
Schnepf, Martha
Scott, Gladys
Sierman, Louis
Sjoberg, Mabel
Smith, Helen
Smith, Agnes
Smith, Edwin
Smith, Hazel
Spring, Esther
Sputh, Paul
Stephens, Pauline
Stormont, Ned
Straight, Dann
Straley, Viola
Swope, Owen
Thompson, Joe
Timothy Glendon
Travers, Harold
Trembath, William
Trembath, Stanley
Turnage, Milton
Vance, Lester
Voris, Clyde
Voris Earl
Waldhauser, Damon
Walker, Reuben
Walsh, Mary
Weigand. Rachel
Wood, William
Yoshemera. Mary
Zitnick, Elise
Zupke, Clara

TENTH GRADE
Alles, Lydia
Anderson, Lloyd
Austin, Phyllis
Baker, Eva
Bailey, Wilam
Billings, Goldie
Boardman, Philip
Capshaw, Faye
Dopas, Alice
Day, George

Jones, Hazel
Jones, Thelma
Just, Olga
Kinsey, Leslie
Lauck, John
McMillen, Warren
Mashburn, Jack
Mitchell, Morris
Moss, Dixon
Mount, Ruth

Dempewolf, Arnold<br>Dempsey, Robert<br>Dempsey, Audrey<br>Derry, Crystal<br>Downer, Walter<br>Dunn, Esther<br>Flint, Edward<br>Flint, Leona<br>Fuhrman, Beatrice<br>Gallegos, Otillia<br>Ginther, August<br>Ginther, Ruth<br>Gosselin, Marjorie<br>Greafe, Minnie Mae<br>Highley, Ethel<br>Hill, Mary<br>Humphrey, Carl<br>Jacobs, John<br>Jackson, Lila<br>Johnson, Kenneth

Myer, Leon
O'Brien, Julia
Oliver, Edna
Parker, Inza Mae
Potter, Ruby
Runnells, Blanche
Schade, Irene
Seastrand, Conrad
Self, Mamie
Smith, Grace
Smith, Harley
Spencer, Edwin
Starkey, Lois
Swope, Owen
Tipton, Mae
VanMeter, Hattie
Van Laningham, Helen
White, Volney
Yearout, Mary
Yearout, Sidney

## ELEVENTH GRADE

Baker, Ruth
Beesley, Hazel
Benway, Grace
Billings, Goldie
Bloder, Mary
Brake, Vera
Brenton, Marr
Cooperrider, Leonard
Culbertson, Virginia
Curry, Marion
Daehn, Charles W
Donner, Hattie
Dunn, Clyde
Dunning, Nora F.
Eaton, Thomas
Edgington, Neva
Fink, Orlo
Glidden, George
Harbottle, Lucille
Harbottle, Marguerite
Hayes, Mary
Hofschult, Agnes
Hubbard, Jessie
Jackson, Lela
Jackson, Marian
Jackman, Marian

Johnson, Garvais
Jones, Thelma
Key, Opal
Kindred, Marion
Koehler, Henry
McCaul, William
McNeal, Imogene
Monroe, Florence
Oberg, 'Lister
Peterson, Robert
Pierson, Esther
Remley, Boyd
Royer, Rowena
Reed, Frank
Schlosser, Walter
Sitzman, Lydia
Smith, Esther
Smith, Ralph H
Streck, Lucile
Taylor, Arthur
Taylor, Charles
Tichenor, Margaret
White, Winnie C
White, Raymond
Woland, Lillian
Wood, Katherine

## TWELFTH GRADE

Alber, Vera
Armgost, Don
Balent, Ella
Benson, Marie
Benson, Philomene
Biswell, Watson
Billings, Fern
Boyer, Homer
Campbell, Dean
Carlock, Kenneth
Cockerill, Ethel
Copeland, Pearl
Curd, Lucille
Davis, John
Dean, Helen
Dempewolf, Bertha
Dunlavy, Kenneth
Dunn, Myer
Engle, Chas.
Evans, Earl
Ewing, Cora
Fielder, Mary
Flood, Fred
Forester, Byron
Forward, Grace
Geiser, Irene
Glaister, Marguerite
Glidden, John
Goerke, Robert

Lance, Lewis
Lahman, Lula
Landis, Amanda
Long, Ted
McCall, Belle
McCune, Margaret
McFarland, Barbara
McGaughey, Pherman
Marr, Brenton
Mashburn, Charles
Meade, Pauline
Mennefee, Ray
Onstine, Daniel
Page, Clark
Piper, Lester
Frice, Dorothy
Price, Belle
Romans, Helen
Rowlands, Bernice
Rupp, Bernice
Schneck, Bessie
Schlosser, Reinard
Schnoor, Beatrice
Seastrand, Ralph
Scott, Olive
Shaw, Nathalie
Sickels, Lola
Shields, Mildred
Smith, Estella

Gustafson, Alva
Hackelman, Mabel
Hale, Edna
Hall, Ila
Hargrove, Ralph
Harper, Archie
Harris, Kenneth
Hofschulte, Laura
Howe, Vera M.
Jacobson, Mabel
James, Thomas C.
Joppa, Florence
Joppa, Richard
Kelly, Marietta
Kohlman, Mattie

Smith, Hanna
Stephens, Eleanor
Stephens, Horace
Sumner, Rutin
Tibbets, Mildred
Tibbets, Vera
Tisdel, Dorothy
Underwood, Goldie
Waggoner, Helen
Wallace, Norma
Warren, Hugh
Wehster, Herby
Williams, Mary
White, Everette N.
Wood, Howard

## ADULTS

Beattie, Howard
Boyer, Eva May
Blake, Myrtle
Brown, Libbie
Cooper, Ida L.
Dick, Joseph Edgar
Eichelberger, N. Emma
Hanna, Mrs. Mattie Poague
Hart, Julia
Hood, L. C.
Hood, L. C.
Koeneke, Hilda
Mengenity, Mrs. Mary
Nicholas, Sara Jean
Patterson, Lula
Pearson, Lillian
Roddy, Alice B.
Robertson, Isabel
Redifer, Burleigh
Redifer, R. W.
Seastrand, Agnes
Thompson, Ethel G
White, Aletha

## TRAINING SCHOOL

FALL, WINTER AND SPRING QUARTERS 1921-1922

## KINDERGARTEN

Abbott, Florence
Adams, Geo. Floyd
Atkinson, Mary Louise
Atkinson, Thomas C.
Baab, Mildred Eliz.
Baldon, Lawrence
Bell, Virginia Sthart
Bodeen, Clara
Boies, Eliz. May
Bradford, Samuel H.
Brown, Maryellen
Burbridge, Mary Jane
Burr, Wm. Frederick
Bush, Catherine
Clayton, John Robert
Clements, Geo. A.
Cline, James McKee
Collins, Ruth Eliz.
Cooper, Billy Underwood
Conn, Helen
Corder, Helen E.
Criswell, Geo. S.
Daniels, Bobbette Marie
Fisher, Doris Pauline
Force, Wm. Wilbur
Gates, Kathryn
Gelder, Harvey Minter
Girard, Meridith
Gladston, Billy
Gooden, Orville Grant
Griffin, Betty Jean
Hall, Geo. Earnest
Hammett, Harley G.
Henry, Jimmie
Hicks, Dorothy Jane
Hinder, Theresa
Horn, Betty Jane
Horn, Frances
Hudson, Ana Belle
Jackson, Roy Earle
Jacobson, Doris
Jacobson, Merrill LeRoy
Jchnson, Frances Louise

Kanousky, Chas. A.
La Ford, Jeanette
Lee, Dorothy
Longaker, Buddy
Magnuson, Mona Virginia
Mallory, Esther Kathleen
McClelland, Juliamary
Meyer, Leon Morris
Meyers, Eugene E.
Morgan, Jean Eliz.
Morgan, Julia Ann
Mortenson, Venetia
Murch, Clarence Morse
Nelson, Rhoda O.
Netherton, Mary Weldon
Oliver, Dorothy May
Neill, Clarence J., Jr.
Orton, Myron
Parker, Davis
Parker, Jeanette
Peterson, Raymond T.
Pary, Anita
Radell, Beach
Rowe, Virginia
Scott, Robert P.
Seawell, Reba 亡̇ouise
Sherman, Gwendolyn
Sherman, Wayne
Snyder, Earl Tyndall, Jr.
Spear, Dorothy Jane
Southart, Billy
Steidley, Theo.
Stillwell, T. Chandus, Jr.
Van Buskirk, Rita
Varvel, Virginia Lee
Webster, Merion
Wheeler, John
Whitlow, Dorothy
Williams, Ruth Miriam
Wilson, Ella
Wobermin, Arthur
Wooden, Della Alice
Wooden, Sherman
Wright, Frank Leon

## FIRST GRADE

Adams, Velda
Alles, Victor
Ankeney, Charles, Jr.
Bain, Enola
Barclay, Frances
Baum, Nancy
Bell, Chauncy F.
Blue, Betty Margaret
Boardman, Myron
Bodeen, Nellie Elvira
Bonell, David Andrew
Carrell, Marian
Carrell, Merlin
Christopher, Camille
Elam, Carol
Folbrecht, Lucille
Freeman, Norman Keith
Griffin, Betty
Halbert, Aleyn
Humphrey, Ruth Maybelle
Jacobson, Rolla
Johnson, Dorothy
Joppa, Edwin
Kough, Rosie
McCain, Harley

McElroy, Wm. Chas.
McMillan, Helen B.
Meyer, Paul
Mitchell, Leonard
Moses, Adela
Murgatroud, Walter E.
Osborne, Cleo
Ostrander, Robert
Packard, Nancy
Reynolds, Violet May
Robert, Lawrence
Sears, Billie
Sitzman, Ruth
Smith, Edna
Snow, Wayne, Jr.
Snyder, Eliz. Rae
Star, Pauline
Stephens, Chas. Edgar
Stephens, Robert Melton
Sturgeon, Eiarl Dean
Tann, Doris
Tegtman, Catherine
Weiglund, Pauline
Williams, Katherine
Wilson, Richard

## SECOND GRADE

Bass, Albert Carter
Benoit, Mina
Bradford, Martha Anna
Burch, George
Castleman, William
Conn, Lois
Conner, Charles
Finley, Mary Eliz.
Girard, Audley
Gray, Velma
Griggs, Ralph
Guess, Barbara
Harrington, Marie
Harris, Walter W
Hofschulte, Dorothy
Hollister, Mary Beverley
Houtchens, Evarett
Jackson, Doirs

Fiovinga, Berman
Haun, Sylvia
Humphrey, Birdett
Kinsey, Philip
Lockhart, Mary
Meyer, John
Megnuson, Fred
Murch, George
Peterson, Lucile
Poole, Glenn
Radell, Dorothy
Fieed, Kathryn J
Scott, William A.
Skold, Arthur
Snow, Dorothy
Stephens, Robert
Tolbert, Clara
Turner, Zelda
Wallace, Philip
Walters, John
Winters, Jane
Zeis, Rita

## THIRD GRADE

Barclay, Florence
Colvin, Margaret Bell
Cleaver, Josephine
Davis, Dorothy
Deierlien, Miriam
Dempsey, Doris
Dunn, Clara
Elam, Elizabeth
Ellis, Helen
Freeman, Eleanor
Ginther, Mary
Goulette, Cheshawgan
Harris, Clarence
Hofschulte, Margaret
Hofschulte, Mary
Humphrey, Edward
Humfreville, John
Humfreville, Mary Jane

Johnson, Alice
Milton, Paul
Oster, Otto
Owens, Margaret
Samuelson, Frances
Shaw, Jack Edward
Smith, Esther
Smith, Jesse
Spencer, Earnest
Strack, Vincent
Stroh, Lester
Styer, Albert
Taylor, Floyd
Waldhauser, Evelyn
Weiglund, Marie
Weiglund, Sam
Windecker, Lillian
Woldruff, Lois

## FOURTH GRADE

Alles, Ruben
Ament, Elmira
Armentrout, Evelyn
Eaker, Arthur
Benoit, Mary
Boye, Carol
Rridges, Forest Roy
Bridges, Marvin
Burch, Kathryn
Butcher, Douglass
Campbell, Howard
Castleman, Regina
Cleaver, Thelma
Coon, Vivian
Crist, William
Dale, Joyce
Donner, Ervin
Dunn, Thomas
Ellis, James Arthur
Erdley, Howard
Fleming, Alma
Freeman, Eugene
Gooden, Eulah

Halpin, Wm. Lawrence
Harbottle, Dorothy
Harrington, Celia
Holt, Albert
Kihm, Ruben
Kirb, Lila
Lehan, Pat
McAlear, Lela
McLain, Grace
McMillan, Mayme
Meyer, Edward
Gster, Louie
Petrikin, Nancy L.
Reed, Mary Eliz.
Reid, Roberta
Roberts, Roland
Salberg, Herman
Segel, Paul
Spears, Bernice
Stevens, Seymour
Vanlaningham, Maxine
Woldruff, George

FIFTH GRADE

Ayers, Finis Larne
Ayers, Ralph Farris
Badger, Robert E.
Barns, William
Bass, Louise
Bickel, George
Bowers, John
Boardman, Janetta
Carbaugh, Nellie

Humphrey, Hazel
Humphrey, Lucile
Kendel, Mary
Lawrence, Elmer
Mayer, Wilmer
McCain, Jessie
McGimsey, Mary Emily
Meyer, Mary
Miller, Marshall

Collins, Jack
Coon, Billy
Culbertson, Grace
Dale, Donald
Deierlien, Harold
Ellis, Mary
Ellis, Martha Olive
Ginther, Elizabeth
Gooden, Herbert
Hargrove, Helen
Harrington, Nellie
Harris, Kenneth
Hicks, Marie
Houtchens, Barnard

Owens, Dorothy
Porter, Cyrus
Smith, Robert
Spencer, Cleo
Stroh, Ruben
Styer, Mabel
Tallman, Rena
Taylor, Leona
Thompson, James
Turner, Elbert L.
Turner, Ollie
Waugh, Doris
Windecker, Dorothy
Wright, Homer Lee

## SIXTH GRADE

Ahlstrand, Charlene
Ament, Herman
Baab, Clarence
Baker, Eugene
Born, Emma
Brethauer. Rachel
Carrico, Oscar
Cleaver, John
Cockerill, Albert
Dale, Glenn
Dale, Kenneth
Defoor, Gretchen
Dempewolf, Lawrence
Freek, Louise
Freek, Raymond
Fuson, John
Haubrich, George
Hollister, Merlin
Kelly, Paul
Kihn, Evelyn
McCalb, Fay
McCave, Donald
McLain, James
Mitchell, Thomas
Poole, Arden
Prunty, Beulah
Odell, Normal
Roles, Twyla
Stroh, Harry
Tann, Ethel
Turner, Lester
White, Isabel
Williams, Dorothy

## SEVENTH GRADE

Alles, Amelia
Armentrout, Ruth
Arnold, Ruby
Benoit, Pansy
Benoit, Tommy
Benway, Ruth
Brethauer, Sam
Brown, Ruby
Buckendorf, Amy
Butscher, Winston
Chapp, Marie
Copeland, Verna
Carbaugh, Andy
Clark, Bert
Culbertson, Ruth
Coon, Elberta
Day, Eunice
Durkee, Roger
Ellis, Victoria
Fleming, Ruth
Forshee, Adele
Galland, Harold
Gillette, Selma
Hall, Marion
Johnson, Oscar
Kihn, Edvina
King, Buel

Kinsey, Muriel
Kirk, Clarence
Lehan, Edward
Long, Jean
Meyers, Dale
Milton, Ruth
Moser, Mary
Murgatroyd, Mabel
O'Connor, James
O'Connor, Leonora
Olinger, Ila Lee
Owens, Harold
Roberts, Vivian
Seastrand, Eugene
Royer, Dean C.
Simms, Albert
Skold, Arvid
Smith, Naomi
Souther, Beatrice
Thompson, Rith
Waugh, John
White, Marion
White, Marvin
Woldruff, Loren
Wynne, Alice
Young. Harold

EIGHTH GRADE

Ahlstrand, Carol
Anderson, Gertrude
Badger, Alice
Baldwin, Jessie
Barger, Mary
Bennett, Pearl
Bower, John
Bowman, Floyd
Burrouws, Winifred
Carlson, Stanley
Crist, Grace
Crist, Van
Cross, Neal

McCain, Floyd
Meyer, Emanuel
Meyer, Jacob
Meyers, Harold
Morse, Mabel
Moses, Nina
Nolte, Rose
Odell, Alma
Roberts, Eleanor
Roberts, John
Roberts, Lucille
Roewe, Eleanor
Salberg, Arthur

Eaton, Bourne Ellis, Virginia Erdley, Ethel Ericson, Alvin Field, Martin Ginther, Clara
Hadden, Margaret
Harrington, Manual
Hill, Clifford
Hofschulte, Leslie
Houtchens, Kathryn
Jarrett, John
Johnson, Thelma
Mann, Claron

Schuster, Helen
Scott, Betty Carrol
Scott, Gladys
Shaw, Marjorie
Sitzman, Mollie
Soper, Edna
Spring, Esther
Spring, Martin
Spring, Walter
Stephens, Pauline
Swartz, John
Turner, Cora
Waldhauser, Damon
Wyatt, Gaily

# DEMONSTRATION SCHOOLS 

## Ashton

## FIRST GRADE

> Ashenbrenner, Willie Ashenbrenner, Lizzie Briggs, Beverly Gustafson, Elizabeth Kerst, Henry Klev, Dora
> Kagohara, Rose Letavec, Luella
> Norma, Esther

Pearson, Florence
Quintana, Gerecita
Quintana, Reyes
Randall, Dick
Redmond, Charlie
Rehmer, Willie
Steber, Annie
Wolfe, Marjorie

## SECOND GRADE

Ashenbrenner, Amelia Ashenbrenner, Henry Alkire, Forrest

Krum David
Strassheim, Lydia

THIRD GRADE
Alkire, Herbert
Drake, Freda
Gustafson, Gunhild
Krum, Ruben
Noeberger, Nellie
Redmond, Alfred
Rehmer, Fred
Steber, Opal
Strassheim, Mollie

## FOURTH GRADE

Brower, John
Balch, Edith
Carlson, John
Drake, Ruth
Krum, John

Mossberg, Carl
Nieberger, Mary
Fiedmond, Roy
Rehmer, Mary
Smith, Ethel May

FIFTH GRADE
Krum, Henry
Newkirk, Margaret
Rehmer, James

SIXTH GRADE
Krum, Lydia
Mossberg, Mildred
Munce, Harvey

SEVENTH GRADE
Lambert, Beulah
Munce, Mildred Nieberger, Charley

Nieberger, Chrisı Redmond, Robert

EIGHTH GRADE

Carlson, Albion
Cooperrider, Katherine
Rehmer, Alice

Rehmer, Charley Wolfe, Frank

Hazelton

## FIRST GRADE

Alberts, Alyne Alt, Molly<br>Barber, James<br>Bentley, Edna<br>Geisick, Esther<br>Libsack, Helen<br>Miller, Leta<br>Moody, Franklin

Nagle, William
Perrin, Jess
Redman, Eva
Semon, Chris
Schore, Lydia
Shepard, Ira
Swetzig, Emma
Wilhelm, Phillip

## SECOND GRADE

## Achziger, Herman Baird, Ruth Graham, Louis Miller, Ernest

Alt, John
Achziger, Leah
Miller, Henry
Moody, Donald
Nagle, Jacob, Jr.
Alt, Sophia
Bolander, Eula
Messer, Jacob
Miller, Marie
Miller Jacob
Moody, Floyd

Alt, Sophia Bolander, Eula
Messer, Jacob
Miller Jacob
Moody, Floyd

Achziger, Daniel Drake, Clyde<br>Geisick, Harry<br>Messer, Minnie

## Achziger, Esther Geisick, John Heimbigner, John Libsack, Rubin

Bentley, Earl
Bolander, Evelyn Gilbert, James Hatch, Gladys

FOURTH GRADE
Nagel, Manuel
Strausky, Grace
Swetzig, Mary
Taylor, Marguerite

THIRD GRADE
Semon, Jacob
Swetzig, Jacob
Shepherd, Elsie
Wilhelm, Hannah

Semon, Molly
Semon, Peter
Shepherd, Nathan
Sitzman, Herman
Swetzig, Lydia

FIFTH GRADE
Shepherd, Hester
Swetzig, Millie
Wolldridge, Georgia

## SIXTH GRADE

Rasmussen, Paul
Shepherd, Kate
Strausky, Alma
Wilhelm, David

SEVENTH GRADE
Sitzman, Lydia
Steinmiller, Jacob
Wilhelm, Lela

EIGHTH GRADE
Miller, Rachel

## ATTENDANCE SUMMARY

## COLORADO STATE TEACHERS COLLEGE <br> SCHOOL YEAR—1921-1922

FALL, WINTER, SPRING AND SUMMER QUARTERS
I. Teachers College:

```
Fall, Winter and Spring Quarters (no duplicates)

Special Students .................................................................. 65

Summer Quarter......................................................................... 2153
Special Students .............................................................................. 155
- 2208

Total ............................................................................................ 3142
II. School of Adults:

Fall, Winter and Spring Quarters (no dupli-
Summer Quarter .................................................................................... 73
Total
96
III. Extension:

Group Plan

Individual Plan
College
 505
Individual ..... 33
538Total1623
IV. State High School of Industrial Arts:
Fall, Winter and Spring Quarters (no dupli- cates) ..... 330
Summer Quarter ..... 126
Total456
V. Training School:
Fall, Winter and Spring Quarters (no dupli- cates) ..... 444
Summer Quarter ..... 324
Total768
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Ashton ..... 57
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\section*{COLORADO STATE TEACHERS COLLEGE} Is a member of the American Association of Teachers Colleges and of the North Central Association of Colleges and Secondary Schools.
LR

\section*{COLORADO STATE TEACHERS COLLEGE BULLETIN}

\section*{PROGRAMS OF COURSES}

FOR THE
FALL, WINTER, AND SPRING QUARTERS 1922-1923

Every student should read the Instructions Concerning Registration before attempting to make up a program for any quarter. Plan your work for the whole year, especially for the required subjects.


\title{
Colorado State Teachers College BULLETIN
}

\section*{Hand Book}

OF THE

\section*{Extension Service}

GREELEY, COLORADO

\section*{Important Notice}

All correspondence should be addressed to
EXTENSION DEPARTMENT
COLORADO STATE TEACHERS COLLEGE GREELEY, COLORADO

The Director of the Extension Service is frequently out of the city and mail addressed to him must wait for his return.

\section*{APPLICATION FOR CORRESPONDENCE STUDY}

\author{
To the Director of Extension Service Greeley, Colorado
}

Date
Name
Post Office Address
Present Occupation
High School Attendance:
\begin{tabular}{|c|c|}
\hline School. &  \\
\hline School.. &  \\
\hline I attended.. &  \\
\hline I earned.....................units. & \\
\hline I graduated in the month of. & -........Year.. \\
\hline I can furnish certified creden & (answer yes or no). \\
\hline
\end{tabular}

College Attendance:
\begin{tabular}{|c|c|}
\hline School Attended. & Years.................Months.. \\
\hline School Attended. & Years..................Months.. \\
\hline School Attended. & Years ...-.--.-.-....-Months.. \\
\hline Graduated from. & Year--.--.-.-......-Month \\
\hline Can furnish certi & \\
\hline
\end{tabular}

Subject desired by correspondence
Be sure to give both name and catalog number.
Note One. Read carefully what this Hand Book has to say about limitations on extension study (see page 10). Students are held responsible for all statements of fact contained in said limitations. Note that no enrollment can be made without payment of fees.

Note Two. All persons who desire to take extension courses with Teachers College are required to matriculate with the College (this involves no additional fee), and to establish by means of certified credentials their educational status.

Note Three. Colorado Teachers College has provided for individuals with broken educational careers, and teachers who have not completed their High School work, high school extension courses. If interested write to the Extension Department of Colorado State Teachers College for High School Extension Bulletin.

\section*{EXTENSION DEPARTMENT}

\author{
John Grant Crabbe, A.B., A.M., Pd.M., Pd.D., LL.D. President of the College
}

\author{
John Randolph Bell, Ph.B., A.M., Litt.D. Director of Extension Department \\ \section*{MEMBERS OF THE COLLEGE FACULTY GIVING COURSES IN THE EXTENSION DEPARTMENT}
}


\section*{FOREWORD}

\section*{Colorado Teachers Have a Professional Attitude}

Last year, 1921-22, two thousand teachers enrolled in extension courses with Colorado State Teachers College. This number was greatly augmented by similar enrollments in other educational institutions in the state.

This truly remarkable enrollment constitutes a splendid tribute to the professional attitude of the teaching corps of Colorado.

It proves conclusively that the teachers of the state are awake, alive to their opportunities, and conscious of the sacred obligation of growth.

They want to be abreast of the times, to increase their skill, to enlarge their power of service, and they find in extension courses the means of accomplishing all of these most worthy ends.

\section*{The Meaning of the Term 'Extension Course"}

At first the term "extension course" signified that a given college prepared and sent out to students not resident in the town where the school was located certain desired courses of study. It was at first conceived to be a service by the college to those without the pale.

Those engaged in the service soon realized that the original conception was both narrow and false. They perceived that the college belongs to all the people of the state. The humblest citizen has a vital share in it and as part owner has a right to its privileges.

This thought brought with it a new sense of responsibility, a feeling that the college was in honor bound to minister to the educational needs of all the citizens of the commonwealth who desire to avail themselves of its advantages. The "extension course" ceased to be a courtesy and became a duty.

Extension service comes in this way to mean, in its wider significance, that the group of students who fill college halls and class-rooms are but a part of its clientele. There is a larger body of earnest men and women who, also, "covet learning's prize" and would vain "climb the heights and take it" though they must use a path more rugged. It means, also, by reason of the fact that it takes more courage of heart and power of will to succeed in this way than by the more direct method, that the extension group is worthy of all honor and consideration.

It means in final analysis that a college is something more than walls and tower and building site, and that its influence should reach everywhere and be everywhere for good.

\section*{Growth of Extension Service}

Coincident with this new and more wholesome attitude on the part of college faculties toward their extension service, there has arisen in the minds of thousands of aspiring and energetic individuals the clear realization that extension courses do afford a sane and practical method of professional advancement.

No phase of educational progress has been more marked in recent years than the rapid growth of extension departments, with the possible exception of the development of summer schools.

From a few isolated cases of persons connected with colleges twenty years ago in the capacity of extension students, the situation has changed to such an extent that today many of the most eminent colleges have more non-resident students than resident. There has been a corresponding advance in the quality of those taking extension work and the excellence of the courses offered.

\section*{The Significance of Preparedness}

Success is always measured in terms of preparation. There are always ready places for ready men. The individual who would make the most of his native gifts is not under the necessity of creating opportunities, but merely the obligation of being tremendously prepared for opportunities when they come.

Every great life bears conclusive and irrevocable evidence of this truth. Preparation, therefore, becomes the best of all investments and the surest guarantee of a useful and happy career.

The lawyer who knows the law does not lack clients. The physician who has mastered the science of medicine is not without patients, and the teacher who can direct life into sane and healthful channels, develop in her students thought power, and lay the foundations of character is needed to the ends of the earth.

\section*{Denver Leads the Way}

Under the leadership of Superintendent Jesse Newlon, the City of Denver has decided to make compensation depend upon preparation. This action has attracted attention throughout the country. Everywhere it is regarded as profoundly significant, and in the opinion of many it is the most important forward step taken in America in recent years.

It cannot fail to place a new emphasis upon the dignity and importance of teaching and to bring in touch with child-life more highly trained types of personality.

It will attract to our schools talented individuals who were wont to enter other professions in the past, and it will cause those who are now teaching to seek the most complete development of their natural gifts. Both of these processes will bring untold blessings to the civilization of tomorrow.

\section*{A Criterion that is Just}

Some gifts the individual owes to heredity, and some to the spirit of effort that wells up in human hearts. Training belongs to the latter group.

To measure teachers by charms of personality that may not be acquiredbeauty of feature and grace of form, in so far as these are beyond the reach of human endeavor-would be to make life's noblest compensations the reward of birth and leave many an earnest aspiring soul devoid of the opportunity for helpful service. To place the major emphasis, however, upon training makes effort the keynote of reward and puts the talisman of success in a field where all may strive.

\section*{The Teacher Who Aspires Can Prepare.}

The standard colleges of America now offer practically all of their courses in the summer when the public schools are not in session, and most of them can be pursued by extension during the winter months. Faculty members go directly from all the leading institutions of higher learning to the larger centers of population and thus make available to teachers the most valuable and important courses offered in said institutions.

The Teacher Who is Willing to Work is Surrounded by a Flood of Opportunity. Courses in Education, Educational Psychology, Educational Sociology, Educational Biology-the four subjects that develop the modern point of view in edu-cation-are listed in profusion in the pages which follow. These are supplemented by content courses in Literature, History, Science, Mathematics, Music and Art, that bestow culture and go far toward the development of true personality. To this imposing list is added method courses that are intended to give mastery in the technique of teaching, and vocational courses that correlate the school and the home with the responsibilities which life is to impose.

The teacher who appreciates the dignity and importance of teaching finds in extension courses the means of gaining professional prestige-the child has a right to the trained teacher and superintendents and boards of education are constantly looking for them; increased power of service-to serve one must be himself endowed with the things which humanity needs, and these are acquired only through study; and the happiness that comes only through growth.

Mr. John Dewey in his little volume on "Interest and Effort in Education" has rendered an inestimable service to the cause of education in making a sharp distinction between that false pleasure that comes through placid receptivityseeing, hearing, tasting, and touching things, which all too often means deterior-ation-and that noble happiness that comes through "mastery, achievement and getting ahead." If this philosophy could only be read and understood by all teachers, then, the realization of the joy of growth would impel all and there would be no need for any other incentive for self improvement.

\section*{A Stepping Stone and a Stumbling Block}

The claim has been made in behalf of extension courses that they have been instrumental in securing promotion for many of the most gifted and useful citizens of America. This claim has real merit. It means that individuals who aspire to improve their condition and are willing to do their very best to realize this hope - those who have the vision to dream and the force of character to put forth the effort essential to make their dreams realities-find in extension courses stepping stones to success.

It would be just as true,however, to say that the extension course is a stumbling block to the lazy and indifferent. The self-satisfied individual, the person without ambition, strength of will and power to work when left to his own resources, never succeeds with extension courses. To him the path of least resistance, which is always downward, proves irresistible. He is idle because no one is present to compel action. He waits and delays action indefinitely for the simple reason that the time limitations are not fixed and definite. He is lost because he cannot successfully direct his own life and energy.

Before undertaking extension work the student should candidly take an inventory of his own physical, mental and moral resources. If he possesses aspiration, energy, self-control and that "divine discontent" which is the beginning of all achievement, he will find the extension course a blessing and a source of increased wisdom and power.

If, on the other hand, he has no serious thought of promotion, if pleasure is more alluring than study, and he has the habit of dissipating his leisure time, he had best save the postage, for extension work will prove only a stumbling block and vexation of spirit to him.

\section*{Improvement in Procedure}

With growth in numbers, there has come improvement in procedure. Experience has taught the better way. The Extension Department has earnestly endeavored to profit by early mistakes and to work out the most practical and helpful way of conducting its courses.

\section*{Two Distinct Types}

There are two distinct ways in which extension work can be carried on. One is known as the group plan, and the other as the individual plan.

The former is intended to meet the needs of teachers who can gather in in sufficient numbers to justify (twenty is the minimum number in all cases where a college faculty member does the teaching) the organization of a class and the selection of an instructor.

The latter is planned for persons who are too far removed from the larger centers of population to make a cooperative scheme feasible.

\section*{Details Relative to the Group Plan}

The University of Colorado, the University of Denver and Teachers College have agreed upon the following conditions for granting credit:
1. Standards-The standard of the work done shall be of such type as to be acceptable for regular undergraduate credit at each of the above mentioned institutions.
2. Instructors-No work shall be accepted for credit except that given by instructors duly approved by the institution in which credit is desired.
3. Class Period-The period of each class shall be ninety (90) minutes, requiring seventeen (17) sessions for three (3) quarter hours' credit. The minimum time requirements for a whole course shall be 1500 minutes spent in class recitation.
4. Fees-The fees shall be \(\$ 8.00\) per student per class yielding 3 quarter hours' credit.

\section*{The Nature of Individual Extension Courses}

Each Extension Course consists of (1) a set of "study units" containing questions such as might be asked in class, assignments such as might be made in residence study, and explanatory sections corresponding to the explanations which instructors often make in class. (2) a "materials sheet" which informs the student fully in regard to all the books and other materials needed for the course, with what study units each book will be needed, what material the College Library will provide, and so on; and (3) a sheet of "general directions" for preparing recitation papers.

\section*{How Individual Extension Courses are Conducted}

The Extension Department sends the student the first four study units of the course he has chosen and the material sheet and book list. He studies the books as directed and works out his first recitation paper-covering the work outlined in the first study unit. HE MAILS THIS TO THE EXTENSION DEPARTMENT AS SOON AS IT IS FINISHED-AND WAITS FOR ITS RETURN BEFORE SENDING IN HIS SECOND RECITATION PAPER, SO THAT HE MAY HAVE THE ADVANTAGE OF THE TEACHERS' SUGGESTIONS. The date on which the paper is received in the Extension Department is recorded on the student's enrollment card and stamped on the back of the study unit, which is then passed without delay to the instructor in charge. When the instructor has read, commented on, and graded the paper he returns it to the Extension Department, where the date of its return and the grade given it are recorded on the enrollment card. The first recitation paper is then returned to the student with the fifth study unit, after which the student may mail to the Extension Department his second recitation paper together with any additions required by the instructor to his first recitation paper. The second paper passes through the same process and is mailed back to the student with the sixth study unit, and so on till the course is completed.

\section*{How Manuscripts are to be Prepared}
1. Each recitation paper must show clearly on the first page the following information.
a. The Student's Name and Address.
b. The Name and Number of the Course.
c. The Number of the Study Unit.
2. Use clean letter-size paper. Remember that the character of the teacher is often judged by the care with which she prepares manuscripts. It pays to be neat.
3. Leave a margin one inch wide on left hand side of each sheet for the criticisms and suggestions of the instructor.
4. Always copy the number of the item or question or assignment with your answer; i. e., let your answer bear the same number as the question you are answering.
5. The student is expected to answer every question asked, or else when it is not possible to work out a fairly satisfactory answer independently, to ask questions of the instructor. The instructor expects to do as much teaching as the course requires.
6. Similarly the student is expected to work out all assignments (such as "list the factors-," or "Illustrate-," etc.) with deliberate care, or else to ask questions of the instructor.

\section*{Information Relative to Books}

The plan of furnishing books has been tried in many places and invariably it has proved a failure. It is workable as long as both courses and enrollments are few in numbers. With a large enrollment, the difficulties prove insuperable.

The Department is anxious to assist teachers in every way possible to secure books promptly and at minimum cost. To this end a list of the books needed in the Extension Courses is being prepared for the college book room, with the re-
quest that these books be kept in stock and sold to teachers at a price as near cost as is practical in view of necessary expenses in handling the books.

When this list is complete and the books are in stock a rubber stamp used on the material sheet will indicate the fact that a book can be purchased from the college book store. Until such notice is given, teachers will save time by ordering direct from the publishers. In the larger cities, teachers are able to secure many of the books needed directly from the Public Library.

\section*{The Question of Cost}

A course for which four quarter hours' credit is granted costs eight (8) dollars; i. e., two dollars per quarter hour. Since a course of this type consists of twelve study units, it follows that the College receives fifty cents for the preparation (original) and grading of each study unit. This is, in the judgment of the Department, fair both to the instructor and the individual taking the work. A recent survey shows that this is less than the average cost of the service as shown by the bulletins of the standard educational institutions in the country. The instructor receives \(75 \%\) of the money paid for any given course.

In the past, forty (40) cents additional has been charged for postage. This has proved to be inadequate for the purpose. The new rate, beginning with the publication of this bulletin, is eighty (80) cents. The entire cost of a four hours' course is, therefore, eight (8) dollars and eighty (80) cents.

\section*{Limitations on Extension Study}

\section*{ALL EXTENSION STUDENTS ARE HELD RESPONSIBLE FOR ALL FACTS STATED IN THE FOLLOWING RESTRICTIVE PARAGRAPHS}
1. No diploma or degree can be earned wholly by extension study. Three full quarters of residence work must be done by all who graduate from the Junior College; graduation from the Senior College requires at least two additional quarters of residence work; and graduation from the Graduate School requires three additional quarters of residence study. Group study done with members of the College Faculty may be counted to the extent of one quarter's residence work in the Junior College, and one in the Senior College.
2. Students in residence are not permitted to do correspondence work except as a means of completing a course which has been begun at least three months before the residence enrollment was made. In such cases the residence work must be correspondingly restricted and written permission of the Dean of the College must be presented to the Director of the Extension Department.
3. Not more than one-third as much work can be taken in any given school year by extension as in residence. The standard amount of residence work in any year at Colorado Teachers College is 48 quarter hours. Sixteen quarter hours is therefore the maximum amount of extension work allowed in any given school year. An additional 4 quarter hours may be taken in the summer quarter, provided the individual is not a residence student. Any group work must be included in the 16 -hour limitation.
4. All extension courses must be completed within six months from the date of enrollment. For sufficient reasons an extension of three months may be granted by the Director of the Extension Department, upon the request of the student.
5. No enrollment can be made until the necessary fees have been paid. Note that the fees are \(\$ 2.00\) per quarter hour, plus 20 cents per quarter hour for postage.
6. No enrollment can be made in any given course until the Instructor shall have prepared and presented to the Extension Department the study units required for the given course.
7. Only persons eligible to College entrance may enroll and study for College credit the credit courses described in this Bulletin and such other credit courses as are offered under the group plan.
8. All students enrolling in the Extension Department, except those who have previously enrolled in Teachers College, must fill out a matriculation blank which will be furnished by the department, giving evidence that by training and experience they are prepared to do work of College grade.
9. In all cases the detailed instructions relative to method of study and preparation of manuscripts as outlined in the Hand Book of the Extension Department must be strictly adhered to.
10. Conference and seminar courses in residence are not given under direction of the Extension Department.
11. Courses begun in residence cannot be completed in non-residence and courses begun in non-residence cannot be completed in residence. The two types of work are entirely distinct.
12. It is the prerogative of any instructor to ask any student to drop a course for which the student is clearly not prepared.
13. The College provides in connection with the State High School of Industrial Arts, the High School department of State Teachers College, extension courses for individuals, especially teachers, who have not been able to complete their High School work and as a consequence are not eligible to regular College extension courses. A Bulletin will be forwarded upon request.
14. Students finishing graduation requirements by extension work must give one month's notice to the Dean of the College of their expectation of graduation.
15. Money will not be refunded for courses after the first three recitation papers have been read and graded by the instructor; or in any event after the expiration of six months from the date of enrollment.

\title{
THE DEPARTMENTS OUTLINE OF COURSES OF STUDY \\ \\ Psychology and Child Study
} \\ \\ Psychology and Child Study
}

\author{
Jacob Daniel Heilman, Ph.D.
}

The general purpose of the courses in psychology is to improve the student's ability to care for, train, and educate the child by means of studying the child's nature, normal development, and modes of learning.
1. Child Hygiene-First year. Four hours.

The main purposes of this course are: (a) to point out how the child's school progress and mental and physical development are arrested and how his health and behavior are impaired by the physical defects which are very prevalent among school children; and (b) to discuss the causes of defects, the methods of preventing them and of detecting them, and the measures required for effective amelioration or cure.

The following topics will be treated: Educational and economic values of health; the need for health conservation; deformities and faulty postures; air requirements; malnutrition and school feeding; hygiene of the mouth; enlarged adenoids and diseased tonsils; defective hearing; defective vision.

2a. Educational Psychology-Second year. Three hours (required of all students).

The purposes of this course are: (a) to make the student familar with the child's capacities, tendencies and native responses and to show him how they, and the nature and order of their development, are involved in the process of educating the child; (b) to discuss such conditions of the school room and school activities as will avoid fatigue and promote work.

The following topics will be treated: The child's native equipment; mental work and fatigue.
108. Educational Tests and Measurements-Required in the fourth year. Four hours.

\footnotetext{
Chief Purpose of the Course-(a) to give the student a working knowledge of the best instruments for measuring the child's school progress and his performance level in the school subjects; (b) to discuss the methods of using the educational tests and tabulating the results and (c) to point out their educational significance in all of its phases.

Topics Treated-Tests and standards of reading, writing, spelling, arithmetic, geography and of all the other elementary school subjects.
}

\section*{110. General Psychology-Four hours.}

\begin{abstract}
Purposes of the Course-(a) to make the student acquainted with psychological theories and concepts; (b) to discuss the nature of mental processes; (c) to show what relations they bear to each other, to the nervous system, to the stimuli of the external world and to the various forms of physical behavior.

Topics-Those which are listed in the text books on general psychology such as the nervous system and its functions, sensations and images, attention, perception, memory, reasoning, instinct, feeling, emotion and volition.
\end{abstract}

\section*{Education}

\author{
George W. Frasier, Ph.D. \\ Frank L. Wright, A.M. \\ W. D. Armentrout, A.M. \\ Mark Burrows, A.B. \\ Grace H. Wilson, A.B.
}

The work of this department, although having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

\section*{COURSES PRIMARILY JUNIOR COLLEGE}

\section*{8. Educational Values-Three hours. Mr. Wright.}

The purpose of this course is to give the student a critical attitude in regard to the educational value of the various subjects of the curriculum.

The first part of the course will be an enumeration of the aims of education, and the subjects in the curriculum by the study of which these aims or ends are realized. In the next few lessons the student will be expected to study the theory of educational value as set forth by Bagley in his "Educational Values".

The last part of the course will be given to a practical consideration of educational values. The student will make a detailed study of text books in at least two fields, one of which may be a high school subject. If the student prefers to make both studies of high schools texts, he should communicate with the instructor in charge. These texts are to be studied from the standpoint of the relative value of (a) method of presentation of material, (b) order and sequence of the various topics, and (c) topics or parts of the text which should be eliminated entirely because of lack of evidence of their being of educational value.

A thesis on the relative value of the method of presentation of some subject as it was presented to the student, and as it is being presented in up-to-date schools, at present, will also be expected.

This is a practical course for any teacher, as he will be made to criticise the material he presents and will perhaps be led to eliminate certain topics he now teaches.
10. The Elementary School Curriculum-Three hours. Required of all students, second year. Dr. Frasier.

This course will deal with the forces by which the various elementary school subjects became a part of the curriculum. Typical courses of study will be studied with a view to determining what material is usually presented in the schools and with the purpose of evaluating this material. Modern text books will be compared with older texts in the same subject so as to understand the place of the text book in present-day curricula. The student will then have the background for considering the problems of the modern teaching of the subject.

\section*{12. Current Movements in Social Education-Three hours. Dr. Frasier.}

The purpose of this course and of 13 is to acquaint the student with some of the more recent movements in the field of education. This course will include a discussion of such subjects as the following: The school as a social center; open-air schools; school credit for industrial work in the home; and other subjects of current interest.

\section*{13. Current Movements in Social Education-Three hours. Dr. Frasier.}

This course is in no way dependent upon Education 12. Either course may be taken without the other. It will include a discussion of vocational education, the school survey, the Junior High School, supervised study, the project method, and other subjects of current interest.

\section*{15. Vocational Guidance-Three hours. Dr. Frasier.}

This course will deal with the place of vocational guidance in public school systems. Among other subjects it will treat of the need and value of the study of occupations, vocational analysis, opportunities for vocational education, opportunities for employment, the work of placement and vocational bureaus and various guidance agencies in this and other countries.

\section*{24. School Administration-Three hours. Mr. Wright.}

This course deals more particularly with school and class management as it relates to the teacher and the school principal. A part of the course is given to the study of co-operation between teacher and principal in instruction, discipline, etc. There will be some time given also to a study of the recent school legislation in Colorado.

Other topics arising in the course are:
(a) Some errors the new teacher often makes and some things she ought to know.
(b) Nature, kinds, and development of conduct.
(c) Teaching children to think.
(d) Teaching children to execute.
(e) School room government; fair play in the school room.

This is a good course for any teacher in the field who has not had courses in education. It is particularly good for the teacher of little or no experience.

\section*{25. Administration of Rural and Village Schools-Three hours. Mr.} Burrows.

This course is a study of the history of rural school organization and administration in our country from primitive local needs to the present time. It aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of rural children.

\section*{26. County School Methods-Three hours. Mr. Burrows.}

Most of the methods found in books on teaching have been worked out for graded schools, but it is also true that most teachers are destined to begin their professional careers in country schools where conditions are different. The application of methods to a rural school, the organization of material, class-room management, and effective presentation will receive special emphasis. This course will aim to discover points of difference between the graded and ungraded school in respect to the utility of pertinent methods used in teaching the various branches of study in a rural and village school.

\section*{32. The History of Education in Ancient, Medieval and Renaissance} Times-Three hours. Mr. Wright.

A general survey of the history of education up to and including the Renaissance will be made in this course, with special emphasis upon the Greek, the Roman, and the Renaissance periods. An effort will be made to show the influence of the various movements in these periods upon the education of our own times.

The course is especially beneficial to one majoring or especially interested in history.

\section*{33. History of Modern Elementary Education-Three hours. Mr. Wright.}

Students who have not had Education 32 or its equivalent will be expected, in the first few lessons, to review the features of the Renaissance which influence materially the men and movements of modern education. While the entire field of modern education will be covered to a certain extent, the main part of the course will be devoted to the study of modern elementary education. Such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbart and Froebel, will be emphasized.

\section*{38. Vocations for Women-Two hours. Miss Wilson.}

A course designed for the study of vocations open to women, with the idea of preparing the teacher to guide her students in the choice of their life work. The course consists of a study of women in industry, agriculture, commercial work, the professions, such as nursing, library work, and medicine.

\title{
Courses Primarily Senior College
}
111. Principles of Education-Required fourth year. Four hours. Mr. Wright.

This course is designed to set forth the theory of aims, values, and meaning of education; the place of a scientific basis in education; the relation of schools to other educational institutions; the social limitations upon the work of the schools; the types of schools necessary to meet the needs of society; and the processes of learning and teaching.
113. Organization and Administration of the Junior High School-Three hours. Required of Grammar Grade Majors and in the Supervisor's Course. Mr. Wright or Mr. Armentrout.

In this course the following points will be considered: Organization; standards for judging junior high schools; historical development; the program of studies; the daily schedule of classes; courses of study for the various subjects; the qualification of teachers, etc. After many representative junior high schools of the United States have been considered from the above mentioned standpoints, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.

\section*{116. The High School Curriculum-Four hours. Mr. Wright.}

In this course an opportunity will be given to study the curricula of various high schools of this and other states. The student will be expected to study the schools the study of which will be most beneficial as a preparation for his own work. After a careful consideration of education values and the needs of typical communities, a program of studies and curricula will be outlined for some community, rural, village or city, utilizing the principles determined upon earlier in the course. This program of studies will include the work for both the junior and the senior high school.
120. High School Administration-Four hours. Mr. Wright.

This course will deal with the organization, management, and administration of the high school, a critical examination of one or more typical high schools, emphasizing courses, programs of study, daily schedule of classes, records and reports, equipment, training, qualification, and work of the teachers and other similar matters of high school administration. The student will be allowed to select topics in which he is especially interested, for study and research, under the direction of the instructor.

\section*{123. Elementary School Supervision-Four hours. Mr. Armentrout.}

This is a course for principals, supervisors and superintendents. It is based upon the following factors: (1) Measuring the worth of teachers. (2) The values and relations of elementary school subjects. (3) The use and misuse of devices, interests, etc., by teachers. (4) Some results to be expected of teachers in the elementary schools. (5) Standards for judging class-room instruction. (6) The problems of training teachers during service.

\section*{130. Rural Education-Three hours. Mr. Burrows.}

A course intended, primarily, to give a comprehensive grasp of American rural history, and a brief study of the rural educational systems of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the schools, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country.

\section*{134. American Education-Four hours. Mr. Wright.}

A brief survey of conditions existing in Europe at the time of the settlement of the American Colonies will be considered with a view to explaining the various types of education found in Colonial times. A study will also be made of the growth of the public school idea, the spread of education from the East to the West, and the development of state control of education.

Other topics of American education emphasized in the course are:
(1) National land and money grants to education.
(2) Higher and professional education.
(3) Higher education of women.
(4) Normal schools and the training of teachers.
[ (5) Education of defectives.
(6) The growth of the kindergarten idea.
(7) Modern movements in American Education.

These topics will be considered briefly historically, but more emphasis will be placed upon present-day tendencies in each of these lines.

The student will also select a topic from a list of some twenty subjects, on which he will write a thesis of from two to five, thousand words. Among, the topics are the following: (1) "Indian Education," (2) "Negro Education,', (3) "Education of the Foreigner," (4) "The General Education Board," (5) "The Smithsonian Institution," (6) "The Carnegie Foundation for the Advancement of Teachers," (7),"Work of the Bureau of Education," and (8) "Modern Movements in Education."

This course is appropriate for principals and superintendents who are anxious to learn of progressive features in American Education.

\section*{135. Educational Classics-Four hours. Mr. Wright.}

The purpose of this course is to study the various educational classics (a) as interpretations and criticisms of the educational practices of the various periods of history represented by them; (b) as to their influence upon the period and writers directly following; and (c) as presentations of theories and practices of present-day education.

Some of the classics to be studied are:
Plato's " Republic."
Quintillian's "Institute of Oratory."
Comenius' "The Great Didactic.
Rousseau's "Emile."
Locke's "Thoughts Concerning Education."
Pestalozzi's "Leonard and Gertude."
Spencer's "Education."
The latter part of the course will be given to a careful study of (a) what constitutes an educational classic, and (b) what twentieth century treatises on education are probably destined to become classics.

The course would probably appeal most to mature students in the Senior College or to mature second year people. It it recommended to English majors.

\section*{142. Educational Administration-Three hours. Mr. Wright.}

In the first part of this course, the student will be given a general idea of the field of school administration by the study of Cubberley's "Public School Administration." Then he may, if he desires, select certain lines of school administration in which he is interested, for study and research. He may make a critical examination of his own city or village system; make a survey of conditions as they exist in his own state or county in organization, powers and duties of the Board of Education; also the qualifications, powers, duties, and opportunities of the superintendent and the principal.

Superintendents and principals will find this course helpful in the administration and critical examination of their own schools.

\section*{143. The Federal Government in Education-Four hours. Dr. Frasier.}

This course treats of the efforts of the Federal Government to aid the states in education.
147. Educational Surveys, a Preliminary Study-Four hours. Not ready until winter quarter. Mr. Wright.

Open to students of Junior College upon permission of the instructor. There are conditions, both good and bad, in every school system which can and should be revealed by a survey, conducted by the administrative authorities in charge of each school system, aided by expert advice from outside the system. The Teachers College is under obligation to furnish this expert assistance. To this end a Survey Committee has been appointed and is ready to render service to any school community in Colorado. The Survey Committee is of the opinion that wherever the administrative authorities in any school community wish to undertake a co-operative survey of their schools a preliminary study of the underlying principles of educational and mental measurements together with a study of social problems, especially as these are related to educational problems, should be made by the teachers and those responsible for the work of the Public Schools in that community. This course is intended to give opportunity for such study. It may be given on the individual plan or by a member of the faculty of the College, or by the superintendent of schools in co-operation with the College. The results of the course should be that all who take it will have a fair grasp of the underlying principles of the subjects treated and some should become fairly proficient in giving the tests and making the observations and calculations involved in educational surveys.

\section*{Courses Primarily Graduate College}

\section*{217. Vocational Education-Three hours. Mr. Hadden.}

This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints.

\section*{223. Research in Education-Dr. Frasier.}

This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Credit hours will be given in accordance with the amount of work done. A suggestive list of subjects follows: Federal aid to education; state aid to special types of education; vocational guidance; the continuation of the education of the adult; methods of school support; student government; vocational education for women; distribution of school funds; social needs of the child and the adolescent in education; differentiated programs of study for older children in elementary schools; certification of teachers; the Junior High School; the after-training of teachers; measurements of results in education.

\section*{228. Comparative School Systems-Four hours. Mr. Wright.}

In this course one makes a rather comprehensive study of the school systems of England, France, and Germany, comparing each with the other and finally emphasizing the points to be found in each system which seem especially applicable to our own American system. Other countries which excel in any particular line are studied from that particular standpoint. For instance, Denmark is studied because of its recognized standing in rural education.

Early in the course, a number of thesis topics like the following will be presented, from which the student may select for the purpose of making comparisons of the various countries.
1. Compare the curricula for the secondary schools of the various countries.
2. Compare the countries as to teachers' preparation, term of office, salary,
interest in their work, etc.
3. Compare the countries as to emphasis placed upon physical education.

In the last part of the course, a study of modern movements in Education in the various countries will be made.

This course is more easily taken by students who have access to some library facilities.

\section*{229. Current Educational Thought-Four hours. Dr. Frasier}

This course will consist of reviews and discussions of recent books in the various fields of education.

Note-Students wishing suggestions in regard to research study upon any educational problem are invited to consult with the College.

\title{
Elementary Education and Teaching
}

\author{
W. D. Armentrout, A.M., Director of the Training School Genevieve L. Lyford, B.S. \\ Louise W. Putzke \\ Mrs. Bella B. Sibley, A.B. \\ Helen C. Davis, A.B. \& A.M. Elizabeth Hays Kendel, A.B. Miss Bernice Orndorff, B.S. Miss Hulda Dilling, B.E.
}

This department aims to give practical courses to teachers in the field, in order to increase their efficiency in teaching. We connect theory with practice. Too often the theory does not seem to be practical because the teacher does not understand how to put her theory into practice. In the following non-resident courses we aim to bring the teacher in contact with our elementary training and demonstration school as well as with the best elementary school practice in the United States and Europe.

\section*{3a. Primary Methods-Four hours.}

This course will be valuable to both beginning and experienced teachers of primary grades. It will include a resume of methods and material for all subjects, giving the viewpoint of some of the best authorities. The value of the Montessori system in primary grades will be discussed. The play life of the child, story telling, the study of poems and nature study will receive special consideration. If the student is teaching we shall expect her to try some of these methods and report the result. A daily program and a brief course of study for any one of the primary grades, with reasons for the selection of subjects and arrangement of material, will be required. This should be based on information

\section*{3b. Primary Methods-Four hours. Mrs. Sibley.}

This course is based on the needs of the child between the ages of 7 and 8 years. This course leads up to the selection of subject-matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given.
51. Story Telling in the Grades-Three hours. Miss Lyford.

The following subjects will be considered in this course: 1. Why we tell stories. 2. The technique of story telling. 3. Adaptation of stories. 4. Fairy tales and folk tales. 5. Animal stories. 6. Nature stories. 7. Mother stories. 8. Stories of legendary heroes. 9. Stories of historical heroes. 10. Stories adopted from standard literature. 11. Holiday stories. 12. Humorous stories. 13. Ethical stories. 14. Biblical stories.
53. Plays and Games for Kindergarten and Primary Children-Three hours. Miss Lyford.

A study of the different theories of play, and the psychology of children's play, the development of games, different types of games, the value of play, characteristics of games for children of different ages, original games based upon rhymes and activities, simple rhythms and methods of presentation.
152. Play Life of Children as a Basis for Education in the KindergartenThree hours. Miss Lyford.

The meaning of educational play and its significance in the mental and moral development of the children of the kindergarten and primary grades, the growth of the new conception of play and its influence upon the work in the kindergarten and primary grades. The difference between illustrative and purposive work for children. Means of establishing a closer relation between kindergarten and primary.

\section*{123. General Principles and Methods of Teaching in Elementary SchoolsMr. Armentrout.}

The following problems will be discussed in this course: Aims and Purposes of Elementary School Teaching, Selection and Organization of Subject Matter; Types of Teaching, drill project and socialized recitation; Fundamental Laws of Learning; The Problem of Individual Differences; Testing the Results of Teaching.

\section*{Biological Sciences}

\author{
F. C. Jean, A.B., A.M.
}

Biology 2a-Four hours. Prof. Jean.
This course may be substituted for Biology 2, which is required in the Junior College. It is a study of some of the fundamental facts and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation, and embryology, Mendel's Law, formation and organization of tissues.

\section*{COURSES PRIMARILY SENIOR AND GRADUATE COLLEGE}

Biotics 102. Heredity (and its application to man)-Four hours. Prof. Jean.

Course to be ready Jan. 1, 1923.
In these times when science is doing so much for the improvement of the world, man has come to the point where he is beginning to make a study of himself. Former studies in heredity were for the most part on animals and did not prove adequate.

\section*{Physical Sciences}

\author{
David L. Zyve, A. B., M.S.
}

There is little doubt that, with the growing importance of modern industrial methods applied even in smaller communities and the increasing number of machines used in homes, the role of Physical Sciences will be given a thorough consideration in the modern public school.

It is, besides, a self-evident necessity for every individual of culture to know at least the general laws of natural phenomena, the ignorance of which was the primary cause of so many superstitions.

The Extension Department, therefore, deems it necessary to include a few of these courses in its program. An extension course in Physics, however, is greatly handicapped by the student's lack of laboratory equipment and his inability to get into direct touch with the experimental side of the study of physical laws and theories. For this reason, it seems desirable to limit the courses in the physical sciences to those only for which adequate and inexpensive laboratory equipment can be easily secured by the student.

The following courses are intended for both General Science and Physics teachers:
1. Physics of the Automobile-Four hours. Prof. Zyve.

This course although practical will not enter into the narrow technicalities of a trade school course. The reason why this course is given lies not only in the importance acquired by the automobile in our every day life but also in the multiplicity of physical principles involved in the gasoline engine.

\section*{2. Household Physics-Four hours. Prof. Zyve.}

Physical principles applied to the needs of the household or to the life of the community at large will be emphasized in a series of topics and experiments taken from the immediate environment. The course will include photography, telephony, heating and lighting apparatus, etc.
19. Physics of Every Day Life-Four hours. Prof. Zyve.

This course is the development of the course No. 2 and will be based upon an adequate knowledge of High School Physics. It will include the study of D. C. and A. C. motors, gas engines, wireless, etc.
107. The History of Epoch-making Discoveries in Physics.-Two hours.

Prerequisite: one year of College Physics. (For description see C. T. C. bulletin 1922-23, page 80, No. 9.)

\title{
Chemistry
}

\author{
W. G. Bowers, B.Sc., A.M., Ph.D.
}

The following courses in Chemistry are intended to give the teacher and prospective teacher a better appreciation of this subject. The great world war has demonstrated in a very forceful manner the woeful lack of development of industrial chemistry in our own country. The realization of our utter dependence on European countries for many of the chemical necessities has given a great impetus to the manufacturing end of chemistry and to individual research and study; With our wonderful natural resources as a basis, and the lessons of the world's war as a strong stimulus, we are looking into the future of a great chemical awakening in this country.
3. Chemistry of the Common Metals-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, and Chem. 2.
8. Household Chemistry-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, and Chem, 2.
11. History of Chemistry-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, and Chem. 2.
108. Organic Chemistry-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, 2, and 3.

\footnotetext{
This course is a study of the methods of preparation and of the properties of the aliphatic series.
}
109. Organic Chemistry-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, 2, 3, and 108.

Food Chemistry and Food Values-(Junior or Senior College). Three hours. Dr. Bowers. Prerequisite, Chem. 1, and 2.

This course takes up a study of the essentials of food, and digestion, absorption, and assimilation.
221. Advanced Inorganic Chemistry-(Senior or Graduate College). Six hours. Dr. Bowers. Prerequisite, Chem. 1, 2, 3, 108, and 110.
223. Chemistry as Applied to Problems of Civilization-(Senior or Graduate College). Three hours. Prerequisite, Chem. 1, 2, 3, 108, 110.

Note-Teachers of Chemistry are invited to make suggestions in regard to courses which should be offered in Extension, and information in regard to the peculiar difficulties met in the teaching of Chemistry will be gratefully received.

\section*{Geology and Geography}

\section*{George A. Barker, M.S.}

The courses offered in non-resident work are in phases of the subject where laboratory and field work are not stressed. It is very difficult to do satisfactory work in a subject like mineralogy by non-resident work.

Physical Geography-Four hours.
A course taking up the land form and climatic sides of the subject. Suggestions as to field and map work are included in this course. A course for students that have not had it in high school.

\section*{3. Climatology-Four hours.}

A course taking up the principal factors controlling the atmosphere, as well as the effect of these in marking out on the earth's surface definite climatic provinces. An elementary course for those who have had little climatic work.

\section*{5. Geography of Europe-Four hours.}

The interaction of environment and race upon the development of the present European Nations. A course for teachers in service. Presupposes a knowledge of North American geography.

\section*{22. Life Geography-Four hours.}

The distribution of plants and animals emphasizing the main climatic and geologic controls of such distribution. An advanced course based on some knowledge of climatology.
113. Mathematical Geography-Four hours.

Covers subjects like earth as a sphere, tides, calendar.

\section*{Mathematics}

\section*{George William Finley, M.S.}

Courses in mathematics are especially well suited to non-resident work by reason of their definiteness. The texts used in this work have been selected with special reference to their clearness of statement and logical arrangement of material. Anyone who has had the preparatory work may take up the courses outlined here with ease and profit.

All five-hour courses in mathematics change to four-hour basis June 1, 1921.

\section*{COURSES PRIMARILY JUNIOR COLLEGE}

\section*{1a. Solid Geometry-Four hours. Mr. Finley.}

This course is designed to meet the needs of that large group of students who completed their plane geometry in high school, but did not take up solid geometry. A careful study of the main propositions and the solution of many of the originals is required.

\section*{2 and 3. Trigonometry-Five hours. Mr. Finley.}

Anyone who has had at least one year of elementary algebra and a course in plane geometry is prepared to take up trigonometry. The course covers the solution of the right triangle, the development of general formulas, and the solution of the oblique triangle. Many problems of a practical nature are included in the work.

\section*{5. College Algebra-Four hours. Mr. Finley.}

Anyone who has had at least one year of elementary algebra should be able to carry this work with ease. It takes up first a rapid review, with special attention given to the principles involved and continues with a study of functions and their graphs, quadratic equations, inequalities, and complex numbers.

\section*{6. College Algebra-Four hours. Mr. Finley.}

A continuation of course 1. Deals with theory of equations, permutations, combinations, probabilities, determinants, partial fractions, logarithms, and infinite series.

\section*{7. Analytic Geometry-Five hours. Mr. Finley.}

Practically all of the ordinary notions of analytic geometry are covered in this course. The student gains a good working knowledge of the elements of this powerful science, and is, at the same time, prepared to go into calculus.

\section*{9. The Teaching of Arithmetic-Four hours. Mr. Finley.}

This course takes up the practical, everyday problems of the teaching of arithmetic rather than a more generalized study. It deals with the methods of presenting the various parts of the subject from primary arithmetic to eighth grade work. It is especially helpful to those actually engaged in teaching in the grades, as they are able to test in their classes the suggested methods.

\section*{COURSES PRIMARILY SENIOR COLLEGE}

\section*{100a. The Teaching of Secondary Mathematics-Four hours. Mr. Finley}

This work is planned for active or prospective teachers of high school mathematics. It takes up a careful study of the purpose and value of secondary mathematics and of the most recent movements in that field. It also includes a study of the fundamental principles of elementary algebra with a view to giving the teacher a clear understanding of the reasons involved in the various processes.

\section*{101. Differential Calculus-Five hours. Mr. Finley.}

This course and the one that follows are designed for those who feel the need of a broader outlook upon the mathematical field. Needless to say every teacher of high school mathematics needs this work to enable him to understand to some extent the possibilities of the subject he is teaching. In this course the fundamental notion of the differential calculus is carefully developed and many practical applications are introduced.
102. Integral Calculus-Five hours. Mr. Finley.

The work in this course follows that of the preceding in logical order. It deals with the ordinary notions and applications of the subject.

\section*{103. Theory of Equations-Four hours. Mr. Finley.}

This course may be taken by anyone who has had Trigonometry and College Algebra. It takes up a discussion of the graph, complex numbers, cubic and quartic equations, symmetric functions and determinants.

\section*{Sociology}

\section*{I. W. Howerth, Ph.D.}

This department offers a series of courses which should meet the needs and ambitions of many students. The courses are liberal and varied in scope. Many of them will meet the immediate practical needs of teachers. Some of them are technical, and are intended for teachers and students of special subjects. Still others are advanced courses in social theory, or are practical studies in applied sociology. Superintendents and principals will find many courses in this list well adapted for group study and teachers' clubs.

The Department invites correspondence regarding these courses. We will formulate new courses, or change present courses when such action seems desirable. Let us know what you want.

\section*{COURSES PRIMARILY JUNIOR COLLEGE}

\section*{1. The Beginnings of Human Society-(Junior or Senior College.) Four} hours. Dr. Howerth.

A study of early human society. Valuable for teachers in descriptions of physical, mental, and social changes in primitive men and women. A story of development through race experience; the evolution of language, industry, art, the family, law, and other social institutes; correlates well with courses in genetic psychology, human biology, human geography; and is also commended to students of history as a basal study.

\section*{2. Social Evolution-(Junior or Senior College.) Four hours. Dr. Howerth.}

A more advanced course in human evolution. The first volume is Elliot's intensely interesting account of the origins of human beings, and the original peopling of the continent of Europe. The second volume is Lord Avebury's standard work on "Primitive Times." The final volume, by Dr. Boaz of Columbia, takes as its thesis the idea that all races are approximately equal in potentiality.

This course correlates well with studies in the psychology of primitive people, race studies, and with many phases of the physical geography of Europe.

\section*{3. Modern Social Problems in Relation to Education-(Junior College.) Four hours. Dr. Howerth.}

This is a first course in sociology. It is planned to meet practical needs of a somewhat varied group of people. It should be distinctly useful to the teacher who wishes to vivify her teaching of history by a clearer view and a more incisive method of work. It should be valuable to the supervisor of elementary school subjects who wishes a livelier sense of the relationship of school to life-as shown in a social interpretation of the course of study. To the student of affairs it offers help in forming judicious attitudes toward various problematic situations, such as the dynamic modern citizen is required to pass judgment on. To some extent the course will be varied to meet these different needs-where they cannot better be met by other courses described in this bulletin. Primarily, however, this is a course for elementary school teachers in the relations of school work to the varied problems of the world outside of school. It is largely concrete. Of the five books studied, only one deals with social theory. This, the first one, is accompanied by full directions for study.

\section*{12a. Social Readjustment-(Junior College.) Four hours. Dr. Howerth.}

This course offers an elementary study of how the processes of reconstruction may be applied to a considerable number of practical social problems. It is a much simpler course than Sociology 4, as well as a much less extensive study. It isolates certain situations from the larger field and by a brief analysis of the factors in these attempts to stimulate the habit of thinking in terms of social cause and effect. Its main concern is with the possible lines of improvement to be realized through supplementing and redirecting the development of such fundamental institutions and relationships as a family, church, school, property and the like. This course should be useful to the elementary school teacher of history and civics.

16a. Society and The Church-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A live, stimulating course of large interest to students of church, Sunday school, and religious social improvement; of special value to classes in religious education. The authors in this course are Rauschenbusch, King, Wormer, and Cutting, all well known writers in this department of social thought.
17. Society and Religion-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

Similar to Course 16, but dealing more directly with growth and changes within the Church. It comprises discussions of the social basis of religion, the relation of the Church to democracy, religion in social action, God in evolution, and the religion of the future.

18a. Rural Sociology-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A constructive study of country life, economic activities, social organizations schools, clubs, churches, social centers, and modern efforts and successes in rural
progress: intended primarily for rural teachers, but is of value to all students of progress; intended primarily for rural teachers, but is of value to all students of rural social conditions and needs.
19. Property and Society-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

An attractive study of property rights, wealth holding, standards of living, social problems resulting from poverty, and theories of the leisure classes.

\section*{COURSES PRIMARILY SENIOR COLLEGE}

104a. Elementary Sociology-(Primarily Senior College but open to qualified Juniors.) Four hours. Dr. Howerth.

This is a course planned to give a clear working notion of the field of thought more or less vaguely called sociology. It presents the accepted results of study in the field and offers a perspective of the whole subject with the various subdivisions displayed in proper relations. In other words, the relationships of the somewhat tangled mass of "modern social problems" is made clear and the most judicial opinions in regard to them are exhibited. This course should be of value to teachers of history and civics. The general reader who is interested in the complex inter-relations of modern life may find this course offering somewhat nearly the orientation he wants.

106a. Social Theory-(Senior and Graduate Colleges.) Four hours. Dr. Howerth.

An advanced course in the principles of sociology based on the works of Ward and Giddings, both of whom are recognized as great creative leaders in sociologic thought. This course is virtually a study in social philosophy, and is commended to mature advanced students only.
107. Social Theory-(Senior and Graduate Colleges.) Four hours. Dr. Howerth.

More varied in material than Course 6. All books in this course are scholarly and scientific products of two of the greatest living American sociologists, and one English author of world fame. This will form a productive study of large value for advanced students.
108. Social Direction-(Senior College and Graduate.) Four hours. Dr. Howerth.

A course in applied sociology, social control, and the scientific direction of comprehensive efforts in social reform. This study presupposes knowledge of social theory, social institutions, and modern political attempts to direct social change without revolution.

A vigorous, vital course for experienced students.
109. Comparative Sociology-(Senior College and Graduate.) Four hours. Dr. Howerth.

For students who have had Sociology 4 or Sociology 6, this course offers an opportunity to consider somewhat deliberately the factors in the rise of sociology, the nature of the theoretic and practical problems confronted by the sociologist, the various points of divergence of theory among the more significant contributors to the science, and the like. It offers in the end the best attempts at a synthesis of the whole field of social thought.

\section*{110. Social Psychology - (Senior College.) Four hours. Dr. Howerth.}

This course might better be called a course in psychological sociology, if the older name had not become fixed. It deals with those parts of psychology upon which social theory immediately rests. It considers, for example, the part played by instinct, feeling, intellect, imitation, sympathy, and the like in the characterization of society. The course should be useful to students of education and to administrators who are not satisfied with merely empirical control of social groups.
113. Scientific Management and Labor.-(Senior College and Graduate.) Four hours. Dr. Howerth.

A somewhat technical course, dealing with detailed study of mechanical operations, and the efficiency of labor. It includes consideration of the relation of psychology and industry; factory management; fatigue surveys; the bonus system, and its effects on production, and also on workmen. The authorities studied are Taylor, Hoxie, Gantt, Munsterburg, and others.

Intended for teachers of industrial classes, commercial and business classes; but is also of large interest to all students of efficiency in industry. It is a superior practical course.

\section*{121. Problems and Methods of Modern Philanthropy-(Senior College and Graduate College.) Four hours. Dr. Howerth.}

This is a course planned to reveal to students of affairs, teachers of history and civics, and those who, from the cultural point of view, are interested in the dramatic under-currents of human life and progress, the least known aspects of our civilization-those aspects which perhaps are to have most credit in the end if we succeed in passing from civilization to humanization. The course will deal with (1) the nature and extent of social failure; (2) the slow and bungling evolution of ways of relieving distress or of putting down the symptoms of misery: (3) the gradual achieving of a conscious technic and curative methods of relief; (4) and the general principles which experience has slowly contributed to present methods of working in social amelioration. There is a considerable number of boaks available for such a course, which possess merits of form and graces of expression entitling them to be called literary while at the same time they exemplify all the conditions and courageous virtues of a thorough-going scientific method.
122. Women and Social Evolution-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A reliable, attractive, sociological study of the modern feminist movement. The contributions are from German, Swedish, and American writers, and include the biologic and psychologic aspects of the problem, as well as its historical and sociological features.

It is closely related to courses 31 and 32 :
123. Immigration and American Problems-(Primarily Senior College and Graduate, but open to qualified Juniors.) Four hours. Dr. Howerth.

This course is intended to be of practical benefit to two groups of people; (1) To teachers-especially teachers of history and civics-it offers the sociologists' and the economists' interpretative principles in the treatment of a social phenomenon which, though it has been the life of America, is hardly considered in the usual school history. (2) To those interested in forming judicious views upon current problems of our life it offers as far as possible in the limits of such a course an impartial account of the great change iu the character of population in the 19th century, whereby from a people comparatively homogeneous we have come to exhibit in our composition the greatest mechanical mixture of racial stocks the world has ever known, and have suffered consequent weakness in our institutions. The course is timely now in view of the recent recognition by the government of the peril implicit in our unassimilated aliens.
124. Problems and Methods of Child Welfare-(Senior College and Graduate, but open to qualified Juniors.) Four hours. Dr. Howerth.

This is a course in the growth and tendencies of the modern movement for the conservation of children. It begins by giving a view of the status of children in the past; passes to a consideration of the evolution of the child protection agencies in the United States; and deals finally with the present problems and tendencies in child welfare programs. This course should be especially useful to parents who are desirous of raising the type of family relations in their community either through organizations intended to affect the community by public effort or through less direct agencies. Beyond this, parents who are especially zealous to give the most humane nurture to their children will find in this course much to recommend it to them. It should be useful to teachers of household arts as an extension of the dynamics of home making. It will appeal also to the elementary school teacher, who next to the parents, best loves the child and most needs to know of the significance of changing attitudes to the child.

225-226. Socialism-(Senior and Graduate Colleges.) Four hours each. Dr. Howerth.

The first of these courses is an introductory study of the scope and meaning of this modern reaction to modern conditions of life. It gives a complete but elementary survey of the whole field, and through some of the simpler treatises presents the pros and cons concretely enough to make the course enjoyable to the novice. In the second course more is done to show the variations of socialism under varied national conditions.
129. Crime and Society-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

This course is a study of the relationship of the criminal to society-to social institutions and social organizations. Incidentally it will show the changing attitude of society toward the criminal, and the more important factors behind the change. The course is, however, mainly concerned with the present relations of the criminal in society and his treatment at the hands of society. The course presents the best modern thought in the various aspects of the field.
130. The Single Tax-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A discreet, careful discussion of the Single Tax, with all material up to date. No old books are used in the course. Taxation reform is one of our most comprehensive social changes, and is probably the gateway to accomplishment of most of the general program for social improvement, through a more equitable distribution of wealth. This course discusses the Single Tax as a possible solution of the general problem.
132. The Family-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A study of the family from the standpoint of education, industry and ethics, and as a social unit. Designed for teachers, but of great value to all students of either theoretical or practical sociology. Closely related to Courses 22 and 24.
133. Social Hygiene-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

A special study of marriage and sex, not highly technical, by writers of national and international reputation; a thoroughly reliable, scientific, study.
134. Heredity and Progress-(Junior and Senior Colleges.) Four hours. Dr. Howerth.

Presenting two books each, on the biologic and sociologic aspects of the problem of social progress. Can be profitably used in connection with courses \(8,11,36\), or 39 .

Note-This department is interested in promoting the study of modern social conditions and problems. Students interested in finding material on any phase of modern life are invited to apply to the College for help.

\title{
History and Political Science
}

\author{
Edwin B. Smith, A.M.
}

The work offered in this department includes some of the resident courses and some special courses that may be taken to advantage. The effort is made to arrange these courses on a practical basis so that they will aid the teacher who is working in the lines indicated. In nearly every phase of school work the teacher utilizes the subject matter of history, either directly in teaching the subject or as supplementary material. The new interest that attaches to political relationships calls especially for new effort in the schools in teaching history and civics.

The department is anxious to meet the needs of teachers. If the desired work is not listed, correspond with the department concerning it.

\section*{COURSES PRIMARILY JUNIOR COLLEGE}

\section*{1. American History-Four hours.}

This course includes: The European conditions that furnished the background for the work of the discoverers and explorers; the life of the Indian, especially of the western section; the settlements made by the Europeans; the life of the colonist; the growth of the European colonists in America; and the struggle for the rights of independent people.

\section*{2. American History-Four hours.}

In this the work of Course 1 is continued as follows: The formation of a government suited to the needs of the people; the experiences of the people under the new government in becoming a strong nation; the western movement; and the testing of the strength of the national government. Throughout, the interest includes the social and industrial conditions.

\section*{3. American History-Four hours.}

The work begins with the reconstruction following the Civil War. The large movements are traced; such as, the growth of industry, the financial measures, American diplomacy, imperialism, business combinations, labor organizations. conservation, and the international relations of the United States.

\section*{4. Medieval Europe-Four hours.}

The conditions of the people of Europe, politically, socially, and industrially, during the period called the Middle Ages form the interest of the course. The conditions of modern Europe and of the United States are so largely affected by the life of Medieval Europe that they cannot be properly understood without consideration of this period.

\section*{5. Early European History-Four hours.}

The countries of Europe at the beginning of the sixteenth century; the commercial revolution; the Protestant Revolt and the Catholic Reformation; the culture of the sixteenth century; absolutism in France; parliamentary government in England; the world conflict of France and Great Britain; the revolution within the British Empire; eighteenth century Germany; the rise of Russia; "Liberty, Equality, Fraternity;" European society in the eighteenth century; the era of Napoleon.

\section*{6. Recent European History-Four hours.}

A continuation of Course 5. The era of Metternich; the industrial revolution; reform and revolution; the growth of nationalism; the problem of the Irish; the German Empire; the new Russia; dismemberment of Turkish Empire; the spread of European civilization in Asia and Africa; international relations; the Great War; and consequences of the War.

\section*{9. National Government-Four hours,}

The relations between the government of the United States and the people; the new conception of the presidency; the growing powers of Congress; the federal judiciary; constitutional protection of business; the police powers of the national government; civil service; direct legislation; corrupt practices act; legislation of the last administrations.

\section*{10. Sociai and Industrial History of the United States-Four hours.}

Current social and industrial conditions will be traced from their beginnings \({ }^{\circ}\) Some of the subjects are the natural resources, influence of cheap land, effect of invention, machinery, and science, the development of agriculture and manufacture, rise of the great industries, business combination and labor organization, and government interference.

\section*{11. Commercial History of the United States-Four hours.}

A survey of commerce from early times; colonial commerce and its consequences to European nations; commerce in the several periods of American development, domestic and foreign; the coastwise trade; government aid; the consular service; improvement of rivers, harbors, and waterways; tariff provisions affecting shipping; commercial treaties; commercial changes of the twentieth century; international complications.

\section*{12. State Government-Four hours.}

The organization and administration of state government.

\section*{13. The Teaching of History in the Elementary School-Four hours.}

The aims in teaching history; the values of history; history of one teaching of the subject; the course of study, past, present, and future; psychology of the subject; methods and materials; testing results of history teaching; and the consideration of the school problems relating to history-the place of history in the school curriculum, and the relation of history to other subjects.

\section*{22. Municipal Government-Three hours.}

The growth of cities; their relation to trade and industry; state control over cities; the development of the American city; services to the people; city planning; the commission form of government; the city manager; other recent movements.

\section*{24. Modern European Government-Four hours.}

A course presenting conditions of European governments; the foundations of their governments; the positions of the heads of governments; democracy under the present governments; most recent movements.

\section*{26. The Teaching of Civics in the Elementary School-Four hours.}

The development of civics teaching from the mere study of the constitution to the present community civics; the value of civics in education for citizenship; the purposes of instruction in government; courses of study for the elementary school; methods and materials for various grades of instruction.

\section*{28. Ancient Social History-Four hours.}

This is a survey of the development of society among the early peoples, with the emphasis on the social and economic phases. The main purpose is to give teachers a new point of view with respect to the teaching of ancient history.

\section*{30. Political Adjustment-Three hours.}

The course attempts to establish relationships between the individual and the political groups which serve him. Consideration is given to democratic ideals and values as opposed to autocratic, to the opportunities and obligations connected with citizenship, to the place which public opinion holds in a republican government, and to creating American spirit. A definite effort is made to show the relations between the individual, education, and the forms and processes of community organization.

\section*{33. American Political Theories-Four hours.}

The social and industrial phases of history are being emphasized. The political theories associated with American life are fundamentally important. The course deals with these in relation to the various phases of development.

\section*{40. Contemporary World History-Four hours.}

This course attempts to present the present conditions, using enough of the comparatively recent past to give a clear understanding of situations as they are. The consequences of the Great War are especially stressed.

\section*{104. Western American History-Four hours.}

The westward movement as an historical process; the migration from the Atlantic into the Mississippi Valley; the Trans-Mississippi West; the history of Colorado as a part of this movement; the Pacific Coast and the dependencies.

\section*{107. English History-Four hours.}

The foundations of England; consolidation of England under Norman supremacy; parliamentary development; medieval institutions; civil wars and the decline of feudalism; the Tudor period; divine rights; monarchy and puritanism; contest for constitutional government; whig supremacy; the age of Walpole; development of Greater Britian; transition to modern England; democracy and reform; the eastern question; present movements.

\section*{116. Spanish-American History-Four hours.}

A course designed to furnish a background for understanding the growing relations between the United States and the republics to the south. In tracing the experiences of the Spanish-American people, attention is given to the work of Spain, to the securing of independence, to the social, political, and economic growth, to international relations and the Monroe Doctrine, to the Panama and the purchase of the Danish West Indies, and to the new Pan-Americanism.

\section*{117. The Teaching of History and Civics in the High School-Four hours.}

The aims and values in teaching the subjects; the development of instruction in these subjects; the socialized course of study problems of teaching; and the relation between history and civics teaching.

\section*{118. Financial History of the United States-Four hours.}

The origin and growth of the currency, banking, and revenue systems of the United States, with especial emphasis upon the relation of the tariff system and the currency system; the recent achievements in the financial system as expressed in the federal reserve banking system, the farm loan plan, and war finance.

\section*{120. Elementary Political Science-Four hours.}

This is an introduction to the principles of the various political organizations which control people. The theories and forms of government, constitutions, and ideals of citizenship are included. The course should be of special interest and value as explanatory of the current political thought relative to democracy and to the radicalism that is expressed in bolshevism.

\section*{121. Problems of Democracy-Three hours.}

The current interests of American democracy are given consideration. The problems selected deal with local, national, and international interests.

\section*{123. Internal Relations-Four hours.}

In this course there is a study of the principles governing the relations of civilized nations, which includes the problems of citizenship, the position of aliens and of alien enemies, the rights of nations with respect to war, neutrality, and intervention, and the regard for treaties. American ideals, the Monroe Doctrine, Pan-Americanism, and the league of nations.
124. History of the Far East-Four hours.

This is a study of the modern history of China, Japan, and India with reference to their relations to Europe and the United States.

Note-The department invites correspondence from those who find themselves perplexed in regard to any phase of the teaching of history and civics.

\title{
Literature and English
}

\author{
Ethan Allen Cross, A.B., A.M. \\ Frances Tobey, A.B. \\ L. W. Boardman, A.M. \\ John Henry Shaw
}

The department of literature and English selects from all the courses which it offers in residence a group that may profitably be conducted by individual correspondence.

Text Books: Wherever a text book is prescribed it is supplied by the College under the usual conditions; but the College does not agree to supply the illustrative pieces of literature studied in these courses. These must be obtained from a local library, or bought by the student. In most cases the books are such as may be found in any good town library, and in all cases they will be worth possessing.

\section*{1. Reading in the Grades-Four hours. Miss Tobey.}

Aims of the course: To re-evaluate, in the light of recent scientific experimentation, the practices through which useful reading habits are sought; to stimulate insight and encourage system in the organization of material; to direct the study of method; to develop initiative and resource in the conduct of the reading class; to quicken the teacher's perception of the values of literature of varied type, for pupils of various grades.
6. American Literature (1700-1900)—Four hours. Mr. Boardman.

This course embraces (a) a survey of the history of colonial literature, and (b) a careful study of the following authors: Emerson, Whittier, Longfellow, Holmes, Lowell, Hawthorne, Poe, and Whitman, with a few others of lesser note
8. English Literature (670-1620)-Four hours. Mr. Boardman.

The course will consist of a study of the following:
1. Beowulf and Anglo-Saxon literature. 2. Chaucer. 3. Miracle and Morality plays. 4. Spenser. 5. The English sonnet. 6. The ballad. 7. The early novel. 8. Early' Elizabethan drama. 9-10. Macbeth. 11-12. Early essays.

\section*{9. English Literature (1620-1798)—Four hours. Mr. Boardman.}

The study of English literature is continued with the following topics:
1-2. Post-Elizabethan writers. 3-4. Milton. 5-6-7. Dryden and his times. 8-9. Pope and his successors. 10. Addison, Steele, Johnson, Goldsmith, Sheridan. 11-12. The lesser Augustans.
10. English Literature (1798-1900)-Four hours. Mr. Boardman.

The survey of English literature is brought to the present time by a consideration of the following:

1-2. Progress of Romanticism. 3. Wordsworth. 4. Scott, Coleridge Southey. 5-6. Byron, Shelley, Keats. 7. Macaulay, Lamb, DeQuincey, Carlyle 8. Newman, Ruskin, Huxley, Pater. 9. Tennyson. 10. Browning, 11. Arnold Morris. 12. The Rosettis and Swinburne.

\section*{31. The Short Story-Four hours. Mr. Cross.}

The study of the forms and themes used by modern short story writers Today the short story is a literary form quite distinct from any other, and capable of carrying a significant theme within its limited space. This course attempts first to study the forms and then to show how the story is being used to entertain and to teach truth to the millions who read magazine fiction. The student is expected to study the structure and meaning of fifty typical stories.

\section*{20. Advanced Composition-Four hours. Mr. Boardman.}

This is a practice course in writing designed for those who are already familiar with the elements of correct expression in writing. It consists of fifteen themes of 6 to 10 pages each, on paper approximately 8 by 11 inches. Detailed directions for each of the fifteen papers are given in the syllabus, which will be sent, one section for each theme, after the student has enrolled for the course. The papers are read, criticised, and returned by the instructor.

\section*{116. The Festival-Four hours. Miss Tobey.}

Aims and scope of the course: A study of the values, the varied forms, and the practical development and direction of school pageants and festivals; the preparation of full outlines of school or community festivals which are detailed and practicable for actual use in schools.
127. Selected Plays of Shakespeare-Four hours. Mr. Cross.

A careful study of the ten plays of Shakespeare, chronicle, comedy, and tragedy, which seem best suited to high school courses in English literature.
132. The English Novel-Four hours. Mr. Cross.

In the main this is a reading course following the development of the English novel from 1740 to 1900 . The two text books which will be indicated are assigned for reading to guide the student through the course in an ordered way. Ten novels are read entire, and parts of two others. The details of the work are furnished in a syllabus of fifteen parts.

\section*{133. The Recent Novel-Four hours. Mr. Cross.}

Many students who do not care to follow the development of the novel as a literary form wish to study the novel of the present. An opportunity for such study is given in this course. It may be taken following Course 16 or independently. In the main, it consists of a careful study of ten or twelve novels of the present, with written work to accompany each study. Some of the most significant pieces of writing on social and educational problems of the day are being published in the form of novels. This course gives literary students an opportunity to study these problems.
134. Modern Dramatists-Four hours. Mr. Cross.

In addition to making a careful study of standard treatises on modern drama, the student will be expected to read and analyze for form and meaning twenty representative plays, Continental, English, and American, since-Ibsen. Detail furnished in a syllabus.

\section*{Ancient and Modern Languages}

Edwin Stanton Du Poncet, A.B., Ph.D.
Courses are offered in the following languages: French, Spanish, Italian, German, Latin and Greek

\section*{French}

1a. Elementary French-Four hours. The first thirty lessons in Chardenal's French Grammar.

2a. Elementary French-Four hours. The forty lessons in Chardenal's French Grammar, beginning with lesson 31.

3a. Elementary French-Four hours. The remaining 35 lessons in Chardenal's French Grammar.

5a. Second year French-Four hours. A critical study of George Sand's works, style and influence. Most of the work devoted to La Mare au Diable.

15a. A comprehensive study of the works of Alexandre Dumas, Sr. Much outside reading. Principal text will be La Tulipe Noire. Original compositions in French subjects. Four hours.

105a. The selected plays of Edmond Rostand. Taking up as a basis Cyrano de Bergerac with special reference to the poetic force of the author. Four hours.

225a. A graduate course in Old French philology, using Aucassin et Nicollete as an introduction to further study of the older classics. Four hours.

\section*{Spanish}

1a. First fifteen lessons in Wilkin's First Spanish course. Four hours.
2a. Lessons 16 to 30 in Wilkins Spanish book. Four hours.
3a. Wilkins First Spanish Book completed. Four hours.
5a. The works of Tamayo y Baus, usin UN DRAMA NUEVO as the foundation for the study of this author. Four hours.

15a. The study of the principal works of Ferna Caballero, using Un Servilon y un Liberalito as a basis. Four hours.

105a. A complete study of the prose works of Pedro de Alarcon. Begi ning with El Final de Norma. Four hours.
225. A graduate course in Old Spanish readings. Beginning with Ford's Old Spanish Readings.

\section*{Italian}

1a. Phelps Italian Grammar, first 12 lessons.
2a. Phelps Italian Grammar, lessons 13 to 25 .
3a. Phelps Italian Grammar completed.
5a. I Promessi Spossi by Manzoni. The entire story completed.
15a. Alberto by de Amicis.
105a. Dante's Divina Commedia. Selections.

\section*{German}

1a. First 25 lessons in Bacon's German Grammar.
2a. Lessons 26 to 50 in Bacon's German grammar.
3a. Bacon's German Grammar completed.
5a. L'Arrabbiata, by Paul Heyse.
15a. Minna Von Barnhelm, by Lessing.
105a. Schiller's Wilhelm Tell. A critical study of this masterpiece.
225a. Goethe's Faust, part 1.

\section*{Latin}

1a. Elements of Latin, by Barry C. Smith. First 20 lessons. Four hours.
2a. Elements of Latin by Smith, lessons 21 to 30.
3a. Elements of Latin, completed.
5a. Caesar's Gallic War, book one.

6a. Caesar's Gallic War, book two.
7a. Caesar's Gallic war, books three and four.
15a. Cicero's four orations against Cateline.
105. Vergil's Aeneid, the first six books. 12 hours.
205. Livy, books 21 and 22. Four hours.

\section*{Greek}

Courses 1a, 2a, 3a. White's First Greek book completed. Designed for students majoring in Romance languages. No other courses beyond the first year will be given, for the present, either in residence or by extension.

Note-All courses are four hour courses unless otherwise stated.

\section*{Music}

\section*{J. De Forest Cline, Director}

The Music Courses offered are for both the experienced and inexperienced musician. Music 2 is a plan of presenting the work of the first eight grades in such a manner that it is hoped it will be helpful to teachers of all degrees of experience. Music 7 is designed to meet the needs of those desiring to develop their cultural appreciation of the art, requiring no special musical ability. Music 8 and 9 are designed for the individual wishing to specialize in music and presuppose some general technical knowledge.

The department will welcome suggestions from students for specially desired courses and will strive to present any courses that can be successfully taught by mail.

\section*{2. Methods for the First Eight Grades-Four hours. Mr. Cline.}

A very practical course covering all the problems of the grade teacher. The course is based on the assumption that the teacher has little or no knowledge of the work at hand, and every effort is made to give the most inexperienced teacher just the knowledge she needs to carry on her work. All problems are discussed and all technical points are explained as they should be explained to children. The emphasis is placed entirely upon making the course practical and helpful. No previous musical knowledge is required.

\section*{7. History of Music-Three Hours. Mr. Cline.}

The study of the history of music from primitive to modern times. The musical theories and instruments of ancient peoples. The music of the Greeks and Romans. The early Christian era. The evolution of notation. A complete study of the development and growth of music into a great art.

This is a literary course which does not require technical skill. Open to all students who wish to study music from a cultural standpoint.

\section*{Industrial Arts}

\author{
S. M. Hadden, A.m.
}

\section*{5. The Arts in Education-Four hours.}

The work of this course is designed to cover the following fields: The historical development of the arts and their introduction in the public schools, with special reference to industrial, fine and applied art, commercial art, agriculture and home-making. Appreciation, correlations, organization of arts courses for the public schools, teaching, method of attack and the relation of student and teacher in the class room.

\section*{10. Elementary Mechanical Drawing-Four hours.}

This course is designed to give a knowledge of the use of drawing instruments and the materials customarily used in a drafting office. The technical phases of the work include lettering, geometrical drawing, orthographic projection, developed surfaces and intersections, working drawings, duplication and drawing for reproduction and general notes on commercial practice.

\section*{12. The Elements of Architectural Drawing-Four hours.}

This course is designed to cover characteristics of architectural drawing, kinds of drawings, preliminary sketching, use of tracing paper, working drawings, places, elevations, sections, details, dimensioning, lettering and titles.
104. Pre-Trade Education-Four hours.

The work includes a historical review of training for occupations with the emphasis on guilds, the arts and craft movements, apprentice systems. The vocational education movement from national, state and local standpoints. Types of industrial schools introduced and the problems of industrial education and the place and nature of pre-trade education in elementary and junior high school work.

Home Economics
Margaret Roudebush, A.B. Ethel B. Pickett, M.A.
Edith Gale Wiebking, A.B.
Elizabeth Clasbey, A.B.

\section*{HOUSEHOLD ARTS}
1. Textiles.-Four hours. Miss Roudebush.

A careful analysis of the four chief fibers and the commonly used fabrics. Text-Woolman and McGowan's "Textiles."
5. Pattern Making-Four hours. Mrs. Wiebking.

Drafting and cutting patterns by the most approved methods.
Text-"Pattern Making," Hanna.

\section*{HOUSEHOLD SCIENCE}
5. Housewifery and Sanitation-Four hours. Miss Clasbey.

A study of efficiency methods relating to every day problems in the home. Text-"Housewifery," Balderston.
9. Food Production-Four hours. Miss Pickett.

Foods-their growth, manufacture, marketing, cost. Consideration of food laws.

Text-Sherman's "Food Products."

\section*{Commercial Education}

Ambrose Owen Colvin, B.C.S. Vivian Merriman, A.B., MA.
S. C. Bedinger, LL.B.
W. L. Knies

It is our aim in the following outline to offer only such courses as seem to be practical by correspondence. We do not encourage the study of shorthand or advanced typewriting by correspondence courses.

We offer Courses 1 and 2 in shorthand, and Courses 11 and 12 in typewriting. We believe that Courses 1 and 2 in shorthand can be successfully taken by mail, but not with the same degree of success that would result from residence courses; therefore, we recommend that students elect other courses from this outline than the ones in shorthand. All of the material necessary for each of these courses is outlined in the first lesson that is sent to the student, and we have omitted further references to the required materials. All of the material and supplies should be bought from the publishers or the local book store of the town.

\section*{1. Shorthand-Four hours. Miss Merriman.}

This course includes ten lessons on the principles of Gregg Shorthand; 1 to 10 inclusive.

\section*{2. Shorthand-Four hours. Miss Merriman.}

Prerequisite: \(\begin{gathered}\text { Shorthand } 1 .\end{gathered}\) Shorthand; 10 to 20 inclusive. Gregg
6. Methods in Commercial Education-Required of Majors in Commercial Arts. Three hours. Spring Quarter.

The entire commercial field will be included in this study; equipment; the course of study; special methods; equipment of teacher; relation of business school to the community.
11. Typewriting-Four hours. Mr. Knies.

Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instruction in the care of machines.

This course covers the first twenty lessons of the Expert Typewriting Manual by Fritz-Eldridge.
12. Typewriting-Four hours. Mr. Knies.

Prerequisite: Typewriting 11 or its equivalent. This course covers Lessons 21 to 38 inclusive of the Expert Typewriting Manual by Fritz-Eldridge.

\section*{21. Elementary Accounting-Four hours. Mr. Colvin.}

Fundamental principles of double entry, the use of the journal and ledger. Making the trial balance and statements. Cash book, purchase book, and sales book introduced.
22. Intermediate Accounting-Four hours. Mr. Colvin.

Commercial paper, bill book, invoice book, bills of lading, special column books. A set of books on wholesale accounts. Prerequisite: Course 21 .

\section*{23. Advanced Accounting. Corporation Accounting-Four hours. Mr.} Colvin.

This deals with the organization of corporations under the laws of Colorado. Books are kept illustrating the commission business. Prerequisite: Course 21 .

\section*{25. Commercial Arithmetic-Four hours. Mr. Colvin.}

This course is intended primarily for commercial students, but is well adapted to those who want a good, stiff arithmetic review. There will be a rapid review of the four fundamental operations and fractions. A thorough treatment of percentage and its applications will be given. Only the most modern methods and short cuts will be used.
26. Penmanship-Four hours. Mr. Colvin.

Drills in free-arm movement writing. Mastery of position and movement expected. Study of the forms of the letters and figures, and methods of teaching.

\section*{26b. Penmanship-Four hours. Mr. Colvin.}

Drill work to develop better form. Much attention is given to the spacing and height of letters. This course includes methods of teaching writing.

\section*{24. Bank Accounting-Four hours. Mr. Colvin.}

This includes a study of the state and national banking laws; loans and discounts; commercial paper; methods and principles of banking; savings accounts. A set of books illustrating several days of business will be given. Prerequisite: Course 21.
32. Cost Accounting-Four hours. Mr. Colvin.

\footnotetext{
Importance of cost accounting in a business. Material cost; labor cost. overhead expense; distribution of expense. A set of books will be prepared; on manufacturing costs. Prerequisite: Course 21.
}
64. Commercial Law-Four hours. Mr. Colvin.

A treatment of the general principles of common law as applied to business together with the study of the Colorado Statute and decisions bearing on commercial interest.
40. Business English-Four hours. Miss Merriman.

The elementary principles involved in writing correct English. The sentence, the paragraph, grammatical correctness, effectiveness, clearness, and punctuation.

\section*{211. Business Adminstration-Mr. Colvin.}

The principles of industrial management and the organization of the modern office. Various types of organization, the labor force, payment of the worker, records of raw material and unfinished goods, etc.
153. Salesmanship and Business Efficiency-Mr. Colvin.

A study of the underlying principles of salesmanship; the psychology of the making of a sale. Demonstration sales will be given from time to time by experts. An effort will be made to get some practical experience for the students of this course in the stores of Greeley.
C. A. 153. Salesmanship and Business Efficiency-(See Gen. Cat. for description), and
C. A. 211. Business Administration-(See Gen. Cat. for description).

\section*{Agriculture}

\author{
W. H. Hargrove, Pd.B., B.S. in Agr., B.S. in Ed.
}

\section*{Extension Courses in Agriculture}

We do not encourage the study of courses of a laboratory character by correspondence. We feel, however, that there are some general courses in each of the main fields of Agriculture that can be pursued with profit without the aid of the laboratory. Each of the courses offered can be worked out with the aid of one or two good texts.

Agriculture 1. Animal Husbandry. Types and Breeds of Farm AnimalsFour hours.

A general survey of the development breeds of livestock, the livestock industry and its present conditions. The fundamentals of livestock judging and its relation to production are covered in this course. The work includes cattle, horses, hogs, sheep and poultry.

Agriculture 4. Farm Crops-Four hours.
An introductory course dealing with the most important farm crops.
Agriculture 5. Soils-Four hours.
A study of the physical and chemical properties of the soil and their relations to soil management.

Agriculture 10. Poultry Raising-Three hours.
This course deals with the general, important factors of poultry production, selective flock breeding, culling, housing, feeding, incubation and brooding.

\section*{Cooperative Extension Service}

\author{
Dr. M. F. Beeson, A.M., Ph.D., District Supt., Grand Junction
}

Colorado State Teachers College, the State University, and the State Normal School jointly maintain a District Superintendent of Extension Service on the Western Slope-Dr. M. F. Beeson, with headquarters at Grand Junction.

The Cooperative Extension Service has steadily grown in popularity and influence. Last year more than five hundred teachers were taking work in the various groups. Everywhere, Superintendents of Schools and administrative authorities have shown a most admirable spirit of cooperation and have contributed not a little to the marked success of the plan.


\title{
Golorado State Teachers College BULLETIN
}

\title{
Supplementary Reading List for
}

\author{
High School English
}

\author{
Prepared by \\ Ida Morgan, A. M. \\ and \\ Lester W. Boardman, A. M.
}

GREELEY, COLORADO, 1922

\title{
Supplementary Reading List for
}

\section*{High School English}

\author{
Compiled and Annotated by \\ Ida Morgan, A. M. \\ and \\ Lester W. Boardman, A. M. \\ Professor of Literature and English in Colorado State Teachers College
}


Published by
COLORADO STATE TEACHERS COLLEGE
GREELEY, COLORADO
AUGUST, 1922

This supplementary reading list, from the nature of its content, can not be regarded as final. Its growth and its emendation will be greatly aided by suggestions from teachers who use the list. Such cooperation is cordially invited. Address:

\author{
Miss Ida Morgan \\ Westminster College \\ Salt Lake City, Utah
}
or
Professor Lester W. Boardman
Colorado State Teachers College
Greeley, Colorado
For copies of this publication (price, thirty cents each), address
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\section*{PREFACE}

IF PUBLISHING this Supplementary Reading List for High School English, Colorado State Teachers College hopes to be of service to the secondary schools of Colorado and of other sections of the United States. I trust that high school teachers of literature realize that their work is only begun by the classroom study of texts, that the ultimate aim of their teaching is the inculcation of the love of good reading, and that the best means of securing this happy outcome is systematic supplementary reading by their pupils. Such reading demands a guiding list of broader scope than can be attained by any one person, whether teacher or librarian.

The compilers of this book list have done a painstaking piece of work in reviewing scores of the best lists previously published. They have attempted to do a new thing in annotating the books from the student, rather than the teacher, point of view. In this task they have gratefully received the assistance of other members of the English Department of Colorado State Teachers College. Furthermore, they desire from those who employ this book list constructive suggestions that shall make it more useful.

I am pleased to approve this work, addressed through their high school English teachers to our American boys and girls.
J. G. CRABBE,

President of Colorado State Teachers College.
Greeley, Colorado
August 2, 1922.

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\section*{ORIGIN OF THE LIST}

IN THIS book list an attempt has been made to compile a comprehensive, graded, annotated, weighted list of six types of literature which will include books useful in all types of high schools. Lists of supplementary reading in high school English are undergoing a process of adjustment. This study is an attempt to prepare a list having advantages over those previously published. It was thought that if a list, showing high frequency of mention in other good lists could be compiled, it would be valuable because it would be superior to any now in existence in that it would represent the judgment of a number of teachers. Furthermore, it was thought that this list might be improved by the addition of selections representing sources of interest in high school English as determined by investigators in this field.

A combination of sources was chosen for this study: namely, state high school manuals, printed syllabi issued by city school systems, and sources of interest in literature as determined by former investigations. The lists in high school manuals represent the practice of the vast number of schools that have no prepared lists of their own. The printed lists issued in city school systems represent the work of men and women who are in close contact with the schools and who are experimenting with the selections. By taking into consideration sources of interest in literature as determined by thorough investigators, we may include selections in accord with the native interests of high school pupils of different ages.

With these ideas in mind the compilers made an examination of some sixty supplementary reading lists representing states and cities in widely separated sections of the United States. After sifting out those which were not found explicit in regard to the study being made, twenty lists, ten of them prepared for city schools and ten found in state high school manuals, were selected for further use. Then frequencies of mention of six types of literature (namely, novel, short story, biography, essay, poetry, and drama) for the ninth, tenth, eleventh, and twelfth grades were tabulated from these lists. The selections appearing in the lists three times or more were used as a core upon which to build. Other selections were added in accordance with various sources of interest found to exist among high school pupils of different ages by C. Edward Jones and other investigators; and in accordance with certain principles of choice of grouping as set forth in Bulletin No. 2 for 1917 of the United States Bureau of Education. The high school manuals and city lists are given below in alphabetical order.


In the core list determined by investigating these twenty lists, only collective judgment was considered, and the development of this list did not depend upon any particular set of principles in the minds of the writers. But when the problem of building upon this list presented its lf it became necessary to have some definitely formulated principles in order to be able to add selections intelligently.

In the past, courses of literature have been largely shaped for the academic curriculum and have not presupposed a variety of types of books to meet the conditions of the different types of schools. In the preparation of this list an attempt was made to include a sufficient variety of literary selections to meet different demands. The general aims of liter-
ature teaching apply to all schools, and specific aims depend upon local conditions. Therefore, no particular classical, vocational, or technical curriculum was considered apart from others, and only the general principle of an inclusive variety applied here.

However, when it came to the more specific choice and grouping, a definite list of principles was necessary. These were derived largely from Educational Bulletin No. 2, 1917, on Reorganization of English in Secondary Schools, as follows:

\section*{Principles of Choice.}
1. Value in content (power of broadening mental vision and stimulating thought), ethical soundness, human sympathy, optimism, literary qualities.
2. Power to interest pupils in the given year. They must enjoy, not merely tolerate.
3. If necessary, subordination of the excellence of style to value of content and power to arouse interest.
4. A variety of choice to meet the needs of individual pupils in schools.
5. A gradual growth in breadth of content and depth of appeal.

\section*{Principles of Grouping.}
1. Pupils from thirteen to fifteen (the age of a majority of our high school freshmen) enjoy stirring narratives full of movement and manly virtues. This is the place for stories of action and adventure. There is a marked tendency for boys' books.
2. Literature of action and adventure may be continued in the second year, but usually by this time students are less easy to interest and arouse. Interest in life is no longer mainly objective and students are interested in their own developing nature. The literature with a prominent love element is not best here. Literature presenting large and serious questions of right and wrong is of great value. Messages of patriotism and practical idealism are popular. Students of this age are eager for a taste of life and its problems. Their minds are open to vital questions of human responsibility. Virtues in characters are recognized, and a moral stimulus from an imaginary association with them results.
3. If students are guided safely past the second year, the rest of the way is easy. In the third year the love of man and woman in their relations with each other may be discussed frankly. Students of this year are interested in human conflicts and great moral laws. Literature stimulative of thought on human responsibility and problems of everyday life has a place here. Literature must be wholesome, for it is still youth and not maturity that is being guided.
4. In the fourth year, even earlier where students have some literary background, the appeal may be made frankly literary. The young people's interest may be aroused in the world's heritage from the past. They are able to give a broader interpretation of the present in the light of the past and to see the simpler relations of American literature to that of other lands. A rapid reading of modern literary productions, especially the work of American authors, will prove of value here.

In the preparation of this final list weighting and annotations were thought essential. Very brief descriptive annotations are given. The point of view of the pupil is primarily considered, and an attempt is made to include only such statements as will arouse the interest of the boy or girl. The principles of choice and grouping as given above suggest to some extent annotations suitable for different years. For example, a book annotated as a thrilling story of adventure will naturally appeal to a first year pupil; and one annotated as introducing prominent literary or historical characters, or as the expression of some great movement, will interest the fourth year student. Moreover, these annotations will also aid teachers in suggesting books to individual pupils.

In view of the fact that there is such a variation in the difficulty with which certain books are read and assimilated, some method of apportioning work among pupils is necessary. Compilers of some lists have decided upon a system of weighting-that is. a statement of the number of comparative points or credits that the reading of different books is worth. In the material here used, four such weighted lists are included-namely, those of Los Angeles, California; Canon City, Colorado; Bloomington, Illinois; and Greeley, Colorado. Comparison of the weighting of these lists revealed rather close correspondence. Where a noticeable difference of
opinion was found, the average was taken. The weighting of the following list consists to a great extent of borrowings from these lists. Selections for which no weighting was found were weighted according to length, difficulty, theme, and value as literature.

In addition to the lists of individual short stories, poems, dramas, etc., mentioned, a number of the best collections were listed. The recent impetus given to the study of these types of literature makes a wide range of choice advisable.

The greatest frequency of mention determined the year in which the selections were placed in the core list. In the few instances where the frequency of mention in different years was the same, the principles of grouping were applied and the selections placed accordingly.

Doubtless at present no high school library contains all the books here listed. Many schools have meager collections of books and small funds to supply deficiencies, and often the supposedly well equipped library has a number of antiquated volumes unsuited to the present needs of the pupils and a sad lack of up-to-date modern material. In view of these facts, it is hoped that this study will assist in the choice of well balanced collections of the most valuable books.

Moreover, this work is not a course of study. It is simply a division of the main types of literature by years that tallies roughly with the natural interests, mental development, and needs, intellectual and spiritual, of a large number of pupils in these years. Consequently no suggestions are given with reference to the number of points or credits to be required of each pupil during a year, the relative amounts of different types of literature or different selections of the same type, or the nature of the reports to be made upon this collateral reading. These things will depend largely upon local conditions, and especially upon library facilities.

Magazines are not included in this list. Those mentioned most often in the lists consulted are the Literary Digest for general information and current poetry; the Atlantic Monthly for its attractive essays; Current Opinion for its review of plays and current poetry; the Mentor for its attractive pictures and condensed information on literature, travel, sciences, and arts; the American for its articles on business principles and development of character; the Survey for its articles on social problems; and Good Housekeeping, a very reliable woman's magazine. Other valuable periodicals mentioned were The Popular Science Monthly, Travel, The National Geographic, The Independent, The World's Work, Literary Review, Review of Reviews, Poetry, Drama, and Harper's Monthly. Pupils should be influenced to read regularly at least three or four good magazines. Therefore, our good magazines should have a place in every high school library, the number depending upon the amount of the library fund, size of the school, and other social circumstances.

\section*{FIRST YEAR}

\section*{NOVELS}
Alcott
Bacheller
Barbour
Carroll

Clemens
* Huckleberry Finn5

A humorous story of boyhood. A raft voyage down the Mississippi. Shows many traits of boyhood, humor, shrewdness, and struggles with conscience.
* Tom Sawyer Full of fun.

\title{
* The Prince and the Pauper
}

The little prince and the beggar boy are very much alike. They change places and have many strange and exciting adventures.

The Secret Garden
The "secret garden" brings health of mind to one child and strength of body to another with the help of the girl who loves everything out-of-doors.

\footnotetext{
* Titles marked with an asterisk belong to the core list. All other titles represent those books that manifestly deserve to be included in the reading of high school students. Nearly all of these appear in some of the many book lists that were consulted but not used for the core list. A few titles of very recent date have been added by the compilers.
}

Connor

Cooper *The Deerslayer 6
Tale of warfare in New York between the white settlers and the crafty Iroquois. Shows us Hawkeye, a famous scout. First of the Leatherstocking Tales.
* The Last of the Mohicans

A story of the French and Indian War. It tells of the siege of Ft. William Henry and of the capture of two young girls by the Indians and the adventures of an English of ficer while trying to rescue them. Hawkeye, the scout, and Uncas, the last of the Mohicans, are two of the other characters. Second of the Leatherstocking Tales.
The Pathfinder
Takes us through the wilderness of the Great Lakes. Cooper considered this his best novel. Third of the Leatherstocking Tales.

\author{
* The Pioneers
}

Fourth of the Leatherstocking Tales. Not so much adventure in this one, but the backwood scenes and the characters are interesting. We have a humorous character in Ben Pump. At the end of this book the hero turns his face westward and we follow his last trail in The Prairie.
* The Prairie

Closes the career of Hawkeye. He has ceased to be a hunter and a warrior and has become a trapper on the upper Missouri.

\section*{* The Spy}

A story of the American Revolution. The hero, the spy, is a cool, shrewd, fearless man, who is employed by General Washington in service which involves great personal danger and little glory.
The Pilot

Story of a secret expedition to the English
 coast founded on the exploits of Paul Jones.

\author{
D'Amicis
}

Defor
* Cuore: Heart of a School Boy

The book portrays the life, feelings, thoughts, and aspirations of an Italian boy beginning with his first day at school. Splendid book for boys.

\author{
* Robinson Crusoe
}

Story of a man who was shipwrecked and lived alone upon an island for a number of years.
* Great Expectations

As in David Copperfield, the hero tells his own story from boyhood. Pip is a village boy who longs to be a "gentleman". His dreams of wealth and opportunity suddenly come true. He later discovers that his unknown benefactor is a convict to whom he had once rendered a service.
* Oliver Twist
Story of a poor boy, an inmate of a poorhouse, whose natural goodness and innocence carry him through poverty and temptation to a happy life.
Dodge Hans Brinker
A picture of life in Holland. The prize silver skates will arouse the reader's interest as keenly as they did that of Hans and his sister.
Doyle * White Company 5
A story of the one hundred years' war between France and England. Gives an account of the customs, costumes, and manners of this period.
* Adventures of Sherlock Holmes 5
The Hound of the Baskervilles
Both thrilling detective stories.
Eggleston *A Hoosier School Master
Narrates the experience of Ralph Hartsook, an Indiana youth, who before the Civil War taught in a back-country district in his native state. Ralph is manly and plucky and has a keen sense of humor.

\section*{* A Hoosier School Boy}
Story of boy life in Indiana and Ohio about 1840, giving a vivid picture of. the difficulties which beset a boy seeking an education in early days.
* Long Knives ..... 4
Story of George Rogers Clark's expedition to Illinois at the time of the Revolution.
Eliot * Silas Marner 4
What makes a miser and how can he be cured? George Eliot works out this problem with truth, humor, and pathos.
Fox \(\quad\) * Little Shepherd of Kingdom Come 4
Pictures life with the Kentucky mountaineers and shows the effects of the Civil War in Kentucky.
Hawes *The Mutineers
An excellent story of the voyage of a trading vessel from Salem to Canton in 1809, full of action and spirit. Splendid sea tale.


Porter * A Girl of the Limberlost
A story of an ambitious girl who pays her way through high school and prepares for college by collecting rare butterflies for naturalists.
Porter, Jane * Scottish Chiefs 5
A tale of the thirteenth and fourteenth centuries. Wallace, the great hero of Bruce's fortunes, is the principal character. An exciting story of adventure and border warfare.
Rice * Mrs. Wiggs of the Cabbage Patch 4
A resourceful family preserves smiling faces under the most trying circumstances. A cheery story full of humor. Shows the good in human nature.
Smith, F. H. * Caleb West
Characters and action center about building a lighthouse on the Connecticut Coast.
Scott
* Guy Mannering
At Godfrey Bertram's birth, Guy Mannering predicts his future. He finds two catastrophies overhanging the boy. These predictions come true. At the age of five Godfrey is stolen by a gypsy, is taken to India, grows to manhood, and later returns to England. An exciting story of adventure.
A brilliant picture of Medieval England. Introduces the Templars. Among the noted characters are Richard Couer de Lion, Robin Hood, Friar Tuck, Allen a-Dale, Isaac of York and Prince John. Portrays the bitterness existing between the Saxons and the Normans.
* The Talisman 6
A story of the Third Crusade. Richard Coeur de Lion and Saladin are prominent characters.
Stevenson
* Treasure Island
5
A story of pirates and the Spanish main. The best story of hidden treasure ever written.

\author{
* David Balfour
}
The stirring adventures of a young Scot who was shanghaied and shipwrecked, and how he finally came into his own. Sequel to "Kidnapped".

\section*{* Kidnapped}
Memoirs of the adventures of David Balfour in the year 1751. As thrilling as Treasure Island.
Gulliver is shipwrecked first at Lilliput, where the inhabitants are six inches high. This satire suggests the littleness of human affairs. Then he goes to Brobdingnag where giants live, and finally to the Houyhnhnms where horses rule humanity. This last shows the follies and cruelties of men.
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Webster} & \multicolumn{2}{|l|}{Long Legs Weighting} \\
\hline & An entertaining story of a girl's college days and love affair told in sprightly letters to a guardian. & \\
\hline \multirow[t]{4}{*}{Wigein} & * Mother Carey's Chickens & 3 \\
\hline & \multicolumn{2}{|l|}{Story of a mother, who, left with several children and very little money, takes an old house in a country town, sends the children to an academy near by, and makes herself and them good neighbors and the house a social center.} \\
\hline & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
* Rebecca of Sunnybrook Farm \\
Story of an original and attractive child who is adopted by two maiden aunts.
\end{tabular}}} \\
\hline & & \\
\hline \multirow[t]{2}{*}{Yonae} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
* Dove in the Eagle's Nest \\
Story of life in a German castle in the middle ages.
\end{tabular}}} \\
\hline & & \\
\hline \multirow[t]{4}{*}{White} & * Gold & 4 \\
\hline & \multicolumn{2}{|l|}{California in the days of the "forty-niners". Splendid story of the hardships, struggles, and indomitable spirit of the pioneers who won the West.} \\
\hline & FIRST YEAR & \\
\hline & SHORT STORY-INDIVIDUAL & \\
\hline \multirow[t]{2}{*}{Brown} & * Rab and his Friends & 1 \\
\hline & \multicolumn{2}{|l|}{One of the best dog stories ever written. Sir WaIter Scott appears in the story.} \\
\hline \multirow[t]{2}{*}{Clemens} & * A Dog's Tale & 1 \\
\hline & \multicolumn{2}{|l|}{Mark Twain was opposed to vivisection. This story will convert the reader to the same opinion.} \\
\hline \multirow[t]{2}{*}{Davis} & * Bar Sinister & 1 \\
\hline & Another good dog story. & \\
\hline \multirow[t]{2}{*}{Dickens} & * Christmas Carol & 3 \\
\hline & \multicolumn{2}{|l|}{The ghosts who visit Old Scrooge on Christmas Eve show him how much of Christmas happiness he has missed.} \\
\hline \multirow[t]{2}{*}{Hale} & * A Man Without a Country & 3 \\
\hline & Story of an American naval officer who said he never wished to hear of the United States & \\
\hline \multirow[t]{2}{*}{Henry} & The Ransom of Red Chief & 1 \\
\hline & \multicolumn{2}{|l|}{Humorous story of how a mischievous boy got the best of his kidnapers.} \\
\hline \multirow[t]{2}{*}{Ouida} & A Dog of Flanders & 2 \\
\hline & An interesting story of the faithfulnes of a great dog to his little master. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Poe} & \multicolumn{2}{|l|}{* Gold Bug Weighting} \\
\hline & \multicolumn{2}{|l|}{Story of the finding of a treasure hidden by the Pirate Captain Kidd.} \\
\hline Stockton & \begin{tabular}{l}
* The Lady or the Tiger \\
Nobody ever found out how the story ended, for the author would not tell.
\end{tabular} & 1 \\
\hline Stevenson & * Will o' the Mill Story of a boy who dreamed of life and adventure out in the wide world through which the river flowed that turned the mill. & 1 \\
\hline Wiggin & The Birds' Christmas Carol A sympathetic account of the humorous and pathetic attempts of a poor family to be happy. & 2 \\
\hline Van Dyre & * Story of the Other Wise Man The story of a fourth wise man who searched for the Messiah and found Him after many, many years. & 2 \\
\hline & SHORT STORIES-COLLECTIVE & \\
\hline Craddock & \begin{tabular}{l}
In the Tennessee Mountains \\
Contents: A-playin' of Old Sledge at the Set-tlement-Dancin' Party at Harrison CoveDriftin' Down Lost Creek-Electioneerin on Chilhower-Over ing t'other Mounting- Romance of Sunrise Rock-Star in the Valley.
\end{tabular} & \\
\hline Church & Stories from the Iliad & \\
\hline & \begin{tabular}{l}
Stories from the Odyssey \\
Two world classics put in attractive form for young people.
\end{tabular} & \\
\hline Deland & \begin{tabular}{l}
Old Chester-Tales \\
Contents: Promises of Dorothea-Good for the Soul-Miss Maria Child's Mother-Justice and the Judge-Where the Laborers Are Few-Sally-The Unexpectedness of Mr. Horace Shields-New England. Quaint old
\end{tabular} & \\
\hline & \begin{tabular}{l}
Dr. Lavender's People \\
Contents: The Apotheosis of the Reverend Mr. Spangler-The Note-The Grasshopper Mountain-At Stuffed Animal House.
\end{tabular} & \\
\hline \multirow[t]{3}{*}{Hawthorne} & Tanglewood Tales Stories of Greek gods and heroes. & \\
\hline & Twice Told Tales Stories from traditions of pre-Revolutionary times. & \\
\hline & Wonder Book Modern versions of the myths told by Greek mothers to the children of long ago. & \\
\hline
\end{tabular}

White

Stories of mystery and imagination. The origin of the detective story is found here.

Contents: Old Pipes and the Dryad-Beman and Orn-Clocks of Rondaine-Griffin and the Minor Canon-Christmas Truants.
Sketch Book
Humorous tales of Colonial New York. Depicts customs and manners of the early Dutch settlers.

Tales of Troy and Greece
Adventures of Ulysses, Perseus, and Theseus.
Jungle Book
Collection of fables of man and beast in India. Of Mowgli, the boy of the Indian Jungle, whose brothers are wolves

\section*{Just-So Stories}
"How the Elephant Got his Trunk" and other remarkable tales.

\author{
Short Stories
}

Contents: Riding the Rim Rock, by SharpFarmer Eli's Vacation, by Brown-Chief Operator, by Phelps-In and Out of a Cab in Amsterdam, by Smith-Face of the Poor, by Graham-Golden Fortunes, by Austin-A Hammerton Typewriter, by White-Tom o' Blub'ry Plains, by Wiggin-My Cousin, the Colonel, by Aldrich-Aunt Cynthy Dallet, by Jewett-Day of the Cyclone, by Thanet-Left out on Lone Star Mountain, by Harte-Birthmark, by Hawthorne.
origin of the detective story is found here.

\section*{Old Greek Folk Stories}

Best known myths of Greece told in simple language.

\section*{Book of Short Stories}

Contents: Rip Van Winkle, by IrvingMinister's Black Veil and Ethan Brand, by Hawthorne-Fall of the House of Usher, and Gold Bug, by Poe-Signal-Man, by DickensLady or the Tiger, by Stockton - Three Strangers, by Hardy-Will o' the Mill and Sire de Maletroit's Door, by StevensonCourting of T'now-head's Bell, by BarriePhoebe, by Henry-Man Who Would Be King, by Kipling.

Best American Tales
Contents: Rip Van Winkle and Legend of Sleepy Hollow, by Irving-Great Stone Face and Rappaccini's Daughter, HawthorneGold Bug, Descent into a Maelstrom, and Fall of the House of Usher, by Poe-What was It? by O'Brien-A Man Without a Country, by Hale.

The Court of Boyville
A series of stories of boy life in a small town. Full of humor and true to life.

GATES \begin{tabular}{l} 
The Biography of a Prairie Girl \\
Clear cut and interesting description of life \\
on the prairie.
\end{tabular}
GRENFELL

\title{
POETRY-INDIVIDUAL
}

LoNGFELLOW \begin{tabular}{c} 
The Falcon of Ser Federigo \\
A lady whom Ser Federigo was very anxious \\
to please came to purchase the falcon, and \\
he, not knowing the cause of her visit, killed \\
and prepared the falcon for her breakfast.
\end{tabular}
\begin{tabular}{c} 
Evangeline \\
Story of the life search of Evangeline for
\end{tabular}
\begin{tabular}{c} 
her lover Gabriel after the expulsion of the
\end{tabular}
Aeadians from their home by the English.


Gareth rescues Lynette's sister, who is shut up in a castle and guarded by four hostile knights. The happiest of the Idylls of the King.

The brook talks-
'Men may come and men may go, But I go on forever."

The Merman \(\frac{1}{2}\)
The Charge of the Light Brigade \(\frac{1}{2}\)
Tells how six hundred soldiers, even though they knew a mistake had been made, rode into the Valley of Death.

\section*{FIRST YEAR}
POETRY-COLLECTIVE

Bates

Hale

Holland

Henley

Paigrave

SEWARD
Child's Garden of Verse
Scenes and emotions of childhood described in such a way as to appeal to both children and adults.
\begin{tabular}{ll} 
Teter & One Hundred Narrative Poems \\
Whittier & Collected Poems
\end{tabular}

\section*{FIRST YEAR}

\section*{DRAMA}
Barrie \begin{tabular}{r} 
Weighting \\
Echoes of the War \\
A collection of short plays showing the feel- \\
ing of various types of people toward the \\
war.
\end{tabular}
Davis Miss Civilization 2

Shows how a girl outwits a gang of burglars.

Three Pills in a Bottle
A sick boy meets the souls of the people he sees passing by. His kindness to them makes his fortune.

Neighbors
2
Simple comedy.
Spreading the News
2
Shows how news once started grows. Humorous.
Traveling Man ..... 2

A modern miracle play. The traveling man
 symbolizes Christ.
Workhouse Ward ..... 2Scene is in a workhouse ward. Very comic.
Maeterlinck * The Blue Bird ..... 3
A story of the search for happiness. The Blue Bird is the symbol of happiness.
Oliphant The Maker of Drêams ..... 2Pierot has his eyes opened to the love ofPierette through the magic of the maker ofdreams.
Rostand The Romancers ..... 3A delightfully humorous comedy. Many highschools have produced the play with suc-cess.
Yeats The Pot of Broth
A humorous story of an Irishman's blarney which he uses to the end of a square meal.2

\title{
DRAMA-COLLECTIVE
}

\section*{Gregory Seven Short Plays}

Contents: Spreading the News-Hyacinth Halvey-Rising of the Moon-JackdawWorkhouse Ward - Traveling Man - Gaol Gate.

The comedies of Lady Gregory are played in many schools with success. They are a part of the Irish Renaissance.

Yeats Hour-Glass and other Plays
Contents: The Hour-Glass-Cathleen hi Hoolihan-A Pot of Broth.

\section*{FIRST YEAR}

ESSAYS AND PROSE MISCELLANY
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Borup} & Tenderfoot with Peary Weigh & \\
\hline & Stories of adventure and splendid pictures of the far north. & \\
\hline \multirow[t]{5}{*}{Burroughs} & * Camping and Tramping with Roosevelt & 3 \\
\hline & Interesting experiences in the open shared by two nature lovers. & \\
\hline & Birds and Bees & 4 \\
\hline & Contents: Bird Enemies-Tragedies of the -Sharp Eyes-The Apple-Taste of Maine Birch - Winter Neighbors
Muskrat-Fox and Hound-Woodehuck. & \\
\hline & The Wit of a Duck An account of the way in which a duck found his way home from a place to which he had been taken. & 4 \\
\hline \multirow[t]{2}{*}{Du Chaillu} & In African Forest and Jungle Unusual experiences vividly described by a famous traveler. & 4 \\
\hline & \begin{tabular}{l}
Land of the Midnight Sun \\
Summer and winter journeys through Sweden, Norway, Lapland, and Northern Finland. Fine descriptions of the scenery and an account of the manners and customs of the peasantry.
\end{tabular} & 4 \\
\hline \multirow[t]{2}{*}{Finley} & American Birds & 6 \\
\hline & Observations of twenty-one northwestern species with special reference to the young. Many photographic illustrations. & \\
\hline \multirow[t]{2}{*}{Forman} & Stories of Useful Inventions & 5 \\
\hline & Full of interesting information for both boys and girls, but of special interest to boys. & \\
\hline \multirow[t]{2}{*}{Garland} & Boy Life on the Prairie & 3 \\
\hline & Descriptions of plowing, sowing, herding cattle, hunting, etc. & \\
\hline
\end{tabular}

Grinnell

Gordon

Kelloga

Marden

Mills

Muir

Nansen
* Oregon Trail
Describes Parkman's actual wanderings in

1846 with a company of Sioux Indians, across
the regions of the Platte River, buffalo hunt-
ing in the Black Hills, and return through
the Rocky Mountains.

Roosevelt
* Hunting Trips

Vivid descriptions of life and hunting in our
 western country.
*African Game Trails 5
Splendid pictures of African forest and jungle.
* Winning of the West

4
Tells how the vast stretches of western country came to be in reality a part of our great United States.

Seton
Flags of the World
Stories that everyone should know about the
origins and histories of the flags of the
world.

Insect Stories
A splendid guide to a knowledge of insects.
Success
A book of ideals, helps, and examples. Some of the chapter headings are: EnthusiasmGame of the World-Education Under Dif-ficulties-Misfit Occupations-Doing Everything to a Finish-Conduct as a Fine ArtMedicine for the Mind-Ideals-Many Anecdotes of Famous Men.
* Wild Life in the Rockies

Picturesque descriptions of the country and interesting accounts of the animals.

A Thousand Year Pine
The story of a pine tree and its experiences
as recorded in the annual rings of the trunk.
A Thousand Mile Walk to the Gulf
Vividly told by an observer who misses nothing in any experience.
Farthest North
A story by one of our greatest Arctic ex-
plorers.

Describes Parkman's actual wanderings in 1846 with a company of Sioux Indians, across the regions of the Platte River, buffalo hunt ing in the Black Hills, and return through the Rocky Mountains.

Interesting account of the work of these great pioneers in founding missions and settlements among the Indians.
\begin{tabular}{|c|c|}
\hline Roosevelt & \begin{tabular}{l}
* Hunting Trips \\
Vivid descriptions of life and hunting in our western country.
\end{tabular} \\
\hline & \begin{tabular}{l}
* African Game Trails \\
Splendid pictures of African forest and jungle.
\end{tabular} \\
\hline & * Winning of the West Tells how the vast stretches of western country came to be in reality a part of our great United States. \\
\hline
\end{tabular}
* The Trail of a Sandhill Stag

1

Shows wonderful familiarity with animal life and habits.

Wahb, the big grizzly of Yellowstone Park. Sounds as if it had been written by a brother grizzly.

\author{
* Wild Animals I have Known
}

Contents: Lobo, the King of CarrumpawSilver, the story of a crow-Raggylug, the story of a cottontail rabbit-Bingo, the story of my dog-The Springfield Fox-The Pacing Mustang-Willy, the story of a yaller dogRedruff, the story of the Don Valley Partridge.

The animals in this book were all real characters and showed the stamp of heroism and personality.

Van Loon America-for Little Historians 7
This innovation in history writing won the A. L. A. prize for the most useful book published in 1921.
Warner * Being a Boy 4

A boy in a Massachusetts hilltown nearly eighty years ago.

Romance of Modern Exploration
Descriptions of curious customs, thrilling adventures, and interesting discoveries and explorers in all the parts of the world.

\section*{SECOND YEAR}

\section*{NOVELS}
Bacheller \(\quad *\) Eben Holden \begin{tabular}{l} 
Life in the Adirondacks fifty years ago. Fine \\
pictures of nature.
\end{tabular}
\[
x+2
\]
* D'ri and I

5
A historical story containing lively action.
Barrie *Sentimental Tommy 5
A splendid story of child life.
* The Little Minister 5

Story of Scottish life. Some parts are very affecting, others exceedingly humorous. Treats of the love affairs of a Presbyterian minister.

Besant All Sorts and Conditions of Men 5
A novel dealing with the very poor of London's East End.
* Judith Shakespeare 5

An attempt to picture rural life in England in the seventeenth century. The story centers about the Shakespeare family.

Blackmore *Lorna Doone 9
A romance of Exmoor at the time of the Stuarts. John Ridd rescues Lorna from the robber Doones.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{Bronte} & \multirow[t]{2}{*}{Shirley} & \multicolumn{2}{|l|}{Weighting} \\
\hline & & Portrays strongly individual people. Intimate account of life in the eighteenth century. & \\
\hline \multirow[t]{2}{*}{Bunyan} & \multicolumn{2}{|l|}{* Pilgrim's Progress} & 5 \\
\hline & & An allegory of a Puritan's life. "Perhaps more widely known that any other book except the Bible." Who has not heard of the Slough of Despond, lions in the way, Vanity Fair? & \\
\hline \multirow[t]{4}{*}{Cable} & \multicolumn{2}{|l|}{The Grandissimes} & 6 \\
\hline & \multicolumn{3}{|c|}{New Orleans and its Creole inhabitants a century ago.} \\
\hline & \multicolumn{2}{|l|}{Dr. Sevier} & 5 \\
\hline & & A story of life in New Orleans just before the Civil War. John Richling, son of a rich planter, marries a northern girl, is estranged from his family, and has a struggle for existence. Character development story. & \\
\hline \multirow[t]{2}{*}{Carruth} & \multirow[t]{2}{*}{Track's} & End & 3 \\
\hline & & Story of loyalty to duty in the face of what seemed insuperable difficulties. & \\
\hline \multirow[t]{7}{*}{Churchill} & \multicolumn{2}{|l|}{* Richard Carvel} & 5 \\
\hline & \multicolumn{3}{|c|}{A historical romance dealing with the Revolutionary War.} \\
\hline & \multicolumn{2}{|l|}{A historical romance dealing with the Civil War.} & 5 \\
\hline & \multicolumn{2}{|l|}{* The Crossing} & 5 \\
\hline & \(\cdots\) & \multicolumn{2}{|l|}{A historical romance dealing with the Louisiana Purchase period. Daniel Boone, George Rogers Clarke, and Andrew Jackson are among the characters.} \\
\hline & \multicolumn{2}{|l|}{Coniston} & 6 \\
\hline & \multicolumn{2}{|r|}{A political tale.} & \\
\hline \multirow[t]{2}{*}{Clemens} & \multicolumn{2}{|l|}{* Innocents Abroad} & 6 \\
\hline & & Describes the author's trip aboard and consists of amusing episodes, satirical essays, and humorous comments upon the ways of the world. & \\
\hline \multirow[t]{3}{*}{Connor} & \multicolumn{2}{|l|}{* Glengary School Days} & 4 \\
\hline & \multicolumn{3}{|c|}{The simple country life of the boys and girls in a backwoods school in Canada.} \\
\hline & \[
\text { * The } \mathrm{M}
\] & \begin{tabular}{l}
an from Glengary \\
A romance of the Canadian northwest.
\end{tabular} & 4 \\
\hline \multirow[t]{2}{*}{Dickens} & \multicolumn{2}{|l|}{* Tale of Two Cities} & 7 \\
\hline & & Story of the French Revolution and the Reign of Terror. The uprising of the Parisian mob against the aristocrats and the horror of the mob rule are described by an eye-witness. & \\
\hline
\end{tabular}monotony of Dotheboys Hall.
'Tis the pathetic story of Little Nell, liked by all lovers of Dickens. This is the chief feature of the work, but there are comic scenes with such characters as Dick Swiveller, the Marchioness, Mr. Toots, and Tommy Traddles.

The feud betwen Richelieu and Anne of Austria and the adventures of the three guardsmen and D'Artagnan.
* The Count of Monte Cristo

The most famous work of Dumas. A story of rapld action and marvelous experiences.

A well told tale of the American Revolution. Battle and love contend for the reader's interest.

Fox

French
Story of Rolf and the Viking's Bow
Story of Iceland. Courage, self.-control, patriotism, and perseverence are the qualities developed in the young hero.

Lance of Kanana
It was the lance of Kanana in the hands of a Bedouin boy that rescued Arabia. A story beautiful in its spirit of heroism.

Gras
* Reds of Midi

A story of the French Revolution. Pascal La Patine in his old age, night after night in a shoemaker's shop, tells the story of his youth. Stirring stories of fighting in France, Spain, Egypt, and Russia. The 'Reds of the Midi" are French insurgents.

Halevy

\footnotetext{
* Abbe Constantine
}

A humorous story of the trials of a bachelor uncle with two live children.

JACESON * Ramona
A moving romance written to show the injustice of the United States in dealing with the Indians. The scene of the story is Southern California.

Jewett
The Country Doctor
A picture of rural New England life.
The Country of the Pointed Firs
Splendid pictures of life and character in a
Maine seacoast village.

Splendid pictures of life and character in a Maine seacoast village.
* Hereward, the Wake

Historical romance of the heroic exploits and the daring stand of the "Last of the English" against the Norman conquerors.

Kipling
* Kim

7
Story of life in India, giving an idea of the country, the system of caste, and the way in which the natives live. Kim is an orphan, the son of an Irish soldier. He is brought up among the Hindus, attaches himself to the devout old pilgrim Llama, is found and sent to school by his father's regiment and trained to use his powers of keen observation as an agent of the secret service.

\section*{Captains Courageous}

Harvey Cheyne, young, rich, and spoiled, falls overboard from an Atlantic liner and is picked up by fishermen bound for a season's catch off the coast of Newfoundland. The reader is given a good picture of life aboard a fishing smack while the rude fishermen make a man of Harvey.

Lever

Little
Lady of the Decoration
A young American teacher's experience in a Japanese school entertainingly rêlated in letters.

Lytton
* The Last of the Barons

6
A historical novel dealing with the Earl of Warwick, called the King-maker, and the contest between the houses of York and Lancaster for the throne of England culminating in the War of the Roses.
*The Last Days of Pompeii
6
Tells about the reconstruction of the luxurious Roman society of the first century.

Mitchell
* Hugh Wynne

6
Many of the greatest figures of American history come and go through these pages, notably Washington, Lafayette, Andre, Sir William Howe, and Hamilton.
Mitchell
Maclaren
Norris
Oliphant,
Margaret
Pyle Men of Iron

Boy life in an English castle in the later days of chivalry. Fine moral tone. A tale of the deeds of Myles Falworth, created knight by his majesty, Henry IV of England.

Scott \(\quad *\) Quentin Durward
8
A rich and varied picture of the last days of feudalism. Scene: the frontier districts of France and Flanders.
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* Rob Roy
The story of the adventures of a Scottish outlaw.

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8
* Kenilworth 8

The time of Queen Elizabeth. Introduces the Earl of Leicester and gives the tragic story of Amy Robsart.
* With Fire and Sword
A worth while romance of adventure and
love.

A worth while romance of adventure and love.

Spartan
5
Sets forth with vivid interest the story of Aristodemus, who alone of the "Three Hundred" came back from Thermopylae and was taunted with being the coward of Thermopylae.

Stevenson
* Dr. Jekyl and Mr. Hyde \begin{tabular}{l} 
Shows the conflict in man between good and \\
evil.
\end{tabular}
* Black Arrow 6

Story of the War of the Roses; what happened to Richard Shelton and the outlaw band of the "Black Arrow."
The Master of Ballantrae
\(\begin{aligned} & \text { Story of a noble Scottish family invoĩved in } \\ & \text { the Jacobite troubles of } 1745 .\end{aligned}\)
Stockton
* Rudder Grange 5

Stockton's most popular work. A series of humorous stories which have for their hero a "middle-sized-orphan".
* Gentleman from Indiana

A convincing Hoosier story. A coward's bul
let almost kills the hero, but finally brings
 him love and fame.4
* Monsieur Beaucaire3

A sprightly eighteenth century romance with an Añglo-French background.
Wallace * Ben Hur 9

A story of the time of Christ. Deals with Jews, Romans, and Christians. Ben Hur is a young Jew of noble family taken prisoner by the Romans and made a galley slave. The sea fight with the pirates of the Mediterranean and the chariot race at Antioch are among the thrilling incidents of the story.

\section*{Woodcarver of 'Lympus}

An idealistic tale of a lad who under restricted conditions revealed beauty in the commonplace. New England setting.

White * Blazed Trail 4
Good tale of rough life in the unsettled regions. Account of life in a logging camp in Michigan.
Wister * The Virginian 4

An accurate picture of cowboy life. Has some fine descriptions and is an interesting story.

Wright * The Winning of Barbara Worth 3
Deals with the reclamation of land in the Colorado desert. A strong and interesting story.

\section*{SECOND YEAR}

SHORT STORIES—INDIVIDUAL
\begin{tabular}{ll} 
Allen & * A Cathedral Singer \\
\begin{tabular}{l} 
A fond mother's son has just been chosen \\
for the cathedral choir school when he is \\
run over.
\end{tabular} \\
Andrews & *A Perfect Tribute \\
\begin{tabular}{l} 
A touching little story of Lincoln and a Con- \\
federate boy, but not historically accurate.
\end{tabular}
\end{tabular}

Courage of the Commonplace
1
Johnny McLean fails to make a senior society at Yale, but shows to the world that the "courage of the commonplace" trains for the "courage of the crisis" when a great mine accident occurs.

Peace of Solomon Valley
An Englishman in India meets the girl of his dreams, and finds that she has dreamed of him.

The Man Who Would Be King 1
An unusually thrilling story of adventure.

Van Dyke

Wilkins

Record of a journey which was a religious revelation to the author. Dr. Van Dyke has discovered that Christianity is an out-ofdoors religion.
* The Revolt of Mother

The story of the unexpected revolt of a patient wife of many years. Depicts the hardships of New England farm life.

Farmer Eli's Vacation
A New England farmer who has never been but a few miles from home, looks forward to a vacation for years, but when the time finally comes, he can't endure the vacation.

\section*{SECOND YEAR}

\section*{SHORT STORIES-COLLECTIVE}

\section*{Marjorie Daw and Other Stories}

Delightfully written stories. Contents: Marjorie Daw-Our New Neighbors at Ponkapog - A Midnight Fantasy - Mademoiselle Olympe Zabriska-A Struggle for Life-Pere Antoine's Date-Palm-Quite So-Rivermouth Romance-The Little Violinist.

\section*{Smith College Stories}

Animated and true portrayal of the girl undergraduate's interest. Contents: Emotions of a Sub-Guard-Case of Interference-Miss Biddle of Bryn Mawr-Biscuits ex MachinaEducation of Elizabeth-Family Affair-A Few Diversions-Evolution of EvangelineAt Commencement-The End of It.

\author{
Cable
}

Ole Creole Days
Contents: Madame Delphine-Cafe des Ex-iles-Belles Demoiselles Plantation-Posson Jone-Jean ah Pouquelin-The PouletteSieur George-Madame Delicieuse.

Cody
(Editor)

Davis

Dickens

Gayley

Hawthorne

Kipling

Page

Paine

Parker

Rolleston

Selections from the World's Greatest Short Stories

Contents: Patient Griselda-Aladdin-Rip Van Winkle-Passion in the Desert-Child's Dream of a Star-Christmas Carol-A Princess' Tragedy-The Gold Bug-Great Stone Face-The Necklace, and the Piece of String -The Man Who Would be King-How Gavin Birse put It to Mag Lownie-On the Stairs.

\section*{Gallagher and Other Stories}

Contents: Gallagher-A Walk up the Ave-nue-My Disreputable Friend-Mr. RaeganThe Other Woman-There were Ninety and Nine-Van Bibber and the Swan Boat-Van Bibber's Burglar-Van Bibber as Best Man.

\section*{Christmas Stories}

Contents: Christmas Carol-Chimes-Cricket on the Hearth-Battle of Life-The Haunted Man and the Ghost's Bargain.

Classic Myths of Greece and Rome
Concise accounts of Greek and Roman myths. Splendid reference book.

Mosses from an Old Manse
A collection of tales and sketches such as the Birth Mark, Roger Marvin's Burial, and The Artist of the Beautiful.

These stories show Hawthorne's love of the mysterious and the unusual.

Plain Tales From the Hills
Stories of Anglo-Indian life and manners, the natives, Tommy Atkins and others.
The Day's Work
Contents: Bridge-Builders-A Walking Dele-gate-Ship That Found Herself-Tomb of his Ancestors-Devil and the Deep Sea-William the Conqueror-007.-Maltese Cat - Bread upon the Waters-An Error in the Fourth Dimension-My Sunday at Home-The Brushwood Boy.

In Ole Virginia
Stories of the Old South
Contents: Marse Chan-"Unc' Edinburgh"Meh Lady-Ole' Stracted-No Haid PawnPolly.

College Years
A fine, clean spirit of fair play pervades these eleven stories drawn from the happenings on the Yale Campus. They teach the spirit of sportsmanship that all good citizens find a necessary part of life's equipment.

Pierre and His People
Tales of the people of the Far North. Chiefly from the Hudson Bay Territory. Stories of love and adventures.

Myths and Legends of the Celtic Race A good reference book for myths of the Celtic races.

Stevenson

Van Dyke Blue Flower and Other Stories
Contents: Blue Flower-The Source-The Mill-Spy Rock-Wood Magic-Other Wise Man-Handful of Clay-Lost Word-First Christmas Tree.

SECOND YEAR

\section*{BIOGRAPHY—INDIVIDUAL}

 speare's Julius Caesar.

Richards Florence Nightingale
Gives an excellent picture of hospital nursing and the horrors of war. Shows sympathy and emphasizes great womanly qualities.
Rils * Theodore Roosevelt "Teddy," by "Jake," \(\quad 6\)
* Making of an American 6

The autobiography of Mr. Riis, who was a native of Denmark and came to this country when a young man. He was a newspaper reporter and a reformer. In his early life he struggled with poverty. He later made a study of the causes of poverty.

Roosevelt

Schurz
Hunting Trips of a Ranchman
Personal experiences of the author.
* Life of Lincoln 3

Short sketch of the character and achievements of the great President.

Stanley Autobiography \(\begin{aligned} & \text { An interesting account of the life of the } \\ & \text { great African explorer. }\end{aligned}\)

Tyler
Patrick Henry
Recounts many interesting incidents in the life of this great American statesman. High ideals and patriotism.

SECOND YEAR

\section*{BIOGRAPHY-COLLECTIVE}
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{Eastman} & Indian Heroes and Great Chieftains \\
\hline & Life stories of fifteen famous Indian chiefs. Helps the modern boy and girl to understand the soul of the Indian. Author is a Sioux Indian. \\
\hline \multirow[t]{2}{*}{French} & Heroes of Iceland \\
\hline & Thrilling life stories of the men of the Far North. \\
\hline \multirow[t]{2}{*}{Hodges} & Saints and Heroes Since the Middle Ages \\
\hline & Contents: Luther-More-Loyola-Cranmer-Colvin-Knox-Coligny-William the Silent-Brewster-Land-Cromwell - Bunyan-FoxWesley. \\
\hline \multirow[t]{2}{*}{Holland} & Historic Inventions \\
\hline & Most interesting stories of Gutenburg, Palissy, Galileo, Watt, Stephenson, Arkwright, Whitney, Davy, Morse, McCormick, Bell, Edison, Marconi, the Wrights. These sketches possess a decided self-help quality. \\
\hline \multirow[t]{2}{*}{Iles} & Leading American Inventors \\
\hline & Contents: John and Robert Livingston Stev-ens-Fulton-Whitney-Thomas BlanchardSamuel Morse-Charles Goodyear-Ericson-McCormich-Christopher Latham Sholes-Howe-Benjamin Chew Tilghman-Ottmar Mergenthaler. \\
\hline \multirow[t]{2}{*}{James} & Heroes of California \\
\hline & Accounts of the Donner party, the scouts, the pony express riders, the gold seekers, the railway builders, and other pioneers. \\
\hline \multirow[t]{2}{*}{Johnston} & Leading American Soldiers \\
\hline & Contents: Washington-Nathaniel Greene-Jackson-Zachary Taylor-Winfield ScottGrant - Sherman - Sheridan - McClellan-Meade-Robert E. Lee-Thomas J. JacksonJoseph E. Johnston. \\
\hline \multirow[t]{7}{*}{Parkman} & Heroes of Today \\
\hline & Contents: Muir - Burroughs - Grenfell Captain Scott-Trudeau-Bishop Rowe-Goe-thals-Langley-Rupert Brook-Hoover. \\
\hline & Pioneers of France \\
\hline & Heroes of Service \\
\hline & Heroines of Service \\
\hline & Fighters for Peace \\
\hline & Similar collections in their respective fields. \\
\hline \multirow[t]{2}{*}{White} & Boys' and Girls' Plutarch \\
\hline & About Theseus, Romulus, Demosthenes, Alcibiades, Coriolanus, Aristides, Pompey, Themistocles, and other Greek and Roman heroes. \\
\hline
\end{tabular}

Wright Children's Stories of the Great Scientists
Describes the life and work of seventeen of the most energetic and successful workers in natural science. Aims to bring out lessons taught by their lives, rather than the results of each one's labors.

\section*{SECOND YEAR}

POETRY-INDIVIDUAL
Aldrich An Old Castle Weighting

A tottering, tumbling, crumbling castle calls forth meditation as to its past occupants.
Arnold \(\quad\) Sohrab and Rustum 2

Sohrab and Rustum are both great fighters. Sohrab is Rustum's son, but Rustum does not know it The poem describes a great fight between the two, in which Rustum finally overcomes and slays Sohrab.
* The Forsaken Merman

A merman marries a mortal, who finally forsakes him and her children and goes back to the little village by the sea to live with her kind.

Browning

Bryant

Byron

Burns

Coleridge

Cowper
* The Ancient Mariner

The mariner kills an albatross, a bird of good omen; a curse rests upon him; he wanders and suffers; finally the curse is lifted, but he must still wander over the world and tell the story to certain people whom he meets. In this poem he is telling the story to a wedding guest.
The Lost Leader
Browning had Wordsworth in mind. He felt that Wordsworth had grown conservative as he advanced in years. Later the author repented of his harsh judgment.

The Flood of Years
The rushing waves are described as gradually engulfing and separating all humanity.

Destruction of Sennacherib
A lyric giving an account of the destruction of Sennacherib by the power of the Lord on behalf of the Israelites.
* Bannockburn

Patriotic Scotch poem. Robert Bruce's ad
dress to his army.\(\frac{1}{2}\)

Highland Mary
A poem written after the death of Highland Mary, whom Burns loved.

The Solitude of Alexander Selkirk
\(\frac{7}{2}\)
Alexander Selkirk has been ship-wrecked and is alone upon an island.
\begin{tabular}{|c|c|c|}
\hline Goldsmith & \begin{tabular}{l}
* The Deserted Village \\
The author describes the village of Auburn with its happy, humble life centering around the two characters, the village parson and the school-master, both drawn with tenderness and no little humor. The village is depopulated by its landlord and Goldsmith follows the exiles over the seas to remote America. In this poem the author is taking the part of the individual against the institution which crushes him.
\end{tabular} & \\
\hline \multirow[t]{2}{*}{Holmes} & The Boys & \(\frac{1}{2}\) \\
\hline & Wrtten to commemorate a class re-union. The gray haired Doctor, Judge, Congressman, etc., are "twenty tonight." & \\
\hline Hunt & \begin{tabular}{l}
Abou Ben Adhem \\
Teaches that the love of God blesses those who love their fellowmen.
\end{tabular} & \(\frac{1}{2}\) \\
\hline \multirow[t]{4}{*}{Kipling} & If & \(\frac{1}{2}\) \\
\hline & Shows what it takes to be a real man. & \\
\hline & L'Envoi & \(\frac{1}{2}\) \\
\hline & Shows the joy of work for the sake of working. & \\
\hline Knox & \begin{tabular}{l}
O, Why Should the Spirit of Mortal be Proud? \\
This was Abraham Lincoln's favorite poem.
\end{tabular} & 1 \\
\hline \multirow[t]{2}{*}{Longrellow} & \begin{tabular}{l}
Building the Ship \\
A patriotic poem comparing our Union to a great ship.
\end{tabular} & 1 \\
\hline & \begin{tabular}{l}
The Builders \\
We are architects of our fate, and we build with the blocks of todays and yesterdays.
\end{tabular} & \(\frac{3}{2}\) \\
\hline Lowell & The First Snowfall Pictures a sad little incident in Lowell's life. & \(\frac{1}{2}\) \\
\hline \multirow[t]{2}{*}{Scott} & * Marmion & 4 \\
\hline & A historical novel in verse. Tells of the bor-der-warfare between England and Scotland and the battle of Flodden Field. & \\
\hline \multirow[t]{7}{*}{Tennyson} & * Enoch Arden & 2 \\
\hline & Enoch and Philip love Annie Lee. Enoch marries her, goes away to sea, does not return for years. Annie thinks him dead and marries Philip. Enoch returns. & \\
\hline & * Ulysses & 1 \\
\hline & Portrays the restlessness of the great Greek hero after his return home. He wants to sail beyond the sunset until he dies. He is determined to employ the remnant of his days pushing into unknown waters. & \\
\hline & * CEnone & \(\frac{1}{2}\) \\
\hline & Lament of CEnone for Paris when he forsakes her for Helen. & \\
\hline & \begin{tabular}{l}
* Lotus Eaters \\
"A land where all things always seemed the same'. 'Twas always afternoon.
\end{tabular} & \(\frac{1}{2}\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{Tennyson} & The Revenge Weighting \\
\hline & Stirring description of a battle on the sea. Fired national courage in England. \\
\hline Whitman & Vigil Strange I Kept on the Field One Night Father and son are in battle. The son is killed, the father keeps vigil over him all night and buries him in the morning. \\
\hline \multirow[t]{5}{*}{Wordsworth} & Daffodils \\
\hline & Beautiful little poem. Shows how close the poet was to nature. \\
\hline & Solitary Reaper \\
\hline & The poet meditates about a solitary Highland lass whom he hears singing in the field. \\
\hline & POETRY-COLLECTIVE \\
\hline Ashmunn & Modern Prose and Poetry for Secondary Schools \\
\hline Arnold & Selected Poems \\
\hline Clark & Treasure of War Poetry \\
\hline \multirow[t]{2}{*}{Gayley and Flaherty} & Poetry of the People \\
\hline & An excellent collection of poems with the human appeal. Not always the highest type of poetry, but always worth reading. \\
\hline Hale & \begin{tabular}{l}
Longer Narrative Poems \\
Contents: Horatius, by Macaulay-Sohrab and Rustum, by Arnold-Enoch Arden, by Ten-nyson-Christabel, by Colerilge-The Eve of lon, by Byron-Lady Geraldine's Courtship, by Browning-Atalanta's Race, by MorrisMichael, by Wordsworth.
\end{tabular} \\
\hline Longrellow & Selected Poems \\
\hline Moody & Poems \\
\hline Newbolt & Poems \\
\hline Noyes & Poems \\
\hline \multirow[t]{2}{*}{Palgrave} & Golden Treasury, Book IV \\
\hline & The complete Golden Treasury contains selections of the best work of the English poets. The choice for this collection was partly due to Tennyson. \\
\hline Robb & National Epics \\
\hline Service & \begin{tabular}{l}
Spell of the Yukon \\
The atmosphere of the Far North.
\end{tabular} \\
\hline
\end{tabular}

\title{
SECOND YEAR
}

\author{
DRAMA
}
\begin{tabular}{|c|c|c|}
\hline \multirow{3}{*}{Baker} & \multirow[t]{2}{*}{The Voysey Inheritance Weighti} & \\
\hline & & \\
\hline & \multicolumn{2}{|l|}{Tells how a young man straightens out an inheritance consisting of a business which swindling of others.} \\
\hline \multirow[t]{4}{*}{Barrie} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
* The Admirable Crichton \\
When the family is shipwrecked, the butler proves a better man than the English Lord.
\end{tabular}}} \\
\hline & & \\
\hline & * Quality Street & 3 \\
\hline & Tells the story of a girl whose life has been barren of happiness and who, through makebelieve, finds happiness in love. & \\
\hline \multirow[t]{2}{*}{Burrill} & \multicolumn{2}{|l|}{* Master Skylark} \\
\hline & \multicolumn{2}{|l|}{A boy stolen away from his home by strolling players is compelled to sing and lead the life of an actor in merry London. He is res-} \\
\hline \multirow[t]{2}{*}{Drinkwater} & * Abraham Lincoln & 3 \\
\hline & Tells the story of Abraham Lincoln's life in springfield, his election, his administraobstacles that Lincoln had to overcome in the
preservation of the Union. & \\
\hline \multirow[t]{2}{*}{Fitch} & * Nathan Hale & 3 \\
\hline & \multicolumn{2}{|l|}{A historical drama. Nathan Hale, the American spy of Revolutionary times, is the hero.} \\
\hline \multirow[t]{2}{*}{Howells} & The Parlor Car & 1 \\
\hline & A clever and amusing society farce. & \\
\hline \multirow[t]{2}{*}{Jones} & \multicolumn{2}{|l|}{Mary Goes First} \\
\hline & \multicolumn{2}{|l|}{land. Mary goes in for first place in society and gets it.} \\
\hline \multirow[t]{2}{*}{Parker} & Disraeli & 4 \\
\hline & Historical play. Disraeli, the great English statesman, is the leading character. & \\
\hline \multirow[t]{2}{*}{Peabody} & * The Piper & 3 \\
\hline & Version of the Pied Piper of Hamelin legend. Teaches that understanding and unselfishness is the key to real life. & \\
\hline \multirow[t]{2}{*}{Pinero} & Sweet Lavender & 3 \\
\hline & A play with an appealing heroine, soldiers, and other elements for successful use in high school. & \\
\hline Rostand & * Cyrano de Bergerac & 4 \\
\hline & A romantic play, dealing with the France of swords and fair ladies. & \\
\hline
\end{tabular}
SHAKESPEARE
* Merchant of Venice
Antonio, the Merchant, borrows money from
Shylock, the Jew, the bond being a pound of
flesh. Antonio fails, Shylock claims the bond,
but Portia saves the Merchant.

Splendid description of life in India as told by a great traveler.
Collier Germany and Germans \(\quad\) Of interest especially to students of history.

Curtis Public Duty of Educated Men 3
An oration setting forth the civic duty of men and women who are educated.

Fowler

French

Funston

Jackson
Bits of Travel Abroad
Each 1
Easy essays.
Glimpses of California and the Missions
Laselle and
Wiley

\section*{Vocations for Girls}

Describes about a dozen kinds of work open to girls, with brief directions on how to qualify for and secure positions. Gives good counsel to the girl who stays at home and to the country girl.
\begin{tabular}{lll} 
MuIr & Travels in Alaska \\
& Intimate glimpses of the work of the great \\
& naturalist. \\
Porter & Eulogy of Ulysses S. Grant
\end{tabular}

Repplier

\section*{Our Convent Days}

Each 1
Humorous papers suggested by experiences in a convent school.

Reid The Immortality of Good Deeds
Ross Changing Chinese 5
Describes the conflict between the western and Oriental cultures in China.

Schurz International Arbitration 2
\(\begin{aligned} & \text { Stevenson } \text { *Travels with a Donkey } \\ & \text { The author traveled across Spain on foot, }\end{aligned}\)
The author traveled across Spain on foot,

\section*{* An Inland Voyage}

An interesting canoe trip through the rivers and canals of France furnishes the basis of this delightful narrative.
\begin{tabular}{|c|c|}
\hline Van Dyke & Salt \\
\hline Warner & My Summer in a Garden \\
\hline - & An attempt to tell the truth about one of the most fascinating occupations in the world No one who has had any experience with a garden can \\
\hline White & The Forest \\
\hline \multirow[t]{7}{*}{Mabie} & Essays that Every Child Should Know Each \\
\hline & A selection of eighteen essays from Joseph \\
\hline & Washington Irving, Nathaniel Hawthorne, \\
\hline & Thomas De Quincey, Oliver Wendell Holmes, \\
\hline & David G. Mitchell, Philip G. Hamerton, \({ }_{\text {John }}^{\text {Drown, Charles Dudley Warner, T. }}\) \\
\hline & Aldrich, and Alexander Smith. \\
\hline & This is a fine list of essays from which to \\
\hline
\end{tabular}

\section*{THIRD YEAR}

\section*{NOVELS}
* The Choir Invisible ..... 5

A Kentucky school master learns his lesson of life.
* The Kentucky Cardinal ..... 4A fine study of personality and excellentdescriptions of Kentucky.
AustenAustin

Vailima Letters
After Stevenson went to live in the South Sea Islands, he wrote to his friends his impressions of life there.

\author{
Allen
}

Austin

Standish of Standish
A story of the Pilgrims. The book is full of romantic and dramatic episodes, all of which are founded on fact.

The Delight Makers
A splendid portrayal of Indian life by a scientific student. Wonderful descriptions of Indian traditions, customs, habits, and superstitions interwoven with an Indian love story.

A Window in Thrums

Stories and sketches of Scottish life. Full of quaint humor.
\begin{tabular}{cc} 
Black & \begin{tabular}{c} 
Princess of Thule \\
Full of romance and pathos. Shows how \\
Shelia Mackenzie, a charming heroine of \\
modern fiction, makes a man out of Mr.
\end{tabular} \\
Lavender, who, when she marries him, is an \\
attractive and talented snob.
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Ebers} & \multicolumn{2}{|l|}{Uarda Weighting} \\
\hline & Story of Egypt in the fourteenth century B. C. Reign of Rameses II. Tells of a conspiracy to usurp the throne of Rameses. & \\
\hline \multirow[t]{2}{*}{Eliot} & * The Mill on the Floss & 2 \\
\hline & One of the most perfect pictures of rural life in England. The two principal characters are a brother and a sister, and the story deals largely with their childhood. & \\
\hline \multirow[t]{3}{*}{Farnol} & The Broad Highway & 4 \\
\hline & A young Englishman starts out on foot to make his fortune and has many adventures. The story has a pleasant fairy tale unreality. & \\
\hline & The Amateur Gentleman Sheer romance, reflecting the England of one hundred years ago. & 4 \\
\hline \multirow[t]{2}{*}{Gaskell} & Cranford & 4 \\
\hline & Pictures a little old fashioned country town. Humorous and deliciously quaint description of bygone etiquette, parties, and gossip. & \\
\hline \multirow[t]{2}{*}{Goldsmith} & * Vicar of Wakefield & 5 \\
\hline & Deals with the fortunes of the Primrose family. Reflects much that happened in Goldsmith's own life. & \\
\hline \multirow[t]{2}{*}{Harrison} & V. V's Eyes & 4 \\
\hline & The quiet power for good of a humble worker in a selfish city. & \\
\hline \multirow[t]{4}{*}{Hawthorne} & * Marble Faun & 7 \\
\hline & Has Italy for its background, but some of its most important characters are New Englanders. Like most of Hawthorne's stories, it deals with the consequences of sin. & \\
\hline & * House of Seven Gables & 7 \\
\hline & Wonderfully human pictures of New England Puritan types. Deals with the blight of an inherited curse. & \\
\hline \multirow[t]{2}{*}{Holmes} & Elsie Venner & 6 \\
\hline & A study in heredity. Elsie Venner is a young girl with a double nature-a higher self and a serpent-nature. & \\
\hline \multirow[t]{2}{*}{Howells} & * A Modern Instance & 5 \\
\hline & A realistic story of American life of the later nineteenth century. & \\
\hline \multirow[t]{4}{*}{Hugo} & Toilers of the Sea & 7 \\
\hline & An effort to picture the eternal struggle between man's will and the elemental forces of nature. & \\
\hline & * Ninety Three & 8 \\
\hline & Unbelievable labors of a poor sailor. & \\
\hline \multirow[t]{2}{*}{Hutchinson} & The Happy Warrior & 4 \\
\hline & When a grown man Percival learns that he and not his friend, Rollo Letham, is Lord Burdon. & \\
\hline
\end{tabular}* To Have and to Hold
A Virginia romance of the time of James I. Full of adventure. Good historical background, lifelike characters, and natural scenery.
Prisoners of Hope ..... 5
A tale of Colonial Virginia.
The Long Roll ..... 4
A story of Stonewall Jackson's character and campaigns.
Kingsley
* Red Rock ..... 5Deals with the reconstruction period in theSouth after the Civil War. An interestinglove story.
* Seats of the Mighty ..... 5Romance of the great struggle culminatingin the battle of Quebec, which dispossessedFrance and enthroned England in NorthAmerica. Wolfe and other famous charac-ters appear.
* Right of Way ..... 4"Beauty" Steele, a rising young lawyer, re-ceives a blow on the head which destroyshis memory. A former client cares for him.Later by an operation his memory is re-stored and he learns from a newspaper thathe is thought dead and his wife is marriedto another. He refuses to return to the oldlife. Interesting character development.
Kipling
Locke
Lnti
Moore
Page

Reade

Scott

Sienkiewicz

Tarkington

Wiggin

Wallace

Wilkins

Zangwill

Put Yourself in His Place
Relates the struggles of Henry Little, workman and inventor, against the jealousies and prejudices of the trades-unions. The story has'a wealth of dramatic incident and moves with dash and vigor.

The Heart of Midlothian
Takes its name from the old jail of Edinburgh, where Scott imagined Effie Deans, the heroine, to have been imprisoned for child murder. Her sister refuses to tell a lie to save her, but walks to London and secures her pardon.

The Abbot
Story of Mary of Scots. Thrilling and romantic adventures at Lochleven Castle. The framework of the tale is historically true.

In Desert and Wilderness
A romance of love and adventure.
The Turmoil
A vigorous impressive satire on modern big business.

\section*{The Magnificent Ambersons}

4
The hero of the story is a spoiled, overbearing boy, belonging to a "magnificent family."

Penelope's Progress
Story of Edinburgh and its neighborhood.
* Fair God

Historical romance of the conquest of Mexico by the Spaniards. The title is derived from Quetzalcoatl, the Aztec deity of the air.

\section*{The Debtor}

A man, because of an injustice done him in his youth, imposes for years upon the world, but finally desperate need makes a man of him. He and his family furnish interesting character studies.
* Children of the Ghetto

A story of the Jews. The first part describes the wretched inhabitants of the London Ghetto, and the second part introduces the Jew who has acquired wealth and culture. This book presents problems that it does not solve, but it gives a better comprehension of the Jewish race.

\section*{THIRD YEAR}

\section*{SHORT STORIES-INDIVIDUAL}

\footnotetext{
* Marjorie Daw

Clever idea of one young man has more than the desired effect upon another.
}

> Goliath

Weighting
Humorous story with a surprise ending.

\author{
* The Jumping Frog of Calaveras County
}

Rich in humor.

\author{
A Double Barreled Detective Story \\ The title suggests the type of story. Full of humor.
}

1
Gallagher

Story of a little newspaper boy who brings
 to the office late at night "copy" relating
 to a famous burglary.1
* Luck of Roaring Camp

Shows the uplifting effect of a little foun
dling upon the rough men in a western min
ing camp a half century ago.
Outcasts of Poker Flat ..... 1

These undesirable characters were driven out of a tough frontier boom town. A mountain blizzard came up and they showed themselves capable of sacrifice and heroism in the desperate struggle for life.
* Fall of the House of Usher

The teller of the story recounts his experi
ences of a few short weeks in the melancholy
 house of Usher with the gloomy Roderick
 Usher, his dying sister, and their ghostly
 servants.
Purloined Letter ..... 1

A very interesting detective story.

\author{
* A New England Nun \\ After a long engagement the heroine of the story unselfishly releases the man when she learns that he loves a younger girl.
}

\section*{SHORT STORIES-COLLECTIVE}

\section*{Meadow-Grass}

Contents: Number Five-Farmer Eli's Va-cation-After All-Told in the PoorhouseHerman's Ma-Heartsease-Mis' Wadleigh's Guest-A Righteous Bargain-Joint Owners in Spain-At Sudleigh Fair-BankruptNancy Boyd's Last Sermon-Strollers in Tivertown.

New England village life characterized by good humor, optimism, and keen delight in the open air.

\section*{Folks from Dixie}

As told by the negro poet.

\section*{Main-traveled Roads}

Realistic stories of country life in the Mississippi Valley.

Short Stories for High Schools
Contents: First Christmas Tree, by Van Dyke-A French Tar-baby, by Harris-Sonny's Christenin', by Stuart-Christmas Night with Satan, by Fox-A Nest Egg, by RileyWee Willie Winkie, by Kipling-Gold Bug, by Poe-Ransom of Red Chief, by HenryFreshman Full-Back, by Paine-Gallagher, by Davis-Jumping Frog, by Twain-Lady or the Tiger, by Stockton-Outcasts of Poker Flat, by Harte-Revolt of Mother, by Free-man-Marse Chan, by Page- "Posson Jone", by Cable-Our Aromatic Uncle, by BunnerQuality, by Galsworthy-Triumph of Night, by Wharton-Messenger, by Andrews-Markheim, by Stevenson. Music-Reward of Virtue-White Blot-Year of Nobility.

Richards

Tarbell \(\qquad\) * Life of Lincoln

The life of our beloved American president splendidly presented. One of the best biographies of Lincoln.

Washington

\section*{Humble Romance and Other Stories}

Realistic sketches of homely, penurious life in a Massachusets village.

\section*{Princeton Stories}

A group of wholesome college stories.

THIRD YEAR
BIOGRAPHY-INDIVIDUAL

Weighting
* Margaret Ogilvy

An interesting story of Barrie's mother. Splendid character sketch.
* Life on the Mississippi

Personal experiences told in a humorous way of the life of the author as pilot on the Mississippi. Many lively stories and comments upon foreign tourists. Also valuable as a record of an epoch in the country's growth.
* Charlotte Bronte

A generous and truthful record of the life of one woman genius written by another.

Life and Letters of Huxley
A great scientist reveals himself as a very interesting personality.
* Abigail Adams 5
* Up from Slavery

Written in a simple, direct style. Bears upon the negro problem. Gives the story of the life of Booker T. Washington.

\section*{THIRD YEAR}

\section*{BIOGRAPHY-COLLECTIVE}

Bennett

Dale

\section*{American Women in Civic Work}

Contents: Caroline Bartlett Crane-Sophia Wright-Jane Addams-Kate Barnard-Albion Fellows Bacon-Hannah Kent SchoffFrances A. Keller-Julia Tretwiler-Lucretia L. Blankenburg-Anna Howard ShawElia Flagg Young.
Score of Famous Composers
Contents: Purcell-Bach-Handel-Gluck-
Haydn - Mozart - Beethoven - Rossini-
Weber-Schubert - Spohr-Meyerbeer-Men-delssohn-Schumann - Chopin-Glinka-Ber-lioz-Liszt-Wagner.
\begin{tabular}{|c|c|}
\hline Fields & \begin{tabular}{l}
Yesterdays with Authors \\
Personal reminiscences of Thackeray-Hawthorne - Dickens - Wordsworth - Miss Mit-ford-Barry Cornwall.
\end{tabular} \\
\hline \multirow[t]{2}{*}{Hubbard} & Little Journeys to the Homes of American Statesmen \\
\hline & Stimulating studies of the lives of great Americans. \\
\hline \multirow[t]{2}{*}{Howells} & Heroines of Fiction \\
\hline & Appreciative studies in the characteristic, sympathetic vein of the author. \\
\hline \multirow[t]{2}{*}{Lummis} & Spanish Pioneers \\
\hline & An interesting account of the early settlers of the great Southwest. \\
\hline \multirow[t]{2}{*}{Morris} & Heroes of Progress in America \\
\hline & Contents: Williams - Eliot - Penn - Ogle-thorpe-Franklin-Henry-Adams-Jefferson-Morris-Hamilton-Aidams-Whitney-Fulton -Astor-Girard-Marshall-Clay -Webster-Calhoun-Morse - Field-Howe-McCormick -Goodyear-Clinton-Wells-Garrison-Phil-lips-Sumner-Mott-E. C. Stanton-S. B. Anthony-Dorothea Dix-Peabody-Cooper-Lincoln-Seward - Blaine-Greeley-Ericsson Edison-Willard-Clara Barton-CarnegieB. T. Washington. \\
\hline RIIS & \begin{tabular}{l}
Life Stories of the Other Half \\
As told by this great philanthropist and reformer.
\end{tabular} \\
\hline \multirow[t]{2}{*}{Stodmard} & Men of Business \\
\hline & Sketches of John Jacob Astor, Cyrus W. Field, C. L. Tiffany. G. M. Pullman, Leland Stanford, Marshall Field, and other successful business men. \\
\hline \multirow[t]{4}{*}{Stedman} & Poets of America \\
\hline & Thoroughgoing, critical studies of our leading American poets up to 1890 . \\
\hline & THIRD YEAR \\
\hline & POETRY-INDIVIDUAL \\
\hline \multirow[t]{4}{*}{Browning} & * The Flight of the Duchess Weighting \\
\hline & A gypsy aids the beautiful young Duchess to flee from her unkind husband, the Duke. \\
\hline & The Patriot \({ }^{\frac{1}{2}}\) \\
\hline & One year ago roses were flung in his path; now stonés are flung at him. \\
\hline \multirow[t]{2}{*}{Bryant} & * Thanatopsis 1 \\
\hline & Written by Bryant at seventeen. He meditates upon the transitoriness of life and human affairs and resolves to so live that he will not fear death. One of the great poems on death. \\
\hline
\end{tabular}
Concord Hymn
Commemorates the first battle of the Amer-
Com Revolution, April 19, 1775. Was sung at
ican completion of the battle monument,
April 19, 1836.\(\frac{1}{2}\) hand and the sound of a voice that is still."
* Crossing the Bar

A peaceful meditation upon death. Tennyson
 wished this to be his farewell word.\(\frac{1}{2}\)
* Coming of Arthur ..... 2
First of the Idylls of the King.
* Launcelot and Elaine ..... 2Launcelot loves the wife of King Arthur.Elaine meets and loves Launcelot and diesof a broken heart because he cannot returnher love.
* Holy Grail ..... 2
Tells how Galahad saw the Holy Grail after a long search.
* Passing of Arthur ..... 2
The last of the Idylls of the King. Tells of Arthur's being carried away by the Three Queens after his last battle.
Locksley Hall ..... 1
Story of a broken love.
Wordsworth * Ode on Intimations of Immortality ..... 2The poet looks back with passionate regretto the lost radiance of his childhood, andtries to connect childhood with a previousexistence whence it brings its light of inno-cence and joy. His greatest poem.

POETRY-COLLECTIVE

Aldington Book of Old English Ballads
Burns
Bryant
Browning
Frothington
Kipling
Militon
Riley
Shelley
Stedman
Thompson
WORDSWORTH

Poems
Selected Poems
'Songs of Men
Barrack Room Ballads
Minor Poems
Selected Poems
Selected Poems
Selections from American Poetry
British Verse from Chaucer to Noyes
Selected Poems

\section*{THIRD YEAR}

\section*{DRAMA}
BARRIE
\begin{tabular}{c} 
* Pantaloon \\
Tells the story of a clown's life, his sor- \\
rows, and his ambitions.
\end{tabular}
\begin{tabular}{c} 
* Rosalind \\
Describes a woman who plays Rosalind, as
\end{tabular}
she is on and off the stage.

Mackaye

Milton

Moody

Noyes

Shakespeare

\section*{The Scarecrow}

A scarecrow is endowed with life and given a pipe to smoke to sustain life. He has strange adventures with real persons.

A Thousand Years Ago
Setting in China. A romantic love story of the Princess of China and a Persian Prince.

\section*{* Canterbury Pilgrims}

Based on Chaucer's stories told by the Pilgrims while on the road to Canterbury. Depicts the life of various classes of people.

Comus
3
A seventeenth century masque, containing the ancient sorceress, Circe.
* The Great Divide

A romantic play dealing with moral freedom of the West and the strict New England conscience, Stephen Ghent, a rough Westerner, marries Ruth Jordan, a typical New Englander.
* Sherwood

A Robin Hood story.

\section*{The Tempest}

One of Shakespeare's last plays. Prospero, the rightful Duke of Milan, and his daughter have been banished to a haunted island in the Mediterranean. Shows how he regains his rights and makes his daughter Queen of Naples.
Romeo and Juliet
Romeo and Juliet, of the two enemy houses of Montague and Capulet, fall in love, but their love is thwarted by fate and death.

\section*{* Midsummer Night's Dream}

A comedy of love and marriage. Puck, by sprinkling the juice of a magic flower upon the eyes of the lovers, causes a train of woes and perplexities.

Fannie's First Play
A highly amusing commentary on middleclass respectability and its horror of the unconventional. Full of wit.

Synae \(\quad\) *Riders to the Sea
An Irish tragedy in which a mother watches her sons ride away to be devoured by the sea.

Tagore The Post Office 3
A lovely, wistful little drama in which the imagining of a sensitive invalid child bridges the breach between life and eternity.

Yeats
Hour Glass
2
What would you do if you were told that you had one hour to live? This is the problem that the hero had to face.

\title{
THIRD YEAR
}

DRAMA-COLLECTIVE

\begin{tabular}{cc} 
EMERSON & Compensation \\
For every unhappiness or deprivation some \\
recompense is made.
\end{tabular}

\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Barrie} & \multicolumn{2}{|l|}{Tommy and Grizel Weighting} \\
\hline & Sequel to Sentimental Tommy. As the boy Tommy was ruled by sentiment, so is the man Tommy. & \\
\hline \multirow[t]{2}{*}{Canfield} & The Bent Twig & 5 \\
\hline & \multicolumn{2}{|l|}{A realistic study of contemporary society. Brings out the effect of youthful training.} \\
\hline \multirow[t]{2}{*}{Caine} & The Eternal City & 5 \\
\hline & Story of political and social life in Rome. & \\
\hline \multirow[t]{2}{*}{Churchill} & The Inside of the Cup & 5 \\
\hline & The story of how a sincere young minister eradicated hypocrisy and power of wealth from his church and opened it also to the poor. & \\
\hline \multirow[t]{2}{*}{Collins} & * The Moonstone & 5 \\
\hline & An Englishman steals a peculiar diamond known as the Moonstone from a holy city of India. A dying Brahmin curses the Englishman. The story is one of mystery and tragedy. & \\
\hline \multirow[t]{2}{*}{Conrad} & Lord Jim & 4 \\
\hline & A description of tropical seas and the civilization of Eastern Islands. & \\
\hline \multirow[t]{2}{*}{Crawford} & Via Crucis & 5 \\
\hline & Romantic story of the Second Crusade. & \\
\hline \multirow[t]{2}{*}{Davis} & Soldiers of Fortune & 4 \\
\hline & A story of war and adventure in South America. Full of excitement and dramatic incidents. & \\
\hline \multirow[t]{4}{*}{Deland} & * The Iron Woman & 4 \\
\hline & Story of a wealthy woman, owner of a steel rolling mill, who rules children and all with an iron hand. & \\
\hline & The Awakening of Helena Ritchie & 4 \\
\hline & The story of the transformation of a worldly woman through the influence of an adopted child. Excellent character studies. & \\
\hline \multirow[t]{6}{*}{De Morgan} & * Alice-for-Short & 5 \\
\hline & \multicolumn{2}{|l|}{A charming love story told with delightful variety of incident and character study.} \\
\hline & Joseph Vance & 5 \\
\hline & \multicolumn{2}{|l|}{Dickens-like story of the hero from boyhood to a manhood of success.} \\
\hline & Somehow Good & 5 \\
\hline & An optimistic development of fine and happy results from sád beginnings, as the title implies. & \\
\hline \multirow[t]{2}{*}{Dickens} & Our Mutual Friend & 5 \\
\hline & The famous story embodying the author's impressions of the United States. Some of his criticisms hurt, but many are true. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Dickens} & Bleak House Weighti & \\
\hline & \multicolumn{2}{|l|}{One of the most heartful and genial stories by a prince of story tellers.} \\
\hline \multirow[t]{2}{*}{Ebers} & * Egyptian Princess & 7 \\
\hline & A romance of Ancient Egypt. Follows the fates of the royal families of Egypt and Persia. Faithful picture of the times. & \\
\hline \multirow[t]{8}{*}{Eliot} & * Romola & 15 \\
\hline & \multicolumn{2}{|l|}{Story set in Florence, 1492-1509. Tito Mele-ma,-a Greek, charming, brilliant, false,-is fascinated by Romola, marries her. His character is weak, and moral degradation and death follow.} \\
\hline & * Daniel Deronda & 0 \\
\hline & \multicolumn{2}{|l|}{The author tries to associate her ideas of individual righteousness with the claims of a great movement, in this case the re-establishment of the Jews in Palestine.} \\
\hline & * Adam Bede & 10 \\
\hline & Portrays a retribution that cannot be escaped. Splendid character development. & \\
\hline & Middlemarch & 10 \\
\hline & Pictures with realism the complex life of a provincial town. Shows how the thought and action of some high-minded persons are apt to be modified by their environment. & \\
\hline Hardy & Far from the Madding Crowd Tragi-comedy of English rural life. & 6 \\
\hline \multirow[t]{2}{*}{Harbison} & Queed & 5 \\
\hline & Splendid character delineation. The book that made Mr. Harrison famous. Scene is laid in the new South. & \\
\hline \multirow[t]{2}{*}{Hawthorne} & * Scarlet Letter & 10 \\
\hline & An impressive tale of remorse and expiation of \(\sin\). & \\
\hline \multirow[t]{6}{*}{Howells} & * Rise of Silas Lapham & \multirow[t]{2}{*}{6} \\
\hline & The story of an ignorant, coarse-grained man who possessed strength, some fine qualities, and who made his way in life under adverse circumstances and many difficulties. There are many humorous incidents. A faithful picture of a type. & \\
\hline & * A Modern Instance & \multirow[t]{2}{*}{5} \\
\hline & Called his representative novel. A realistic picture of modern life. & \\
\hline & The Son of Royal Langbraith & \multirow[t]{2}{*}{5} \\
\hline & A tragic story of the weaknesses of a good mother who lacks the courage to tell her son of the iniquities of his dead father. & \\
\hline \multirow[t]{2}{*}{Hugo} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
* Les Miserables \\
An effort to paint civilization in all its details. A very long work but possibly the greatest novel ever written. A picture of Waterloo from the French side.
\end{tabular}}} \\
\hline & & \\
\hline
\end{tabular}

\section*{8}

One of the most heartful and genial stories by a prince of story tellers.

Ebers

Eliot

Hardy Far from the Madding Crowd Queed

Splendid character delineation. The book that made Mr. Harrison famous. Scene is laid in the new South.
* Scarlet Letter

An impressive tale of remorse and expiation
 of \(\sin\).10

The story of an ignorant, coarse-grained man who possessed strength, some fine under and who made his way in life culties. There are many humorous incidents. A faithful picture of a type.

\section*{* A Modern Instance}

Called his representative novel. A realistic picture of modern life.

A tragic story of the weaknesses of a good mother who lacks the courage to tell her son of the iniquities of his dead father.
* Les Miserables

An effort to paint civilization in all its degreatest novel ever written. A picture of Waterloo from the French side.

Ibanez The Four Horsemen of the Apocalypse
A war novel showing the transformation of the character of an idle worthless young French-Spanish South American by his participation in the World War.
The American
A self-made American goes to France to
enjoy his wealth and becomes engaged to a a
French widow belonging to a noble family.
The contrast between the good nature and
the pluck of the American and the pride and
meanness of the old nobility is well brought
out.
Lane \(\quad\) * Nancy Stair \(\quad\)\begin{tabular}{l} 
A story in which Burns plays an important \\
part.
\end{tabular}

Quest of the Four-Leaved Clover
A story of Arabia. Tells of the search of two foster brothers for happiness Explains Mohammedan beliefs, gives ideals of the Koran.
\begin{tabular}{|c|c|}
\hline Morris & The Roots of the Mountains \\
\hline & Life of the early Germanic folk. \\
\hline Oliphant & The Beleaguered City \\
\hline
\end{tabular}
Parker The Battle of the Strong 5

A story of romance and adventure based upon the career of Philip d'Avranche, who became Duke of Bouillon.

Poole *The Harbor \(\quad 5\) in New York.

Reade * The Cloister and the Hearth 15
Story of the era of the Reformation. Struggle of a man between his marriage vows and his church vows.
Stockton \(\quad\) * The Casting Away of Mrs. Lecks and Mrs. 4

A good illustration of Stockton's humor. Account of the incongruous and improbable Crusoe adventures of two New England women.
\begin{tabular}{rl} 
Thackeray & * Henry Esmond \\
& \begin{tabular}{l} 
Story of a cavalier and a Jacobite in the \\
time of Queen Anne. Introduces Marlbor-
\end{tabular} \\
ough, Addison, Steele, and other well known \\
people.
\end{tabular}

\footnotetext{
* The Newcomes
}

Colonel Newcome is a beautiful character, one of the most pathetic creations in English literature.

Alice of Old Vincennes
Romantic story of Ft. Vincennes at the time of Clark's conquest in 1779.
Van Dyke The Mansion

The story of a wealthy New York business man who was a churchman and a philanthropist, but whose whole scheme of life was selfish. A dream of death and the future life led him to see himself as he really was and to change his manner of life. A wholesome little book.

Wallace
Prince of India
The Prince of India is a Jewish shoemaker compelled by our Lord to wander over the earth until His second coming.

Wells \(\quad\) Mr. Brittling Sees It Through 4
Realistic picture of the great World War, from the point of view of a middle aged citizen at home.

The War of the Worlds 4
A Jules Verne story of the possibilities of science in war and communication with other worlds.

Westcott
* David Harum

A humorous, thoroughly human novel having for its hero a droll, philosophical country banker.

White, W. A. * A Certain Rich Man
Evolution of an ordinary boy into a financier of wide commercial influence.

\section*{FOURTH YEAR}

\section*{SHORT STORIES--INDIVIDUAL}


FOURTH YEAR

SHORT STORY-COLLECTIVE

Ashmun

Collins

Henry \(\quad\) Voice of the City

\section*{Kelly}

Macleod

Harte Tales of the Argonauts and Other Stories
Contents: Rose of Toulumne-Mr. John Oak-hurst-Wan Lee, the Pagan-How Old Man
Plunkett Went Home-The Fool of Five
Forks-Baby Sylvester-Episode of Fiddle-
town-Jersey Centenarian. hurst-Wan Lee, the Pagan-How Old Man
Plunkett Went Home-The Fool of Five
Forks-Baby Sylvester-Episode of Fiddle-
town-Jersey Centenarian. hurst-Wan Lee, the Pagan-Hr. Wow Old Man
Plunkett Went Home-The Fool of Five
Forks-Baby Sylvester-Episode of Fiddle-
town-Jersey Centenarian. hurst-Wan Lee, the Pagan-How Old Man
Plunkett Went Home-The Fool of Five
Forks-Baby Sylvester-Episode of Fiddle-
town-Jersey Centenarian.

Realistic stories of life incidents in a great American city.

\section*{Modern Short Stories}

Contents: Cask of Amontillado, by PoeReturn of a Private, by Garland-Mateo Falcone, by Merimee-Hiding of Black Bill, by Henry-Substitute, by Coppee-Rip Van Winkle, by Irving-Thief, by Dostoievske-King of Boyville, by White--Father, by BjornsonWhat Was It? by O'Brien-Real Things, by James-Dr. Heidegger's Experiment, by Haw-thorne-Rose of the Ghetto, by ZangwillTwo Friends, by De Maupassant-Aged Folk, by Daubet-To Build a Fire, by LondonRhymer the Second, by Morrison-Living Relic, by Turgenev-Monkey's Paw, Christmas Guest, by Lagerlof-Long Exile, by Tolstoi.

\section*{The Short Story Classics}
(Foreign-Five volumes.)

\section*{Little Citizens}

Stories of school life in a foreign district of New York.

Washers of Shrouds, and other stories

Mason \(\quad \begin{gathered}\text { Aucassin and Nicolette and other Medieval } \\ \text { romances and legends }\end{gathered}\)
Matthews The Short Story
Contents: Husband of Aglace, from Gesta Romanorum-Story of Griselda, by Boccacio -Constantia and Theodosius, by AddisonRip Van Winkle, by Irving-Dream Children, by Lamb-Wandering Willie's Tale, by Scott-Mateo Falcone, by Merimee-The Shot, by Ruskin-Steadfast Tin Soldier, by Anderson-Fall of the House of Usher, by Poe-Ambitious Guest, by HawthorneChild's Dream of a Star, by Dickens-What Was It? by O'Brien-Father, by BjornsonTennessee's Partner, by Harte-Siege of Berlin, by Daubet-Insurgent, by Halevy-Substitute, by Coppee-Mrs. Knollys, by Steven-son-Necklace, by Maupassant-Markheim, by Stevenson-Man Who Was, by KiplingSisterly Scheme, by Bunner.
(American, five volumes.)
Twenty-three Tales
Contents: Part I.
Tales for Children-God Sees the Truth, but Waits-A Prisoner in the Caucasus-The Bear Hunt.

Part II.
Popular Stories.-What Men Live By-A Spark Neglected Burns the House-Two Old Men-Where Love Is God Is.

Part III.
A Fairy Tale-The Story of Ivan the Fool.
Part IV.
Stories Written to Pictures-Evil Allures, but Good Endures-Little Girls Wiser than Men-Ilyas.

Part V.
Folk Tales Retold-The Three Hermits-The Imp and the Crust-How Much Land Does a Man Need-A Grain as Big as a Hen's EggThe Godson-The Repentant Sinner-The Empty Drums.

Part VI.
Adaptations from the French-The Coffeehouse of Sura-Too Dear.

Part VII.
Stories Given to Aid the Persecuted JewsEsarhaddon, King of Assyria-Work, Death, and Sickness-Three Questions.


FOURTH YEAR

BIOGRAPHY-INDIVIDUAL

Addams
* Twenty Years in Hull House

Personal experiences of Jane Addams in the great social work she has done in Chicago.

\section*{Life of Phillips Brooks}

A splendid account of the life and works of the great preacher.
\begin{tabular}{ccc} 
Bok & \begin{tabular}{l} 
Americanization of Edward Bok \\
This recent autobigraphy will prove of inter- \\
est to students of American and foreign birth \\
alike.
\end{tabular} \\
Boswell & \begin{tabular}{l} 
*Life of Johnson \\
Boswell studied samuel Johnson's doings and
\end{tabular} \\
\begin{tabular}{ll} 
Sayings for twenty years, and then wrote \\
this biography. Much of Johnson's fame is \\
due to this biography.
\end{tabular}
\end{tabular}

This recent autobigraphy will prove of interest to students of American and foreign birth alike.

Cross Life and Letters of George Eliot
The author and compiler was the husband
and discerning friend of the great novelist.
Ford * The Many-sided Franklin 6

Shows us Franklin in the various positions which he filled with honor, also his contributions to many different lines of progress.
Lodae \(\quad\) Life of Washington
\begin{tabular}{l} 
Written from abundant knowledge and shows \\
excellent judgment.
\end{tabular}
Palmer, G. H. * Life of Alice Freeman Palmer 7

Private and public life of the one-time president of Wellesley College. An inspiring biography.

Ruskin Praeterita 5
The life story of an apostle of beauty.
Sinclair The Three Brontes 6
A life of Charlotte, Anne, and Emily Bronte, the English novelists.

Tennyson, Hallam

Life of Tennyson
6
Written by his son, who speaks understand ingly of the intimate life of the sensitive poet.

\section*{FOURTH YEAR}

\section*{BIOGRAPHY-COLLECTIVE}

Burton Literary Leaders of America
Contents: Irving-Cooper-Poe-Hawthorne-
Emerson-Bryant - Longfellow - Holmes-Whittier-Lowell-Whitman-Lanier.

Bolton
Famous Men of Science
Contents: Newton-Galileo-Linnaeus-Cu-vier-Sir William and Caroline HerschelAlexander Von Humboldt-Davy-Audubon-Morse-Sir Charles Lyell-Joseph Henry-Agassiz-Darwin-Frances T. Buckland.
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{Cooper} & Some American Story Tellers \\
\hline & Contents: Frances M. Crawford-Kate D. Wiggin-Winston Churchill-Rob't W. Cham-bers-Ellen Glasgow-David G. PhillipsRobert Herrick - Edith Wharton - Booth Tarkington-O. Henry-Gertrude AthertonOwen Wister-Frank Norris-Ambrose Pierce. \\
\hline \multirow[t]{2}{*}{Cook} & Our Poets of Today \\
\hline & Valuable information about our present day poets. \\
\hline Farrar & Men I have Known \\
\hline \multirow[t]{2}{*}{Gardiner} & Prophets, Priests, and Kings \\
\hline & Sketches of forty individuals chiefly connected with English statesmanship, social movements, literature, and the church. Among them are five foreigners and two women, Florence Nightingale and Mrs. Pankhurst. \\
\hline \multirow[t]{2}{*}{Morley} & English Men of Letters \\
\hline & Invaluable references for the lives of the great English writers. One volume for each author. \\
\hline \multirow[t]{2}{*}{Warner} & English Men of Letters \\
\hline & Another valuable collection of biographical material. \\
\hline
\end{tabular}

\section*{FOURTH YEAR}

POETRY-INDIVIDUAL
\begin{tabular}{|c|c|}
\hline & Weight \\
\hline \multirow[t]{4}{*}{Arnold} & * Balder Dead \\
\hline & Tells of the unfortunate death of Balder and its effect on the earth. \\
\hline & Beowulf \\
\hline & The great epic poem of the old English period. The terrible monster Grendel is killing and carrying away men by the dozen from the court of the Danish King, Hrothgar. Beowulf hears this and crosses the sea from Gothland, fights and slays Grendel and Grendel's mother. \\
\hline \multirow[t]{2}{*}{Byron} & * Childe Harold \\
\hline & Describes Byron's wanderings through Europe and the East. Vivid pictures are painted. \\
\hline \multirow[t]{2}{*}{Brooke} & The Soldier \\
\hline & An optimistic expression by a soldier facing death. \\
\hline Browning & * Prospice \\
\hline & Perhaps the greatest poem on Death. Written after the death of Mrs. Browning. \\
\hline
\end{tabular}

* Paradise Lost
Lucifer, the fairest and mightiest of the an-
gels, jealous of the son who shares God's
throne, rebels, and draws with him a third
part of the hosts of Heaven. Great battles
follow. Finally the Son of God casts Lucifer
and his followers headong from heaven.
Hell is hollowed out to receive them, the cre-
ation of the earth follows, and Adam and Eve
are placed in the Garden of Eden. Satan
tempts, they yield, and are driven out.

Poe The Raven
Once upon a dreary midnight when a tempest is raging, an ungainly raven visits the poet, and to all questions answers, "Nevermore."

Story of an old shepherd, Michael, his wife, his home, and his son, Luke, who went away and never returned.

Ode to Duty
1
Only through obedience to Duty, the "Stern Lawgiver," will real happiness come.

Van Dyke America for Me 1
Patriotic expression-"We love our land for what she is and what she is to be."
Whittier \(\quad\) * Snowbound
\begin{tabular}{c} 
Splendid pictures of New England home life. \\
Describes an old fashioned snowstorm.
\end{tabular}

\section*{POETRY-COLLECTIVE}

Selected poems from the best American poets -Bryant, Poe, Longfellow, Emerson, Whittier, Holmes, Lowell, and Walt Whitman. Selected poems from the minor American poets-Aldrich, Alice and Phoebe Carey, Field, Harte, Holland, Hunt. Gilder, Lanier, Markham, Read, Riley, Sill, Taylor.
\begin{tabular}{|c|c|}
\hline Davis & \begin{tabular}{l}
Drums in our Street \\
Little book of modern verse, chiefly war poems.
\end{tabular} \\
\hline Herchel & Translation of Wagner's operas into narrative poems \\
\hline & Parsifal - Lohengrin - Tannhauser - the Niebelung Ring-Four volumes. \\
\hline Le Gallienne & Poems \\
\hline Masefield & Poems \\
\hline Noyes & Tales of Mermaid Tavern \\
\hline Percy & Reliques of Ancient Poetry \\
\hline Quiller-Couch & \begin{tabular}{l}
Oxford Book of English Verse \\
Covers the period from 1250 to 1900 .
\end{tabular} \\
\hline Rittenhouse & \begin{tabular}{l}
Little Book of Modern Verse \\
Contains representative poems of the best recent poets.
\end{tabular} \\
\hline Shakespeare & Sonnets \\
\hline Stevenson, B. S & \begin{tabular}{l}
Home Book of Verse for Young Folks \\
This is one of the most recent and the best anthologies for young folks. It contains selections from Mother Goose to Rupert Brook.
\end{tabular} \\
\hline UNTERMEYER & \begin{tabular}{l}
Modern English Poetry \\
An introduction to recent British verse. Covers the period from about 1870 to 1920, and gives a list of the best poems from recent English poets.
\end{tabular} \\
\hline & \begin{tabular}{l}
Modern American Poetry \\
An introduction to recent native verse. Covers the period from about 1870 to 1920. Best poems of recent American authors.
\end{tabular} \\
\hline
\end{tabular}

\section*{FOURTH YEAR}

DRAMA

Shows the eternal clash between the new and the old. The affairs of three generations are shown.
\begin{tabular}{|c|c|c|}
\hline Erown & \begin{tabular}{l}
* Every Woman \\
A modern morality dealing with the experiences of every woman.
\end{tabular} & 3 \\
\hline Burnett & The Dawn of a Tomorrow Optimistic play. & 2 \\
\hline \multirow[t]{2}{*}{Bynner} & Iphigenia of Tauris & 3 \\
\hline & A Grecian priestess whose duty it is to prepare the victims for human sacrifice finds that the man she must prepare for death is her brother. & \\
\hline \multirow[t]{2}{*}{Dekker} & The Shoemaker's Holiday & 3 \\
\hline & An interesting Elizabethan revival. & \\
\hline \multirow[t]{2}{*}{Euripides} & Alcestis & 5 \\
\hline & A man is told that he can live forever if he finds some one who is willing to die in his place, but even his father and mother refuse him. His wife must decide whether he or she must die. & \\
\hline \multirow[t]{2}{*}{Goethe} & Faust-Part I & 5 \\
\hline & Gives an account of the life of a man who sells his soul to Mephistopheles in exchange for youth and love. & \\
\hline \multirow[t]{2}{*}{Hugo} & Hernani & 3 \\
\hline & The romance of a bandit who is the successful rival of the King for the love of a beautiful girl. A tale of conspiracy, nobleness, and adventure. & \\
\hline \multirow[t]{4}{*}{Galsworthy} & * The Pigeon & 3 \\
\hline & An artist tries to help some worthless characters. They accept his charity and do not improve. Presents the problem of the futility of charity for some of the very low. & \\
\hline & * Justice & 3 \\
\hline & Gives an account of the punishment of a young man who should have been shown mercy, and how his treatment by society finally drove him to end his life. & \\
\hline
\end{tabular}
\begin{tabular}{rl} 
Hauptmann & The Sunken Bell \\
A great bell falls into a chasm. This signi- \\
fies the fallen ideals of the man who is re- \\
sponsible.
\end{tabular}
Houseman and Prunella
Parker \(\quad\)\begin{tabular}{l} 
A heartless Pierrot falls in love with a maid- \\
en and through his love for her awakens a \\
soul in himself.
\end{tabular}
Ibsen \(\quad\) * A Doll's House \begin{tabular}{l} 
Because she never grows up, the childish \\
wife leaves her home and children.
\end{tabular}

An Enemy of the People
The question considered in this play is whether it is worth while to work for the good of the people. forgetful of self. Greal men are often misunderstod and unappreciated.

A story of life among the poor and the crime of a mother.
\begin{tabular}{lll} 
Knoblauch & Kismet & \begin{tabular}{l} 
A drama of Asia involving a romantic plot \\
of love and adventure.
\end{tabular} \\
Lytton & * Richelieu
\end{tabular}

A historical play in which Richelieu, the great Cardinal of France, is the hero. An intense, interesting play of conspiracies and romances.

Loti and
Gautier
Maeterlinck

McGroarty
* The Mission Play

A dramatic representation of the heroic fortitude and devotion of the early founders of the Missions in our southwest. This play is given every year at San Gabriel by the Indians for whom it was written.

Peabony Marlowe 3
Christopher Marlowe, the great Elizabethan dramatist, is the chief character. Very poetic.

Noyes Drakẹ 3
The life adventures of a great English hero on land and sea.

Phillifes
* Ulysses

3
A charming drama based on the Odyssey.
Shakespeare *King Lear 5
Depicts the wronging of children by parents and of parents by children. Lear has two she-devils and one ministering angel for daughters.

Macbeth
Macbeth, influenced by the weird sisters and spurred on by his own and his wife's ambitions, commits crime after crime until finally he is overcome and beheaded.

Hamlet
Hamlet learns of his father's tragic death through the agency of his ghost, and in order to be avenged, feigns insanity.

Shaw

\section*{Androcles and the Lion}

A humorous Shavian perspective upon the early Christians. Androcles, cast into the arena unexpectedly, finds a friend in the person of a lion, from whose paw he has removed a thorn.
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Sophocles} & * Antigone & \\
\hline & The tragedy of a beautiful Greek girl whose love for her brother was greater than her love of life. & \\
\hline Robertson & \begin{tabular}{l}
David Garrick \\
The life of Garrick, the actor, presented dra. matically.
\end{tabular} & 3 \\
\hline \multirow[t]{2}{*}{Rostand} & \begin{tabular}{l}
* L'Aiglon (The Eaglet) \\
A romantic tragedy showing the attempt of a son of Napoleon to regain the throne of France.
\end{tabular} & 3 \\
\hline & \begin{tabular}{l}
* Chanticleer \\
A satire on society.
\end{tabular} & 3 \\
\hline Van Dyke & \begin{tabular}{l}
* House of Rimmon \\
A tragedy in verse, dealing with a Biblical theme and setting.
\end{tabular} & 3 \\
\hline \multirow[t]{2}{*}{Yeats} & \begin{tabular}{l}
* Land of Heart's Desire \\
A lyrical play based upon Irish fairy lore. The dreamy little bride struggles between the bond of the home and the lure of fairy land.
\end{tabular} & 2 \\
\hline & \begin{tabular}{l}
Countess Kathleen \\
Peasants stricken by famine are selling their souls for gold to demons in the guise of merchants. The generous countess Kathleen outbids the demons. They steal her wealth. She agrees to sell her soul for the souls of her people and is thereby saved.
\end{tabular} & 2 \\
\hline ZANGWILL & The War God & 4 \\
\hline
\end{tabular}

\section*{FOURTH YEAR}

\section*{DRAMA-COLLECTIVE}

Bangs
Bjornson Plays
Tatlock and Martin

Quinn

Representative English Plays
Representative American Plays
Contents: Prince of Parthia, by T. Godfrey -Contrasts, by R. Tyler-Andie, by W. Dunlap-Superstition, by J. N. BarkerCharles II, by J. H. Paines and W. Irving-Triumph at Plattsburg, by R. P Smith-Pocahontas, by Curtis-Broker of Bogota, by Bird-Tortesz, the Usurer, by Wil-lis-Fasbion, by Ritchie-Francesca de Rimini, as played by Jos. Jefferson-Hazel Kirk, by S. MacKaye-Shenandoah, by HowardSecret Service, by Gillette-Madame Butterfly, by Belasco and Long-Her Great Match, by Fitch-New York Idea, by MitchellWitching Hour, by Thomas-Faith Healer, by Woody-Scarecrow, by P. MacKaye-The Boss, by Sheldon-He and She, by Crothers.

\section*{FOURTH YEAR}

\author{
ESSAYS AND PROSE MISCELLANY
}


\(\gamma\)

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\section*{Colorado}

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\section*{COURSE OF STUDY}

OF THE

\section*{ELEMENTARY TRAINING SCHOOL}
(VOLUME 7, SERIES XXI, REVISED)


Published Monthly by State Teachers College, Greeley, Colorado. Entered as Second-Class Matter at the Post Office at Greeley, Colorado,

Under the Act of August 24, 1912

\section*{A MODERN CONCEPTION OF THE SCHOOL}

Children living and learning; older people present to stimulate and guide; the race experience to furnish the basis of guidance; the resulting growth in the children implying the increasing appropriation of the race experience.
-Kilpatrick.

\section*{COLORADO}

\section*{sTATE TEACHERS COLLEGE BULLETIN}

\section*{COURSE OF STUDY of the}

Elementary Training School

\section*{NOTE TO THE REVISED EDITION}

The first edition of the course of study for the Elementary Training School met with such a cordial reception among the teachers of Colorado and adjoining states that the supply was soon exhausted. The fact that a course of study can never be finished but is always in the process of making, together with the urgent demand for this Course of Study, prompted a revision.

In the revised edition an attempt has been made to organize the material around each grade rather than around subjects. The important factor is the needs of the child in each grade rather than the organization of subject matter.

Grateful acknowledgment is made to the following teachers of the Training School and College who have taken a part in the writing and revision of this course of study: Genevieve L. Lyford, kindergarten; Louise Putzke, first grade; Bella B. Sibley, second grade; Hulda Dilling, third grade; Susan Van Meter, fourth grade; Annie McCowen, fifth grade; Helen Davis, junior high school geography; Elizabeth Kendel, junior high school mathematics; Bernice Orndorff, junior high school English; Sonora Metsker, junior high school history; Dean E. A. Cross, professor of English and literature; Frances Tobey, professor of oral English; A. O. Colvin, professor of commercial arts; G. A. Barker, professor of geography; E. B. Smith, professor of history; Grace Baker, professor of fine and applied arts; Florence Lowe, assistant professor of fine and applied arts; Elizabeth Clasbey, assistant professor of home economics; C. M. Foulk, professor of manual training; H. Elizabeth Roesner, supervisor of public school music.

An earnest effort has been made to profit by mistakes made in the first edition. The bibliographies have been extended and brought up to date.

\author{
W. D. ARMENTROUT, \\ Director of Training Schools.
}

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PART I.
ELEMENTARY TRAINING SCHOOL

\section*{ELEMENTARY TRAINING SCHOOL}

The elementary training school is an educational laboratory where educational problems are being worked out under the direction of skilled experts. New methods that save time, new schemes for better preparing the children for the real needs of life, new curricula and courses of study are continually considered and tried out, provided they are sound educationally. The aim is not to develop a school that is entirely different from the elementary schools of the state but to reveal conditions as they are and as they should be. The elementary training school strives to be the leader in the state in all that is new and modern. Ettrort is made to maintain such standards of excellence in the work that it may at all times be offered as a demonstration of good teaching under conditions as nearly normal as possible in all respects.

The elementary training school is a complete elementary school unit containing kindergarten, first, second, third, fourth and fifth grades. The sixth, seventh and eighth grades are organized on the departmental plan for the purpose of exploring and diagnosing, earlier than usual, the interests, attitudes, and abilities of pupils, and at the same time provide better for individual differences. This organization affords a splendid opportunity for studying junior high school problems.

\section*{AIMS AND PURPOSES OF ELEMENTARY EDUCATION.}

It is the purpose of the Elementary School to provide experience to meet the common needs of all, regardless of sex, vocation or social status. Its content is made up of those activities in which every one must participate with a like degree of knowledge and skill and with like attitude and appreciation in order that there may be efficient social life. Its activities, values and ideals may be regarded as "the common denominator of life for the whole nation." It deals with children during a period in their lives when their general tendency to action, thought, and feeling, are most nearly alike and most susceptible to common appeal. It deals with social problems which are the same for all. It applies itself to the development of that knowledge, of those habits, attitudes and ideals and of those appreciations which enable people to understand each other, to share in the common life, and to co-operate in realizing common purposes. This, of course, does not mean that the facts of individual differences in children are to be neglected in the elementary school. In method of teaching, individual differences are of profound importance, but the content of activities-"the understanding of how the needs of life are met, the experience of the race in living, the value to life of interests and activities as found in history and literature, the ways of recreation, present and past, the tools used by man as reading, writing, number, drawing, mechanical skills and devices for group activity"-may and should be the same in the elementary school for all children everywhere. This content appropriate for the elementary school is equally of interest and value to boys and girls.

Only that school work which bears a vital relationship to some worthy life purpose can be justified. Only that activity which can be appreciated for its worth by the pupil can be said to be truly educative. If no identity can be appreciated by the pupil between the activities which he experiences in school and some life purpose to which they contribute there is no basis whatever for attributing any life value to the activity. Schools have no basis for existence except that of providing helpful means and experiences in meeting the problems and various needs of life itself. The elementary school, therefore, justifies itself in the measure in which it equips individuals to engage in the activities of life efficiently. Only as the knowledge, habits, skill, attitude, ideals and appreciations developed in the elementary school are operative in meeting the problems of life are these of any worth.

\section*{FACTORS DETERMINING A COURSE OF STUDY}

The problem in selecting the content of the elementary school curriculum is that of first determining the objectives of life in terms of different needs. Second, finding the means or forms of activity best adapted to meet these needs, and third, presenting these needs with the activities for meeting them.

Dr. Bonser classifies the general aims of life in terms of four large fields of purposeful activity. First, the health activities of everyday life. Second, the practical activities of everyday life. Third, the cooperating activities of everyday life, and fourth, the recreational activities of everyday life. If we consider these aims, then the purposes of the elementary school are to provide a basis for health equally desirable for all; to develop practical efficiency in activities shared by all in daily work and intercourse; to develop ideals and habits of group activity of equal value to all; and to cultivate means of recreation common to all.

Many similar classifications can be made of the aims of the school in terms of life purposes. Any normal individual can be found at any time living, thinking, feeling, and acting in one or another of five major fields of activity; in the home, at work, at play, in the field of social intercourse, or in organized community life. These are the five classes of relationships and activities for which the elementary school must educate its pupils.

In studying the forces which brought the school into existence we get another similar classification. The school is an institution established, organized and maintained by society for the purpose of developing its own efficiency. Social efficiency has been analyzed into five types; physical efficiency, moral efficiency, vocational efficiency, avocational efficiency and civic efficiency. Therefore the elementary school must equip its pupils with the necessary knowledge, habits, skills, attitude, ideals and appreciations which will enable them to become efficient in health, in morality, in recreation, in work and in citizenship.

In accomplishing all of these large life problems the only means of growth is by effective and satisfied participation in these activities. Meeting each day's needs of childhood is the best preparation for meeting the needs of adult life. Therefore, the curriculum should be, as far as possible, a series of purposeful activities in meeting life's needs in the best way. The teachers' problem lies in helping to bring about the filling of these needs in some orderly arrangement, and in so directing the activities that pupils discover and use the most pertinent knowledge and the best methods of procedure.

A course of study can never be finished but is always in the process of making. Because of the ever changing forms of activity by which the purposes of life are realized the curriculum must correspondingly change. As new needs arise, as new methods of meeting needs are developed, the curriculum must respond to all of these changes which are desirable and more effective in meeting life's purposes. This includes the dropping from the curriculum of activities that are no longer used and of less value than newer methods.

\section*{BIBLIOGRAPHY ON AIMS OF EDUCATION}

\footnotetext{
Betts, G. H., "Social Principles of Education." Chapters X, XI. Scribners. Bode, B. H., "Fundamentals of Education. Macmillan.
Bonser, F. G., "The Elementary School Curriculum." Ch. I-V. Macmillan. Charters, W. W., "Methods of Teaching." Ch. I-VI. Houghton, Mifflin. Dewey, John, "School and Society."
Dewey, John, "Interest and Effort." Houghton, Mifflin Company.
Dewey, John, "Democracy and Education." Macmillan.
Dewey, John, "Human Nature and Conduct." Henry Holt Company.
Kendall \& Mirick, "How to Teach the Fundamental Subjects." Chapter I.
}

Moore, E. C., "What Is Education." Chapters I-X. Ginn and Company.
Moore, E. C., "What the War Teaches Us About Education." Chapter I, II, III, IV, XIV, XV. Macmillan Company.

\section*{BIBLIOGRAPHY ON SELECTION OF TEXTBOOKS}

Frauzen, R. H., and Knight, F. B., "Textbook Selection." Warrick \& York. Hall-Quest, Alfred T., "The Textbook; How to Use and Judge It." Macmillan.
Maxwell, C. R., "Selection of Textbooks." Houghton, Mifflin Co.

\section*{AIMS AND METHODS IN HABITS OF STUDY}
1. Pupils must be convinced that getting the meaning of the author from a printed page is quite different from repeating meaningless expressions found there.
2. Pupils must be taught to eliminate from consideration material of minor importance if important matter is to be given proper attention.
3. Ability to formulate intelligent questions is an indication that the pupil has some knowledge of the related and essential facts in the paragraph or the page under discussion.
4. Making a simple outline after having discovered the essential facts is a great help in memorizing desirable information.
5. Much valuable time can be saved if pupils have an adequate knowledge of how to use a textbook.
6. Special practice should be given in the use of the index, table of contents, references, the appendix, use of foot-notes, chapter, section and paragraph headings, and list of general references.
7. Pupils should be given training in selecting important things in a sentence, paragraph and page.
8. Pupils should be given training in writing intelligent questions about a paragraph or page.
9. Pupils should be given training in collecting information sug. gested by simple outline.
10. Skill in use of chapter, section and paragraph headings.
11. Use of outlines in summarizing thought and selecting important facts.
12. Definite reference should be given in the assignment to particular paragraphs or sections which pupils read and tabulate the important facts that furnish the desired information.
13. Discover whether pupils understand adult expressions used in textbooks.
14. Pupils should be required to prove their statements by reference to the textbcok.

\section*{BIBLIOGRAPHY}

Dearborn, Geo., "How to Learn Easily." Little, Brown \& Co.
Hall-Quest, Alfred T., "Supervised Study." Macmillan Co.
Earhart, Lida B., "Teaching Children to Study." Houghton, Mifflin Co. Kitson, H. D., "How to Use Your Mind," Lippincott.
McMurray, F. M., "How to Study and Teaching How to Study." Houghton, Mifflin Co.

Simpson, Mabel E., "Supervised Study in History." Macmillan Co.
Whipple, Guy M., "How to Study Effectively." School and Home Publishing Co.

Wilson, H. B., "Training Pupils to Study." Warwick and York.

PART II.
SUBJECT-MATTER.

\section*{ARITHMETIC}

In everyday life, the facts and processes of arithmetic are used only in situations requiring relationships of measurements in units of quantity or value. The simplest and least difficult question is that of mere serial order-how many? Beyond this are the questions of how much, in terms of inches, feet, pounds, dozens, and so on, and at what cost, or profit, or loss, in terms of money values on the basis of these various units. The general daily uses of arithmetic are chiefly those concerned with the measurements and values of the goods used for food, clothing, furnishings, utensils, tools, and the means of communication, transportation, and recreation. In supplying ourselves with these or in supplying them to others, arise most of the problems calling for the use of number as a tool. In interpreting the meaning of situations of which we are a part, or of which we read, a knowledge of number is required, often involving quantities, values and relationships quite beyond those which enter into our direct manipulation of amounts and processes. For direct usage as a tool, habits of mental manipulation highly accurate and rapid are required; for interpretation, an understanding of meaning and significance only is necessary.

Surveys of the social usage of arithmetic emphasize the relatively small range of kinds of situations calling for the use of arithmetic, the relatively small quantities and values involved, the relatively small number of processes, and the great frequency with which these processes recur. Such surveys show a fair degree of proficiency in the manipulation of processes as such-a possession of the facts and processes of arithmeticbut they show also a deplorable want of knowledge of how to use these processes in solving many of the important problems of daily life with economy and efficiency. The work in the schools has developed the tool without teaching its use. When we recall how largely the work in arithmetic has been taught as a thing apart and separate from the situations in life in which it is used the result is not surprising. The remedy lies in developing, as far as possible, the facts and processes of arithmetic as parts of projects or problems requiring their use as tools and means of interpretation.

\section*{AN OUTLINE OF ELEMENTARY MATHEMATICS}
I. Counting Numbers.
II. Reading Numbers.
(1) Integers-Arabic and Roman.
(2) Common Fractions.
(3) Decimal Fractions.
(4) Denominate Numbers.
III. Writing Numbers.
(1) Integers-Arabic and Roman.
(2) Common Fractions.
(3) Decimal Fractions.
(4) Denominate Numbers.
IV. The Processes.
(1) Addition
(2) Substraction
Of
(3) Multiplication
Integers,
(3) Multiplication Common Fractions,
(4) Division Decimal Fractions
V. Percentage Applications.
(1) Trade and Commercial Discount.
(2) Profit and Loss.
(3) Commission.
(4) Simple Interest.
VI. The following subjects treated largely for information purposes:
(1) Taxes.
(2) Insurance.
(3) Mortgages.
(4) Stocks and Bonds.
(5) Bank Discount.
(6) Compound Interest.
(7) Accounts.
VII. Denominate numbers in useful problems of community value.
VIII. Concrete Geometry-intuitional and observational.
(1) Geometry of Form
(a) What is the shape of the object?
(2) Geometry of Size
(a) How large is the object?
(3) Geometry of Position
(a) Where is the object?
(4) Supplementary Work
(a) Squares and square roots.
(b) Pyramids.
(c) Cones and spheres.
IX. Algebra
(1) Simple formulas
(2) The equation
(3) The graph
(4) Negative numbers
(5) Algebraic operations
(6) Practical use of algebra in problems in business.

\section*{GENERAL SUGGESTIONS}

Abstract problems deal with number purely and are to establish principles. Concrete problems are the applied problems and are to give a practical use of the knowledge gained. Teach the unknown through the known.

Introduce new work in its simplest form.
Use illustrations and objects whenever they are needed. Often ask pupils to illustrate their work by drawing.

Note-In fractions. Boy has \(1 / 2\) of a melon and sells or gives away one-half of it. What has he left? Draw instead of working.

Make several applications of the newly learned facts. Use plenty of oral work based on these new facts. Seek for accuracy first, speed second. Check all work for accuracy. Place answers in short division above and not below the dividend.
1. Read and understand what the problem gives and what is required.
2. Plan how to solve it.
3. Solve by shortest way.
4. Test work.

\section*{Oral or Drill Work}
1. Oral work is one of the chief factors of arithmetic teaching. It is well to use the first five or ten minutes of each recitation in a quick, snappy, oral direct drill. It should leave no time for thinking.
2. From the 4th grade up, the Studebaker or Courtis Practice Tests should be used.
a. They are well arranged and therefore save the teacher much time in arranging drill materials.
b. Gives the child a chance to master his particular difficulty.
c. Standard tests make it possible to measure the efficiency of any given method and they also give the child a chance to measure himself. (See list of tests, page 19.)
d. In the Courtis Standard Tests, Series B, in four fundamentals, the 6 th grade pupils should attempt 6.7 addition with \(58 \%\) accuracy; 7.9 subtraction with \(73 \%\) accuracy; 6.8 multiplication with \(70 \%\) accuracy; and 5.1 division with \(68 \%\) accuracy.
3. If not able to obtain the tests many oral drills can be arranged thus: \(6 \times 9-1 \div 8 \times 7-1 \times 12=\)
4. To test work on combinations.


Begin with 1 and add 3's till you reach 100. See that the child adds by combination and not by counting.
5. Just the same for subtractions. Combinations or separations.
\begin{tabular}{rrrrrrrrrr}
10 & 7 & 4 & 11 & 8 & 5 & 12 & 9 & 6 & 3 \\
3 & 3 & 3 & 3 & 3 & 3 & 3 & 3 & 3 & 3 \\
- & - & - & - & - & - & - & - & - & -
\end{tabular}

Begin with 100 and subtract 3 until you reach 1.
6. Take the concrete work for the day and think through the process and estimate answers.
7. Give problems similar to those assigned to the class; only using small numbers.
8. Use statements instead of long drawn out analysis.
9. Checking for acuracy.
a. Give drill in fundamentals.
b. Teaches pupils to depend on self, rather than on answer in the book.
10. Motive. Motive must be provided for the work. The stronger the incentive the greater will be the attention given to the work. Timing is an incentive for speed.
11. Games. One of the best ways of creating a liking for drill. Creates a dissatisfied state of affairs in the mind of the fellow not prepared. Incentive to learn so that he can play the game.

\section*{GAMES FOR DRILL}

\section*{1. Addition Game}

The pupils choose or the teacher appoints two captains who choose sides. The teacher places on the board two columns of numbers exactly alike. The captains or ones chosen by them from their sides come forward and add as quickly as possible. The child writing the correct answer first wins a point for his side. If the child takes his seat and has an incorrect answer another child from his side may pass to the board and correct it and win a point for his side if he is through first.

This game may be used in the same way for subtraction and multiplication.

\section*{2. Climbing the Ladder}

This game is used for drill in the four fundamental processes of arithmetic.

Have device on board before class, making it as attractive as possible by the use of colored chalk. A picture of a ladder is drawn and one number placed on each round. In using this for multiplication drill the multiplier is placed at the side of the ladder. The class is divided into two teams. The first child goes to the board and tries to climb the ladder by multiplying the number on the first round by the multiplier, and so on up the ladder. Both sides are watching carefully and the pupil who first
sees and corrects a mistake goes on up the ladder and comes down if he is able.

The child who can go up and down the ladder successfully wins a point for his side.

The side having the most points in a given time, wins the game.
The ladder is placed against a burning building.
As in the apple game, the number at the side is more difficult coming down. The child who reaches the bottom has saved a life. The side rescuing the most people wins.

This is played like the apple game only that here they rescue people instead of picking apples.

\section*{3. Automobile Race}

Have drawing on board representing hill with wide road running over it. On each side of road are signboards with numbers to be added on them. Numbers on opposite sign boards to be the same. Make drawing as attractive as possible. Pupils choose sides and sides choose name for automobile. One chauffeur from each side steps to board and takes crayon. At the word "go" they begin to add the numbers on signboards. The one who solves the problem first wins a point for his side. Continue in this way until each couple has had a chance or time is up. Side having most points wins in the races. In lower grades or when used for multiplication, subtraction, or division the number to be added to, subtracted from, multiplied or divided by may be written at starting point and answers written beside each signboard.

\section*{4. Long Row Game}

Pupils sit or stand in one long row facing the blackboard. Flash cards of addition or multiplication combinations are placed along the ledge of the blackboard. The teacher writes the answers to the cards on the board above the cards. Pupils select ones difficult for them and study. At the end of a few moments the teacher erases the answers and calls the sum or product of one of the cards. The pupil who sees the card first, runs to the board, picks up the card and reads it, as: " 6 twos are 12 ", and takes the card to his seat. Child is not to move from his seat or place of standing until he knows exactly which card he is running for. If one runs to the board without knowing where he is going, a card is forfeited. When all cards have been taken the teacher asks all to stand or raise their hands who have one card; two cards; etc. If sides have previously been chosen, the captain of each team may take up the cards for his side and the team having most cards wins the game. Line UpAny Process.

The children or the teacher choose the captains. The captains choose sides. The two sides stand in rows facing each other. The teacher gives the combinations. The first two in each row answer. If they both answer together another combination is given. But if one answers before the other answers, he keeps his place at the head of the line. The other child takes his seat and the child next to him moves to head of the line. The side which stays up the longest wins a point for his side.

\section*{5. Mush Рот}

The teacher and pupils stand in a circle. The teacher gives a combination to the pupil on her right. If the child gives the correct answer she gives a combination to the next child. If this child gives the incorrect answer he has to step in the center of the circle. (Mush pot.) The teacher gives the next child a combination and the one in the mush pot tries to give the answer before the one in the circle. If he succeeds the one in the circle takes the place of the one in the mush pot, and so continues about four minutes.

\section*{6. Multiplication Game Drill "Buzz"}

Class count in turn. When a given number or any of its multiples is reached they say buzz instead of the number.

The number decided on is four. The first child in the row begins counting. They count in turn until four is reached. Instead of saying four, the child says buzz. The counting is continued and each time a multiple of four is reached, buzz is said instead of the number.

Those pupils fall out who miss or hesitate to answer. The one who doesn't miss is the winner.

\section*{7. Number Work Game}

Arrange the pupils in two groups with a captain over each group. Place on the board two rows of figures, one above the other, extending across the board, if you wish a problem of that length, as
\begin{tabular}{cccccccc}
7 & 8 & 9 & 6 & 3 & 1 & 9 & 6 \\
3 & 5 & 4 & 6 & 2 & 0 & 8 & 2 \\
& - & - & & - & & &
\end{tabular}

At a signal, a pupil from each group starts, at opposite ends of the blackboard, placing the answers under the columns, and working toward each other. When they meet, the one who has solved the most problems correctly scores a point.

Then, two other pupils, one from each group, pass to the board, and work in the same manner, the answers having been erased and the numbers changed.

This is continued until every pupil in each group has had a turn, the victorious group being the one with the highest score.

The problem may be varied by changing the process from time to time.

\section*{8. Floor Relay}

Material-Diagram on floor
2 erasers or bean bags to throw.
Chalk, erasers, and blackboard.
Draw a circle 4 or 5 ft . in diameter. Divide it into eight sections by drawing a line through the center of the circle horizontally, another vertically and two diagonally through the center of the four sections already formed. This figure will resemble a pie cut in eight pieces.

Draw a circle within the large one one foot in diameter and having the same point as its center as the large one. Within the small circle place the number to be used as the multiplier, divisor, or to be added or subtracted. In the large sections place other numbers.

\section*{Directions-}

Pupils line up as chosen by two captains and stand on opposite sides of circle. The first on each side when called by teacher, stands with eraser in hand on base. When the teacher says "Go" the contestants throw their erasers into sections of the large circle. They then go quickly to the board and write the combination indicated by the throw and solve. Both make another throw if either one throws outside of the circle. The one who has correct result first gains a point for his side. The next in line on each side has its turn and so on until all have had a chance to make a point.

The diagram consists of a large circle with a small circle in its center on the floor. In the small circle is written a figure with a sign to indicate the process of multiplication or whatever it may be.

In the equal sections of the large circle are written figures to serve as multiplicands, dividends, addends, or minuends. A base line is marked at a proper distance below the large circle.

Caution-All figures should face the pupil when on the base. Figures should be changed several times during game to prevent pupils memorizing the problems.

\section*{9. Whispering Game}

The class is divided into two teams having an equal number on each side. The teacher gives some concrete problem as: "We are going to make fudge. Mary may go to town and get the materials. We will need ten cents worth of sugar, five cents worth of butter and five cents worth of syrup. How much money will Mary spend?

As soon as any one has the result, he or she whispers it to the teacher. If they give it correctly, they are allowed to remain, counting a point for his side; if not, they take their seats. The side having the greatest number of points wins the game. Problem is explained and another given and so the game continues.

Instead of whispering answer to teacher the children may put their heads on the desk. When a child is called on to give the answer, all those who have the same answer raise their heads.

\section*{10. Fishing Game}

Make a drawing of a boy sitting on a green bank with a fishing line thrown into the pond. Bait the hook with a number. Draw fish and put numbers on these fish.

Captains choose sides. One from each side goes to the board when the signal is given. They point to a number on one of the fish and multiply it by the number on the bait and give the product.

The scorekeeper of each side keeps a record of number of pounds caught by each side. The one getting answers correct first wins that number of pounds for his side. At the end the side having the greatest number of pounds wins.

For fourth and fifth grades the number could be made larger and more difficult to suit the grade. Problems can be formed to make game more complicated by setting a price per pound and multiplying price by number of pounds. This game may be used for multiplication, addition, subtraction, or division.

\section*{11. Flash Card Game}

Choose two captains and let them choose sides. Next seat the children in four rows, all of one side being seated in rows one and three, and all of the other side in rows two and four.

The teacher stands in front of rows one and two with the flash cards. The card is flashed and the children in the first seats of rows one and two answer. The child giving the right answer first, gets the card to count for his side. Then the second two, third two, etc., receive a turn and the card is given to the child in the front seat of the row in which the child who answered correctly is seated. Teacher then stands in front of rows three and four and each child has a chance. Should any two children be unable to give the correct answer or be too slow in answering, the card is held by the teacher and is given to the row in which the next correct answer is given.

Each time everyone has a turn it is called an inning. This is optional with the teacher. The number of cards held by each side are counted and the result put on the board after each inning. There are usually three innings. The numbers for each side are counted and the side having the most cards wins.

\section*{12. Baseball Game}

Divide the group into two sides, "A" and "B". Have each side choose a pitcher, a catcher, and a score-keeper. Decide on the number of outs before beginning the game, say three or four.

The "A's" are up to bat first. The pitcher of the "B's" gives a combination of numbers. If the " \(B\) " catcher gives the correct answer before the batter, it is counted an out for the "A's". If the batter gives the correct answer first, he scores a point for his side He then takes his place at the end of the line and is permitted to "bat" again if the number of outs given have not occurred before his turn.

After having the number of outs allowed, the other side is permitted to bat. The game is continued as before. The score-keeper stands at the board, chalk in hand, to mark the points and the outs for his side. The side having the most number of points at the end of a desired number of innings wins.

\section*{13. Rat Trap Game}

A number of rats are drawn upon the board to be caught in trap. Each rat has number, one which is one of a multiplication, addition or subtraction combination, whichever process is chosen for drill. The other number is placed somewhere else on the board for the multiplier. A circle is drawn around rat when answer is given to show rat is caught in trap. Circle may be drawn either by the teacher or the pupil.

The children are divided into two groups with a captain for each. A child is chosen first from one side and then from the other in turn and given an opportunity to score for his side. There must be a score-keeper who keeps count of number of rats caught for each side in a given length of time. Side getting most rats in that time wins.

\section*{14. Subtraction Game}

The teacher places one long subtraction problem on the board. The class is then divided into two sides. A child may be chosen from one side or the other. The one chosen goes to the board and proceeds to work the problem. If he makes a mistake he goes to his seat. The child first perceiving the error, regardless of side may go to the board, correct the problem and proceed with it. The game continues until the problem is completed. The pupil completing the problem correctly wins a point for his side. Any number of points the teacher may designate may be the amount required to win the game.

\section*{SUGGESTIVE TEXTBOOKS}
Alexander-Dewey Arithmetic..........................Longmans, Green \& Co. Elementary Book Intermediate Book Advanced Book
The Anderson Arithmetic, Books I, II, III.............Silver-Burdett \& Co. The Thorndike Arithmetic, Books I, II, III.............. Rand-McNally Co. Hamilton's Essentials of Arithmetic, Revised...........American Book Co. Three Book Series
Everyday Arithmetic-Hoyt \& Peet, Bks. I, II, III..Houghton-Mifflin Co. Junior High School Mathematics, Books I, II, III...... Wentworth-Smith Ginn \& Company
Junior High School Mathematics, Books I, II, III...........John C. Stone Sanborn \& Company
Junior High School Mathematics, Books I, II, III...........Taylor \& Allen Henry Holt \& Co.
Junior High School Mathematics, Books I, II, III............. Walter Hart
D. C. Heath Co.
Junior High School Mathematics, Books I, II, III.......Theodore Linquist
Scribners

\section*{Arithmetic Tests}

Courtis Standard Research Tests in Arithmetic, series B. Courtis-Cleveland Arithmetic Tests. Cleveland Survey Tests.
Monröe-Diagnostic Tests in Arithmetic.
Peet and Dearborn-Progress Tests in Arithmetic.
Woody-Arithmetic Tests.
Bibliography
Bonser, F. G., "The Elementary School Curriculum." Chapter XI. Macmillan Company.

Brown and Coffman, "How to Teach Arithmetic." Rowe, Peterson Company.

Freeman, F. N., "Psychology of the Common Branches." Chapter IX. Houghton, Mifflin Company.

Harris and Waldo, "First Journeys in Numberland." Scott-Foresman \& Company.

Klapper, Paul, "The Teaching of Arithmetic." D. Appleton Company.
Kendal and Mirick, "How to Teach the Fundamental Subjects." Chapter III. Houghton, Mifflin Company.

Jessup and Coffman, "The Supervision of Arithmetic." Macmillan Company.

Overman, James R., "Principles and Methods of Teaching Arithmetic." Rowe, Peterson Company.

Smith, David Eugene, "The Teaching of Arithmetic." Ginn \& Company.

Stone, Benj. H., "The Teaching of Arithmetic."
Stone, J, C., "How to Teach Primary Number Work." Benj. H. Sanbourn \& Co.

Suzzalo, Henry, "The Teaching of Primary Arithmetic." Houghton, Mifflin Company.

Wilson, H. B. \& G. M., "The Motivation of School Work." Chapter IX. Houghton, Mifflin Company.

Thorndike, Ed., "The New Methods in Arithmetic." Rand-McNally Company.

\section*{ART}

This course is intended for general guidance in the consideration of fundamental art principles and their relation to various subjects of the school curriculum. It affords opportunity for the development of the major divisions of art training; appreciation, representation, design and industrial expression.

The purposes underlying the course are conceived to be as follows:
To develop ability to recognize the essential principles of beauty as expressed in good form, design, and color in dress, in the home and in the products of industry; to establish the habit of searching for beauty in things the pupil sees from day to day; to cultivate the spirit of freedom and good workmanship in self-expression through the use of simple tools and materials.

Methods of procedure and subject matter vary to meet conditions presented by projects and problems in the life of the child.

A graphic vocabularly of symbolic forms for illustrative purposes is developed in the first four grades.

All object drawing in the first three grades is for the purpose of stimulating observation and visualization of form and color and to increase the vocabulary for self-expression.

\section*{Bibliography}

Bonser, F. G., The Elementary School Curriculum, Ch. IX and XIV, Macmillan Company.

Dobbs, Ella, Illustrative Handwork. Macmillan Company.
Dobbs, Ella, Primary Handwork. Macmillan Company.
Sargent \& Miller, How Children Learn to Draw. Sargent \& Miller, Ginn \& Company.

Sargent, W., Fine and Industrial Arts in Elementary Schools. Ginn \& Company.

Snow \& Froelich, Industrial Art Text Books. Peary Company.

\section*{ENGLISH}

\section*{LANGUAGE AND COMPOSITION}

\section*{The Aim of the Whole Course}

The aim of the whole course in oral and written composition is to train all the children to express their thoughts in good English and in logically arranged sentences. This involves not only constructive teaching in the use of words, in sentence making, in the orderly arrangement of sentences into paragraphs, but also the eradication of speech faults which the child brings with him to school from the street and from homes and early environment in which faulty speech prevails. Since inelegant speech, grammatical errors, bad spelling, vulgarisms, slang and the like are much more striking than faulty sentence structure, illogical order of sentences, indistinct enunciation, and loose thinking, it appears that the larger phase of this work is corrective and not constructive. This is not the case. Important as the corrective side of English teaching is, the larger task is the constructive. A teacher must not be satisfied with merely suppressing faulty speech. She must so draw her children out that they will not only be able to say something correctly, but will also have something worth saying correctly.

\section*{Minimum Expectations}

Some children come to school with good speech habits already formed, with the ability to speak easily and accurately. Others have none of this valuable home training. Of course the less fortunate will not speak and write as well as the best at the end of a school year. It is, however, desirable and entirely possible to set a minimum standard of achievement and to expect the best and the poorest to do at least as much as the standard implies. (See example of these minimum expectations at the close of the outline of the work of each grade in Mahoney's Standards in English.)

\section*{Accuracy First or Fluency First}

There are two groups of English teachers. One of them insists upon fluency first. Teachers in this group want children to say what they think without trying consciously to be accurate. They do not want the progress of their children to be impeded by forty-nine danger signs along the way. If, as the children proceed along their primrose bordered language way with their pink hair ribbons in an ideal blue haze, they stumble over a wrong pronoun or verb or a vulgar "aint got no," or "them there," they are to be gently sprayed with perfumed grammar long after they have finished their stroll through the flowery fields of speech, and thus cleansed of all their linguistic transgressions. The other group believes that "I seen" is as disfiguring as dirt under the finger nails and that it should be carefully scrubbed away as quickly as possible. With them accuracy first is essential. The one group would have the children talk much, write much, compose stories, edit little school papers, write poems and essays, and work out intended individual and group projects, and would expect interest in the task to impel the children to seek and find the accurate and logical way of saying the things that are in their minds. The advocates of "accuracy first" believe that learning the art of speaking and writing is like learning to play a musical instrument, that little pieces carefully and accurately done soon give skill and power and confidence to undertake more complex things.

It is regretably obvious that the graduates of our elementary schools do not master the simple technic of speech and writing. Teachers do not even assume that verbs and pronouns can be mastered once for all like the multiplication tables. They tacitly admit that the pevailing "fluency first" program fails. French children are taught by the accurate, little five-finger exercise first, and are admitted to be better writers and speakers than American children. The work in English in the sixth, seventh, eighth grades becomes a definite unit in itself, distinct from other
subject matter presented. We believe that it is better for a fourth grade child to be able to write four simple sentences about a pet dog or making a doll's dress and to arrange them in a logical sequence than to write an incoherent, ungrammatical, unpunctuated, misspelled narrative about the life of the pioneers of Colorado. In other words we are frankly for accuracy first.

But "accuracy first" does not mean "fluency never." Our plan provides for both types of composition. In the formal language work the assignments call for short pieces of work accurately done; but in the informal work in language, such as is called for in the various individual and group projects in connection with the lessons in literature, history, hygiene, geography, arithmetic, etc., there is ample room for practice upon larger units with more attention to the thing said and less to the details of construction.

\section*{List of Errors to be Corrected}

It is the intention of the course to provide for the correction in each grade of a few errors prevalent among the pupils of that grade and others which belong to individual pupils. No lists are given for the different grades because the errors are not known until the teacher actually catalogs them for the grade and for individual pupils. It will be found when such a catalog is made that the list is small and the task of eliminating the errors actually possible. The teacher is warned against the practice of attacking "school ma'am" errors which are not errors at all, such as the correct use of "have got" and the preposition at the end of a sentence. There are enough real errors to engage all the teacher's ingenuity without attacking fanciful errors such as these which are in good literary usage. The number of real errors will be found to be encouragingly small. If a few are attacked and slain in each grade the language of the pupils will be greatly improved long before the end of the elementary school period. (See Mahoney pp. 13 and 14.)

\section*{The English Period}

In all the grades there should be a special period set aside for the language lesson. In this time there should be the assignment and talking over of the topics, the oral telling, dramatizing, etc., the writing, self criticism, revising, etc.-not all in one day, but each in its turn. In the grades above the fourth all this work of oral and written composition should be carried on in connection with the work of the other classes; and every class, positively every one, should be an English class. Constant drill in the use of correct forms and constant correction of all sorts of the errors must be carried on in all the classes of the school day. While it is good for upper grade children to know why a certain form, construction, or punctuation mark, is correct so that they may become self-criticizing, it must be remembered that no child ever learned to speak correctly by learning the rules of grammar. Speech-faults must be worn out and correct habits rubbed in.

\section*{Copying From the Blackboard and From Dictation}

Young children should have frequent practice in copying correctly written sentences from the blackboard. Older children should occasionally be given that kind of drill. It makes them conscious of capitals, punctuation marks, spelling, arrangement, etc.

Throughout the grades there should be almost daily opportunity for writing from dictation. This can be done in any class during the school day. It may be done just as well in the history class as in the English. Whenever it is done it should be brief. Exactness should be required. A half sheet of ruled paper, uniform for all the class, will be an aid to both pupil and teacher. It will suggest neatness and will encourage by its brevity.

\section*{Self Criticism}

Pupils should be taught to examine all of their writing before it is handed to the teacher. This applies especially to the short pieces copied
from the board or from dictation. Have them read through the sentences first to see that no words have been omitted, second to see that capitals, spelling, and punctuation are satisfactory. Insist on neat, careful pen-manship-the best the pupil is capable of.

\section*{A Word of Encouragement}

If you are a teacher, you can really teach children to speak and write just as surely as you can teach them the multiplication tables; and you can teach English so that it will stay taught and not have to be done over and over and then never done, as is the usual expectation in the schools.

\section*{SCALE FOR MEASURING RESULTS OF ENGLISH TEACHING}
1. The Nassau County Supplement to the Hillegas Scale. Teachers College Publications, Columbia University, New York.
2. The Harvard-Newton Composition Scale.
3. Willing's Composition Scale for Measuring Written Composition. Bureau of Educational Research, Urbana, Illinois.
4. Charters' Diagnostic Test in Language and Grammar for Pronouns. Bureau of Educational Research, Urbana, Illinois.
5. Charters' Diagnostic Language Tests. Bureau of Educational Research, Urbana, Illinois.
6. Starch, Punctuation Scale. University of Wisconsin.
7. Trabue, Language Completion Tests. Teachers College Publications, Columbia University, New York.

\section*{Suggested Text-Books:}

Bolenius, Emma-Elementary Lessons in Everyday English. A. B. C. Cross, E. A.-The Little Grammar. Atlantic Monthly Press.
Elson, W. H.-Good English, 3 bk. series. Scott-Foresman Co.
Breggs-McKinney, Skeffington-J. H. S. English, Bk. II. Ginn \& Company.

Pearson \& Kirchwey-Essentials of English, 3 bk. series. A. B. C. Potter, Jescke, Gillet-Oral and Written English, 2 bk. series. Ginn \& Company.

Wohlfarth, Mahoney-Self Help English Lessons, 2 bk. series. World Book Company.

\section*{GENERAL BIBLIOGRAPHY}

Bonser-The Elementary School Curriculum, Chapter 13.
Bolenius-The Teaching of Oral English.
Brown-How the French Boy Learns to Write.
Carpenter and Baker-The Teaching of English in the Elementary and Secondary School.

Chubb-The Teaching of English.
Compagnac, H. M.-The Teaching of Composition.
Cooley-Language Teaching in the Grades.
Deming-Language Games for all Grades.
Kendall and Mirick-How to Teach the Fundamental Subjects, Chapter 2.

Leiper-Language Work in Elementary Schools.
Leonard, S. A.-English Composition as a Social Problem.
Mahoney-Standards in English, pages 1 to 40 and pages 177 to 193.
Sheridan-Speaking and Writing English, pages 1 to 50 and pages 144 to 153.

SUGGESTIONS FOR STIMULATING SILENT READING
1. Dramatization. Reading Motive.
2. Varied, easy, and interesting supplementary reading accessible of worth while material.
3. Judging relative values. Speed, comprehension, organization, and memory.
1. Read for central thought or main points.
2. Make outlines for chapters.
3. Make paragraph headings.
4. Read to see if chapters are well named and to make better headings.
5. Making up questions to cover main points.
6. Read to find favorite verse.
7. Selecting most beautiful scenes, best character sketches, wellturned words or phrases.
8. Drawing the picture described.
4. Reading so as to read to others.
5. Reading so as to report to others-either individually or by groups, oral or written.
6. Rapid reading to answer a specific question.
7. Games for matching phrases and sentences.
8. Read silently directions for game, errand, problem; then do it.
9. Studying a story, description, of character sketch, so as to write well oneself.
10. "Flashing" words, phrases, or sentences. A device.
11. Time limit for silent reading. Read a minute then count words.
12. Teacher reads a random sentence and child who first finds place continues.
13. Read part of the story. Allow class to finish exciting part silently.
14. Competitive reading clubs-secret book reading.
15. Keeping a written list of books read.
16. Reports to class of current events.
17. Keeping individual speed records.
18. Only within the limits of accurate comprehension are speed exercises safe.
19. The rate at which one should read is determined both by the material read and the purpose in mind.
20. We ought not to speak of speed in silent reading but rather of speeds in silent reading.

\section*{PHONICS}

Phonic methods are simply devices for making the child self-reliant and independent.

Besides this purpose, phonic aims to aid children in the pronunciation, enunciation, articulation, and mastery of words.

This use of phonics, phonograms, syllabification and spelling are not ends in themselves but merely means to an end.

A separate period for phonics aside from the reading period should be given a place in the daily program during the first three years of school.

\section*{MATERIAL FOR PHONIC DRILLS*}

Thorndike has selected about seventy of the most useful phonograms and entered after each phonogram the words from the first thousand of his word list. Some of these words are not equal in interest to the words now used in beginning reading for the purpose, but on the whole, they will form a very serviceable basis for phonic drills; and every one of them is well worth learning for its own sake.
ace-face, place, race, space.
ack-back, black.
ade-made, shade, trade.
ail-sail.
ake-cake, lake, shake, take.

\footnotetext{
*Thorndike, E. L.-Word Knowledge in the Elementary School-Teachers College Record, Vol. XXII, No. 4, Pp. 362-364.
}
all-all, ball, call, fall, hall, small, tall, wall.
ame-came, game, name, same.
and-and, band, command, demand, hand, land, sand, stand.
an-an, can, cannot, man, manner, plan, ran, than.
at-at, fat, hat, matter, sat, that.
ate-gate, late, state.
ay-away, bay, day, gray, lay, may, pay, play, stay, today, way.
bl-black, bless, blind, blood, blow, blue.
br-branch, brave, bread, break, breakfast, bridge, bright, bring, broad, broken, brother, brought, brown.
ch-chair, chance, change, charge, chief, child, children, choose, church.
cl-class, clean, clear, clock, close, cloth, clothing, clothes.
cr-cried, cross, crowd, crown, cry.
dr-draw, dream, dress, drink, drive, drop, dry.
eam-dream.
eep-deep, keep, sheep, sleep.
eet-meet, street, sweet.
ell-bell, fell, fellow, tell, well.
en-men, pen, ten, then, when.
ent-cent, center, different, enter, entire, sent, went.
est-best, nest, rest, yesterday.
et-get, let, letter, met, set, settle, yet.
fl-floor, flow, flower, fly.
fr-free, French, fresh, friend, from, front, fruit.
gl-glad, glass.
gr-Grace, grain, grant, grass, gray, great, green, grew, ground, grow.
ice-nice, price.
ick-prick, quick, sick, stick, thick.
ide-beside, decide, divide, guide, hide, ride, side, wide.
ight-bright, delight, fight, light, might, night, right, sight.
ill-bill, fill, ill, kill, mill, still, till, will.
in-begin, in, inch, increase, indeed, Indian, instead, interest, into, skin, thin, win.
ine-line, mine, nine, shine.
ing-being, bring, coming, during, evening, going, king, morning, ring, sing, and many others.
ip-lip, ship, trip.
it-fit, it, its, sit.
ite-quite, white, write.
oat-boat, coat.
ock-clock, lock, rock, stock.
old-cold, gold, hold, old, sold, told.
ong-along, belong, long, song, strong, wrong.
ook-book, brook, cook, look, took.
on-noon, soon.
op-shop, stop, top.
ot-hot, not.
ound-around, found, ground, pound, round, sound.
out-about, out, outside, shout.
own-brown, crown, down, town.
ox-box.
pl-place, plain, plan, plant, play, pleasant, pleasure.
pr-practice, press, pretty, price, promise, proper, proud, prove.
qu-quarter, queen, question, quick, quiet, require.
sh-shade, shake, shall, shape, she, sheep, shine, ship, shoe, shop, shore, short, should, shoulder, shout, show, shut.
sk-skin, sky.
sl-sleep. slow.
sm-small, smoker.
sp-space, speak, spend, spirit, spoke, spot, spread, spring.
st-stand, star, start, state, station, stay, step, stick, still, stock, stone, stood, stop, store, storm, story, study.
str-straight, strange, stream, street, strength, strike, strong.
tr-trade, train, travel, tree, trip.
wh-what, wheat, wheel, when, where, whether, which, while, white, who, whole, whom, whose, why.

\section*{READING TESTS}

Courtis' Reading Tests. Speed and content of silent reading.
Courtis Standard Research Tests, 82 Eliot St., Detroit, Mich.
Gray's Reading Tests. Oral Reading, Silent Reading.
William S. Gray, School of Education, University of Chicago, Illinois.
Monroe's Standardized Silent Reading Test. Modified form of Kansas Test.

Starch's Silent Reading Test. A test for each grade. University Supply Association, Madison, Wisconsin.
Starch's English Vocabulary Test. Range of vocabulary.
Thorndike's Improved Scales for Word Knowledge and Visual Vocabulary, Scale A2 and Scale B. Test of ability to recognize meanings of words.

Bureau of Publication,
Teachers College, Columbia Univ. New York City.
Thorndike's Improved Scale for Measuring the Understanding of Sentences, Scale Alpha 2. Test of grasp of content.

Bureau of Publications, Teachers College, Columbia Univ. New York City.
Thorndike-McCall, Reading Scale. A scale for testing and teaching silent reading. Ten forms have been prepared in order that a teacher may test her pupils once each month during the school year.

Bureau of Publications, Teachers College, Columbia Univ. New York City.

\section*{GENERAL BIBLIOGRAPHY}

Arnold, Sarah, "Learning to Read." Silver Burdett Company.
Bolenius, Emma, "Teachers Manual of Reading." Houghton, Mifflin Co.
Bonser, F. G., "The Elementary School Curriculum," Chapter XIII. Macmillan Company.
Briggs \& Coffman, "Reading in Public Schools," Rowe Peterson Company.
Bushwell, Guy T., "Fundamental Reading Habits." University of Chicago Press.
Charters, W. W., "Teaching the Common Branches." Chapter IV. Houghton, Mifflin Co.
Freeman, F. N., "Psychology of the Common Branches." Chapter IV. Houghton, Mifflin Co.
Gray, W. S. and Others, "Remedial Cases in Reading, Their Diagnosis and Treatment." University of Chicago Press.
Halliburton and Smith, "Teaching Poetry in the Grades." Houghton, Mifflin Co.
Huey, E. B.,' "The Psychology and Pedogogy of Reading." Macmillan Company.
Jenkins, Frances, "Reading in the Primary Grades." Houghton, Mifflin Company.
Leonard, Sterling A., "Essential Principles of Teaching Reading and Literature in the Intermediate Grades and the High School." J. B. Lippincott Company.
O'Brien, John A., "Silent Reading." Macmillan Company.
Stone, Clarence R., "Silent and Oral Reading." Houghton, Mifflin Company.

Watkins, Emma, "How to Teach Silent Reading to Beginners." J. B. Lippincott Company.
Eighteenth Yearbook of the Society for the Study of Education, Part II. Pub. Sch. Publ. Co., Bloomington, Ill.
Fifteenth Yearbook-Part I.
Fourteenth Yearbook-Part I.
Sixteenth Yearbook-Part I.

\section*{THE READING OF LITERATURE}

Literature may not with profit be rigidly graded for children's reading. The suitability of any classic to meet a need in a child's experience is determined by many widely varying conditions. The following outline therefore must not be regarded as fixed and unchanging. It is offered rather as suggestion of the range of resource from which much of the literature studied in the Training School is selected. Moreover, it is by no means comprehensive. The teacher of the young, alert to every opportunity of inspiring each pupil to new contacts in the world of books, is constantly breaking through and transcending whatever program other teachers with other classes may have determined. A general plan is essential to the end of economy and unity; but the wise teacher knows when to use it as a point of departure.

Again, there has been no attempt in the outline to offer a consistent plan of correlation. No hard-and-fast logic of sequence or of association may profitably be followed in formative periods of literary appreciation; hence there is avoidance of insistence upon any scheme which might at times be artificial. Especially has the difficulty of offering an adequate basis of sequence in the primary grades been felt. Since the opportuneness of presentation of a literary unit to little children depends upon constantly varying factors, any plan of grouping in outline form is apt to be misleading. Therefore merely a list of available material is presented in form of basic and supplementary readers and compilations of verse and story.

The outlines for the upper grades hint here and there at types of correlation found of value in vivifying and enriching literature. In no instance has any study been made inclusive of all suitable material which the resourceful teacher should have at her command. Moreover, many units or cycles herein offered singly are actually presented to the children in connection with many other units related in theme and spirit. It is hoped that the occasional tentative groupings suggested will point the teacher to many studies of similar type.

In many years of experimentation, we have realized satisfactory results from the plan of enriching, with a mass of related material, a few great cycles as a central core. For example, any fifth or sixth grade teacher should be able, with the King Arthur tales as a center, to interest her group in themes of chivalry and heroism embodied in many tales and poems. Such a study has proved of greater value than the consecutive use of a reading book containing unrelated classics. Our use of school readers, indeed, after the children have mastered the tools of reading, is for the most part rather supplementary than basic.

The tentative grading herein suggested is determined in part by the content of other courses, such as history, geography and nature study. Lack of space forbids amplification here, but a study of the curriculum will reveal more or less significant connections.

Moreover, it is not herein fully indicated whether certain units listed are used for intensive study, for supplementary class reading-prepared or sight reading, for reading aloud by the teacher, for dramatization, or for individual reading, silent or oral. It is obvious that these matters must be as flexible as the grading. However, a few general principles serve as a guide in determining them.
(a) Literature, an art inseparable in its origin from living speech, must be presented in large measure in oral form by the teacher until
the pupil is able to draw for himself from the sources which are his birthright. Even in the upper grades, the teacher should occasionally make her contribution in the social situation which alone affords an adequate reason for oral reading in any class.
(b) In order that emphasis may be put from the beginning upon reading as thought-getting, and the pupil established early in habits of growingly wide and rapid reading, many easy arrangements of simple folk and literary material should be read even in the first year; and oral reading should be only one of various types of motor reaction to the printed page.
(c) Since every practice must be tested in the light of its service in the formation of a reading habit at once accurate, appreciative, and rapid, care must be taken that increasingly extensive silent reading be stimulated, throughout the grades, by many motivations: in the light of the entire curriculum, of local and world affairs, of analogies and contrasts of theme and treatment, of group interests, of individual interests.
(d) It follows that wide variation of individual range of reading is inevitable, even desirable.
(e) Oral reading, to the ends of fuller appreciation of literary values, more nearly complete identification with the human experience reflected in the literature read, and the development of personality through luminous expression, has its place throughout the grades. But its declared ends should be social, never formal; it should comprise only a relatively small part of the child's reading; it should concern itself only with pure literature; it should illuminate such literature by reflecting its emotional, imaginative, and artistic values.

\section*{GEOGRAPHY}

In adjusting his life to his physical environment man has accumulated much knowledge about the resources and conditions of the earth which make them of most use to him. Progress has depended much upon the adjustment man has made to these earth controls. Geography is made up of this useful body of experience in discovering the resources of the earth and in discovering and inventing ways to use them.

In the geography for the elementary school, selection is necessarily limited to those elements most useful in understanding our relationships to the various regions of the earth and to the peoples of those regions.

The earth contains a wealth of natural resources, but it imposes certain unchangeable conditions under which these resources may be made available. Man must discover these resources and adjust himself to the conditions under which they may be used before he can benefit by them. He finds coal in some regions; he mines it and distributes it as it is needed. Cotton grows well in some regions only; enough must be grown in these regions to supply the needs of all. Some climates are cold; man adjusts himself to their rigor by the use of proper food, clothing, and shelter. Rainfall is insufficient for agriculture in some regions; man resorts to irrigation and reclaims some of these regions. Routes of travel follow waterways or land formations offering least resistance. People make their homes where conditions offer the most favorable opportunities for living. The surplus produced in one region is exchanged for the surplus different in kind from other regions. To some regions many people are attracted by climatic conditions or by the properties of water particularly favorable to health. Numerous mountains, gorges, waterfalls, forests, and other land and water forms are visited because of their peculiar beauty or grandeur or other unusual character. Everywhere man's life is a response to the controls of climate, distance, and possibilities of exchange and travel, determined by the very nature of the earth. Geography furnishes us the results of man's experience in making these responses or adjustments.

For the elementary school, those elements must be selected which most clearly have to do with the everyday life needs of all.

\section*{THE USES OF GEOGRAPHY}

The study of geography yields two kinds of information, practical and interpretative.

Practical knowledge as applied to agriculture, mining, and industries using immediately available raw materials, has to do with local resources, climatic controls, and market facilities. For trade and transportation the practical knowledge required is that of sources of surplus raw materials, centers of industrial production, markets, trade customs, and routes and conditions of transportation. For travel as recreation the practical knowledge needed is that of interesting features of climate, land and water forms, plant and animal life, and of the life and work of peoples of different regions of the earth. Such information is called practical because it is directly helpful in determining the action of those engaged in any of those pursuits of business or pleasure.

Interpretative knowledge is that which provides an understanding of the dependence of man upon earth resources and the relationships among peoples in making these resources available. All of that information which is practical is at the same time interpretative. But there is much contributed by geography study which is not directly practical in the sense in which the term is here used. Such studies include information concerning the sources of the various products which we use but do not produce, the routes of travel by which they come to us, the markets to which our surplus products go and the routes by which they go, the earth conditions which make these differences in production and which determine methods of transportation, and the life conditions, occupations, recreations and characteristics of the peoples living in those regions distant from us yet related to us by exchange of products and often in many other ways. Interpretative values lie also in knowledge of the earth controls that have determined much in the acts of historic peoples who have contributed to the development of the race and through which we are helped to understand the life currents of our own time. All interpretative knowledge is social in character, helping us to a fuller appreciation of human interdependence. Geography helps us to realize how we ourselves are living more comfortably and happily because of the products we receive from the work of others in all parts of the world, and how our products in turn are useful to many of them. Not only is this true of material commodities of exchange, but also of much in music, art, literature, and other forms of recreation which we interchange.

The work in geography in the sixth, seventh, and eighth grades becomes a definite unit in itself, distinct from other subject matter presented. The purpose is (1) to emphasize our relation to other regions of the world by pointing out the existing interdependence and the needs for a better appreciation of the people, and (2) to make clear those geographic factors which condition our relations.

\section*{BIBLIOGRAPHY}

Allen, "Industrial Studies-Asia, South America, Europe." Brigham-McFarlane, Book II. American Book Company.
Bowman, I, "South America." Rand-McNally Company.
Carpenter, "Asia." American Book Company.
Carpenter, "Africa."
Carpenter, "Australia."
Carpenter, "Europe."
Carpenter, "North America."
Carpenter, "South America."

Carpenter, "How the World is Fed."
Carpenter, "How the World is Clothed."
Carpenter, "How the World is Housed."
Dodge, "A Reader of Physical Geography."
Freeman and Chandler, "World's Commercial Products." Ginn \& Co.
Frye-Atwood, Book II. Ginn \& Co.
Geographic News Bulletin. U. S. Bureau of Education.
Hardy, "Plant Geography." Oxford Clarendon Press.
Herbertson, "Man and His Work," Block, London.
Huntington, "Asia." Rand-McNally Company.
Huntington and Cushing, "Principles of Human Geography." John Wiley \& Sons.
Huntington \& Williams, "Business Geography." John Wiley \& Sons.
"Human Geography," Book I and II, Smith. John C. Winston.
Keller \& Bishop, "Commercial and Industrial Geography." Ginn \& Co.
"Little Journey Series," F. J. Koch. A. Flanagan Co.
McMurry \& Parkins, "Advanced Geography." Macmillan Company.
Newbigin, "Animal Geography," Oxford Clarendon Press.
"New Geography," Book II, Fry-Atwood. Ginn \& Company.
"Northern Europe," M. A. L. Lane. Ginn \& Company.
"Our Little Cousin Series," M. H. Wade. Page Company, Boston.
"Peeps at Many Lands," Eliz. Greirson. Macmillan Company.
Rocheleau, "Geography of Commerce and Industry." Educational Pub. Co.
Redway, "All Around Asia," Scribner.
Stanley, "In Darkest Africa."
Stoddard's Lectures.
"Strange Lands Near Home," M. A. L. Lane. Ginn \& Company.
Smith, J. Russell, "Commerce and Industry." Holt \& Co.
Smith, J. Russell, "World's Food Resources." Holt \& Co.
Tarr-McMurry, Book II. Macmillan Company.
"Toward the Rising Sun," M. A. L. Lane. Ginn \& Company.
"The Wide World," M. A. L. Lane. Ginn \& Company.
"Under Sunny Skies," M. A. L. Lane. Ginn \& Company.
Winslow, "United States," D. C. Heath.
Winslow, "America's Neighbors."
Winslow, "Distant Countries."

\section*{OUTLINE OF CLIMATOLOGY}

\section*{1. High Mountain Regions or Coloraboan Climate}
I. Location.
1. The high mountain regions of the world.
2. Places: Rocky Mountains in N. A., 10,000 ft.; Andes in S. A., \(6,000 \mathrm{ft}\).; Alps and Kiolen Mts. in Europe, \(6,000 \mathrm{ft}\).; Caucasian and Himalayan Mts., Hindu Kush, etc., in Asia. In Africa, Mt. Kilimanjaro and Mt. Kenia.
II. Climate.

Cold niights, and warm, sometimes hot, days in the sunshine. Two seasons a day. The sun shines brightly and produces considerable heat.
Data for Graphs of Temperature and Rainfall for Coloradoan Climate
Corona, Colorado, \(12,000 \mathrm{ft}\).


Lake Moraine, Colorado, \(10,000 \mathrm{ft}\).
Temperature, degrees \(\quad \begin{array}{llllllllllll}22 & 21 & 26 & 33 & 40 & 47 & 50 & 53 & 54 & 47 & 37 & 29\end{array}\)

III. Plants or Vegetation.

Plants must adapt themselves to the sudden changes of temperature from 90 degrees in the sun to 24 degrees or lower at night.
1. The winds blow a great deal, which causes the moisture in the plants to evaporate so the plants have to be able to retain the moisture and are therefore peculiar in structure, as follows:
a. They are spine-like cactus.
b. Hairy leaves, as sagebrush, greasewood, mountain sage,
c. Cattle eating this oily vegetation grow sleek and shiny, the milk is flavored with the oil, and cheese made from the milk has a peculiar flavor. Swiss cheese cannot be made in low countries. Goats and sheep are also raised in these regions. The milk of these animals is flavored with oily grasses, the hair and wool have a distinctly glossy appearance and is finer in texture. Other animals found here are mountain goats, alpaca, mountain sheep, chamois, yak.
References:
Robbin, "Climate and Vegetation of Colorado," Vol. 49. Botannical Gazette.
Hardy, "Plant Geography," Chap. 19, 20, 21.
Newbigin, "Animal Geography," Chap. 4.
IV. Industries.
1. Agriculture is limited because of lack of space and heat and short growing season. Crops do not ripen. Grass and potatoes grow well. This is the native region of potatoes. Turnips, lettuce, carrots, radishes, and peas do very well. They have a milder, sweeter taste than when grown on lowlands.
2. Grazing and mining are two most important industries here.
3. Exports and imports.
4. Cities or towns: Leadville; Cripple Creek; Corona; Cuzco, Peru; Lapaz, Bolivia; Murren, Switzerland; Quito, S. A. Towns are scarce, and usually small because there are only a few things people can do to make a living; there are only a few places where cities could be built. The climate is too severe.
V. People.

Study mountains of Colorado and Switzerland. The population is scanty, but the people are rugged, brave and industrious, overcoming the climate's conditions and adapting themselves to its changes. Study Incas.
VI. Maps and Graphs.
VII. Study Gold and Silver, Lead and Zinc.

\section*{2. Nevadan or Sagebrush Climate}
I. Location.
1. Lowlands of Colorado.
2. Great Basin in N. A.
3. Patagonia, S. A.
4. Central Asia, Desert of Gobi to Caspian Sea.
5. Central Spain.
II. Climate.
1. Arid climate in prevailing westerly region. Semi-desert region, dry and warm, with sudden changes of heat and cold.
2. Temperature averages from 50 to 60 degrees F.
3. Usually brief vegetation season with short, heavy or fine drizzling rains.
III. Reasons for Nevadan Climate.
1. In Eastern Colorado, where there are rainy summers and springs, with dry falls and winters.
2. It is not the amount of rainfall so much as when it occurs. In Eastern Colorado the greater amount of rain ( \(76 \%\) ) falls
during the growing season. In Western Colorado \(50 \%\) of rain in summer.
3. All parks sloping eastward get greater amount of rains in summer.
4. North Park, and other parks, get \(70 \%\) in summer.
5. Best to have most rainfall in spring and summer.

Reasons for summer rains in Eastern Colorado-Monsoon influences. Great Basin is heated all over. Winds drift from Gulf toward heat. Little moisture, except on eastern side of mountains. Western side receives little rain from east winds. Thunderstorms often occur.
Air rising and condensing in Great Basin blown by westerly winds, so there is wet season in winter in Great Basin and dry on eastern plains. Steppes of Russia have summer rains. Asia is large and interior is far from the sea, similar to Great Plains. Desert of Gobi, summer rains. Patagonia, winter rains.
IV. Plants.
1. Summer rain brings grass. Every steppe or plain has summer rain.
2. Gramma grass, buffalo grass in Eastern Colorado.
3. On western slope, where there is more winter than summer rain, perennials, like sagebrush, thrive better than grass and annuals. Patagonian Plain of "Sagebrush" type.
V. Industries.

Grazing.
Dry farming.
Commerce.
Desert of Gobi separates East and West Asia, is surrounded by mountains similar to Great Basin. Westerlies affect country open to sea.
Patagonia is dry because westerlies lose moisture on western side of Andes. Southern South America is narrow, so is never overheated. Similar to Washington, east of Cascades. Rain falls throughout year but mostly in winter. Sagebrush flourishes and sheep raising is important.
Vi. Resources of Nevadan.
1. Cattle in Eastern Colorado feed on grass.
2. Sheep on western slope feed on woody vegetation and grass.
3. Sheep industry is most flourishing in sagebrush region.

Sheep and goats-Gobi, Patagonia.
Horses and cattle on grass lands not browsers as sheep and goats.
Great plain of Colorado. Chinooks, dry winds.
Alberta open grassland.
Chinooks make Eastern Colorado more of health resort, dry winters.
4. Industries.
a. Herding. Cattle, sheep, horses, camels.
b. Farming. Dry and irrigated. Crops adapted to dry farming are plants from dry regions. Wheat, alfalfa, white Australian corn (silo), Mexican beans, Sudan grass from Sahara.
c. Tropical plants will thrive in temperate climates if crop will ripen in one-half year.

Data for Graphs of Temperature and Rainfall for Nevadan Climate, North Latitude
Greeley, Colorado-Great Plains Bunch Grass Type



Pocatello, Idaho-Great Basin Sagebrush Type
Temperature, degrees............. 29.28 29 28 38 45

Silver City, Oregon-(Great Basin Type)
Temperature, degrees.............. 30 29 \(29 \begin{array}{llllllllllll}31 & 36 & 43 & 50 & 56 & 63 & 62 & 53 & 45 & 36\end{array}\)
Rainfall, inches........................... 1.2 . 8 1.0 1.0
Denver, Colorado, Elevation 5,280 ft. (Great Plains Type)

Rainfall, inches.......................... . 7 . 5
Pueblo, Colorado, Elevation 4,650 ft. (Great Plains Type)

Rainfall, inches............................ . 5 . \(4 \times\). 5

\section*{Nevadan Climate, South Latitude}

Rawson 43 51' S. 65 W. (Great Basin Type)
Patagonia-
Dec. Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v.
 Rainfall, inches.......................... . 6
Santa Cruz 50 S. and 69 W. (Great Plains Type)
Patagonia-
Temperature, degrees.............. 54 61 645052
 References:

Hardy, "Plant Geography," Chap. 14 and 15.
Newbigin, "Animal Geography," Chap. 3.
Hudson, W. H., "Idle Days in Patagonia."

\section*{3. Mississippian}

This is the most important region of the world because of its immense variety of products.
I. Location.

East side of continents. Between 32 degrees and 48 degrees north latitude. Interior of Europe.
II. Places.

Eastern U. S. from Atlantic to 100dth meridian, between 32 degrees and Great Lakes, Asia, Chinese Empire north of 32 degrees to the mountains west of Japan and Korea.
Europe, Southern Russia, Bulgaria, Roumania, and south and central Germany, Czectro, Slovakia, Hungary, Jugo Slavia except coast, Austria, North Italy, Po Valley.
(Much time should be given to detailed study of these places.)
iII. Climate.

Winters and summers-Hot summers, cold winters.
Winds, Westerly but rain due to temporary "lows" bringing sea winds.
Rainfall-Rainfall 25-60-mostly in spring and summer.
Data for Graphs of Temperature and Rainfall for Mississipian Climate Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v.
Bloomington, Ill.
Temperature, degrees. \(\begin{array}{llllllllllllll} & & 29 & 25 & 24 & 39 & 53 & 64 & 72 & 76 & 73 & 68 & 56 & 40\end{array}\)

Chestertown, Maryland
Temperature, degrees \(\begin{array}{lllllllllllllll} & \cdots & \cdots & 35 & 33 & 32 & 43 & 51 & 63 & 71 & 76 & 74 & 68 & 56 & 46\end{array}\)

Little Rock, Arkansas
Temperature, degrees.... \(\quad \begin{array}{lllllllllllll}44 & 41 & 44 & 53 & 63 & 70 & 77 & 81 & 79 & 73 & 63 & 51\end{array}\)

IV. Vegetation.

Forest. Reasons for forests.
Prairies. Reasons (Due to water soaked soil).
V. Products.

Wheat, corn, fruits, animal products, coal, copper, and iron.
VI. People.

Characteristics, and one or more famous persons in each place studied.
ViI. Trade.

Rivers, lakes, canals, and railroads.
Exports, imports.
ViII. Cities.

New York, Chicago, Buffalo, Cleveland, Philadelphia, Baltimore, Pittsburgh, Boston, Peking, Shanghai, Tokyo, Yokohama, Bucharest, Buda Pesth, Belgrade, Milan, Lyons.
IX. Make maps and locate countries of this climate all over the world. Make graphs of temperature and rainfall of typical places in this climate.
References:
Hardy, "Plant Geography," of Temperate Deciduous Forests. (Except British Isles and France.)
Magazine, "Public Schools," Vol. 1 (June, 1915, pp. 11).

\section*{4. Californian Climate}
I. Location.

Californian climate is found on the western coasts of continents, between 30 degrees and 40 degrees of latitude. Europe up to 44 degrees. U. S. Central and south coast of California, Valley of California.
II. Seasons.

There are two seasons, the rainy season and the dry season. The rainy season is in winter when the land gets cool enough to form the moisture into rain. There is little snow. The rain falls in showers, then the sun comes out. In Los Angeles there are only forty rainy days in the year. Because there is so much sunshine in this climate there are many luscious fruits. In California there are more than 300 sunny days in a year. The countries of the world that are in the Californian Climate are:
1. Asia-Coast of Holy Land.
2. Australia-Southwestern, Southeastern, Victoria.
3. Africa-Southwestern coast in Cape Colony.
4. South America-Central part of Chile.
5. Europe-Mediterranean basin and Atlantic coast of Spain and Portugal.
6. North America-Coast of California.
7. Africa-N. Algeria, Morocco.
III. The Big Trees of California.

The big trees grow on the western side of the Sierra Nevadan mountains. The peaks of these are covered with snow which melts and the water runs down the slope, giving plenty of water to these great trees. There is also plenty of rain for them. There are two great regions which have been made into National Parks. One is Yosemite National Park, the other is Sequoya National Park. Both are near the San Joaquin Valley. On the eastern side of the mountains is a place called "Death Valley," where rain seldom falls. In Californian climate the rainy season is in the cooler part of the year when the sun is farthest from the tropic. In the northern hemisphere the rainy months are November, December, January, and February. South of the equator the rainy season is in May, June, July, and August.
IV. Cities.

Most of the cities of the Californian climate are seaports.
In California are San Francisco, San Diego, Los Angeles.
In Chile are Valparaiso, Santiago.
In South America is Cape Town.
In Australia are Perth, Adelaide.
In Portugal are Lisbon, Oporto.
In Italy are Naples, Rome, Genoa.
In Spain are Malaga, Cadiz, Barcelona.
In France are Marseilles, Mentone, Nice.
In Greece is Athens.
In the Holy Land is Jerusalem. Study each country with its cities.
V. Vegetation.

No specially good season, dry and hot.
No specially bad season, wet and cool.
Trees-Thick-leafed evergreens.
Kinds-Olive, holly, English walnut, almond, oak, cork, evergreen, oak, mulberry, laurel.
Plants-Hard wheat, grapes.
Animals-Sheep with silky wool, angora goat with silky wool, silkworms.
VI. Study nuts, olives, fruits, wine, quicksilver.

\section*{Data for Graphs of Temperature and Rainfall for Californian Climate}

Los Angeles, California Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N’v. Temperature, degrees............ 56 Rainfall, inches........................ 3.8 2.7 2.6 2.5 1.2 .5
Perth, Australia
Temperature, degrees............ \(71 \begin{array}{lllllllllllll}76 & 76 & 76 & 73 & 68 & 63 & 58 & 55 & 55 & 56 & 62 & 67\end{array}\)

Algiers, Algeria
Temperature, degrees............. 55
Rainfall, inches......................... 5.7 5.0 4.5 4.1 3.2 2.5
Valparaiso, Chile

Rainfall, inches......................... 1.0 .0 \(\quad .0\)
Cape Town, So. Africa
Temperature, degrees............. 66

Naples, Italy
Temperature, degrees............ 47 48 540 50 56
Rainfall, inches
\(\begin{array}{llllllllllll}4.0 & 3.5 & 3.0 & 3.0 & 2.5 & 1.5 & 1.2 & 0.8 & 1.1 & 2.5 & 4.0 & 5.0\end{array}\)
References:
Hardy, "Plant Geography," "Mediterranean Woodland."
Schimper, "Plant Geography," "Warm Temperate Regions with Moist Winters."
Hogarthis, "Nearer East," Chap. 2 and 14.
Ellsworth Huntington, "Palestine and its Transformation."

\section*{5. Oregonian Climate}
I. Location.

On the west coasts of continents between forty degrees and fifty degrees of latitude. Because it has a higher latitude it is cooler than the Californian climate and has more rain. It has fewer days of sunshine, but the days are longer in summer and shorter in winter than in Californian climate. Places that are in the Oregonian climate are: Oregon, Washington (west of Cascades), Southern Chile, Northern Spain and Portugal, France, Ireland, England, New Zealand, Tas-
mania, Belgium, Germany, and Denmark. There are two regions, wet and less wet. The wet region is west of the mountains along the coast in U. S. and New Zealand; sea exposures facing west are all wet in Oregonian climates.
II. Less Wet.

In the Willamette Valley and in the sheltered region we find grain and fruits. We do not find so much grass or dairy products. Sheep are raised in Oregon, Washington, England and New Zealand. In the Oregonian climate we find the most healthful regions for white folks. Blonds especially thrive in this climate. The death rate in Portland, Oregon, is lowest, which is probably due to low infant mortality due to cool summers. Then comes Seattle, Tacoma, Christ Church in New Zealand, and Tasmania. Children do well because there is no great heat, which is hard on infants. Old people enjoy this climate, as it is not too hot or too cold. Blonds came originally from Northwestern Europe, which is Oregonian. People, like plants, thrive best in their native climate. They adapt themselves to foreign climates, but never do their best in them. Some transferred plants are potatoes, native of Southwestern Chile, hops, and apples, which still do their best in Oregonian climates.
iII. Cities.

London, Paris, Hamburg, Portland, Oregon; Seattle, Victoria B. C., Auckland and Wellington N. Z., Hobart in Tasmania, Eureka, California.
(See magazine Public Schools, Vol. 1, Page 11, May, 1915, for larger treatment of Oregonian climate.)
iV. Wet Region.

In the wet region it rains all the year round, but the heaviest rains are in winter. The heaviest rainfall is at Glenora, Oregon. The annual rainfall is 136 inches. In the wet region we find very large trees and great forests. There is also plenty of good grass, but very little grain or fruits, because there is not enough sunshine to ripen the fruit or the grains. Occupations of the wet region are: grazing, dairying, and lumbering. Here we find the largest lumber mills in the world, along Puget Sound. The trees are mostly evergreens, such as Douglas fir and Oregon pine.
V. Study Dairying and Lumbering.
VI. Maps and Graphs.

\section*{Data for Temperature and Rainfall Graphs for Oregonian Climate}

Valentine, Ire., W'rd


Seattle, Wash., W'rd
Temperature, degrees \(\quad . \quad \begin{array}{llllllllllll}43 & 41 & 42 & 45 & 50 & 55 & 60 & 64 & 64 & 57 & 52 & 46\end{array}\)

Portland, Ore., L'rd


Greenwich, Eng., L'd


Christ Ch., N. Z., L'd
Temperature, degrees... \(\quad \begin{array}{lllllllllllll}63 & 61 & 61 & 57 & 52 & 50 & 49 & 49 & 43 & 46 & 49 & 54\end{array}\)

Hokitita, N. Z., W'd
Temperature, degrees


\section*{6. Floridan Climate}
I. Location.
a. East coast of continents.
b. Latitude \(23 \frac{1}{2}\) degrees north and south.
c. Places.

In North America, southeastern states, south of 32 degrees parallel, including eastern narrow coast of North Carolina and Georgia and Eastern Mexico. West as far as Corpus Christi, Texas.
In South America, from Rio de Janiero to La Plata, west to Paraguay.
In Asia, from Hong Kong to Shanghai.
In South Africa, from south point up to Lorenzo Marques on east coast.
In Australia, from Sidney to Tropic of Capricorn.
Winds.
In trade and wind belt. Heavy rains in consequence. Heaviest in summer, because belts shift to the equatorial in winter. No dry season. Trades shift over here most in summer, east in winter.
ili. Vegetation.
Plant life under ideal conditions. No dry season. Thick-leafed evergreens, tea, mulberry, sugar cane, rice, cotton, sweet potatoes, oranges and other citrous fruits.
IV. Cities.

Hong Kong, China; Hamilton, Bermuda; Durban, Natal; Brisbane, Australia; Mackey, Australia; Rio de Janeiro, Brazil; Sao Paulo, Brazil; Asuncion, Paraguay; Jacksonville, Florida; Miami, Florida; Tampa, Florida; New Orleans, La.
V. People.

Population dense, due to slight changes of temperature, and easy life conditions.
VI. Industries.

Study.
1. "Essentials of Geography." Agriculture, pp. 120-123; Cities, pp. 126-128, 361-362.
2. Tea, cotton, rice, silk, phosphate rock, fruits.
VII. Give two famous persons of each country.

Give characteristics of people.
VIII. Maps and Graphs.

Data for Temperature and Rainfall Graphs for Floridan Climate
Hatteras, N. C.
Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v.


Ft. Myers, Fla.


Pt. Eads, La.
Temperature, degrees. \(\begin{array}{llllllllllllll} & -\cdots & 58 & 56 & 57 & 62 & 68 & 75 & 80 & 83 & 82 & 80 & 73 & 66\end{array}\)

Miami, Fla.
Temperature, degrees. \(-\cdots \quad \begin{array}{llllllllllll}6 \times . . . & 69 & 65 & 67 & 71 & 74 & 76 & 81 & 82 & 82 & 81 & 78 \\ 74\end{array}\)

Galveston, Tex.
Temperature, degrees \(\quad-\quad . \quad . \quad . \quad . \quad 57 \quad 53 \quad 56 \quad 62\) 69
Rainfall, inches \(\begin{array}{llllllllllll}3.8 & 3.7 & 3.1 & 3.1 & 2.9 & 3.3 & 4.6 & 4.0 & 5.1 & 5.7 & 4.3 & 4.0\end{array}\)
References:
Schimper, "Plant Geography," Chapter on warm temperate regions with summer rain.

\section*{7. Caribbean Climate \\ The Chief Tropical Climate}
I. Location.

Usually toward the tropics in the Torrid Zone, Lat. 10 degrees \(231 / 2\) minutes.
1. Places.
a. Nearly all of Brazil, all of the West Indies, and Northern South American coast.
b. Central Africa, except Congo Valley and West coast.
c. Coast of India, Ganges and Indus Valley.
d. Indo China, Philippines, North Australian coast, and Hawaiian Islands.
II. Dry 3 to 6 months. Wet the rest of the time.

No changes of temperature to speak of.
Dry season in winter when sun is farthest away.
Drier \({ }^{\circ}\) on leeward side of islands.
III. Vegetation.

Plenty of grass.
From forest to grass, according to rainfall. Deciduous due to dry season; not cold.
References:
Savanna and Monsoon, chapters in Hardy's Plant Geography. Schimper's Plant Geography, "Tropical Regions with Dry Season."
IV. Animals.

Cattle are present because of luxuriant grass.
V. Cities.

Manila, Havana, Kingston, Jamaica, Calcutta, India, Mandalay, Burma.
VI. Crops.
VII. Industries.

Products. "Essentials of Geography," West Indies, pp. 216-217; Coffee, p. 227; Cacoa, p. 226; India Tea, Silk, p. 352; Indo China, p. 354; Central Africa, Northern Australia, Philippines, etc., pp. 195-197; Hawaii, p. 193.
Cane sugar and beet sugar manufacturing.
VIII. Maps and Graphs.
IX. Study intensively the Panama Canal.

\section*{Data for Temperature and Rainfall Graphs in the Caribbean Climate}

Alfred, Mauritius Island. Dec. Jan. Feb.Mar.Apr. May June Jly. Aug.Sep.Oct.N'v.
Temperature, degrees..... \(78 \quad 79\) 78 78

Rainfall, inches..................5.2 \(\quad 7.2\) 6.1 8.6 5.9 4.0
Guatemala, Guatemala, C. A.
Temperature, degrees...... \(61 \quad 61 \quad .62 \quad 66\)

Antigua, St. Johns
\(\begin{array}{llllllllllllll}\text { Temperature, degrees...... } 77 & 75 & 76 & 77 & 78 & 79 & 80 & 80 & 81 & 80 & 80 & 78\end{array}\)
Rainfall, inches..................3.7 \(3.4 \quad 2.4 \quad 2.3\) 3.6 4.6
Majunga, Madgascar Island
\(\begin{array}{lllllllllllllll}\text { Temperature, degrees...... } 79 & 80 & 80 & 82 & 81 & 78 & 75 & 75 & 76 & 78 & 80 & 81\end{array}\)
Rainfall, inches.................9.1 16.1 17.1 8.7 3.1 \(\quad .2\). 0
References:
Hardy, "Plant Geography." Chapters 5 and 7.
Newbigin, "Animal Geography." Chapter 6.
Kipling, "Mandalay."
O. Henry, "Cabbages and Kings."

Conrad, Joseph, "Nostromo."

\section*{8. Mexican Climate \\ A Dry, Tropical Climate}
I. Location.
a. Between the Floridan and Arizonian regions. It is sometimes called the Thorn-belt region.
b. Places.

In North America is Western Northeast Mexico.
In South America is Southwest Brazil.
In Asia. The Deccan in India.
In Africa, South Central part also N. E. part.
See Hardy-Caatinga or Other Forests-E. Africa.
II. Climate.

The climate is hot and dry, but has more rain than the Arizonian regions. There is little if any cold weather or frost.
III. Industries and Products.

Farming is carried on extensively if water can be had for irrigation. Grazing is the natural industry and is more profitable than farming. Mining in Mexico is especially important. Much lead, zinc and silver are obtained. Mexico leads the world in the production of silver. Other minerals are Mexican onyx (which has been used in our own state capitol building), iron ore, coal, quicksilver, jasper and other gems. Mexico is the second country in the world in production of copper. Minerals in India are: iron and coal; gold and rubies in Burma.
IV. Maps and Graphs.
V. Cities.

San Antonio, Texas; Pretoria, Johannesburg, S. A.; Bourke, Aus. References:
才O. Henry Stories of S. W. Texas.
Roosevelt, "African Game Trails." Hardy, "Animal Geography," Chapters 6 and 8.

\section*{9. Arizonian Climate}
I. Location.

Between 0 degrees and 32 degrees. On leeward side of mountain. Driest in world. True deserts.
II. Regions.

Arabia, Sahara, S. Persia, S. Arizona, S. W. Mexico, Central and N. W. Australia, N. Chile and S. Peru. Kalahari desert in Africa, Lower California, opposite Florida. Places in Sahara no rain for three or four years.
III. Climate.

Hot summers. Hottest in world in Arizona; 125 degrees to 135 in Sahara. Salton and Needles contend for hottest. Needles has three rainy days a year. Mild winter.
IV. Vegetation.
1. In struggle for existence cactus and euphorbia lose leaves and stems to lessen evaporation.
2. Reduction of leaf surface, leaves covered with down. Yucca or soapweed for storage of water.
3. Plants have very long roots. Alfalfa extends down 30 to 40 feet.
4. Resting stage three or four years. If a rain occurs, plants will be growing well in three or four days. Bulbs store up food and water, and rest for a time.
5. Animals. Fleet of foot. Travel fifty or sixty miles a day to feeding grounds. They avoid enemies by "a get-away." Struggle for existence is great.

Sluggish kinds of animals-gila monster, reptiles, lizards. Little food for a long time.
6. Man.

Through stages of cultúre:
a. No beast of burden. Bushmen of Kalahari, Aborigine of Australia.
b. With beasts of burden. Navajos, Arabs, warlike people. These people face fearful chances in struggle for existence. Pestilence among herds, dry water holes.
c. Irrigation. Egyptians, Peruvians and Babylonians. They worship the sun and rain for crops. Aztecs peaceful, almost civilized.

Data for Temperature and Rainfall Graphs for Arizonian Climate Omdurman, Nile Sudan
Lat. 15 deg. 38 min. N. Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v. Temperature, degrees. \(\quad \begin{array}{llllllllllll} \\ \quad . . . & 76 & 73 & 80 & 83 & 87 & 93 & 90 & 90 & 87 & 90 & 90\end{array}\)

Cairo, Egypt
Lat. 30 deg. 4 min. N.
 Rainfall, inches...
Wadi Halfa, Sudan
Lat. 21 deg. 55 min . N.
Temperature, degrees........... \(63 \begin{array}{lllllllllll}59 & 63 & 71 & 81 & 88 & 91 & 91 & 89 & 83 & 82 & 70\end{array}\)
Rainfall, inches Drops fell 15 times in ten years.
Yuma, Arizona
Temperature, degrees.......... \(56 \begin{array}{lllllllllll}54 & 59 & 61 & 70 & 77 & 85 & 92 & 91 & 84 & 76 & 62\end{array}\)
Rainfall, inches....
10. Amazonian Climate

\section*{I. Location.}

These climates are found along the equator in the Doldrum belt. Places: The Amazon Valley, Kongo Valley, and Malay Archipelago, and Malay peninsula. The Doldrum belt is the rainy belt in the equatorial calms and follows the heat equator. It is in the region of winds.
II. Climate.

There is an excess of rainfall. Nearly every day there are heavy rains. In the rainy season the rains are heavier and last longer than in the less rainy season. The heat is intense, steamy and sultry, and favorable to plant growth. There is a struggle for light. Always about twelve hours of daylight. There are no seasons. The trees shed individual leaves.
III. Plants.

There are heavy forests all over these regions. The trees are evergreen with broad, thick leaves. Fruit is found in all stages on the same tree. The bark on the trees is very thin because they do not need to preserve moisture. This protects the rest of the plant from too much sun. Plants must have "air and sun as well as moisture, so we find plants growing tall with their foliage, their fruits and blossoms near the tops of the trees. There are three layers of vegetation: canopy, climbers, undergrowths.
IV. Animals.

The animals of these regions live in trees so they can get food. Snakes, birds, monkeys, sloths and insects, parrots.
V. Productis.

Study rubber and quinine.
Rubber is obtained from eight or ten kinds of trees and plants. Mahogany, rosewood, ebony, cocoanuts, Brazil nuts, vanilla, pepper, quinine, allspice, cloves, and cinnamon.
VI. People and Industries.

We find the people of these climates very low in the scale. Pygmies in Africa. They need no shelter or clothing. Their food is found on the trees. There is no need of industry. The products of commerce are gathered by the natives for white men who live there only for a short time each year.
VII. Maps and Graphs.

Data for Temperature and Rainfall Graphs in Amazonian Climate Grand Bassum, Africa

Dec. Jan Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. \(\begin{array}{lllllllllllll}\text { Temp., degrees..... } 81 & 80 & 81 & 83 & 82 & 80 & 78 & 76 & 75 & 75 & 78 & 80\end{array}\) Rainfall, inches...4.3 1.6 1.6 3.3 \(\begin{array}{llllllllll} & 8.0 & 17.0 & 27.9 & 3.1 & .8 & 1.8 & 5.2 & 7.3\end{array}\) Sierra Leone, Africa

Lat. 8 deg. 30 min . N.
\(\begin{array}{lllllllllllll}\text { Temp, degrees...... } 79 & 79 & 80 & 80 & 79 & 79 & 78 & 76 & 75 & 76 & 77 & 78\end{array}\)
\(\begin{array}{lllllllllllll}\text { Rainfall, inches...1.3 } & .6 & .5 & 1.1 & 5.4 & 14.8 & 21.4 & 36.8 & 39.6 & 32.5 & 15.2 & 5.3\end{array}\)
Akassa, Nigeria, Africa
Lat. 4 deg. 20 min. N.
\(\begin{array}{lllllllllllll}\text { Temp., degrees...... } 79 & 78 & 79 & 79 & 80 & 79 & 77 & 76 & 76 & 76 & 77 & 78\end{array}\)

Ambonia Molucca Is., East Indies
Lat. 3 deg. 41 min. N.
\(\begin{array}{lllllllllllll}\text { Temp., degrees...... } 81 & 81 & 81 & 81 & 79 & 79 & 78 & 77 & 78 & 78 & 79 & 80\end{array}\)
\(\begin{array}{lllllllllllll}\text { Rainfall, inches...5.7 } & 5.6 & 4.5 & 5.4 & 10.9 & 20.5 & 23.9 & 23.3 & 16.1 & 9.1 & 6.9 & 4.1\end{array}\)
VIII. Cities.

Para, Brazil, Bolivia, Java, Monrovia, Liberia, Iquitos, Peru, Singapore, Strait Settlements.
References:
Roosevelt, "In the Brazilian Wilderness." Hardy, "Plant Geography." "Selvas." Schrimper, "Tropical Regions Constantly Moist."

\section*{11. Canadian Climate}
I. Location.

The Canadian climate is located on the east side and interior of continents, between the parallels of 50 degrees and the polar circle ( \(661 / 2\) degrees) north and south latitude. In North America, Canada, New Foundland and Central Alaska. In Europe, Sweden, Northern Russia. In Asia, Siberia.

\section*{Climate.}

Winters are long and cold, days are short. Snow falls and remains all winter. Cold is steady, the soil frozen. Temperature is lowest in the world. Summers are hot, but short; days are long. Rainfall is ample.
III. Life.

Plants are hardy. Trees are of the pine family, because the spiny leaves do not evaporate as much moisture as the broad leaves. In the fall the soil freezes and the moisture is held in the soil. Pines do not need as much moisture as broad leaves. Animals depend upon surroundings. The moose belongs to the deer family; eats conifers. Fur-bearing animals abound because of the cold. Animals take on lighter-colored coats in winter. See fur-bearing industry.
IV. Industries and Products.

Mining of nickel, gold, iron, and asbestos is important. There is lumbering in Sweden, Finland, Russia, and Canada. Trees are cut when the snows are on the ground and hauled to river banks. When the snow melts the logs are floated to the saw mills. The snow is so hard that men stand on the crust to cut trees. Paper pulp is an important product of Canada. Matches come from Sweden. Wood carvings and wooden ware are products of this climate. Fishing is an important industry.
V. Agriculture.

Grain ripens quickly due to long periods of sunshine in a day. The nights are too cool for corn to flourish. Wheat, potatoes, barley, rye, sugar beets in Southern Canada. Black earth in Russia is good for rye. Russia leads the world in grain production. The peasants eat black bread made of rye. Veg. etables of temperate zones abound. There is no cattle herding, but dairying is important. Because of cool climate grasses are long in summer. These afford pasture and hay for winter use.
VI. Paper.

Study paper making.
VII. Maps and Graphs.

Data for Temperature and Rainfall Graphs for Canadian Climate
Mayfield, Maine
Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v.
Temperature, degrees \(\quad \begin{array}{lllllllllllll} \\ \quad \cdots \quad . \quad 20 & 16 & 19 & 29 & 41 & 52 & 61 & 66 & 64 & 56 & 45 & 42\end{array}\)

Saranac Lake, N. Y.
Temperature, degrees \(\quad \begin{array}{llllllllllll} \\ -\quad . \quad . \quad 19 & 15 & 16 & 28 & 41 & 54 & 62 & 66 & 63 & 57 & 45 & 32\end{array}\)
Rainfall, inches. \(\quad\) 2.4 2.6 2.42 .8 2.1 2.9 4.1 4.13 .43 .22 .82 .8
Calumet, Mich.
Temperature, degrees.......... \(21 \begin{array}{lllllllllll}16 & 14 & 22 & 37 & 48 & 59 & 64 & 62 & 55 & 44 & 30\end{array}\)

Moscow, Russia


Montreal, Canada
Temperature, degrees_- \(\quad . \quad \begin{array}{llllllllllll}20 & 13 & 17 & 26 & 40 & 55 & 65 & 70 & 67 & 62 & 45 & 33\end{array}\)

References:
Hardy, "Plant Geography." "Taiga." Newbigin, "Animal Geography." "Taiga."
12. Alaskan Climate
I. Location.
1. On western coasts of continents between 50 degrees and 65 degrees of latitude.
2. Countries. Alaska, Norway, southern part of S. A., Scotland and Iceland, west coast of Canada, Faroc Islands, Denmark, and Falkland Islands.
iI. Climate.
1. Differs from Oregonian in that it has longer winters, shorter summers, longer days in summer, shorter days in winter.
2. The land is cooler than the sea for longer time. Longer rainy season, less sunshine, and the rays of the sun are not as bright or warm as in Oregonian climate.
3. Rainy days. Some places in Alaska there are 250 rainy days a year. 365-250 equals 115 days not rainy. In Denver we have 3,000 hours of sunshine in a year. In Alaskan climate there are often only 560 hours of sunshine. Chicago has 2,600 hours of sunshine. Falkland Islands have 300 rainy days.
4. The Alaskan climate is divided into two regions.
a. Coast Alaskan, 54 degrees 60 minutes; Chile, 50 degrees 54 minutes S . latitude.
West Norway up to Arctic Circle.
"Birds of Terra del Feugo."
References,
Alaskan Experimental Reports.
Harriman, "Alaskan Expeditions," Vol. 1 and 2.
Cockayne, "New Zealand Plants."
Subanarctic Islands of New Zealand.
b. Island Alaskan-Highlands of Scotland, Kerguelen, Falkland Islands, Turra Del Fuego, Fairees, Shetlands, Hebrides, Campbell Islands, Shetland Islands, Aleutian Islands.
There is a mountain wall near the coast of Alaska and Norway that cools the winds from the ocean, therefore the climate is very wet in summer and especially winter. The glaciers on the mountains help to cool the winds and make more rainfall
III. Plants.

The slopes of the mountains are heavily forested near the base. Timber line is 2,500 feet. Grass grows in abundance.
IV. Industries.

There is very little agriculture, because there is so little sunshine. Grain will not ripen. Dairying and herding and lumbering are carried on. In Norway the people use the rapid mountain streams for power. A great deal of manufacturing is done. They make woodenware, hardware, fish oil, cotton and woolen goods, and lumber. Cotton, linen, and woolen goods are made in Glasgow. Water power due to heavy rainfall.
Fishing: In all countries of Alaskan climate fishing is an important industry, because there are great quantities of food for the fish that swarm there to get food. There are also good harbors for fishermen to land in safety. Bergen, in Norway, in a great fish market. Mackerel, cod, herring, and oysters.
V. Cities.

Bergen, Norway; Sitka, Alaska; Punta Arenas, Chile; Fort William, Scotland.

Data for Temperature and Rainfall Graphs in Alaskan Climate
Sitka, Alaska
Dec. Jan. Feb. Mar. Apr. May June Jly. Aug. Sep. Oct. Nov.
Temperature, degrees \(\begin{array}{lllllllllllll} & 36 & 34 & 33 & 37 & 42 & 47 & 52 & 54 & 57 & 52 & 46 & 40\end{array}\)

Bodo, Norway
Temperature, degrees \(\begin{array}{lllllllllllll}37 & 37 & 28 & 32 & 37 & 46 & 52 & 55 & 50 & 44 & 35 & 33\end{array}\)
Fort William, Scotland
Temperature, degrees \(\begin{array}{lllllllllllll}38 & 40 & 40 & 42 & 46 & 52 & 56 & 54 & 52 & 43 & 41 & 40\end{array}\)
13. Polar Regions
I. Location.

Between the circles and the poles.
Places: Lapland, Greenland, Northern Iceland, Northern Russia, Northern Siberia, Northern Canada and Northern Alaska.
II. Climate.

Two types-Oceanic Arctic, Greenland, Spitzberger, N. Siberia. Continental Arctic, North America.
Temperature is very cold. The sun's rays are very slanting, there is little heat from the sun, and light is dim. Rainfall is abundant because of the oceanic position and very cold land surface. Fort Conger is very cold. It is always frozen and the winds have no effect.

There are two regions of Polar climate:
1. Marine Arctic. Greenland. Spitsberger.
2. Continental Polar or "tundra" region. Lapland, North Siberia, North Alaskan, Barren Ground, Canada.
In the marine arctic region the rainfall is very heavy, with much snow. Winds from warm currents blow against the snow and melt it. Much of the land is thus covered with glaciers.
iil. Vegetation.
There is very little land vegetation. A glacier apron. Mosses and lichens abound and give appearance of dry conditions. Perennials have waxy, downy coverings.
Oases in "tundra" are dry regions, not wet places.
IV. Animals.

Fur-bearing animals live in Continental Polar. They are peculiar in coloring, according to season. Weasels of summer form the ermine of winter. Protective coloring of both animals and birds is very noticeable.
V. People.

These regions are the homes of the Eskimos, Oceanic Arctic, and Laplanders in the Continental Arctic. These people are flesh eaters. Dogs for the Eskimos and reindeer for the Laplander are beasts of burden and main source of wealth. Contrast lives of these two people as to Arctic types.
VI. Maps and Graphs.

Data for Temperature and Rainfall Graphs in Polar Climate
Godthaab, Greenland
Dec.Jan. Feb. Mar. Apr. May Jun. Jly. Aug. Sep. Oct. N'v.
Temperature, degrees........... \(1814141421223237 \quad 43\)

Nova Zembla, Russia
Temperature, degrees \(\quad \begin{array}{llllllllllll} \\ \cdots & 5 & -7 & -15 & 5 & 20 & 23 & 24 & 42 & 42 & 30 & 20 \\ 16\end{array}\)
Rainfall, inches \(\quad\). 9 . 7 . 8 . 5 . 5 . 4 . 6
Sagastyr, Siberia
Temperature, degrees.......-29-35-44-28 \(\begin{array}{lllllllll}-29 & 16 & 33 & 40 & 38 & 32 & 5-25\end{array}\)
Rainfall, inches
Ft. Conger, Grinnell Land, W. Gr.
Temperature, degrees.........-32-39-47-30 \(-9 \begin{array}{llllllll}17 & 33 & 37 & 33 & 11 & -2 & -24\end{array}\)

References:
Hardy, "Plant Geography," Tundra.
Newbigin, "Animal Geography," Tundra.
Eskimo, Knod Rasmussen, "The People of the Polar North."
\(\Varangle\) DuChaillu, Laplander, "The Land of the Midnight Sun."

\section*{HISTORY}

The historical elements of value are those which are necessary for an appreciation by the boys and girls of our ideals and institutions. It is only through a study of social organizations and institutions that they come to appreciate the heritage left them by former civilizations.

The broad general aims of history are:
(1) To lead the child into the habit of thinking; the analysis and solution of problems.
(2) To lead the child into a knowledge of his historical inheritance.
(3) To lead the child to a fundamental understanding of American institutions and ideals.
(4) To develop the unity of all history and show the best in all the past and in all nations. To develop a world viewpoint.

\section*{REFERENCE BOOKS IN HISTORY}
\begin{tabular}{|c|c|}
\hline History of the United States (Text) & Beard \& Bagley \\
\hline The Story of American History & Blaisdell \\
\hline Child Life of Colonial Days. & Earle \\
\hline Elementary History of the United States. & Gordy \\
\hline Story of the Thirteen Colonies. & Guerber \\
\hline Colonial Days. & Gordy \\
\hline American Indians & Starr \\
\hline Four American Indians & Whitney \\
\hline Camps and Firesides of the Revo & Hart \\
\hline Stories of Useful Inventions. & Forman \\
\hline A History of the United States. & Gordy \\
\hline The Winning of the West. & Roosevelt \\
\hline Men Who Made the Nation. & Spark \\
\hline Expansion of the American People & Spark \\
\hline American Colonial History. & Ashley \\
\hline A History of the United States. & Bourne and Benton \\
\hline Colonial Days in Old New York & Earle \\
\hline How Our Grandfathers Lived & Hart \\
\hline Source Book of American History. & Hart \\
\hline Documentary Source Book of American History... & MacDonald \\
\hline Old Franciscan Missions of California & Anonymous \\
\hline A History of the United States. & Thwarte and Kendall \\
\hline A Short History of the United States & Bassett \\
\hline Pioneers of Land and Sea & McMurry \\
\hline Pioneers of the Mississippi Valley. & McMurry \\
\hline Pioneers of the Rocky Mountains and the West & McMurry \\
\hline Builders of Our Country. & Southworth \\
\hline Side Lights on American History & Elson \\
\hline Story of the English & Guerber \\
\hline Heroines Every Child Should Know. & Mabie and Stephens \\
\hline The American Girls from History & ..Sweetser \\
\hline Days and Deeds One Hundred Years Ago. & Stone and Fickett \\
\hline American Leaders & Walter Lefferts \\
\hline Grandfather's Chair & Hawthorne \\
\hline Story of Modern France & Guerber \\
\hline Hero Tales from American History & Roosevelt and Lodge \\
\hline Up from Salvery & Washington, B. T. \\
\hline Dawn of American History in Europe & ..Nida \\
\hline History of the United States. & Mace \\
\hline Plain Tales from American History. & Bassett \\
\hline Commerce and Industry & J. Russell Smith \\
\hline
\end{tabular}

\section*{GENERAL BIBLIOGRAPHY}

American Historical Association, Report of Committee of Eight. Scribners.
Freeman, F. A., "Psychology of Common Branches," Chap. VII. HoughtonMifflin.
Johnson, Henry, "Teaching History in Elementary and Secondary Schools." Macmillan.
Kendall and Stryker, "History in the Elementary School." HoughtonMifflin.
Committee on Reorganization of Secondary Education-U. S. Bureau of Education, Bulletin 1916, No. 28, Yearbook National Society 1 and 2.
Simpsnn. Mabel E., "Supervised Study in American History." Macmillan.
Tryon, "Teaching of History in the Junior and Senior High School." Ginn \& Company.
Van Wegenen, Marvin. J., "Historical Information and Judgments of Pupils in Elementary Schools." Teachers College Contribution to Education No. 101.

Wayland, J. W., "How to Teach American History." Macmillan.
Wilson and Wilson, "The Motivation of School Work." Chapter X. Houghton-Mifflin.

\section*{HOME ECONOMICS}

Aims of the Course:
1. To dignify the labors of the home.
2. To teach the proper selection of materials used in the home.
3. To teach the wholesome and economical use of these materials.
4. To establish sane standards of living-including simplicity, economy, cleanliness and forethought.
5. To conserve human life and energy.
6. To insure peace and happiness in the home of the future if not of the present.
The Scope of the Work:
1. Clothing:

The selection, purchase, making, repair, care, cleaning, and laundering of clothing.
2. Foods:

The selection, purchase, preparation, cooking, serving, keeping, refrigeration, and economic uses of foods, and the care of utensils.
3. Household Management:

The arrangement, use, care, furnishings and textiles for the kitchen, dining room, living room, bedroom, and bath room.
4. Home Care of the Sick:
5. Shelter or Housing:

Principles of location, renting or building, heating, lighting, ventilation, plumbing, drainage, furnishings.
6. Personal Hygiene:

Care of skin, hair, eyes, nails.
When, how much, and what food to eat.
Digestion of food.
Baths.
Shoes.
Hygiene of Clothing.

\section*{BIBLIOGRAPHY}

Bailey, "Domestic Science Principles and Applications." Webb Pub. Co., St. Paul, Minn.
Burton, "School Sewing Based on Home Problems." Vocational Supply Co., Muncie, Ind.
Bradhurst, "Home and Community Hygiene." Lippincott Company.
Campbell, "Domestic Science for Secondary Schools." Macmillan Company.
Chambers, "Principles of Food Preservation." Whitcomb and Barrows.
Cooley-Marshall, Winchell-Spohr, "Teaching Home Economics." Macmillan Company.
Frick, "Basic Principles of Domestic Science." Muncie Normal Institute, Muncie, Ind.
Grier, "School and Home Cooking." Allyn and Bacon, Chicago.
Hanna, "Home Economics in Elementary and Secondary School." Whit. comb and Barrows.
Hunt, "The Daily Meals of School Children." Bulletin U. S. Bureau of Education.
Harrison, "A Textbook of Home Nursing." Macmillan Company.
Mathews, "Elementary Home Economics." Little Brown \& Co., Boston.
McGown \& Waite, "Textiles and Clothing." Macmillan Company.
White, "Household Arts." Educational Board, Gary, Indiana.

\section*{MANUAL ARTS}

There is practically no basis of commonly accepted theory or practice on which to form a course of study. In other words there is no common understanding of the purpose and no common practice of instruction in the manual arts as exists in most of the older academic subjects. At least eight different objectives should determine the work in manual arts:
1. To develop handiness.
2. To promote the immediate carrying over of ideas into action.
3. To help encourage special interest and aptitudes, important for vocational guidance.
4. To provide a means for developing technical skill.
5. To provide a means for imparting technical knowledge.
6. To enable the pupil to apply the test of practice to some of his thinking.
7. To interest in school work those pupils to whom the traditional studies do not appeal strongly.
8. To create interest in the arts and industries without any reference to their vocational significance.

\section*{WOODWORK}

In this course it is assumed that the fifth grade is the beginning grade in this work but it is not to be taken as being the exact beginning for, in many instances, students who have had no previous woodworking, are taken into the other three grades.

\section*{PRINTING}

The aims of the work in printing, though prevocational, is to teach the fundamental principles of the trade and through typographical con-struction-paragraphing, capitalization, punctuation, spelling, accuracy, and division of words-better English. In the printshop the pupil is trained in type setting, proofreading and handling of the press. In addition to "straight copy" he assists in job work, tabular composition, commercial forms, and some display work which requires a knowledge of values and relation of paper and inks; cutting stock, involving mathematics; and design for which he must understand definite art principles. In studying the principles of design in printing he learns to distinguish between good and bad printing.

\section*{BOOKBINDING}

Bookbinding of an elementary nature-binding small volumes in one-fourth leather, in full cloth and in buckram; making photograph books, note books and small leather articles. The underlying idea in this course is to give children ideas regarding the nature of a book and the technique involved in a completed piece of binding. They, also, gain an appreciation of bookbinding as an art and the relation of bookbinding to the other arts. Besides the binding of books the children are given an opportunity to work on objects of interest to them, to their families or friends, or upon objects that may have a particular, or general, value to them.

\section*{SPELLING}

The study of spelling has value for the child just to the extent that the words learned are the words he uses or that he will use in the near future in doing the writing involved in carrying on the everyday affairs of life.

In making word lists distinctions between hearing, speaking, reading and writing vocabulary must be kept in mind. It is unwise to have a pupil spend the greater part of his sspelling time upon words that appear
only in his hearing, reading or speaking vocabulary. The words that a child needs to know how to spell are in the main the words that he uses in writing. While the words of the writing vocabulary are common to the hearing, speaking and writing vocabularies, the writing vocabulary does not by any means represent a random selection of words from the other groups but rather it consists of a relatively small minimum of the words most useful to the child in expressing his own thoughts.

The Horne-Ashbaugh Speller supplies lists of words for each grade. By calling attention to the recurrence of these words in written compositions and expressions, by making lists of the words pupils frequently misspell in written work and by requiring the use of words in sentences, the teacher will be able to keep the purpose and significance of spelling clearly before the children as well as provide for the use of words in their natural setting.

\section*{DEFINITIONS}

The definition is a device for testing or clarifying the pupil's knowledge of a word. It is frequently difficult for pupils to give and is not so vital as the use of a word in a sentence. Nevertheless it may be used to add variety and interest in the work. The logical definition of words involves a high degree of abstract thinking and should not be expected of children in the lower grades. It has been found that the rational method of defining words of children in the Fourth grade is by colloquial definitions. In the Fifth grade the use of synonyms becomes prominent and in the Sixth grade logical definitions are in the majority although definitions of other kinds are still common.

\section*{TRAINING IN THE USE OF THE DICTIONARY}

The knowledge of using the dictionary is essential to the development of independent power in acquiring pronunciation, meaning, use and spelling of words. Suzzallo in his "Teaching of Spelling" says: "First, the alphabet is reviewed to see if it is well within the child's easy habitual command. Then the child is sent to the dictionary to find simple words the spelling of which he knows. At first these words have different initials, to establish the simple principles of alphabetic order. Later, words beginning with the same initials are assigned, to show that the initial letter alone does not determine the place of a word in an alphabetical list. Thus the principles of alphabetical and subalphabetical arrangements are mastered. And last, words the spellings of which are doubtful to the child are given; and the child is taught to scan the pages till he finds them. Special exercises are given to show a child how the pronunciation (lesser, lessor; least, lest) or meaning will assist him to find the word when the spelling is in doubt (capitol, capital; limpit, limpid). Special exercises are given to show the child how to determine which is the preferred spelling when there are two.
"Exercises in finding pronunciation are given in the same careful way until each technique is taught,-preferred pronunciation, the interpretation of diacritical marks through the key words at the bottom of the page, the meaning of the accents, etc. Then the child is drilled until he can readily determine the meaning of a word. The abbreviations for the parts of speech are explained. He is encouraged to read all the meanings, avoiding those marked 'rare', 'colloquial,' or 'obsolete', and to select the most likely meaning with the aid of the examples of usage."

\section*{METHOD OF PRESENTATION}

The attention of the child is called to the whole word on the board or in the book. The word is pronounced by the teacher and, if quite unusual or unfamiliar, by the children.
1. The word is used in a sentence or defined.
2. The teacher writes the word on the board in syllables.

3 . The children pronounce the word separately and distinctly by syllables with a clear visualization of the letters of each syllable.
4. The attention of the children is fixed upon the familiar, unfamiliar, common and difficult parts of the words by picking out and associating them with familiar parts of other words.
5. The children are told to look away from the board and try to see it as it looked on the board.
6. The word is spelled orally by individuals or by the class.
7. Oral spelling is preceded by a clear and accurate pronunciation of the word.
8. The word is written several times.

Slavish obedience to this program is not necessary as Tidyman in "The Teaching of Spelling" says: "It is offered as giving the essentials of a spelling method, the order in which the several exercises should occur and the relative emphasis that each exercise should receive. It is highly desirable that each teacher work out her own plan of teaching spelling, which should be determined largely by the needs of her own particular group. The essential things to be accomplished in any preparation of spelling words are:
1. Recall or development of the heard, spoken, and written symbols of the word together with its meaning and use.
2. The clear, accurate pronunciations and visualization of the word by syllables.
3. An accurate auditory-speech-motor image of the word; and a definite hand-motor image."
Dr. Ernest Horn gives the following methods of learning to spell a word:
1. The first thing to do in learning to spell a word is to pronounce it correctly. Pronounce the word saying each syllable very distinctly and looking closely at each syllable as you say it.
2. With closed eyes try to see the word in your book, syllable by syllable, as you pronounce it in a whisper. In pronouncing the words be sure to say each syllable distinctly. After saying the word, keep trying to recall how the word looked in your book, and at the same time say the letters. Spell by syllables.
3. Open your eyes, and look at the word to see whether or not you had it right.
4. Look at the word again, saying the syllables very distinctly. If you did not have the word right on your first trial, say the letters this time, as you look sharply at the syllables.
5. Try again with closed eyes to see the word as you spell the syllables in a whisper.
6. Look again at your book to see if you had the word right. Keep trying until you can spell each syllable correctly with closed eyes.
7. When you feel sure that yon have learned the word, write it without looking at your book, and then compare your attempt with the book to see whether or not you wrote it correctly.
8. Now write the word three times, covering each trial with your hand before you write it the next time so that you cannot copy. If all of these three trials are right, you may say that you have learned the word for the present. If you make a single mistake,
- begin with the first direction and go through each step again.
9. Study each word by this method. Take special pains to attend closely to each step in the method. Hard and careful work is what counts.

\section*{DEVELOPMENT OF SPELLING CONSCIOUSNESS}

The development of a spelling consciousness is accomplished primarily through getting a strong positive impression of a correct form of a
word in presentation and in frequent repetition and use of this form until it is positively known and all danger of vagueness and uncertainty is passed. Another principle, of a general preventive nature, is never take a chance in spelling a word about which you have any doubt. There is nothing that more quickly and surely undermines the security of the spelling consciousness. A mistake made through carelessness will be repeated with increasing readiness until all feeling of certainty as to the correct form of spelling is lost. When in doubt about the spelling of a word children should be taught to use the dictionary, or in the lower grades to consult the teacher. Experiments show that this habit would have prevented nearly two-thirds of the spelling errors. If children gain a strong, vivid impression of the correct spelling of words and form the habit of looking up every word when it is first doubted, errors will be reduced to the minimum.

\section*{TESTING}

It is the problem of the teacher in spelling to locate difficult words, to determine their particular difficulty, to find when words have been learned and where further instruction or drill is needed, to locate individuals who need special help and to determine the particular help needed. To accomplish these things it is necessary to use three types of tests. The preliminary test, the main test, and the review test.

The preliminary test is a test given before instruction is begun to find out what words children already know, what words are difficult, how time should be disposed among the words of the lesson and what the particular spelling difficulties of the words are. For the saving of time the preliminary test should consist of the dictation of isolated words. Tidyman found it well to include in the preliminary test the new words for a week and to give the test on the Friday preceding the week in which the words were taught. In recording errors as much work as possible should be placed upon the children. Above the third grade experiments show that the teacher can spell the words back to the children and rely upon their judgment and honesty for marking. The tabulated result of the preliminary tests will consist of the number of times each word was misspelled. By comparing these with the number of pupils present it will be possible to determine the relative difficulty of each word. The determination of the particular spelling difficulty of each word is also very important. To find this the teacher should look over the papers for the most frequent form of misspelling or the part of the word causing the greatest difficulty. In these tests, as in all other tests, children should be taught to discover for themselves the hardest words as well as the parts of words causing the greatest difficulty. For this purpose individual word lists should be prepared, containing words missed.

The purpose of the main test is to find out where further drill is needed and to discover what pupils need special help. This test follows the instruction and drill periods. It is customary to use a column test for this purpose. The sentence test has some advantages over the column test and also some disadvantages.

The review test should occur occasionally as the need for review demands and should be of the sentence sort. The review tests occur after long intervals to show retention and to give children additional drill in the use of words.

\section*{STANDARD TESTS AND SCALES}

The important standard tests are the Buckingham Test, 50 words; the Buckingham revision of the Ayres Scale; the Ayres Scale; Ayres Ten Word Test, and the Starch List.

The practical value of these scales are:
1. They provide common tests of words of a known degree of difficulty.
2. They make possible a more accurate comparison of the different groups of children.
3. They provide standard scores from the point of view of the classroom teacher.
The limitations of the scales are that:
1. The measurements lack precision because they do not measure the special results of spelling instruction.
2. They do not measure growth in the spelling efficiency.

ONE HUNDRED SPELLING DEMONS
\begin{tabular}{lllll} 
ache & could & here & read & too \\
again & country & hoarse & ready & trouble \\
always & deer & hour & said & truly \\
among & doctor & instead & says & Tuesday \\
answer & does & just & seems & two \\
any & done & knew & separate & used \\
been & don't & know & shoes & very \\
beginning & early & laid & since & wear \\
believe & easy & loose & some & Wednesday \\
blue & enough & lose & straight & week \\
break & every & making & sugar & where \\
built & February & many & sure & whether \\
business & forty & meant & tear & which \\
busy & friend & minute & their & whole \\
buy & grammar & much & there & women \\
can't & guess & none & they & won't \\
choose & half & often & though & would \\
color & having & once & through & write \\
coming & hear & piece & tired & writing \\
cough & heard & raise & to-night & wrote
\end{tabular}

\section*{BIBLIOGRAPHY}

Ayres, L. P., "A Measuring Scale for Ability in Spelling." Russel Sage Foundation.
Buckingham, B. R., "Spelling Ability," "Its Measurement and Distribution." Pages 14, 15; 69-75; 78-79. Teachers College, Columbia University.
Cook and O'Shea, "The Child and His Spelling." Bobbs Merrill Co.
Hollingworth, Leta S., "The Psychology of Special Disability in Spelling." Pages 14, 16, 38-39, 42, 53-58, 60-67, 79-80.
Jones, W. F., "Concrete Investigation of the Material of English Spelling." The University of South Dakota.
Monroe De Voss and Kelly, "Educational Tests and Measurements." Pages 112-144. Houghton-Mifflin Co.
Starch, Daniel, "The Measurement of Efficiency in Spelling." Journal of Educational Psychology, Vol. VI.
Tidyman, W. E., "The Teaching of Spelling." World Book Company.
Wallin, J. E. W., "Spelling Efficiency in Relation to Age, Grade and Sex and the Question of Transfer." Warwick and York.

\section*{SUGGESTIVE SPELLING BOOKS}

Aldine Speller, Bruce, Sherman, Kallom.
Newson \& Company
Lewis, E. E., "The Common Word Speller"
Ginn \& Company Book 1, Grades 1, 2, 3, 4. Book 2, Grades 5, 6, 7, 8.
Pearson \& Suzzallo, "Essentials of Spelling", American Book Company Essentials of Spelling, Lower Grades, 2 to 4. Essentials of Spelling, Middle Grades, 5 to 6. Essentials of Spelling, Higher Grades, 7 to 9.
Starch-Merick, "The Test and Study Speller"...........Silver-Burdett Company First Book, Grades 2 to 4.
Second Book, Grades 5 to 6. Third Book, Grades 7 to 8 .
Horn-Ashbaugh Speller

\section*{MUSIC}

As music has proven itself worthy to be classed as a major subject, co-ordinate with reading, writing, and arithmetic, the following definite aims are set forth as our standard of attainment.

First, every child shall have acquired the use of his singing voice and pleasure in song as a means of expression.

Second, every child shall have acquired a repertory of songs which may be carried into the home and social life.

Third, every child shall have developed oral power to know by sound that which he knows by sight and vice versa. Every child shall have acquired the ability to sing at sight, using words, a unison song of hymn tune grade; or using syllables, a two-part of hymn tune grade, and the easiest three-part songs; these to be in any key; to include any of the measures and rhythms in ordinary use; to contain any accidental signs and tunes easily introduced; and in general to be of the grade of difficulty of folk songs such as the "Minstrel Boy"; also knowledge of the major and minor keys and their signatures.

Fourth, every child talented in musical performance shall have had opportunity for its cultivation.

Fifth, the children shall have developed a love for the beautiful in music, and taste in choosing their songs, and the music to which they listen for the enjoyment and pleasure which only good music can give.

Sixth, the children shall have acquired the ability to appreciate the charm of design in songs sung; to give an account of the salient features of structure in a standard composition after a few hearings of it; to identify at least the three-part song form from hearing; and to recognize and give titles and composers of a reasonable number of standard vocal and instrumental compositions.

Seventh, above all, the children shall have arrived at the conception of music as a beautiful and fine essential in a well-rounded, normal life.

\section*{PENMANSHIP}

The fundamental principles underlying penmanship are:
1. In judging the penmanship of pupils the method of writingpenholding, movement, ease, speed-should be considered as well as legibility and form.
2. A moderate slant is better than vertical writing. Uniformity of slant is more important than conformity to a particular degree of slant.
3. A method of writing by which arm movements are used for productive of better results than a method that makes use of the fingers alone.
4. Copying is not a good method of teaching penmanship. There should be systematic instruction in word and letter forms, in pen holding and movement, following by practice. The child should be taught to study and analyze the form he is producing.
5. To establish desirable habits in writing the instruction given in handwriting lessons must be applied not simply in those lessons but at all times in written work.

The grade given in penmanship should be based upon the quality of the work which is turned out in the other subjects as well as that which is produced in the writing lesson.
6. The teacher should herself practice a correct method of writing. If she does not exemplify the methods she is teaching, pupils have little reason to adopt them.
7. The individuality of pupils should be respected in teaching writing as in teaching all other subjects.

\section*{PRACTICE PERIODS}

To secure desirable results in writing an adequate amount of time must be devoted to it. The same amount of time divided into rather short periods is more effective than if it is all expended in long periods. With the child in the earlier grade ten minutes is probably the best length of period, and the upper grades from twenty to thirty minutes.

\section*{THE GRADES}

The characteristics of the child make the acquirement of writing a difficult matter for him and one which is attended with considerable nervous strain. In the beginning the requirements for speed and accuracy should be made very low. At the beginning the writing should be done on the blackboard. This may very profitably be started in the second grade. When the child first uses paper he should write with large letters, the pencil should be large and the lead smooth. As the child grows older and gains in skill, the writing may be gradually decreased in size and may become gradually more precise. In grades four and six the child should begin formal drills. The development of skill should be accomplished in two or three years.

\section*{TESTS}

Children should be taught to trace their progress in both quality and speed. Each child should be compared with his own past record rather than with that of other pupils and this should be expressed in a form as definite and objective as possible. The best means to accomplish this is by the use of handwriting scales. Interest in writing may be kept alive by frequent use of tests for form, speed, and fluency. The pupils should become familiar with the use of the scales and with the standards appropriate to their respective grades.

The following scales are of value:
Ayres, "Scale for Measuring the Handwriting of School Children;" Freeman's series of charts in which the progressive degrees of excellence in each of the main elements of form are illustrated; StarchHandwriting Scale; Lister's Handwriting Scale; the Gettysburg edition of the Ayres Scale; Thorndike--Handwriting Scale.

\section*{EIGHT ESSENTIAL STEPS IN TEACHING WRITING}

The Three Stages into which these Eight Essential Steps should be divided:
First Stage.
1st Step-Posture: 1st, of body; 2nd, of feet; 3rd, of arms; 4th, of head.
2nd Step-Muscular Relaxation: Showing pupils how to overcome the natural tendency to muscular rigidity. Opening and closing fingers, raising and lowering arms, and other calisthenic exercises to be used in the beginning stages, and later when necessary.
3rd Step-Penholding: Follow physical training lines. Because of the differences in size and construction of hands, length of fingers, etc., it is not well to try to make all pupils hold their fingers in exactly the same positions. This is thoroughly discussed in the textbook entitled: "The Palmer Method of Business Writing."
4th Step-Making the first easy exercise with special relation to the first three steps until position and easy movement are somewhat automatic; the speed element to be seriously considered.
In the first stage it is expected that teachers will give the closest possible attention to posture, the development of the right motive power
and its application at the required speed in making the straight line and oval drills. It would be a waste of time to talk much about the application of the movement in muscular movement writing before pupils have mastered this first stage of the word and are able to make well the drills mentioned. The instructions on pages 2 to 23 , inclusive, of the Manual should be studied very closely. It is suggested that teachers read and discuss these instructions with their pupils. It should be borne in mind that exactly two hundred downward strokes should be made to the minute in both straight line and oval drills and that 100 counts should carry the pen not more than one quarter of the distance across a page eight and one-half inches wide. While this practice of the straight line and oval is proceeding, teachers should closely watch the arms and hands of the pupils. Wrists should be kept from the paper. It is well to keep the wrists high enough to bring the forearm rest back to a point very near the elbow. It must be remembered that in muscular movement penmanship there are only two points of contact. They are: the muscle of the forearm just in front of the elbow, and the third and fourth fingers. These fingers should slide over the paper either on tips of the fingers or on the finger nails.

Pupils are prepared to learn how to write with the muscular movement when they can make, automatically and well, the straight line and oval exercises, in easy rhythm, with correct movement.
Second Stage.
5th Step-Specific application of the automatic movement to easy letters and words. Strive for the retention of good posture and correct speed.
6th Step-Movement correlation in all written work. This can be accomplished only when the grade teacher, who is constantly with her pupils, has studied, digested, and mastered the preceding steps. An expert penman and skilled teacher of muscular movement writing-giving occasional lessons in the class-could accomplish but little by intermittent visits in this stage of transition from movement drill to movement writing.
In the second stage of the work we include steps 5 and 6 . In this stage we bridge the chasm between movement drill and movement writing, and teach pupils how to do all of their penmanship with muscular movement. The movement used in writing should be swift enough to produce sharp, clear-cut lines and at the same time slow enough to permit the pupils to form letters well. In this connection special study should be made of the instructions at the bottom of page 23 in the last edition of the Palmer Method Manual. Then, the words "mine," and "sell" should be practised at the speed indicated in the instructions. It is very important that pupils should understand the relative amount of force to be used in making the two space straight-line and oval drills, and that in writing these little words the minimum letters are only one-twelfth as high, or one-sixteenth of an inch. When pupils can write the words on page 23 well, they will then be ready to write other words. It will not matter particularly in what part of the Manual the words practised are found, but the more difficult words should be avoided until the pupils can write simple words well at the required speed and with correct movement. It will be well to use frequently the words found on page 23 for the purpose of ascertaining whether or not the pupils are writing too slowly or too swiftly. If in these words it is found that the small " s " is not made very well, then pupils should be required to turn to page 45 , on which the small "s" is given as a special drill. Then, perhaps, it will be discovered that the small " i " is made too long or too broad, or to tip over too much. If so, it will be well to turn to drill 33 and practice that exercise according to the instructions until it can be made correctly and at the right speed. Indeed, as words are selected and practiced from
different parts of the Manual, the letters found to be most difficult should be given special attention and the drill in which they are treated in the Manual should always be those selected for practice. Drill 14 is one of the best exercises for use in developing the over-motion used in " \(m\)," " \(n\)," the last part of "h," the first part of "y," and in parts of other letters. In this exercise, pupils also train their hands to change from over-motion used in the letters to under-motion used in the connective line. When pupils do all of their writing with muscular movement, even though in a crude sort of way, they are then ready to pass from the second to the third stage.

\section*{Third Stage.}

7th Step-The element of speed application and movement direction in letters, parts of letters, words, and connective lines. In this step, which is one of the most important in the teaching of good writing because of its bearing upon good formation, and consequently upon good writing, pupils must be taught that a line is the product of the motion used; that the motion preceding the contact of the pen to the paper must be in the direction of the line to be made, and that some lines, being more complex than others, should be made with less speed.
8th Step-The teaching of observation and mental concentration as they have a bearing upon the relation of one letter to another, in size, slant, and spacings. This is an essential and final step in the teaching of writing which embodies legibility, rapidity, ease, and endurance. It is a lamentable fact that many teachers are satisfied when they have mastered and are able to teach the first six steps. Teachers who have not mastered steps seven and eight may secure good postures and easy muscular movement in all written work, but the writing is likely to be ragged and dissipated in appearance.

Teachers who try to change the teaching order of these eight steps will build mountains of trouble which worry and work will only enlarge.
Every teacher should be able to demonstrate before her pupils the letters which she is to teach and the words which are used as form builders. It is not expected that pupils will write well during the second stage of this work, but unless the first six essential steps are taught in exactly the right way, the pupils will not be prepared to learn how to write with accuracy and ease when they take up the seventh step. Teachers must not rely wholly upon the directions given in these Eight Essential Steps and the three stages into which they are divided. These are intended to be only a guide for the study of the instructions in the Manual and the practice of the drills in that book.

\section*{BIBLIOGRAPHY}

Ayres, L. P., "Scale for Measuring the Quality of Handwriting of School Children." Bulletin 113, Russell Sage Foundation.
Freeman, F. N., "The Teaching of Handwriting." Houghton-Mifflin Co. Judd, C. H., "Genetic Psychology for Teachers." Ch. VII, Pp. 219-235. Houghton-Mifflin Co.
Thorndike, E. L., "Handwriting." Teachers Col. Record 1910.
The Fourteenth Yearbook of the National Society for Study of Education, Part I., Chapter V.

PART III.
ORGANIZATION OF MATERIAL BY GRADES

\section*{KINDERGARTEN}

The kindergarten is a vital part of the elementary school. It aims to give the child social experiences, enrich and interpret his past and present experiences, and lead him to purposeful thinking; thus working out worthwhile problems and projects-which help him in forming correct life habits-in citizenship, manipulation of materials, appreciation of art, music, literature, plays and games, and the study of his natural surroundings.

\section*{A. Development of Citizenship:}

Playing in the playhouse-co-operation in the household. Telling the truth about one's accidents, and a playmate's conduct. "Taking turns," and "Fair Play" in Games. Visiting the postoffice, and other public buildings. Learning Mother Goose Health Rhymes. Interest and care of the college campus; planting and caring for school garden. Putting away, and mending kindergarten materials. Value of a penny and of a nickel in playing store. Helping one another with wraps, games, work, etc. Traffic laws noticed and practiced. Appreciation of the festivals of the years. Respect for elders and guests. Protection of the younger children and pets.

\section*{B. Manipulation of Materials:}

This forms an important part of the daily course and through the use of the following list many problems and projects arise: Hill; Schoenhut Floor Blocks; Fallis Large Floor Blocks; Miscellaneous Blocks; Enlarged Froebel Building Blocks; Fallis Toys; Schoenhut Wooden Dolls; Montessori Apparatus; Saws, Hammers, Nails, Boards, Wooden and Pasteboard Boxes, Clay, Plasticine, Paint, Paint Brushes, Crayonola, Paste, Scissors, Chalk, Blackboard, Paper, Sand, String, Playhouse, Doll Furniture, Doll Dishes, Engine and Train.

Through the use of the above material the child is encouraged to work out his own ideas and to handle the tools correctly. He is also encouraged to work with the group, contributing his share of the labor, giving to, and taking suggestions from his fellow workers.

\section*{C. Art Appreciation:}

Surrounding the child with beautiful pictures. Allowing him to see good colors. Letting him compare colors. Making a choice of colors. Making a choice in decorating his work. Allowing him to arrange colors. Watching the colors in sky, leaves, flowers, birds, etc. Painting and coloring with large brushes on paper and large boxes, flower-pots, etc.

\section*{D. Music Appreciation:}

Ability to listen to music. Recognition of different rhythms. Distinguishing between light and shrill tones. Recognition of Mother Goose Melodies. Recognition of other short songs. Desire and willingness to sing alone. Ability in keeping time, with baton, with feet, or voice. Clear enunciation of the words with the singing. Encourage "the making up" of a verse to be sung with a familiar tune.

\section*{E. Literature Appreclation and Correct English:}

Allowing the child opportunity to converse. Forming habits of courteous response. Repeating Mother Goose Rhymes and poems. Listening to well-selected stories. Retelling the shortest stories. Allowing him to tell the stories with the Fallis Toys. Allowing him to tell the stories with Puppets. Allowing him to dramatize stories.

\section*{F. Plays and Games:}

The use of balls of different sizes. The use of bean bags. Rhythms, such as skipping, running, tiptoeing, hopping, flying, rocking-horses, etc. Representative games. Sense training games. Original games from the children. Out-of-door games.

\section*{G. Excursions:}

To arouse interest in natural surroundings. To arouse interest in civic pride. Visits are taken to parks and museums, stores and shops, city library and other public buildings. Appropriate movies are attended. Circus parades and dog shows are attended.

\section*{H. Nature Study:}

Encouraging the child to notice leaves, buds, birds, flowers, butterflies, trees, sky, clouds, rain, snow, mountains, etc. Each child is provided with garden work. Given opportunity to work and play out of doors.

\section*{I. Unclassified Lessons:}

The child is helped to meet unforseen situations and is encouraged to rely on his own ability. Counts up to ten or twenty, according to his needs. Makes oral number combination in handling blocks and bean bags. Exercises for correcting speech defects and monotones.

\section*{LITERATURE}

Poems, Nursery Rhymes:
The Man in the Wilderness Asked Me, The North Wind Doth Blow, There Was a Crooked Man, There Was a Little Guinea Pig, There Was an Old Woman Tossed Up in a Basket, There Was an Old Woman Who Lived in a Shoe, The Wind Must Blow, Three Little Kittens, Wee Willie Winkie, Winter Has Come, Around the Green Gravel, Baa Baa Black Sheep, Bye Baby Bunting, Cock-a-doodle-doo, Daffy Down Dilly, Hey Diddle Diddle, Hickory Dickery Dock, Humpty Dumpty, If All the Seas Were One Sea, I had a Little Nut Tree, I Love Sixpence, Pretty Little Sixpence, I Saw a Ship A-sailing, I Saw Three Ships Come Sailing By, Jack and Jill, Jack Be Nimble, Jack Spratt, Little Bo-Peep, Little Boy Blue, Little Jack Horner, Little Miss Muffet, Mistress Mary Quite Contrary, Old King Cole, One Misty Moisty Morning, Queen of Hearts, See-Saw Marjorie Daw, Sing a Song of Sixpence, The Cocks on the Housetop; Christina Rossetti-The City Mouse Lives in a House, At the Seaside, Boats Sail on the River, Brown and Furry, Horses of the Sea, Hurt No Living Thing, If All Were Rain and Never Sun, Mix a Pancake, On the Grassy Bank, The Peach Tree on the Southern Wall, What is Pink?, Wrens and Robins in the Hedge; Poulsson-Baby's Breakfast, Welcome to Spring; Bird-Fairy Folk; Jane Taylor-I Like Little Pussy, Pretty Cow; Palgrave-Little Child's Hymn; Lord Houghton-Lady Moon, Lady Moon; WordsworthMarch; Stevenson-Rain, Singing, The Cow, The Swing, Time to Rise; Duffenback-The Mouse's House; Lear-The Nonsense Alphabet; Alma-Tadema-The Robin; Josephine Dodge Daskam-The Sleepy Song; Setoun-The World's Music; Tapper-When We Have Tea; Bates-Who Likes the Rain? Unknown-How They Sleep, The Fairy, Two Little Kittens.

Suggested Source
Another Book of Verses for Children
A Book of Verses for Children Lucas The Big Book of Nursery Rhymes
The Cambridge Book of Poetry for Children Graham
The Children's First Book of Poetry
Book of Nursery Rhymes Welsh
The Children's Second Book of Poetry Baker
Children's Treasury of Lyrical Poetry

Jerrold
Author
Lucas

Baker

Palgrave

Publisher
Macmillan
Henry Holt \& Co.
Diutton
Putnam Co.
American Book Co. D. C. Heath \& Co.

American Book Co. Macmillan
A Child's Garden of Verses Stevenson Scribner
A Child's Book of Old VersesSmithThe Golden StaircaseChrisholm
Duffield
Graded Poetry, First andSecond YearsGraded Poetry, Third YearAlexander \& Blake MerrillAlexander \& Blake Merrill
The Home Book of Verse for
Young Folks (Shorter Vol.)
National Rhymes of the Nursery Saintsbury
The Nursery Rhyme Book Lang
Lang
Nonsense Books Little, Brown \& Co.Wiggin \& Smith
Henry Holt
Pinafore Palace.
Stokes
Posy Ring Wiggin \& Smith Doubleday-PageReading Literature, SecondBook Free \& Treadwell Rowe, Peterson
Rhymes for Young Folks

Sing Song

Sing Song
Frederick, Warne \& Co ..... Macmillan
Rossetti
RossettiA Treasury of Verse for LittleChildren Edgar
The Treasury Book of Children's Verse QuillerFrederick Warne \& Co.
Doubleday-Page
Free \& Treadwell Row, Peterson Reading Literature, First BookT. V. Crowell \& Co.Couch-Hodder \&Stoughton
English Fairy Tales. The Cat and the Mouse ..... Jacobs
Chicken Little
The old Woman and Her Pig
Johnny Cake
"Wee Bannock"
The Old Woman and the Three Bears
The Three Pigs
Grimm’s Fairy Tales (Lucas Translation).
The Elves and the Shoemaker ..... Grimm
Oak Tree Fairy Book.
The Fox and the Little Red Hen JohnsonThe Little Red Hen and the Grain of Wheat
Travels of a Fox
Through the Farmyard Gate.
(The Three Goats Source) ..... Poulsson
Johnny and the Three Goats
Little Black Sambo.
Little Black Sambo Bannerman
Happy Boy P. 1-9.Oeyvind and Marit
Firelight Stories.
The Kid Who Would Not Go. ..... Bailey
tales from the Field.
How They Got Hairlock Home (Norweigien) ..... Dasent
Cossack Fairy Tales.
Sparrow and the Bush (Russian) ..... Bain
Italian Popular Tales.
Cock and Mouse ..... Crane
Tales from the Field (Dasant Translation). Pancake (Norse) Asbjornsen
St. Nicholas, Vol. II, 1875.
Gingerbread Boy (New England) ..... Dodge
More English Fairy Tales.
Scrapefoot (Original Story of the Three Bears) ..... Jacobs

Fatry Tales Every Child Should Know.
Goldilock and the Three Bears
Mabie
Popular Tales from the Norse.
Three Billy Goats Gruff
Dasent
Italian Fatry Tales.
The Three Geese and the Wolf \(\quad\) Faulkner
Fairy Tales
Thumbelina Andersen
Scottish Fairy Tales.
Wee Robin's Christmas Song . Doughlas
Stories from the Bible.
Birth of Christ. Luke II, 1-20; Mathew II, 1-11.
Selected List of Stories for Children in the Kindergarten. Compiled by the Literature Committee of 1818-1920, International Kindergarten Union.

\section*{BIBLIOGRAPHY \\ Kindergarten Methods}

Chubb, Percival, "The Teaching of English," Chap. 3 and 4. Macmillan Company, New York.
Fulmer, Grace, "The Use of the Kindergarten Gifts." Houghton-Mifflin Company, Boston.
Gesell, Arnold L. and Beatrice C., "The Normal Child and Primary Education." Ginn \& Co., Chicago.
Hill, Patty Smith, "Experimental Studies in Kindergarten Theory and Practice." 1915 Teachers College Record, Teachers College, Columbia University, New York City.
O'Shea, M. V., "Mental Development and Education," Chap. 6 and 9. Macmillan Company, New York.
Parker, Samuel Chester, "General Methods of Teaching in Elementary Schools," pp. 16-235. Ginn \& Co., Chicago.
Parker, Samuel Chester, "Types of Elementary Teaching," pp. 14-411. Ginn \& Co., Chicago.

\section*{Curriculum}

Subcommittee on Curriculum of the Bureau of Education, Committee of I. K. U. The Kindergarten Curriculum, U. S. Bureau of Education, Bulletin 1919. No. 16.
Subcommittee on Curriculum of the Bureau of Education, Committee of I. K. U. A Kindergarten-First Grade Curriculum. U. S. Bureau of Education. Bulletin 1922. No. 15.
Moore, E. C., "Minimum Course of Study." Chap. Kindergarten. Macmillan Company, New York.

\section*{Kindergarten Materials}

Hill, Patty S., Experimental Studies in Kindergarten Education. University Teachers College, Columbia, New York City.
Hill, Patty S., Kindergarten Plays and Games, Kindergarten Review 16:640-642, 1916, Springfield, Mass.
Kindergarten Projects, Chap. I., Twentieth Year Book, Bloomington, Ill. Public School Publishing Company.

\section*{Literature}

Selected List of Stories and Poems to Tell Children, published by Literature Committee of 1918, International Kindergarten Univ., Springfield, Mass.

\section*{Books and Games}

Bancroft, Jessie, Games for Playground, Home, School and Gymnasium. Macmillan Company, New York.
Crawford, Caroline, Dramatic Games and Dances for Little Children. A. S. Barnes Co., New York.

Johnson, George E., Education by Plays and Games. Ginn \& Co., Boston. Palmer, Luella A., Play Life in the First Eight Years. Ginn \& Co., Boston.

\section*{Song Books}

Arnold, Francis M., Arnold's Collection of Rhythms for the Home, Kindergarten and Primary. The Willis Music Company, Cincinnati, Ohio.
Cody, Music Education, 2 books. Clayton F. Summy, Chicago.
Elliott, Mother Goose Melodies. MacLaughlin Bros., New York.
Gaynor, Jessie Ls, Songs for Little Children. The Willis Music Company, Cincinnati, Ohio.
Hill, Song Stories for Kindergarten. Clayton F. Summy, Chicago.
Hofer, Mari Rulf, Children's Singing Games. A. Flanagan Company, Chicago.
Hollis-Dann, First Year Book. American Book Company.
Hollis-Dann, First Year Music. American Book Company.
Jones and Barbour, Child Land in Song and Rhythm. Arthur Schmidt, New York.
Jones and Barbour, Child Land in Song and Rhythm. The Arthur B. Schmidt Company, New York.

\section*{FIRST GRADE}

\section*{ARITHMETIC}

The purpose or aim in the First Grade is to develop by concrete means, a number sense which shall later lead to skill and accuracy. All material and its use should be determined by the child's needs and experience.

Very little time is given to formal number work as such. The number of groups of things of a kind all about the child stimulate his interest in counting and he develops the notion of serial relations almost incidentally. Reading numbers as found on pages of books, calendars, on street signs, at corners, on houses, on clocks, etc. All these and many more give splendid opportunity for learning the number symbols. Real problems should arise which involve the use of inch, foot and yard; pint. quart, half gallon and gallon; pound and halfpound; dozen and half dozen; cent, nickel, dime, quarter and dollar.

Near the close of the year several short periods a week may be used for practice if the number facts reveal a need for greater facility.

\section*{ART}
I. Representation.

Figure: Stick symbols of boy, girl, man, woman. Drill for skill in expressing action. Clothe the figures to represent familiar characters.
Animals: Rabbit, duck, chicken, mouse, goose, tortoise, bear, squirrel, fish, toad, goat.
Birds: Sparrow, crow, robin, jay.
Nature: Fruits, vegetables, grasses, flowers, leaves, trees.
Shelters: Rabbit hutch, chicken coop, dog house, barn, garage, bird house, igloo, wigwam.
Illustration: Stories, school and home activities.
Objects: Tools, utensils, furniture, toys. Mediums: Tearing, cutting, crayons, paints.
II. Color.

Names of standard hues. Color recognition through observation of things in the environment. Color games.
III. Design.

Repetition, alternation and rhythmic grouping of units. Problems in simple balance applied to blotters, booklets, baskets, and other construction problems.
Mediums: Crayon strokes, brush spots, paper units, seeds, leaves.
IV. Construction.

Folding: Seed box, envelope, cart, cradle, houses, pin wheel, boat problems for special days, furniture, house.
Introduce inch measurement.
Booklets: Color booklet, animal cutouts, nature, picture cutouts. Table Problems: Subjects suggested by school interests of the children as stories, Indian life, occupations, doll's house.
Textiles: Stick printing for decoration of textiles in the doll's house. Costumes for dolls. Weaving of rugs, holders, and mats in connection with the study of cotton. Stitchery applied to simple problems.
Clay Modeling: Rabbit, bear, squirrel, pig, hen, cow, tortoise, dishes, tools, utensils, fruit and vegetables.
V. Picture Study.

First Step, Millet.
Feeding the Hens, Millet.
Mother and Children, Nourse.
Children of the Shill, Murillo.
A Piper and a Pair of Nut Crackers.
Holy Night, Correggio.
Age of Innocence, Reynolds.
Return to the Farm, Trayon.
Sculpture: Rabbits, Barye; Lion, Barye; "The Bambinos," Della Robbia.

\section*{ENGLISH}

\section*{Reading}

The fundamental aim in reading is to stimulate thinking so the first experience a child should have in reading is thought-getting. The first reading is short stories, rhymes or sentences giving complete thoughts and the children do not distinguish the individual words. Then sentences phrases and words are located that say certain things. The sequence is story sentence, phrase, word, sound, and letter. The stories, poems, rhymes, and conversations about interesting experiences of the children form a splendid basis for thoughtful first grade reading. The beginning of phonics is words that are alike or begin alike and then the phonograms and individual sounds.
I. Comprehensive or Intelligent Interpretation.
a. By relating material to child's experience.
b. By effective habits of study.
c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.
1. Use as interesting experiences as possible for first lessons so children will attach vivid meaning to words learned.
2. Children read story from cards.
3. Teach children short poems or nursery rhymes.
4. Later place on cards and read by wholes and sentences.
5. Teacher tell story and pupils reproduce.
6. Pupils dramatize short stories.
7. Discuss name of story and pictures before reading.
8. Relate each new story to some similar experience of the children.
9. Direct children's reading by asking questions.
10. Have children read by thought units instead of lines or pages.
11. One child reads aloud and others ask him questions on what he reads.
12. Illustrate story with cuttings or crayolas.
II. Thorough Mastery of the Mechanics.
a. For effective oral reading.
b. For effective silent reading habits.
1. Children locate sentences, phrases and words that say certain things.
2. Use sentence, phrase and word drills and flashcards to get quick recognition.
3. Find words that begin or end alike.
4. Give phonograms and letter sounds when children know enough sight words for comparison.
5. Use period separate from the reading period for word and phonic drills.
6. Use short exposure sentence to get rate in silent reading.
7. Give pronunciation drills for voice control to get good articulation.
8. Build sentences and words from familiar stories with words or letters.
9. Develop ear training.

Suggestions:
1. Teach children how to care for their new books.
2. Show how pages are numbered.
3. Show how to find page and title of story quickly.
4. Read aloud and discuss with children short stories.
5. Have as many books of real content at hand or individual reading as possible.
6. Read aloud and have class memorize several short poems.

\section*{Phonics}

Material.
Consonants.
Short sounds of vowels.
Final e.
Double vowels.
Two vowels together.
Blends th, wh, sl, di, ti, sp, tw, fl, I (initial), sh, nk, ng, ck, ch, tch, ing, ir, ur (final).
Beginning of syllabification.
The formal work in phonics preceded by ear and lip drill.
Phonics are then introduced incidentally as the need is felt for them.
The order and material varies somewhat according to books used for reading.

\section*{Literature}

The following text books offer a wide range of simple verse and folk tale in suitable form:
Riverside Primer and First Reader...Van Sickle, Seegmiller and Jenkins (H. M.)

Reading-Literature Primer and
First Reader .........................................................
Reader ........................................................................
Primary School Reader-Book One...Elson (S. F. \& Co.)
The Progressive Road to Reading- Kleiser, Ettinger and Shimer Story Steps ........................................................ \& Co.)
The Easy Road to Reading-Primer...Smith (L. \& C.)
The Winston Readers-Primer................Firman and Maltby (J. W. Co.)
Literary Readers-Book One................. Young and Field (G. \& Co.)
Studies in Reading-Primer and
First Grade \(\qquad\)
Story Hour Readers-Primer and
Second Book \(\qquad\)
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Summers Readers-First.....|- .}} \\
\hline & \\
\hline & Beacon First and Second Reader.......Fassett (G. \& \\
\hline \multicolumn{2}{|l|}{Horace Mann First Reader.... Hervey and Hix (L. G. \& C.)} \\
\hline \multicolumn{2}{|l|}{Aldine Primer and First Reader.........Bryce and Spaulding (N. \& Co.)} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Beginner's Series First Reader--- (H. M.)}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Red Riding-Hood and the Seven Kids Action, Imitation and Fun Series...Pratt-Chadwick (Ed. Pub. Co.)}} \\
\hline & \\
\hline \multicolumn{2}{|l|}{Bow-Wow and Mew-Mew.....)} \\
\hline \multicolumn{2}{|l|}{Sunbonnet Babies' Primer - Grover (R. Mc.)} \\
\hline \multicolumn{2}{|l|}{Overall Boys' Primer-.- \({ }^{\text {a }}\)} \\
\hline & Hiawatha Primer .-.] \\
\hline & \\
\hline
\end{tabular}

\section*{Further Poetry Sources}


Examples of Poetry Taught: Mother Goose-Peter Piper, Old King Cole, Five Little Pigs, The North Wind Doth Blow, Blow Wind Blow, Rain, Rain, Go Away; Rorert Louis Stevenson-Autumn Fires, The Wind, Windy Nights, The Rain is Raining All Around, Where Go the Boats, My Shadow, Foreign Children, Bed in Summer, The Sun's Travels, The Moon; Christina Rossetti-O Wind, Where Have You

Been, Dancing on the Hill-tops; Jane Taylor-Twinkle, Twinkle, Little Star; Tennyson-Sweet and Low, Minnie and Winnie, The Bee and the Flower; Eugene Field-Seein' Things, Wynken, Blynken, and Nod, The Night Wind, The Duel, The Rock-a-Bye Lady; George Mac-donald-Where Did You Come From, Baby Dear; Elizabeth Prentiss -Sleep, Baby, Sleep; Clara Bates-Who Likes the Rain; PoulssonThe Sunbeams; Cooper-Come, Little Leaves; Mack-Little Ducks; William Blake--The Lamb; Van Dyke-"This is the Carol the Robin Sings;" Child-Thanksgiving Day; Unknown-Grasshopper Green. Typical Stories: For the Children's Hour-The Anxious Leaf, (also in Classic Stories), the Shoemaker and the Elves, (also in Stories to Tell to Children, Grimm's Fairy Tales, Free and Treadwell Second Reader, Great Stories for Great Holidays), Proserpina, Story of the Christ Child, Coming of the King, How the Fir Tree Became a Christmas Tree, Little Cosette, Brave Tin Soldier, (also in Andersen's Fairy Tales and Free and Treadwell's Second Reader), The Wind and the Sun (also in Aesop's Fables, In the Child World, and Stories to Tell to Children), Silvercap, or King of the Frost Fairies, Legend of the Dandelion, Clytie, (also in Nature Stories, Around the World in Myth and Song, Good Stories for Great Holidays, In the Child World, Classic Myths), Hans and the Wonderful Flower, Pippa's Song, or Pippa Passes, Matsuma's Mirror, Arachne (also in Good Stories for Great Holidays), Goldenrod and Aster; Stories to Tell to ChildrenEpaminondas, (also in Aesop's Fables and Stories Children Need), Piccola, Story of the Pink Rose; How to Tell Stories to ChildrenThe Pig Brother (also in Golden Windows), Star Dollars, Story of the First Christmas Tree, Legend of Christmas Eve, or the Three Wishes, The Leak in the Dyke, (also in In The Child's World), Raggylug, The Pied Piper, Why the Morning Glory Climbs; Good Stories for Great Holidays-Why the Evergreens Keep Their Leaves, (also in Classic Stories and Riverside Second Reader), The Months, (also in Stories Children Need), Story of Saint Valentine, (also in Saints and Friendly Beasts), Betsy Ross and the Flag, The Lesson in Faith, (also in Parables from Nature and In the Child's World), The Little Butterfly's Brothers, The Golden Goose, (also in Tales of Laughter and Story Teller's Magazine, December, 1914), King of the Cats; In the Child's World-Vulcan, Echo, (also in Classic Myths) ; Stories Children Need-The Bluebird; Nature Myths-Why the Bear Has a Short Tail, How the Robin's Breast Became Red, The First Butterflies; Aesop's Fables-The Hare and the Tortoise, The Lame Man and the Blind Man, The Sun and the Wind; Uncle Rexus - Tiny Hare and His Friends-Why Tony Bear Went to Bed, Tony Bear's Christmas Tree, Easter Bunny, Son Cat's First Mouse, Son Cat's Surprise; Tales of Laughter-Seven at One Blow, The Wee, Wee, Mannie; Hollow Tree and Deep Woods-A Rain in the Night, Why the Rabbit Explains; Half a Hundred Stories-Frost Fairies and Water Drops, Grandma's Thanksgiving Story, Father Time and His Children; Nature Study and Literature-The Poplar Tree, Legend of a Chrysanthemum; Andersen's Fairy Tales-Little Tuk, Great Clause and Little Clause; Fairy Tales Every Child Should Know-Aladdin or the Wonderful Lamp; Stories and Story Telling -Tom Thumb, (also in Hero Folk of Ancient Britain); Firelight Stories-Why the Bear Sleeps All Winter; Grimm's Fairy TalesCinderella; The Golden Windows-The Hill, The Wheatfield, The House With the Golden Windows; Japanese Folk Stories--Princess Moonbeam, Frost Rabbits; The Happy Prince and Other Tales (Oscar Wilde)-The Selfish Giant; Free and Treadwell Second Reader-The Mouse, Son Cat's Surprise; Tales of Laughter-Seven at Sleeping Beauty; Riverside Second Reader-The Steam Engine; Story Teller's Magazine, March, 1914-The Foolish Bears; Decem-
ber, 1914-Little Gretchen and the Wooden Shoes; Bible-Moses in the Bulrushes.

\section*{Language and Composition}

All of the English work in the first grade is oral. Its purpose is to get from the children free expression in correct simple sentences. Eradicating faulty speech habits and preventing the formation of new ones by guiding the child into correct speech ways is a second and equally important purpose.
Aims.
1. To encourage children to talk freely about the things they are interested in.
2. To secure distinct articulation and a natural speaking tone.
3. To correct a few errors of speech-those that are simple and the most noticeable.
4. To make a beginning in the conscious use of simple sentences.

\section*{Means and Ways.}
1. Story telling by the teacher-the children getting their use of language through hearing stories told simply, in correct language, and with a careful choice of words.
2. Dramatization of the stories told by the teacher. The pupils' contribution should be in simple sentences. The "and," "so" and "and so" habits should be avoided.
3. Children's "stories." These are used to encourage children to talk simply, freely, and correctly about the things they are interested in.

The typical story is something like this:
Teacher-a vacant lot makes a good playground. What do you like to play?

Harry-I like to play Indian.
Nancy-We like to play house.
John-My brother and I made a cave on a vacant lot
Teacher-How would you play house on a vacant lot? Tell me three things you did.
Mary-We raked the leaves up in little rows. They were the walls of the rooms. We found pieces of broken dishes for our table.
Topics for Children's Stories.
a. Home objects and experiences, such as: Playthings, pets, helping, home happenings, anecdotes, good times on holidays and Saturdays.
b. School objects and experiences, such as: Playmates, playground incidents, the reading lesson, dramatization, story reproduction, picture lessons.
c. Flowers, birds, animals.
d. Lessons in manners.

Correction of Children's Errors of Speech.
a. Verb errors, such as: I seen it, I come early yesterday, I done that, she aint comin'.
b. Pronoun errors, such as: Me and him tried it.
c. Provincialisms and slang.
d. Mispronunciations.

\section*{The Use of Word Cards and Senpence Cards.}

While there is no writing in the first grade, the children learn to recognize words and the alphabet in script. With these sentences are built, and the child forms the habit of beginning a sentence with a capital letter and closing with a period or question mark.

Before leaving the grade each child should be able with the alphabet letters to make his own name and address, using a comma between the names of the city and state thus:

\author{
Alice Martin \\ 815 Seventh Street \\ Greeley, Colorado
}

Also the habit of using the capital "I" should be fixed, as well as the use of a capital letter at the beginning of the card-constructed sentence, and the period or question mark at the end of a sentence so constructed.

Chubb, The Teaching of English, Chapters 3 and 4.
References.
Mahoney, Standards in English, Pages 41 to 50 and 4 to 38.
Sheridan, Speaking and Writing English, Pages 51 to 61 and 1 to 46.
Brown, How the French Boy Learns to Write, Chapter 3.

\section*{SOCIAL SCIENCE}

Civics
1. Aims in Teaching:
a. To teach children an appreciation of dependence upon parents; what parents do for them.
b. To show children what they can do to help parents and others.
c. To teach children to keep clean and well by exercising simple health rules, such as those concerning fresh air, food, clothing, exercise, sleep, care of the skin, hair, eyes, teeth, nose, and ears.
2. Outline of Material: The family is the basis for the work with the following subjects included:
a. Duties of parents: love, protection, support, and regulation of the home.
b. Duties of children: love for one another, kindness, respect, gratitude, good conduct, obedience, honesty, ownership, generosity, loyalty, and patriotism.
c. Health of the family: food, clothing, exercise, sleep, care of the eyes and the ears, cleanliness of skin, hair, and teeth.
d. Special community service of the family: recognition of any special interest which may develop.
3. Procedure: In the early grades not much time need be given directly to this work. The greater part of it may be accomplished through correlation with other subjects. Talks and stories are the direct efforts.
4. Bibliggraphy-Other subjects in the course of study furnish material.
a. Texts for the teacher:

Dealey, J. Q., The Family in Its Sociological Aspects.
Gillette, J. M., The Family and Society.
Cabot, E., Ethics for Children.
Allen, W. H., Civics and Health.
b. Stories for children; some selections classified:

The Family.
The Fairy Who Came to Our Home, in For the Children's Hour, Bailey.
Little Red Riding Hood.
Why Tony Bear Went to Bed.
Grandfather.
Love.
The Hidden Servants, in Stories to Tell Children, Bryant.
The Selfish Giant.
Support.
The Little Red Hen, in Stories to Tell Children, Bryant. Obedience.

Raggylug, in How to Tell Stories to Children, Bryant. Little Half Chick.
Cleanliness.
The Pig Brother, in Stories to Tell Children.
Helpfulness.
Why the Morning Glory Climbs, in How to Tell Stories to Children.
Why the Chimes Rang.
The Little Hero of Harlem.
Kindness.
Why the Evergreens are Always Green, in Stories to Tell Children.
Wheat Fields, in For the Children's Hour, Bailey.
Honesty.
Honest Woodman, in Child's World, Poulsson.
The Boy and the Wolf.
Gratitude.
The Elves and the Shoemaker, in Stories to Tell Children. How Patty Gave Thanks, in Mother Stories, Lindsay.
Good Conduct.
The Gingerbread Boy, in Mother Stories.
Patriotism.
Betsy Ross and the First Flag, in For the Children's Hour.

\section*{HISTORY}

The work of the earlier grades cannot properly be called history. It is rather a study of social situations aiming to help little children gain an intelligent grasp, as far as their capacity permits, of the great whole world in which they live; to have a consciousness of his own activities and relationships. His own community furnishes the background with which he approaches this study.

\section*{Home and Community}
I. Relationship Between Farm and Town.
1. What the farmer contributes. How he co-operates.
2. Needs of farmer which he cannot supply alone.
II. The Farm.
1. Idea of farm.
2. Building spot or homestead.
a. House.
b. Lawn.
c. Garden and Orchard.
d. Barnyards.
e. Barns.
f. Repair Shop.
III. Farm Activities.
1. Harvest.
a. Methods.
b. Harvest of Grain.
c. Gathering Corn.
d. Potatoes.
2. Farm pleasures.
3. Festivals.
a. Thanksgiving.
b. Christmas.
IV. Food and Clothing Studies.

\section*{The Home}
I. The Family.
1. Members.
2. Activities in the home.
3. Family pleasures.
4. Supplying material needs in the home.
a. Food.
b. Clothing.
c. Shelter.
II. Community Activities Related to the Home.
1. Workers needed to build home.
2. Importance of co-operation.
III. Activities Related to the Communities.
1. The street cleaner.
2. The park and campus gardener.
3. The garbage man.
4. The ice man.

\section*{MUSIC}

\section*{B Class}

The problem of this grade lies in getting the voices unified into a sweet singing quality through individual and group participation in many beautiful rote songs. The experience of the child should be broadened by listening to good music containing some intrinsic feature of educational value. Free expression in rhythm is developed through response in bodily activity. Motion songs, singing games and simple folk dances are also used. Much attention is paid to the classification and training of the unmusical children through many and varying types of imitative calls, games and devices. The following rote songs are taught according to the ten steps of teaching a rote song:
I. Observation-Rote.

First twenty songs found in Progressive Series, Book I.
II. Art-Rote (Teacher's Manual, Vol. I).
1. When Mother Sings.
2. How Many Days Has My Baby to Play.
3. The Man in the Moon.
4. Choo-Choo-Choo.
5. The Little Seeds.
6. Afternoon Tea.
7. The Hall Clock.
8. A Telephone Message.
9. Indian Song.
10. Frosting.

\section*{A Class}

At the end of Grade I A, children should be able to sing all the songs in Progressive Series, Book I, Part I, with words and neutral syllables. Their aural attention should have been directed to the recognition and recurrence of phrase repetitions in the first twenty-five songs in Book I. Intensive study of the ten following Observation-Rote Songs should include the so-fa syllables taught as an additional stanza, noting phrases, motives and figures, and their recurrence:
1. Good Morning.
2. A Good-by Song.
3. Fido and His Master
4. Polly's Bonnet.
5. The Postman.
6. Bubbles.
7. Cherries.
8. The Holiday.
9. Dolly's Lullaby.
10. Lady Bug.

Continued persistency in the development of the unmusical child. \({ }^{*}\) Rhythmic free expression is interpolated with suggested expression. Loosely organized rhythmic response thru singing games and simple folk-dances is continued. The following ten Art-Rote Songs (Teacher's Manual, Vol. I) are taught:
1. My Beautiful Doll.
2. A February Song.
3. Prince Finikin.
4. Ride a Cock Horse.
5. Garden Song.
6. The Wild Geese.
7. Dandelion, Yellow as Gold.
8. Little Miss Patty and Master Paul.
9. The Greedy Mouse.
10. America-first stanza.

\section*{SECOND GRADE}

\section*{ARITHMETIC}

The second year begins dealing more formally with number relations and attempts abstraction. In the second (and each subsequent year in the primary grades), the teacher must not lose sight of the iwo phases of number work-that of using numbers for immediate needs, and that of gaining control over the symbols of numbers. Advantage should be taken of all opportunities for using numbers. They occur in measuring and making booklets, seed envelopes, card boxes, calendars, in other forms of construction, and in counting and keeping the score in games. The formal work should be introduced, if possible, in answer to some need. A pupil must learn to make figures well and rapidly, but the immediate end may be set up of learning to make figures well and rapidly in order to keep the score in games. The formal teaching of numbers begins, practically, in the second year. The pupil's equipment is the ability to count objects and to recognize figures. This ability varies in different pupils, but in each case it forms the basis from which to proceed. Counting, repeating the number names in a series, is the primitive response to a "how many" situation. It is customary to teach second-grade pupils to count to one hundred orally, and to write figures to one hundred. In the writing, for convenience, the figures are often grouped in tens.

It is possible to use this device much more effectively than is usually done. If,. before emphasizing the oral counting, the pupil can have in his hand a number scale in large, clear figures, as in Table 1, time will be economized.

The counting should be first from this scale, so that each number name corresponds to a symbol. When the child says "eleven, twelve, thirteen, fourteen," he looks at the figures "11, 12, 13, 14." He thus organizes the numbers \(1-100\), so that the numbers have certain space relationships in his mind and can be easily recalled. The work on form must follow and grow from work which is concrete. These tables, through the visualization of symbols and space relationships of numbers, are designed to assist in the process of abstraction. If in counting from memory the pupil hesitates, he should look at once at his number scale, and, as in the beginning, read the figures, after which he can repeat them readily. Visualization should be emphasized in the early formal work.

The first counting should be by 1's; begin at 1, count to 100. Follow by counting in groups of 10 ; in the last column, J, begin with 10 , count to 100 ; first column A, begin with 1 and count by 10 s to 91 ; in the same way count each column by 10's. Count each column in reverse order. For example, in column B begin at 92, count to 2. Pupils should learn to write figures to 100 . An immediate use is the making of inch-
square number cards on gray bogus paper. These are kept in boxes or trays and furnish a profitable form of seat work. The pupils place the cards on the desk to show the groups of 10 's, A-J.

\section*{TABLE I.}

\section*{Number Scale}
\begin{tabular}{lrrrrrrrrrr} 
& A & B & C & D & E & F & G & H & I & J \\
1— & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
2- & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 \\
3- & 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 & 30 \\
4- & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 \\
5- & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 & 49 & 50 \\
6- & 51 & 52 & 53 & 54 & 55 & 56 & 57 & 58 & 59 & 60 \\
7- & 61 & 62 & 63 & 64 & 65 & 66 & 67 & 68 & 69 & 70 \\
8- & 71 & 72 & 73 & 74 & 75 & 76 & 77 & 78 & 79 & 80 \\
\(9-\) & 81 & 82 & 83 & 84 & 85 & 86 & 87 & 88 & 89 & 90 \\
\(10-\) & 91 & 92 & 93 & 94 & 95 & 96 & 97 & 98 & 99 & 100
\end{tabular}

For diversity in grouping Table II is given. Each group of 10 's is arranged in vertical instead of horizontal lines. It is used in the same way.

Following the counting by 1's, 10 's and 5 's, count by 2 's. Beginning with zero, touch, while counting, the even numbers; beginning with 1 , touch, while counting, the odd numbers. Subsequently count from memory. Count by 8 's and by 4's through the first three or four groups. Count by adding lines A-J numbers 1 to 9 , as, add 4 to each number in line E: 5 plus 4 equal 9, 15 plus 4 equal 19, 25 plus 4 equal 29 , to 95 plus 4 equal 99 ; subtract, similarly, as in Table I, column C, 3 minus 3 equals zero, 13 minus 3 equals 10 , to 93 minus 3 equals 90 . Following actual subtraction with objects this scale may be used to advantage with pupils who are unable to make the abstraction readily. For example, in the problem 9 minus 5 , begin at 9 in row 1 ; count back 1, 2, 3, 4, 5; the figure 4 indicates the number that remains; also, the places \(1,2,3,4\), show it.

\section*{TABLE II.}

\section*{Number Scale}
\begin{tabular}{lrrlllllllr} 
& & & 1 & 21 & 31 & 41 & 51 & 61 & 71 & 81 \\
\(\mathbf{A}-\) & 1 & 11 & 21 \\
\(\mathrm{~B}-\) & 2 & 12 & 22 & 32 & 42 & 52 & 62 & 72 & 82 & 92 \\
\(\mathrm{C}-\) & 3 & 13 & 23 & 33 & 43 & 53 & 63 & 73 & 83 & 93 \\
\(\mathrm{D}-\) & 4 & 14 & 24 & 34 & 44 & 54 & 64 & 74 & 84 & 94 \\
\(\mathrm{E}-\) & 5 & 15 & 25 & 35 & 45 & 55 & 65 & 75 & 85 & 95 \\
\(\mathrm{~F}-\) & 6 & 16 & 26 & 36 & 46 & 56 & 66 & 76 & 86 & 96 \\
\(\mathrm{G}-\) & 7 & 17 & 27 & 37 & 47 & 57 & 67 & 77 & 87 & 97 \\
\(\mathrm{H}-\) & 8 & 18 & 28 & 38 & 48 & 58 & 68 & 78 & 88 & 98 \\
\(\mathrm{I}-\) & 9 & 19 & 29 & 39 & 49 & 59 & 69 & 79 & 89 & 99 \\
\(\mathrm{~J}-\) & 10 & 20 & 30 & 40 & 50 & 60 & 70 & 80 & 90 & 100
\end{tabular}

The intention of Table III is to lessen the difficulties of learning the addition combinations by building them up by counting and by showing them all upon one page. It often seems that pupils become lost in the maze of addition combinations and experience the uncertainty and distress of one who has lost his way. The pupil does not know what new combinations may leap out at him from the region of unknown things But if he sees the primary sums, all of them, and learns that there are only forty-five, the task of learning then becomes much more definite and possible. After the combinations have been learned by counting, as in columns A to I, Table III, is useful in speed drills. A class goes to the board with instructions to write column 3. The pupils begin at a signal. The one who finishes first says " 1, " and makes the figure " 1 " over his work. Each, as he finishes, announces and records his place.

The teacher checks on accuracy. At the end of the recitation it is of interest to observe the different scores. The teacher should try to account, to herself at least, and by observation while the work is in prog. ress, for the variation in speed of a given pupil. For example, if the score is \(1-4-2-1\), why did the pupil drop to fourth place in the second exercise. In using Table III at the desks the pupils build the primary sums with their inch-square number cards, varying the order each day.

Subtraction is developed by counting, using Table III, as minus 1 equals zero, 2 minus 1 equals 1 , continuing through columns A to I.

TABLE III.

Table IV presents the differences in varying order. The pupils are encouraged to arrange the "problems" in a different order each day when placing them on their desks with inch-square number cards. It is very important that the addition and subtraction processes be closely associated. When 4 and 3 are combined to make 7, at once separate each addend from the sum; 7 minus 3 equals 4,7 minus 4 equals 3 .

TABLE IV.
The 45 Primary Differences
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (1) & (2) & (3) & (4) & (5) & (6) & (7) & (8) & (9) \\
\hline A-1 & 2 & 3 & 1 & 2 & 4 & 1 & 3 & 1 \\
\hline B- & 1 & 2 & 4 & 5 & 2 & 5 & 2 & 7 \\
\hline C- & & 1 & 3 & 3 & 5 & 3 & 1 & 9 \\
\hline D- & & & 2 & 4 & 3 & 4 & 6 & 4 \\
\hline E- & & & & 1 & 6 & 2 & 8 & 5 \\
\hline F- & & & & & 1 & 7 & 4 & 6 \\
\hline G- & & & & & & 6 & 7 & 3 \\
\hline H- & & & & & & & 5 & 8 \\
\hline I- & & & & & & & & 2 \\
\hline
\end{tabular}

Following the counting for becoming familiar with the number spaces \(1-100\) should come counting by 2 's, 3 's, 4 's, etc., within the first
two groups of ten, as an aid in learning the combinations. For example, the pupil counts by 4:
Beginning with zero:
\begin{tabular}{rrrrrllllll} 
& 0, & 4, & 8, & 12 \\
\(1:\) & 1, & 5, & 9, & 13 \\
\(2:\) & 2, & 6, & 10, & 14 \\
\(3:\) & 3, & 7, & 11, & 15 & & & 12, & 8, & 4, & 0 \\
3 & & & 14, & 9, & 5, & 1 \\
\hline
\end{tabular}

Table V gives further drill in addition and subtraction. The pupils are not to read the problems, as 4 plus 3 equal 7 ; but simply name the sums and differences. The purpose of this work is to make pupils able to recognize the primary combinations instantly, and to speak or to write them instantly. The use of perception cards ( \(3 \times 51 / 2\) inches on which each figure is at least an inch and a half) is valuable.

\section*{TABLE V.}

\section*{Addition}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline 4 & 1 & 5 & 2 & 3 & 4 & 7 & 0 & 2 & 0 & 5 & 7 \\
\hline +3 & 2 & 4 & 7 & 2 & 0 & 1 & 5 & 4 & 8 & 5 & 3 \\
\hline & - & - & - & - & - & \(-\) & - & - & - & - & \\
\hline 4 & 9 & 2 & 6 & 4 & 0 & 3 & 6 & 1 & 6 & 3 & 9 \\
\hline +2 & 1 & 0 & 1 & 5 & 0 & 4 & 3 & 5 & 2 & 0 & 0 \\
\hline - & - & , & - & \(\square\) & - & - & - & \(\bigcirc\) & - & 6 & 9 \\
\hline 3 & 6 & 5 & 3 & 9 & 4 & 2 & 4 & 8 & 4 & 6
0 & 9 \\
\hline +3 & 9 & 2 & 7 & 7 & 1 & 2 & 7 & 5 & 4 & 0 & - \\
\hline 3 & 0 & 6 & 7 & 8 & 9 & 0 & 7 & 10 & 8 & 6 & 8 \\
\hline +9 & 10 & 4 & 5 & 6 & 2 & 11 & 8 & 4 & 9 & 5 & 7 \\
\hline 9 & 5 & 8 & 9 & 7 & 9 & 6 & 3 & 0 & 7 & 4 & 5 \\
\hline \(+8\) & 6 & 7 & 3 & 7 & 6 & 7 & 5 & 7 & 6 & 7 & 8 \\
\hline & & - & - & - & - & - & & & - & & \\
\hline
\end{tabular}

\section*{Subtraction}

Read Sign - minus. Read o, zero.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline 6 & 7 & 8 & 4 & 5 & 7 & 9 & 11 & 2 & 12 & 8 & 6 \\
\hline -2 & 5 & 1 & 2 & 0 & 3 & 2 & 5 & 0 & 5 & 3 & \\
\hline 11 & 8 & 3. & 13 & 14 & 9 & 7 & 12 & 4 & 18 & 10 & 3 \\
\hline -2 & 5 & 0 & 5 & 7 & 4 & 3 & 6 & 1 & 9 & 7 & 2 \\
\hline - & - & - & - & - & - & - & - & - & - & - & - \\
\hline 15 & 9 & 7 & 13 & 10 & 8 & 12 & 9 & 1 & 16 & 7 & 4 \\
\hline -7 & 3 & 1 & 7 & 5 & 4 & 5 & 6 & 0 & 8 & 2 & 0 \\
\hline - & - & - & - & - & - & - & - & - & - & - & - \\
\hline 12 & 9 & 7 & 17 & 15 & 7 & 11 & 13 & 15 & 14 & 12 & 9 \\
\hline -7 & 5 & 0 & 9 & 8 & 6 & 6 & 8 & 6 & 6 & 2 & 0 \\
\hline 10 & \(\overline{11}\) & 9 & 5 & -17 & 15 & 10 & 14 & 9 & \(\overline{11}\) & 8 & 14 \\
\hline -2 & 4 & 1 & 1 & 8 & 9 & 3 & 4 & 7 & 7 & 0 & 9 \\
\hline
\end{tabular}

\section*{PERCEPTION CARD}

The teacher exposes the card an instant; the pupil gives the sum or difference as directed. If he misses, he takes the card and reports the combination correctly when he hands it back at the close of the recitation. By shifting the perception cards the teacher makes sure that the pupils are able to recognize the combinations in any order.


TABLE VI.
Double of Numbers
Read signs: + plus, - minus. Learn doubles of numbers.
\begin{tabular}{rrrrrrrrrrrr}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 \\
+1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 \\
- & - & - & - & - & - & - & - & - & - & - & -
\end{tabular}

Use doubles of numbers as a guide in addition and subtraction. Read from top; as, 2 plus 3 equal 5 .
\begin{tabular}{rrrrrrrrrrrr}
2 & 2 & 2 & 3 & 3 & 3 & 4 & 4 & 4 & 5 & 5 & 5 \\
+2 & 3 & 1 & 3 & 4 & 2 & 4 & 5 & 3 & 5 & 6 & 4 \\
- & - & - & - & - & - & - & - & - & - & - & - \\
+6 & 6 & 6 & 7 & 7 & 7 & 8 & 8 & 8 & 9 & 9 & 9 \\
+6 & 7 & 5 & 7 & 8 & 6 & 8 & 9 & 7 & 9 & 10 & 8 \\
-10 & -10 & -10 & -11 & -11 & -11 & - & - & - & - & - & - \\
+10 & 11 & 9 & 11 & 12 & 10 & 12 & 12 & 12 & & & \\
- & - & - & - & - & - & - & - & - & & &
\end{tabular}

Read from top: as, 6 minus 4 equal 2.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline 2 & 3 & 4 & 4 & & 6 & 6 & 6 & 7 & 8 & 8 & 8 \\
\hline -1 & 3 & 2 & 3 & & 3 & 4 & 2 & 7 & 4 & 5 & 3 \\
\hline 9 & 10 & 10 & 10 & 11 & 12 & 12 & 12 & 13 & 14 & 14 & 14 \\
\hline -9 & 5 & 6 & 4 & 11 & 6 & 7 & 5 & 13 & 7 & 8 & 6 \\
\hline - & 16 & - & - & - & - & - & - & - & - & - & - \\
\hline 15 & 16 & 16 & 16 & 17 & 18 & 18 & 18 & 19 & & & \\
\hline -15 & 8 & 9 & 7 & 17 & 9 & 10 & 8 & 19 & & & \\
\hline - & - & - & - & - & - & - & - & - & & & \\
\hline 20 & 20 & 20 & 21 & 22 & 22 & 22 & 23 & 24 & 24 & 24 & \\
\hline -10 & 11 & 9 & 21 & 11 & 12 & 10 & 23 & 12 & 13 & 11 & \\
\hline - & - & - & & - & - & - & & & & & \\
\hline
\end{tabular}

Table III, column 1, presents the doubles of numbers below ten. They are easily learned in the forty-five primary sums, of which they constitute one-fifth. The knowledge of these furnishes a guide in addition and subtraction. Table VI suggests the use of this knowledge in learning and recalling primary sums and differences. For instance, 8 plus 8 equal \(16 ; 7\) is 1 less than 8 ; hence 8 plus 7 equal 1 less than 16 , or \(15 ; 8\) plus 8 equal \(16 ; 9\) is 1 more than 8 ; hence 8 plus 9 equal 1 more than 16, or 17. When the pupil has the idea of using the double of a number as a guide in addition or subtraction he is able to do it instantly without any formal explanation.

Counting by 10 's is an easy form of adding or subtracting. Pupils often consider adding 9 difficult. This difficulty may be removed by using 10 as a guide in adding 9 as suggested in Table VII.

\section*{TABLE VII.}

\section*{Addition}

Ten. It is easy to add ten to any number. Read lower number first: as 1 plus 10 equal 11.
\begin{tabular}{rrrrrrrrrrrrrrr}
10 & 10 & 10 & 10 & 10 & 0 & 10 & 10 & 10 & 10 & 10 & 10 & 10 & 10 & 10 \\
+1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 \\
\hline & - & - & - & - & - & - & - & - & - & - & - & - & - & -
\end{tabular}

Nine. 9 is 1 less than 10 . The sum of 9 and any number is 1 less than the sum of 10 and that number. Use 10 as a guide in adding 9 to any number.
\begin{tabular}{rrrrrrrrrrrrrrrr}
10 & 9 & 10 & 9 & 10 & 9 & 10 & 9 & 10 & 9 & 10 & 9 & 10 & 9 & 10 & 9 \\
+2 & 2 & 3 & 3 & 4 & 4 & 5 & 5 & 6 & 6 & 7 & 7 & 8 & 8 & 9 & 9 \\
\hline
\end{tabular}

TABLE VIII.
Table of Two's


In the counting by 2 's from the number scales, Tables I and II, the equivalent of the multiplication table of two's has been developed. These facts may be thrown into the form of Table VIII. Use this for both multiplication and division; 9 times 2 equal 18. How many 2 's in 18 ? There are nine 2's in 18.

ART
I. Representation.

Review graphic forms learned in the previous grade and develop new ideas needed in illustration of stories and reading lessons.
Figure: Stick figure in relation to study of home and school activities. Dutch boy and girl, Indian, Arab.
Animals: Study animals in varied positions. Elephant, lion, turkey, sheep, camel, ox, fox, rabbit, donkey, goat, horse, circus animals.
Birds: Meadow lark, warbler, cat bird, woodpecker.
Nature: Fruits, vegetables, flowers, seed pods, grasses, leaves, trees.
Shelter: Indian wigwam, Arab tent, Dutch house, Cinderella's house, trees.
Illustration units from literature. Je-Shib, Hiawatha, Arabian Life.
Objects: Toys, tools and utensils used by Indians and Arabians, and in home occupations.
II. Color: Review color names and combine colors to produce secondary group. Compare colors in nature, recognizing light and dark of standard hues.
III. Destgn.

Arrangements of dark and light masses to develop feeling for balance and good spacing.
Subjects: Fairy pictures of trees, and castles, birds and butterflies with flowers, booklet covers.
Arrangement of colored paper units to form borders and surface patterns involving repetition, alternation and rhythmic grouping. Interpretation and application of Indian design.
Lettering.
IV. Construction.

Paper Problems: Furniture, envelopes, houses, barn, garage, box, boat, May basket, gifts, toys, special day problems, measuring to the inch and half inch.
Booklets: Color booklet based upon nature study.
Table Problems: Arabian life, Je-Shib, circus.
Textiles: Weaving: Rug, head band, mat, dolls, toboggan, hammock.
Stitchery: Simple designs applied in decorative color to burlap, mats, moccasins, book-bags. Costumes for dramatization.
Clay: Animal forms, beads, and utensils suggested by the study of Arabs and Indians.
V. Picture Study.

A Primary School in Brittany, Geoffrey.
A Strawberry Girl, Reynolds.
A Helping Hand, Renouf.
Arrival of the Shepherds, Lerolle.
The Drinking Trough, Dapre.
Carnation Lily, Lily Rose, Sargent.
Baby and Grandmother, McEwen.
Mother and Child, Toulmouche.
An Aristocrat, Landseer.
Study of a Lion, Landseer.
Knitting Shepherdess, Millet.
Sculpture: Head of a Boy, Donatello; Choir Boys, Della Robbia; Elephant Running, Barye.

\section*{ENGLISH}

\section*{Reading}

The fundamental aim of reading is thought-getting. This grade is to continue the habits of study and mastery of mechanics begun in the first grade and develop fluency by wide reading. There needs to be three periods devoted to reading. In the morning period teacher and pupil work out new material. There should be much thoughtful silent reading in answer to stimulating questions. At first the questions are given orally by the teacher and later written on the board or class cards to get good habits of study. The drill period should be separate from the reading periods where phonics and word analysis are given. The afternoon period should be used for oral and silent reading of easier material to get rate, fluency and fix the habits developed in the morning. There should be both silent and oral reading and lively discussion of content of what is read. This reading should be as wide as possible and along different lines.
I. Give Comprehension or Intelligent Interpretation.
a. By relating materials to child's experience.
b. By effective habits of study.
c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.
1. Relate new material to some similar experience of the children.
2. Teacher tell story in abridged fashion, pupils work out complete story from book.
3. Pupils read to find answers to questions.
4. Pupils follow written or printed directions.
5. Pupils tell meaning of words by suggesting others that might have been used.
6. Read story to plan scenes and characters for dramatization.
7. Help pupils study a difficult story by asking questions while they work out story.
8. Direct the reading by thought units not by pages.
9. While one child reads aloud others study to ask him questions on what he reads.
10. Illustrate story with cuttings or crayolas.
11. Use some simple reading units as Indian Life or Animals for informational reading.
II. Give Thorough Mastery of the Mechanics.
a. For effective oral reading.
b. For effective silent reading habits.

Suggestions for accomplishing above reading habits.
1. Continue use of sentence, phrases and word drills from flash cards to increase rate of recognition.
2. See that children can use sounds learned in first grade to gain independence in word recognition.
3. Complete analysis of monosyllabic words and recognize known parts of longer words.
4. Teacher tell short synopsis of new story, putting difficult words on board as she comes to them; pupils pronounce them.
5. Find quotations quickly in answer to questions to get speed.
6. Give drills for careful articulation.
7. Teacher read aloud and discuss with children several books of different types.
8. Have some supplementary books to be taken nome and read and reported on.
9. Read aloud and discuss with the children several short poems, then memorize.
10. Teacher read part of some book aloud and then put with books for individual reading.
11. The standard in rate for second grade is from 80 to 100 words per minute. The comprehension is not easily indicated except by a particular test, but informal tests can be given by questions or reproduction of suitable paragraphs or stories.

\section*{Phonics}

The educational values derived from phonics in the second grade are-
1. Ear training.
2. Clear articulation.
3. Foundation for use of dictionary.
4. Pronunciation of new words.

The work develops as follows:
1. Review first grade phonics.
2. Teach a, e, i, u, before r greatly modified.

Two sounds of \(\mathrm{c}, \mathrm{s}, \mathrm{g}\), and the correct sound of wh.
all the sounds of double vowels.
ai and ay like long sound of a.
sa and oe like long sound of 0 .
le and y like long sound of i.
ew and ue like long sound of \(u\).
g and dg like j .
au and aw like a in all.
a like short o.
ph and gh like f.
tion and sion alike.
Short vowel followed by two consonants, long vowel followed by one consonant.

Illustrate the silent \(\mathrm{k}, \mathrm{g}, \mathrm{w}, \mathrm{b}, \mathrm{l}, \mathrm{t}\), gh.
Give some work with prefix and suffix and begin the diacritical marking.

\section*{Literature}

The following textbooks offer a wide range of simple verse and folk tale in suitable form:
Child World Second Reader.................Browne, Withers and Tate
(John Pub. Co.)

Story Land in Play.................................
Tales and Customs of the Ancient
Hebrews (Flan.)
Indian Story of Je-Shib .
Children of the Cliff............................Wiley and Edick (Ap.)
Lodrix, the Little Lake Dweller.........Wiley and Edick (Ap.)
Children's First Book of Poetry..........Emelie Kip Baker (Am. B. Co.)
Graded Poetry, Book Two -.........................
Racketty-Packetty House (Drama)...Burnett (Cen.)
The Posy Ring..........................................
Best Stories to Tell to Children............Bryant (H. M.)
Also the Second Readers of the Various series included in the First Grade outline. In the First Grade outline also are sources for Second Grade poetry and story.
Poetry: Christina Rossetti-A Birthday gift, The Wind It Has Such a Rainy Sound, Who has Seen the Wind, Boats Sail on the River, Now The Noisy Winds Are Still, Milking Time, A Pin Has a Head, but no Hair, O Wind, Why Do You Never Rest, Fly Away Over the Sea; Wil liam Blake-The Lamb, Spring, The Shepherd; Kingsley-The Lost Doll; Miller-Winter Song; Jacobson-October; George MacdonaldLittle White Lily; Brewer-Little Things; Frances Thompson-Little Jesus; Coleridge-If I Had But Two Little Wings, He Prayeth Best; Jane Taylor-The Violet, Thank You Pretty Cow; Susan CoolidgeHow the Leaves Came Down; Mary Mapes Dodge-Snowflakes, Now the Noisy Winds Are Still, Nearly Ready, Night and Day; Alma Tadema-Lambs in the Meadow; Lydia Maria Child-Who Stole the Bird's Nest; John Kendrick Bangs-The Little Elf; Burns-A Child's Grace; Elizabeth B. Browning-A Child's Thought of God; Rand'sThe Wonderful World, The Pedlar's Caravan; Lord Houghton-Goodnight and Goodmorning; Mulock-Who Comes Dancing Over the Snow; Celia Thaxter-The Spring; George Eliot-Spring Song; Ann Taylor-The Boy and the Sheep; Tennyson-What Does Little Birdie Say; Coonley Ward-Christmas Song.
Stories: Merrill Reader, Book III-Hop O' My Thumb; Best Stories то Tell то Children-Rumpelstiltskin, The Little Jackal and the Alligator, How Brother Rabit Fooled the Whale and Mr. Elephant; Grimm's Fairy Tales-Little One Eye; Andersen's Fairy TalesThe Ugly Duckling; Fairy Tales Every Child Should Know-Beauty and the Beast; The Children's Hour-The Legend of Arbutus; Van Dyкe-The First Christmas Tree; Legend of St. Christopher (From Schonberg Cotta Family); Bible Stories told in connection with Shepherd Life: Abraham and Lot, Isaac, Jacob and Esau, Jacob and Laban, Jacob's Journeyings, Joseph, Joseph and His Brothers, Israel in Egypt, Moses, The Plagues of Egypt, Joshua, Sampson, Samuel, Saul, Goliath, Saul and David; David Made King, Sheep Shearing, The Song of Our Syrian Guest, The Twenty-third Psalm. From the back of a Sheep to the Legs of a Boy.

\section*{Language and Composition}

In the second grade the pupil is expected to make a beginning of writing. During the early weeks in this grade the composition is all oral except for a continuation of the card-constructed sentences, such as were used in the latter half year of the first grade. After that the writing of little sentences is begun. This work is continued through the year. At the end of the time each pupil should be able to write simple "stories" composed of from two to five simple sentences each correctly written and all arranged in an orderly sequence. The oral story telling is kept simple also, but the stories may be made up of more sentences than occur in the written.

Aims.
1. To develop ability in each pupil to construct orally simple stories of five or six related sentences.
2. To give practice in the oral reproduction of short, simple stories told by the teacher.
3. To eradicate a few of the noticeable errors in speech common to this grade.
4. To make a beginning of writing-in the end aiming to secure the skill in each pupil to write from three to five related sentences accurately with respect to capitalization, spelling, and punctuation.
Means and Ways.
1. Alphabet cards and word cards with which to construct short sentences copied from the blackboard, dictated by the teacher, or made up by the pupil. The use of these cards should be discontinued by the end of the first half of the year-before if the pupils have made sufficient progress in writing.
2. Stories told by the teacher and later retold by the children, the teacher guarding against the habit of "running on" by making use of "and," "so," and "and so" where new sentences should begin. She should see to it that neither she nor the children develop or continue this habit.
3. A continuation of the dramatization of little stories, the object being to get the children interested in thinking of something to say and then to say it correctly.
4. A list of the outstanding errors which the children of this particular grade make and which the teacher is determined to correct during the year.
The tendency will be to take a ready made list from some book, and to drill all the children on all the expressions. That's the easy way. Do not be tempted. Make your own list. Keep a note book something like the sample below:

\section*{Individual Errors of my Pupils to be Corrected This Year.}

Edmond-I done it, Aint got no, Got it offa him.
Carol-Hadn't ought to, hisself, "would of" for "would have."
Charles-Knowed, "they was" for "there was" them kind.
Nancy-She don't, gimme, "done" for "did."
Keep an account book with a page devoted to each pupil. Cross out an error when it ceases to be used. Occasionally exhibit the book to the pupils.

Make your account book a double entry system. Keep a page for each error that is made by as many as five in the grade, thus:
\[
\begin{gathered}
\text { "done" for "did" } \\
\text { Mary } \\
\text { Kate } \\
\text { John } \\
\text { *Samuel } \\
\text { James } \\
\text { Harry } \\
\text { *Nancy }
\end{gathered}
\]
* Check off a name whenever a pupil conquers that error.

Don't try to make perfect speakers of your pupils in this grade. If you do, they will be perfect because they are not saying anything. Attack from a dozen to twenty errors with the determination that the third grade teacher shall not have those to subdue. She will have others a-plenty but not these. Sufficient unto the grade are the errors thereof.
5. Writing: The writing consists of simple sentences:
(a). Copied from the blackboard, (b) written from dictation, and (c). made by the pupil.

The pupils should be taught to examine their own work to see that it is correct before handing it to the teacher. This may be done by comparing it with the teacher's correct copy on the blackboard, first, to see that each sentence begins with a capital letter and ends with a period or question mark; second, that no word has been omitted, and third, that all the words are correctly spelled.

No long narrative is attempted in writing in the second grade. We are content if at the end of the year all the pupils can write correctly a "story" of three, four, or five short, simple sentences.
6. Teghnical Items:
a. Capitals: At the beginning of a sentence. Names of persons, places, days of the week, the months, and the word I.
b. Punctuation: Period at the end of a telling sentence and after the abbreviations Mr. and Mrs. Question mark at the close of sentence that asks a question.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, Pages 4 to 38 and pages 51 to 61.
Sheridan-Speaking and Writing English, Pages 1 to 46 and pages 61 to 74.

\section*{SOCIAL SCIENCE}

\section*{Civics}
1. Aims in Teaching:
a. To help children to appreciate their relations to the several social groups.
b. To show dependence of the individual upon the group.
2. Outline of Material-The general subject is the home studied with relation to:
a. Cleanliness in and about the house: floors, windows, toilet, bath, fresh air, garbage, gardens, and yards.
b. Community service for the home: food, clothing, shelter, water, electricity, telephone, etc., as suggested by the grocer, milkman, and others.
c. Home service for the community: care of the home and surroundings, complying with requirements relative to health and other community relations.
d. Special community service in the home: contributions for relief purposes; also any new interest that may develop in the reconstruction.
3 Procedure: In this grade the practices of the first grade are continued; that is, the subject is taught largely through correlation with other subjects. Talks and stories are continued.
4. Bibliography.
a. Texts for the teacher:

Allen, W. H., Civics and Health.
Cabot, E. L., A Course in Citizenship.
-Ethics for Children.
Dunn, A. W., Community Civics.
(See Bibliography in Grade I.)
b. Stories for children:

The Home.
How the Home Was Built, in Mother Stories, Lindsay.

The Little Gray Grandmother, in For the Children's Hour, Bailey. Helpfulness.

How the Crickets Brought Good Fortune.
The Stone in the Road.
The Cock, the Mouse and the Little Red Hen.
The Little Brown Lady.
Generosity.
The Story of Midas, in Stories to Tell Children, Bryant.
The Little Boy Who Had a Picnic.
The Little Old Man and His Gold.
The King of the Golden River.
Love for Animals.
Hiawatha's Childhood, Longfellow.
Dick Whittington and His Cat, in Tell Me Another Story, Bailey. Selfishness.
The Queer Little Baker Man, in Stories Children Need, Bailey. The Cooky.
The Legend of the Woodpecker, in For the Children's Hour.
The Coming of the King.
Bravery.
The Eyes of the King, in Story Telling Time, Bailey.
Patriotism.
How Cedric Became a Knight, in For the Children's Hour. Little George Washington.
Co-operation.
How Nice It Would Be, in Stories That Children Need.
The Story of the Pink Rose, in How to Tell Stories to Children.
The Old Woman and Her Pig.

\section*{HISTORY}

The history topics for the second grade grow directly out of the consideration of food and clothing, certain phases of which have already been started in the first grade. Following the study of farm life, a special agricultural industry in* the Greeley community, sheep feeding, is taken up. After the study of the sheep industry, the elements of time and change are introduced. The children are taken back to early shepherd times, and certain large historical concepts enter into the work. The development of man is traced through the pastoral agricultural period of his growth from a nomadic tent dweller to that in which the desire for permanent homes and possessions is manifest.
1. The Sheep Feeding Industry.
a. Field trips to sheep feeding pens are taken and observations noted.
b. Sheep-of what use to man-food, clothing.
c. Materials for pens-lumber, nails, wire, etc.
1. These lead to the problem of transportation-wagons, horses, automobiles, railways, ships.
d. Communication is necessary-telephone, telegraph, mail.
II. Shepherd Life of Long Ago.
a. The beginnings of shepherd life as a result of the domestication of animals.
1. Environment necessary for shepherd life.
2. Manner of tending flocks in ancient times, differentiation of labor.
(a) Men and boys live with flocks.
(b) Women-spinning, weaving, cooking, making butter and cheese, gathering vegetables, making pottery, baskets, tents, moving.

\footnotetext{
*Some industry in the local community may be used.
}
b. Food-products of the flock, and wild vegetables.
1. Meals consist of cakes made of crushed grain, curds, flesh of the flock or wild venison; water from water jars made of clay.
c. Clothing-made of textile, fabrics, and skins.
1. Making textiles-the mother combs out wool; spinning and weaving.
2. Making of tunics of wool; sandals, caps.
3. Shepherds' crooks.
d. Shelter-woven and skin tents.
1. Family life inside the home.
2. Use of fire.
e. Social organization-Patriarchal.

Material for working out the above outline of ancient shepherd life is taken from the following Bible stories: Abraham and Lot, Isaac, Jacob and Esau, Jacob and Laban, Jacob's Journeyings, Joseph, Joseph and his brothers, Israel in Egypt, Moses, the Plagues of Egypt, Joshua, Sampson, Samuel, Saul, Goliath, Saul and David, David made King.

\section*{MUSIC}

\section*{B Class}

The work of this grade is still all aural, in development of the melodic discrimination through a tonal vocabulary-the motive or figure (tone-word). Tone thinking is encouraged by applying syllables to all bits of melody heard. Phrase cards and flash cards with motives and figures are constantly kept before the class. Through constant association with figures made familiar in former songs are the children led to anticipate the syllables of the new songs.

Rhythm work consists of rhythmic response through the more loosely organized singing games and simple folk-dances as well as simple meter sensing through the scanning of the word context of songs learned.

The following art songs should be taught to broaden the children's musical experiences and add definitely to their vocabulary of musical ideas. Many of these songs embody problems to be studied in succeeding grades: (Teacher's Manual, Vol. I).
1. One Misty, Misty Morning.
2. Chrysanthemum.
3. Windy Nights.
4. Rock-a-bye, Hush-a-bye, Little Papoose.
5. Eatings.
6. Bedtime.
7. Kris Kringle's Song.
8. Sing a Song of Sixpence.
9. The Jolly Holly Farm.
10. Icicles and Bicycles.
11. The Song of the Wind.
12. If.

\section*{A Class}

The chief work of this grade is to develop the visual image in notation. The teacher presents the songs from Progressive Series, Book I, Part I, by copying the song on the board just as found in the book. By locating motives and figures by position, by making comparisons, etc., the phrases are studied from the blackboard. Same process later repeated from book. A great deal of stress is laid upon visualization drills. The presentation of these familiar songs in staff notation should follow the following analytic methods:
1. Words and melody by rote.
2. Singing with loo.
3. Recognition of phrase repetition.
4. Application of syllables.
5. Independent recognition of motives and figures.

The following art-rote songs should be taught-(Teacher's Manual, Vol. I).
1. Winter Jewels.
2. Miss Rainy Day.
3. The Goblin.
4. The Umbrella Man.
5. The Windflower.
6. The Cats of Kilkenny.
7. The Naughty Tulip.
8. The Scissors Grinder.
9. Little Robin Redbreast.
10. Daisy Nurses.
11. The Pink Pig.
12. The Ragman.
13. The Happy Bee.
14. The Five Toes.
15. Little Miss Tulip.

While teaching the latter two, children should have books in hands and should be encouraged to follow the notation as the teacher sings with loo. They should be able to recognize familiar motives and figures as well as repetitions of the same.

Rhythm work consists of highly organized rhythmic response through folk dances consisting of set figures and requiring some degree of accuracy from each participant.

\section*{THIRD GRADE}

\section*{ARITHMETIC}

\section*{B Class}

Review.
Combinations and separations should be thoroughly reviewed. Emphasis should be placed upon accuracy and speed in this grade.
New Work.
Reading and writing numbers with three orders.
Addition through series work as....

Place right hand figures first in addition of this kind.
Subtraction, the same.
Addition by 2 's, 3 's, 4's, and 5's. Example.
\begin{tabular}{rrrr}
\(\mathbf{1}\) & 2 & 1 & 1 \\
3 & 4 & 4 & 5 \\
5 & 6 & 7 & 9 \\
7 & 8 & 10 & 13 \\
9 & 10 & 13 & 17 \\
\hline & - & - & -
\end{tabular}

Teach multiplication and division tables to the 6's.
Have only one digit for the multiplier and divisor.
Teach division in the following ways:
\[
3 / 3=1 \quad 3 \div 3=1 \quad 1 / 3 \text { of } 3=1
\]

Children should know that \(27 \div 3\) means the same as \(3 \div 27\).
Give only even division problems with two and three numbers in the quotient. Games.
1. Number Race. Divide blackboard into spaces. In each space, place simple number combinations or examples in separation or multiplication tables. Select two children to run a race. Start one child at A and the other at \(B\). The one running the greatest number of miles correctly wins the race.
2. Fireman Game. Draw windows at the top of the blackboard. Have ladders reaching up to them. Place combinations or separations on the
rounds of the ladder. The child is to see if he can climb the ladder without falling, or he may descend the ladder without accident.
3. The Race. Ten or fifteen combinations are written on a row on the board. The two children chosen pass to opposite ends. At the signal they begin writing the answers. When they meet, a line is drawn and each counts the problems he has answered. Compare the number of answers. This gives a good opportunity for more than and less than work.
4. Mush Pot Game. The children form a circle, teacher standing in the center with drill cards. The cards are exposed to each child in turn. If the answer is incorrectly given, the child goes into the mush pot. When the round is made the children in the center are given an opportunity to get back in the circle by giving the correct answer to the card they hold. They still retain the card, however, until the game is over, then it is easy to check up to each child his individual problem.

This game may be played in a different manner. The first child who misses goes into the mush pot without his card, which is passed to the next child; as soon as he tells or catches another card, he goes into the circle, and the one caught takes his place in the center.

Half of the time should be given to oral work. All review in abstract work should be given without thinking or counting. The following terms should be understood: add, addition, subtract, subtraction, multiply, divide, sum, remainder, difference. The child should be taught the use of the following signs: \(+-\times \div\)

\section*{A Class}

Review all the work previously outlined.
New Work.
Read and write numbers to 4 orders.
Complete multiplication tables through the 9's. Division, same.
In multiplication, let the multiplier be one digit.
Let all short division be even.
Teach the process of borrowing, but say "take."
Give one step problems in addition, subtraction, and multiplication.
As reasoning is the basis of concrete work, much oral drill should be given, the teacher and class working together, that correct habits of attacking a problem may be formed. The steps necessary to solve problems orally with objects will be the basis for solving written problems. Work many of the written or book examples orally, using a few principles that will apply to most examples.

Read the problems carefully.
What am I asked to find?
What is known?
How will I find it?
In multiplication, make a statement similar to this:
A boy earns \(\$ 6\) in one week. In 2 weeks, he earns 2 times \(\$ 6\) or \(\$ 12\) ( not \(2 \times 6\) ).

Give store problems involving the use of money and bills.
The same achievements should not be expected from all classes nor from all individuals.

Standards should vary with the amount of drill given. Knowledge of the process is the first standard, accuracy follows next, and then speed.

Allowance should be made for the slow pupil. In records based on time, each pupil should be encouraged to raise his own previous record, and to advance until he has reached his limit.

Place the standard above the average of the class. Keep a record so that each may know whether he is advancing toward this standard or has exceeded it.

About one-half of the time should be given to oral drills. Emphasize the oral drills in multiplication and division. Keep up the drill work on the combinations and separations.

ART
I. Representation.

Figure: Development of figure and costume of nationalities and characters suggested by other subjects in the curriculum. Activities of Indians and early settlers of Colorado, activities of people in the industries of our state.
Animals: Beaver, bear, fox, squirrel, domestic animals and fowls, insects. Development of more complex form and action than is attempted by previous grades.
Birds: Oriole, black bird, tanager, flicker, jay.
Nature: Fruits, vegetables, plants and flowers in connection with nature study.
Shelter: Home and public buildings. Homes of early explorers of Colorado.
Objects: Vehicles of transportation, tools and utensils suggested by home occupations and local industries.
Illustration: Indian life, life of early settlers and explorers in Colorado, means of travel, incidents suggested in reading, history and geography. Hiawatha.
II. Color.

Recognition of light and dark values of standard hues. Observe color in nature and contrast values. Work for appreciation of refined color combinations. Make a color booklet.
III. Design.

On cross section paper develop units of design subject such as seeds, leaves, fruit, flowers, birds, animals. Study Indian motifs and the interpretation of Indian design.
Work for feeling of balance, rhythm, and good spacing in the decoration of construction problems.
Lettering, posters.
IV. Constructions.

Paper and cardboard problems involving measuring to the quarter inch, scoring, dotted line, full line, mitering. Suggestions-envelopes, candy box, May basket, telephone pad, calendar, pen wiper, jointed toys. Introduce the circle marker. Begin use of coping saw on compo board toys.
Table Problems: Local industries, Hiawatha, projects developed in the life of the child.
Textiles: Costumes for play, school, party. Costumes related to study of tribal life.
Stitchery applied to gingham, canvas and burlap problems related to daily work.
Weaving: Indian head band, blanket or rug, mat, basket.
Clay: Animal forms, Indian pottery, objects correlated with various subjects of the curriculum.
V. Picture Study.

Shepherdess, Lerolle.
Woman Churning, Millet.
Sistine Madonna, Raphael.
Girl with a Cat, Roecker.
Children of Charles I, Van Dyke.
Angel with Mandolin, Carpaccio.
Shepherd and His Flock, Bonheur.
Saint Cecelia, Raphael.
Distinguished Member of Humane Society, Landseer.
Society, Landseer.
Sculpture: The Trumpeters, Della Robbia.
Boy Extracting a Thorn, Greek.
The Goose Boy, Greek.

\section*{ENGLISH}

\section*{Reading}

The fundamental aim of reading is to stimulate thinking and get experience from the printed page. The third grade is to continue the habits of study begun in the first and second grades, gain wider fluency and complete the mastery of the mechanics. At the end of the third year the children should be able to read independently third grade material and read fluently supplementary material at sight. The same three periods of the second grade need to be continued, the afternoon period being on reading units for geography or other work.
I. Give Comprehension or Intelligent Comprehension.
a. By relating material to child's experience.
b. By effective habits of study.
c. By wide reading to establish many centers of interpretation.
Suggestions for Accomplishing above Points.
1. Keep material related to children's experience.
2. Pupils read to find answers to questions during study period.
3. Pupils find main parts of story and read in thought units, others asking questions.
4. Pupils read short individual stories to tell to rest of class.
5. Pupils read silently to find answers to teacher's questions and discuss accuracy of answers.
6. Pupils read and find main and minor characters in story.
7. Plan scenes and dramatize stories.
8. Have some reading units where children can read extensively for information.
9. Pupils write questions on different parts of the story, best used in class.
10. Find meaning of new words from content and suggest others that might have been used.
11. Make list of new words or unusual expressions from lesson to be used in sentences.
12. Illustrate stories with drawings.
13. Use of flash cards to test thought-getting and mechanics of reading.
II. Give Thorough Mastery of the Mechanics.
a. For effective oral reading.
b. For effective silent reading habits.

Suggestions for accomplishing above points.
1. Use sentences and longer phrases for short exposure drill to increase span of recognition.
2. Use phonic drills if still needed.
3. Recognize known parts of polysyllabic words and work out pronunciation.
4. Teach some of the more common prefixes and suffixes, an, in, dis, and, less, ness, ful, fully, both for meaning and pronunciation.
5. Complete the mastery of the mechanics.
6. Have articulation drills for clearness and flexibility of voice.
7. Read orally and silently much easy material to rhythmical movements of eyes and gain fluency.
III. Give Effective Use of Book.
a. Pages and chapters.
b. Tables of content.
c. Glossary.
d. Reference books.

Suggestions for accomplishing above points.
1. Call attention to titles of books as indicating content.
2. Insist that pupils use tables of contents to find topics.
3. Show how chapter headings indicate central thought of chapter.
4. Teacher use dictionary in front of children to get meaning, spelling or pronunciation of new words.
5. Teacher read aloud and discuss with children several books of different types.
6. Pupils make short reports to class of books read from individual reading lists.
7. Read aloud and interpret several short poems that children memorize later.
8. Have as many kinds of books from types above as possible for individual reading.
9. Show class how different books will give information on certain topics as life in Holland or How Ants Live.
10. Let children hunt up extra reading material on any topic they are studying.
11. The standard in rate for third grade is 100 to 125 words per minute. The comprehension standard cannot be indicated very well except in a particular test, but the teacher can give informal tests by having all the class read a certain paragraph or story by time and then reproduce or answer questions on amount read.

Phonics
Silent letters: w, f, k, l.
a as in ask.
ss, sp, st.
ff, ft.
ph, tion, th, nt, nd.
e-a.
a-e.
a-o.

\section*{Literature}



Also the Third Readers of the various series included in the First Grade outline. See also the First Grade outline for poetry and story references.
Poems: Stevenson-The Little Land, The Land of Story Book; Long-fellow-The Children's Hour; Tennyson-The Throstle; The Snow. drop, The City Child, The Owl; Browning-The Pied Piper of Hamelin; Jean Ingelow-Seven Times One; Celia Thaxter-Wild Geese, Little Gustava; Eugene Field-A Norse Lullaby, The Poppy Lady; Lucy Larcom-Sir Robin; Charles and Mary Lamb-The Magpie's Nest; Alice Cary-The Woodpecker, The Blackbird; Emily Miller-The Bluebird; Moore-A visit from St. Nicholas; Unknown -Lullaby of the Iroquois; Margaret Deland-The Christmas Silence; Laura Richards-A Child's Thanksgiving; Riley-The Bear Story; Vandegrift-The Sandman; Emerson-A Fable; Oliver Herford-The Elf and the Dormouse; John B. Tabb-A Bunch of Roses; Old Carol -I Saw Three Ships; Richard Watson Gilder-A Midsummer Song; Nora Perry-The Coming of Spring; H. H.-September; DodgeWhen the Noisy Winds Are Still; Emily Dickinson-A Day; Kipling -The Seal's Lullaby, The Swallow's Nest; Field-Little Boy Blue, Jest 'Fore Christmas; Swinburne-A Baby's Feet, A Baby's Hands, A Baby's Eyes; Lear-Owl and the Pussy Cat; Aldrich-Kris Kringle.
Stories: Grimm's Fairy Tales-Snow White and the Seven Dwarfs, The King of the Birds, The Twelve Brothers, Snow White and Rose Red, The Frog Prince, Diamonds and Toads; Williston-The Tongue-Cut Sparrow; Andersen's Fairy Tales-Five Peas in a Pod, The Snow Man; Aesop's Fables-The Man, The Boy and the Donkey, The Crab and His Mother, The Two Frogs; Indian Legends (Judson)-Saints and Friendly Beasts-The Mouse Tower on the Rhine; Pandora; Indian Myths (Judson) ; The Golden Touch; The Striped Chipmunk's Thanksgiving Dinner; The Christmas Angel (Katherine Pyle); Bible -The Good Shepherd, The Christmas Story; Van Dyke-The Christmas Tree That Wanted to Bear Leaves; Tolstor-Where Love is There God is Also; Dickens' Christmas Carol-Tiny Tim; Miss Alcott's Scrap Bag; Tilly's Christmas for the Children's HourHerr Oster Hans; Stories of Lewis, Clark and Pike; Sailor Man (Laura E. Richards); Uncle Remus; Seton-Lobo; Jungle Book-Riki-TikiTavi.

\section*{Language and Composition}

The composition in the third grade is still largely oral and is still such as would grow naturally out of the child's own experiences. Freedom of expression in correct, simple natural language is the aim of the grade. The campaign against a few errors is carried over from the second grade, with a book account of the progress made by each pupil against his special errors and by the whole grade against the small list of common errors.

In reading and literature real progress is made in this grade toward a mastery of the technic of reading so that the child begins
to get some pleasure out of what he reads in addition to that which comes from mastering the mechanics of reading. Aims.
1. To develop in all the children the power to express themselves simply in natural, clear, correct English.
2. To conquer a few of the errors common to the children of this grade.
3. To teach the spelling of such words as are frequently used in writing in this grade.
4. To make a beginning in the reading of literature which is within the range of comprehension of third grade children.

Ways, Means and Materials.
1. Accuracy is the first essential; freedom and fluency are no less essential, but they must not be secured at the expense of accuracy.
2. Language games are still made use of to drill in accurate expression.
3. The means used to give practice in oral expression are:
a. Retelling simple stories.
b. Telling original stories, using topics and models suggested by the teacher, and also those thought of by the children.
c. Relating anecdotes.

In all the work noted above the war against "and," "and so," and "so," "then," and "and then" must be vigorously kept up. Don't overdo it though, and leave the impression that these are never to be used. This has been done with the word "got." The aim is to get the child to use simple telling, asking, and exclaiming sentences with only the occasional use of the compound sentence. The complex sentence with the relative and abverbial clauses for most children is not natural at this age.
d. Memorizing verses, and whole poems.
e. Making original rhymes and riddles.
f. "Stories" growing out of picture study; i. e., three, four, or five related simple sentences about a picture.
g. Dramatizations.
h. Conversations growing out of the development of projects in history, geography, reading, etc.
4. The means used to give practice in written expression in this grade are:
a. Copying from the blackboard and from books single sentences and brief "stories" of from three to five sentences.
b. Copying from dictation the same sort of sentences and "stories." This copying (a and b) should be daily practice. There is nothing like it to accustom children to the look of correct forms and to the habit of writing neatly and with mechanical accuracy.
c. The occasional short written reproduction of stories told in the class-at first copied from the board, and later without this intermediate copying step.

The teacher will find that any device which makes the task of writing seem possible and simple will greatly increase the accuracy of the work. These devices are suggested: 1. Uniform half-sheets of paper, \(8 \times 51 / 2\) inches, ruled the long way. 2. Stories three to five sentences in length. 3. Self correction, consisting of one look through to see if all the words are there, a second for spelling, and a third for capital letters and punctuation.

All of this formal written work must be read and marked by the teacher, but it should be corrected only for the technical matters taught in grades two and three.
d. Brief letters and invitations with headings and endings copied from models.
e. Technical Items

New abbreviations: Dr. and Colo.
New uses of capital letters: At the beginning of each line of poetry.
Indentation of a paragraph.
Commas in a series of words.
Contractions: Don't, doesn't, can't, isn't, I'll, I'm, it's for "it is."
Exclamation point at the end of exclamatory sentence.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, Pages 4 to 38 and pages 62 to 72 .
Sheridan-Speaking and writing English, Pages 1 to 46 and pages
74 to 85 .

\section*{SOCIAL SCIENCE}

Civics
1. Aims in Teaching:
a. To create an appreciation of what the school does for the child; to stir in the child an appreciation of the values of co-operation, mutual service, and community interest.
b. To create good citizens through instilling proper regard for the neighborhood; to encourage a desire to improve the community.
2. Outline of Material-The school and the neighborhood are considered with respect to the following:
a. The school: purpose, buildings, rules governing, sanitation, exercise and play.
b. The neighborhood: traffic regulations, street cleaning, removal of garbage, lighting, parks, occupations and industries of the community.
c. The school and the community: thrift campaigns, liberty bonds, military education, occupations in the community concerned with the reconstruction interests.
3. Procedure: The work may be given indirectly by correlating with other subjects; it may receive attention directly through some periods being given to it each week. Talks and stories may be continued.
Observation and excursions.
4. Bibliography.
a. Texts for the teacher:

City Laws and Ordinances.
Gulick, L. H., Town and City.
Allen, W. H., Civics and Health.
Ayres, M., Williams, J. F., and Wood, T. D., Healthful Schools. Dunn, A. W., Community Civies.
Beard, C. A., American City Government.
Howe, F., The Modern City and Its Problems.
United States Bureau of Education, Bulletin No. 17, 1917.
Civic Education in Elementary Schools.
b. Stories for children: (See bibliography in Grade II.)

\section*{HISTORY}

The aim of the history in this grade is to give the children an interest in their own community and their state and to give them experience with simple living conditions such as were experienced by the Indians in their primitive ways of living, and the simple ways of the early settlers of this locality. This will be done through the history stories.

Outline for the Study of the Indians
I. Early Indian Life in Colorado.
A. Different types of Native Tribes.
1. Mountain tribes-Utes.
2. Plateau tribes-Navajo.
3. Desert tribes-Cheyennes, Comanche, Kiowa.
4. Cliff dwellers-Pueblo, Hopi, Zuni.
B. Characteristics of each type of tribe.
1. Appearance.
2. Dispositions.
3. Homes.
4. Dress.
5. Customs and religious ceremonials.
6. Mode of gaining a livlihood.
7. Mode of travel, trade and exchange.
8. Relation to white man.

Outline for the Study of the Early Explorers and Settlers
I. The Coming of the White Man.
A. Purpose.
B. Means of Travel.
1. Travel on horseback.
2. Emigrant wagons.
3. Prairie schooners.
4. Stage coaches.
C. Relations and difficulties with Indians.
D. Early settlements.
1. Greeley Colony.
a. Founding of colony.
1. When.
2. By whom?
3. Why.
b. Making of colony.
2. Trouble with the Indians.
3. Early life and trade.
a. Homes.
b. Occupations.
c. Transportation.
4. Comparative study of growth of colony.
a. Homes.
b. Public buildings.
c. Schools.
d. Churches.
e. Means of transportation and travel.
f. Industries.

The use of all available material and devices, such as maps, reference books, construction work, sand table, dramatization and projects growing out of the study of these stories will be prominent features in the teaching of this history work.

Possible projects might be-
Depicting scenes of the early Indian life, life of settlers, crossing of plains in the prairie schooners, and the making of a pueblo in the sand table.

\section*{GEOGRAPHY}

The purpose of the study of geography in the Third Grade is to arouse in the child an interest in people and things and to develop a consciousness of interdependencies and relationship of communities upon one another, and to give the children experiences to serve as a foundation to build upon in later grades rather than to teach specified geographical facts. The history is so interwoven with the geography
that the geography furnishes the background of the history work and community civics that is given.
(In correlation with Nature Study)
I. Study of
A. Local weather conditions.
B. Incidental work on wind, temperature, length of day.
C. Making of weather charts.
II. Study of
A. Directions.
B. Use of globes and maps to locate places.
C. Land and water masses.
D. Mountains, valleys, plains, plateaus, deserts.
E. Rivers.
III. Study of Colorado.
A. Location.
B. Characteristic features.
1. Surface.
a. Mountains.
1. Rocky Mts.
2. Pikes Peak
3. Longs Peak.
4. Mt. Holy Cross.
b. Canyons, gorges.
c. Valleys.
1. San Luis.
d. Deserts.

Problem Method of Attack.
1. Little Journeys to
a. Pikes Peak.
b. Longs Peak.
c. Mt. Holy Cross.
d. San Luis Valley.
2. By means of
a. Sand table.
b. Pictures.
c. Post cards.
d. Projectoscope.
e. Stereopticon.
1. Colorado.
e. Plains.
f. Plateau.
g. Continental Divide.
h. Rivers.
C. Industries.
a. Agriculture.
1. Life of a Dry Farmer.
2. Dry farming. 3. Life in a mining camp.
b. Fruit raising. 4. Life of a cowboy.
c. Mining.
d. Stock raising.

Problem Method of Attack
IV. Plant and Animal Life.
A. Plant Life.
1. Trees, grasses, wild flowers common to Colorado.
2. Russian thistle, tumble weed, sage brush, etc.
B. Animal Life.

Problem Method of Attack
1. Common animals. Excursions and field trips.

Common Wild Animals. The protection of birds and wild
a. Coyote. animals.
b. Deer.
c. Beaver.
d. Bear.
e. Mountain sheep.
2. Common Birds.
a. Magpie.
b. Housefinch.
c. Mountain bluebird.
d. Mountain bluejay.
e. Meadowlark.
f. Warblers.
g. Thrushes, and so on.
3. Common Domestic Animals.
1. Cattle.
2. Sheep.
3. Hogs.
4. Goats.
5. Fish hatchery.
V. Means of Transportation.
A. Old Trails.

Problem Method of Attack.
a. Santa Fe.
1. Same as under III.
(Study of Colorado)
7. Last Night.
8. Benediction.

\section*{FOURTH GRADE}

\section*{ARITHMETIC}

B Class
Read general suggestions for 4, 5, 6 grades. Review-

All work given in preceding grades.
a. Work for accuracy and speed in this review.
b. Let the child know just how he is gaining in accuracy and speed. This is incentive for improvement.
Spend some time on addition of this type:
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
& 6864 \\
& 8678 \\
& 6486
\end{aligned}
\]} & \multirow[t]{2}{*}{\[
\begin{aligned}
& 661 \\
& 846
\end{aligned}
\]} & \multirow[t]{2}{*}{6864
1864} & \multirow{4}{*}{10} & \multirow[t]{2}{*}{Note: Ten Method} \\
\hline & & & & \\
\hline & 864 & 1681 & & Place line for the ten. \\
\hline & 264 & & & \(2+8=10\) \\
\hline & - & 2648 & 12 & Place line for the ten. \\
\hline & & 6486 & & \(1+4+4=9\) \\
\hline & & 8646 & & Place 9 in answer. \\
\hline & & & & Two tens to carry to secon \\
\hline
\end{tabular}

Use the ten method, being careful to see that the child really understands it.

Subtract some problems of this type:
\begin{tabular}{lll}
864 & 6486 & 1646362 \\
164 & 1648 & 2222222 \\
\hline
\end{tabular}

Do NOT require them to read answer of over six digits.
Review all work given in preceding grades. In reviewing multiplication tables work for accuracy and speed. Let the child know just how much he is gaining in speed and accuracy.
1. Teach multiplication by 2 digit multiplier, including multiplication where zero is used:
2. Do NOT use more than 3 members in multiplicand.
3. The child should master short division in 4-B. Should be able to place the zero in the quotient.
4. Stress the idea that digits in answer must be placed directly over digits in dividend.
\[
\frac{\mathrm{XXXx}}{2)}
\]
5. Be sure to make clear the use of zero in subtraction.
\begin{tabular}{rrrr}
800 & 180 & 806 & 806 \\
-166 & -160 & -166 & -160 \\
\hline
\end{tabular}

Teach the dollar sign and the decimal point in dollars and cents.
Give examples in dollars and cents in addition, subtraction, multiplication and short division.
\begin{tabular}{lrrr}
\(\$ 86.40\) & \(\$ 62.24\) & \(\$ 8.24\) & xx.xx \\
12.32 & -3.14 & x9 & \(2) \$ 86.40\)
\end{tabular}

Make these examples vital and practical to child life. Encourage children to bring in their own problems from home and store.

Read and write numbers of 5 and 6 orders.
This can easily be done by playing a game.
Teach children to begin at right and group by 3 's thus:
Thousand Units
\(000 \quad 000\) Then teach names of the groups or families.
OMIT the use of fractions of UNLIKE denominators.

OMIT the use of fractions with numerators other than ONE.
In 4-B, pupils should be taught to divide squares or circles into onehalf, one-fourth, one-third and one-sixteenth.

\section*{A Class}

Oral Drill.
U. S. money. Drill in fundamentals thru bills, playing store or cafeteria. Make change. Pupils make money at home and bring to class. Socialize the recitation. Be sure they know the 1, 2, 5, 10 dollar bills.

Note: Place price list on board, using local prices. Check multiplication with one digit multipliers, by short division. Good strong review of tables. Use different forms.


Notation and numeration thru two periods. Group in families.
Thousands Units 000 000
Roman numerals as needed for chapters of books.
If grouping is properly taught the comma is not necessary.
New Work, 4-A.
1. Multiplication by three digit multipliers. Use of naught in multiplier.
\begin{tabular}{rrr}
1264 & 1264 & 864 \\
112 & 102 & 60 \\
\hline 2528 & 2518 & 51840 \\
1264 & 1264 & \\
1264 & &
\end{tabular}

Study the above forms.
Note: Remember that first digit in product is placed under digit by which you multiply.

Do not place naught out at side, thus:

864
60
6213
202
12426
00000
12426
2. Long Division. Work intensively. Take short division problems on long division plans and prove, thus:

411 Steps
21) 8631 Divide

84 Multiply
23 Inspect
21 Subtract
21 Bring Down

Teacher, assisted by pupils, should work one on board every day for at least a week. Answer digits must be placed directly above the dividend digits, thus:

\section*{xxyx}
2) 6428

First problems should come out even. Divisors such as 11-10-20-30-40. The smaller the divisor, the larger the quotient should be taught in 4 A .

Steps on board at all times until pupils can travel independently. Stress the inspection step for here is where many fall down.

In bringing down, insist on numbers being in line. Do individual work until trouble is remedied. Do not allow a child to continue working incorrectly.
3. Fractions.
4. Reasoning problems involving multiplication by 2 or 3 place multipliers and two place divisors.

One definite statement instead of long drawn out analysis.
Reasoning problems: 1 hat cost \(\$ 6,14\) hats cost \(14 \times \$ 6=\$ 84\). Six chairs cost \(\$ 120\), one chair cost \(1-6\) of \(\$ 120\) or \(\$ 120 \div 6\).

Most important thing is the correct answer.
5. Applied measurements, especially the linear, using inches, feet, and yards. Making of hair ribbons and fishing lines very interesting. Allow pupils to measure each other, their teacher, and visitors.

Liquid-Selling milk.
Dry-Buying and selling apples, making change.
Parts of time tables.
6. Many problems should be supplied.
7. Test often for mastery of fundamentals.

Terms to learn:
multiplier measures dividend fraction
multiplicand total of bills product statement
\begin{tabular}{ll} 
dividend & fraction \\
square & halves \\
rectangle & thirds \\
triangle & fourths
\end{tabular}

Reference for measurement work, "Thorndike Arithmetics."
I. Representation.

Figure: Characters suggested by the literature of the gradeGreek heroes, giant, brownie, Pilgrim, Indian, Pinocchio, Japanese. Activities of children in occupation, and sports. Animals: Horse, grizzly bear, mountain sheep, chipmunk, dog, wolf.
Birds: Humming bird, eagle, magpie, house finch, blue jay, grosbeak, mountain jay.
Nature: Sprays, flowers, berries, seed pods, and trees as a basis for design and color.
Shelter: Spanish missions, homes of Indian and early explorers. Objects: Subjects suggested by the study of industries of Colorado such as farm products, furniture, wooden utensils, vehicles of transportation and conveyance.
Illustration: Pioneer life, industries, literature.
II. Color.

Observe color in nature and record three values of each spectral hue in nature drawing. Learn intermediate hues and begin the study of opposites. Strive for increased appreciation of color.
iiI. Design.

Development of design principles in the application of units to a given space. Decoration of circle and square for construction problems. Cultivate feeling for balance, rhythm and harmony in spacing. Search for beauty lines in motifs studied.
Motifs: Nature, insects, birds, animals. Lettering, posters.
IV. Construction.

Paper and cardboard construction involving measuring, scoring, mitering, pasting. Problems-telephone and list pads, calendars, booklets.
Problems for the coping saw-Toys, vehicles, and machines suggested through the study of industries.
Table Problems: Industries studied in geography, history stories, life of fur traders and explorers, Spanish missions, Pilgrim life. Textiles: Study costumes for school, street and social functions. Make costumes for small figure of Dutch children, Japanese Twins, Pinocchio. Application of Stitchery to Textiles.
Weaving: Marble bag, hat band, raffia basket.
Clay: Tile, paper weight, ink well, bulb bowl. Model figures and animals suggested by various subjects of the curriculum.
V. Picture Study.

The Cleaners, Millet.
Dignity and Impudence, Landseer.
Sheep Fold, Jacques.
Prince Balthasar, Velasquez.
The Haymaker, Adan.
The Balloon, Dupre.
The Melon Eaters, Murello.
The Sower, Millet.
Holy Family, Murello.
Shoeing the Bay Mare, Landseer.
Sculpture: Children with Cymbals, Della Robbia.
Flying Mercury.
Niobe, Greek.

\section*{ENGLISH}

\section*{Reading}

The mechanics of reading should be fairly well mastered by the time children enter the fourth grade. There will need to be less word and phonic drill for word recognition and more word and phrase study for meaning. There should be wide reading with emphasis on silent reading, using thot-provoking assignments that will develop independent habits of study. Much reading will be informational reading connected with geography, history or other subjects of the grade.
I. Give Comprehension or Intelligent Interpretation.
a. By relating material to child's experience.
b. By effective habits of study.
c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.
1. Connect new material with similar experience of pupils,
2. Find answers to thot-provoking questions.
3. Find the central thot in paragraphs and short selections.
4. Read quickly to reproduce ideas of a paragraph.
5. Find author's aim or purpose in a selection.
6. Determine relative importance of statements.
7. Draw conclusions and give reasons for them.
8. Pupils write questions on main parts of story-class discuss and criticise them.
9. Judge meaning of words by manner used, then verify with dictionary.
10. Read story to dramatize it, others critical of the interpretation.
11. Read individual stories for reproduction.
12. Have some reading units relating to geography, history, hygiene or nature study, as all the stories the class can find about Lincoln.
13. Use of flash cards to test thought-getting and mechanics of reading.
II. Give Thorough Mastery of the Mechanics.
a. For effective oral interpretation.
b. For effective silent reading habits.

Suggestions for accomplishing above points.
1. Increase amount of easy silent reading to get rhythmical sweeps of eyes and few fixations.
2. Begin systematic study of the dictionary. (See spelling outline.)
3. Give word analysis for meaning as well as pronunciationprefixes and suffixes in, de, pro, est, ly, ness, less, ing, ed, and ous.
4. Study some common roots, make word lists from root, as light, lights, lighting, lightning, delight, sunlight.
5. Give time drill in reading for thot.
6. Use informal test to locate pupils especially weak in rate or comprehension.
7. Locate their difficulty and arrange a special help period for them.
8. Have some motivated oral reading morning exercises, when only one book is available, parent-teachers, etc.
9. Indicate class standards and encourage pupils to work toward them.
III. Give Effective Use of Books.

Pages and chapters.
Table of contents.
Glossary.
Reference books.
Suggestions to accomplish above points.
1. Show and discuss how to use each new book in content sub-jects-tables of content, maps, charts, graphs and glossary.
2. Begin use of dictionary.
3. Show class how to find information on some topics, from other books.
4. Take class to library to show uses.
IV. Give Knowledge Reading Materials and Permanent Interest in Reading.
Literature. Travel.
History. Industry Science. Biography.
Suggestions for accomplishing above points.
1. Encourage pupils to bring in clippings on any topic being studied.
2. Have reports on outside reading, telling characters and main points of story.
3. Have as many of above types of books for individual as possible.
4. Teacher read aloud and discuss several standard books.
5. Read aloud and discuss several longer poems and interpret and memorize some short ones.
The rate for fourth grade is about 145 words per minute. The comprehension score depends upon the test, but informal tests can be given in reproduction or questions to locate weak pupils.

\section*{Рhonics}

Use of phonics and diacritical markings as a self-help. Children will use all of them in working out new words and pronouncing words for themselves. No special time on the program is given for a phonics class but they are used whenever an occasion demands their use.

Literature


Also other Fourth Readers of Series mentioned in First Grade Outlines; and poetry and story sources listed earlier.
Poems: Field-The Shut Eye; Shakespeare-Hark, Hark the Lark; When That I Was and a Little Tiny Boy; Heywood-Up Little Birds That Sit and Sing, Morning Song; Dekker-Golden Slumbers Kiss You; Tennyson-The Brook; Browning-Pippa's Song; Wordsworth-My Heart Leaps Up, Lucy Gray, The Pet Lamp, The Kitten and Falling Leaves; Mary Howett-Fairies of Caldon Low; Coleride- Choral Song to the Illyrian Peasants; Swinburne-White Butterflies; Celia Thaxter-Sand Piper; Bryant-Robert of Lincoln; LongfellowVillage Blacksmith, Christmas Bells; Lowell-The Fountain; Whit-tier-Barefoot Boy; G. Wither-Listening Child; Riley-Little Orphant Annie, and other poems; James Hogq-a Boy's Song; Isaac Watts-Cradle Hymn; Edwin Arnold-The Swallows, The Swallow's Nest; Thomas Nash-Birds in Spring; Allingham-Robin Redbreast, Wishing; Christina Rossetti-Hope is Like a Harebell, There's Nothing Like the Rose; Alma Tadema-A Blessing for the Blessed, Strange Lands, Snowdrops; Bjornson-The Tree; Helen Gray Cone-Dandelions; Coolmge-Answers to a Child's Questions; Star Spangled Banner, and America; Psalm 121.
Stories: Grimm's Household Tales, The Fisherman and His Wife; English Fatry Tales-The White Cat, Prince Cheney; Andersen's Fatry Tales-The Flying Trunk, The Nightingale, The Emperor's New Clothes; Norse Heroes and Tales-Valhalla and It's Gods, Iduna and Her Apples, Thor and the Frost Giants, Sif's Hair, Loki's Punishment; Canterbury Tales-Faithful Constance, Patient Criselda; American History Stories; Tortoise and the Geese-Fables; Tales from Maria Edgeworth; Uncle Remus Stories; Bible-The Gate Beautiful; Stories from Seton and Wm. J. Long; The Spell of the Rockies (Enos Mills)-Rob of the Rockies, Little Boy Grizzly, A Midget in Fur; In Beaver World (Mills) ; Rocky Mountain Wonder-Land-Wild Mountain Sheep, A Mountain Pony, The Grizzly Bear, My Chipmunk Callers; Marjorie Fleming; The Story of the Other Wise Man; The Christmas Gift-Sabot of Little Wolff (Coppee); Christmas Carol, (W. J. Long), in Ways of Wood Folk; Christmas on the Singing River (J. S. Harbon) ; First Thanksgiving (Blaisdell Ball), in Short Stories from American History; Old Fashioned Thanksgiving (Alcott), in Aunt Joe's Scrap-Bag; Runaway's Thanksgiving (Borgeson), in Norseland Tales; A Thanksgiving Dinner that Flew Away (Butterworth), in Our Holidays; The General's Easter Box, in Our Holmays; Hallowe'en Myths, in Our Holidays (Brown and Hall) ; Jewett-A White Heron.

\section*{Language and Composition}

While the language period is still used, there is less need in the fourth grade and the grades above for a stated period for the language lesson (especially the oral) and a greater need to give attention to language in all the lessons of the day. The language period is retained, however, but may be used when needed for the written work in connection with other lessons, such as history, geography, nature study, etc.

With a growing mastery of the mechanics of reading a wider interest in children's literature itself is possible, but in the fourth grade there is still the problem of actually learning to read well enough that reading itself shall in time cease to be an effort.
Aims.
1. To make it possible for each child in the grade to speak his thoughts clearly, in well chosen words, in correct sentences, whatever he is thinking that may be worth telling to others.
2. To secure an acceptable and pleasing bearing and manner in speaking, and to cultivate speaking voices that may be heard by all the children in the room without becoming loud, or strained or in any other way unnatural.
3. In oral and written composition, to help the children to have something to say and to want to say it rather than merely to be saying something.
4. In the literature to begin to make the pieces of literature scources of pleasure in themselves, beyond the pleasure of conquering the mechanical difficulties of reading.
5. To attack and conquer another group of errors in speech and writing which are either peculiar to this age or which have been left over from earlier grade.

Means, Ways and Materials.
In Oral and Written Composition:
1. A continuation of the copying from the blackboard and from dictation. (See directions in Grade three concerning uniform paper, and the pupils' self criticism of his work.) Occasionally allow the pupils to write on the blackboard. Visible comparison helps.
2. Picture studies continued.
3. Reproducing, in original language, stories told by the teacher. Telling stories from points of view different from the original.
4. The recitation, oral or written, in every class throughout the day should be regarded as a part of the work in English.
5. Dramatizations.
6. The oral preparation and the writing in connection with working up individual and group projects in history, arithmetic, geography, literature, etc.
7. Letter writing. Forms for addressing an envelope. Informal friendly letters. Invitations. Simple business letteis. Real problems are used as the basis of all letter writing.

\section*{Technical Items.}
1. The apostrophe and \(s\) with singular nouns to denote possession.
2. Other contractions in addition to those indicated in grade three as need for them arises.
3. How to find the meaning and correct spelling of words by using the dictionary. Dictionary games.
4. No new uses of punctuation in addition to those shown in earlier grades.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, Pages 4 to 38 and pages 73 to 89.
Sheridan-Speaking and Writing English, Pages 1 to 46 and pages 86 to 96 .

\section*{SOCIAL SCIENCE:}

\section*{Civics}
1. Aims in Teaching:
a. To show the service which the city renders the citizen.
b. To make clear the value and the necessity for co-operation of the citizens in furthering the welfare of the community.
2. Outline of Material-The life in the community and some of the problems associated with the home:
a. Food supply: markets, dairies, prices, and inspection.
b. Water supply: source of supply, purity, and cost.
c. Housing: building laws, lighting, cleanliness, ventilation, sewerage, gas, and electricity.
d. Fire protection: fire company, fire escape, origin of fires, and prevention of fires.
e. Police department: duties of the policemen, relation of the citizen to the policeman.
f. Health department: inspection of supplies, quarantine, education of the public.
g. Community activities affecting the home: increase in cost of living due to the war, the food supply as affected by the war, the changing source of supply, limitations on the quantity of food available. The subjects mentioned in the other grades may be continued.
3. Procedure: The practice still may be largely indirect. Correlation with other subjects aids. The more direct teaching of the subject may be practiced. Contact with the various interests of the community should be held by trips to investigate them.
4. Bibliography.

City Laws and Ordinances.
Gulick, L. H., Town and City.
Allen, W. H., Civics and Health.
Denison, E., Helping School Children.
Hughes, R. O., Community Civics.
(See Bibliography for Grade III).

\section*{HISTORY}

The history stories faught in this grade are based upon the geography studied and thus will deal with the stories of explorers, discoverers and makers of our western country and of the Mississippi Valley.

These stories will include those of the Lewis and Clark Expeditions and their opening of the Great Northwest, Colorado, Cortez, Pizarro, Balboa, Coronado, and the Spanish Missions; Fremont, Carson, Powell, Pike, Parkman, the Western Fur Traders, the Mormons, and Indians of Western United States, Champlain, Cartier, Joliet, La Salle, Ponce DeLeon, De Soto, and Daniel Boone.

\section*{Outuline for the Study of the Explorers}
I. Aims.
II. Difficulties.
A. Physical barriers in opening the new country.
B. Struggle for a livelihood.
C. Indian troubles.
D. Protection-ways and means.
III. Results of attempts of explorations and of settlements.
IV. Comparisons between the particular story told with others similar in character.
(Note)-The use of all available material and devices in the study of these stories and construction work in projects growing out of them should be made very prominent.

Use of supplementary reading material should form" part of the outside work.

Outline for the Study of the Pueblo Indians
I. Where found.
II. Homes.
A. Kind of homes-how built.
B. Home life.
C. Relations with other tribes.
D. Comparison with other Indian tribes as to their characteristic traits in manner of life.
III. People.
A. Character of
B. Contrast with other Indians.
C. Manner of living.
IV. Customs.
A. Beliefs and traditions.
B. Primitive forms of industry.
C. Dress.
D. Method of warfare.
E. Amusements.

\section*{The Study of Spanish Missions}
I. Location of Missions.
II. How the missions came to be built-and by whom.
III. Success and result of the building of them.

Outline for the Study of the Western Fur Traders
I. Traders.
A. Character of.
B. Purpose of.
C. Hardships and dangers encountered.
D. Manner in which they carried on their work.
II. Trading posts.
A. In the Rocky Mountain section.
B. On the Upper Arkansas River.
C. Bent's Fort.
D. On South Platte River.
E. Fort St. Vrain.
F. Fort Laramie.

G, Western Slope.
H. Santa Fe Trail.
III. Relation of Trappers and Traders with the Indians.
IV. Decline of Fur Trade.

The Study of Pioneer Life in Middle West
I. Colonial Life in the French settlements in the St. Lawrence Valley and along the Great Lakes.
II. Indian Life in the forests of the Mississippi Valley and region of Great Lakes compared with the Indians and their life in the West.
III. Stories of Pioneer Life in the Middle West.
IV. Stories of the Following Explorers:
A. Marquette and Joliet.
B. Jesuit Missionaries.
C. La Salle.
D. Ponce DeLeon.
E. Daniel Boone.
F. De Soto.

\section*{Bibliography}
1. References for Teachers:

Chittenden, H. M., American Fur Trader in Great West. Frances P. Harper.
Fynn, A. F., The American Indian as a Product of Environment. Little Brown \& Company.
Hollister, U. S., The Navajo and His Blanket.
Inman, H., The Old Santa Fe Trail. Crane \& Company.
James, G. W., Indian Blankets and Their Makers. A. C. McClurg \& Co.
Wissler, G., North American Indians of the Plains. American Museum and Natural History.
2. References for Children:

Lucia, R., Stories of American Discoverers for Little Americans. American Book Company.
Mace, W. H., Primary History. Rand-McNally Company.
McMurray, C. A., Pioneers of the Rocky Mountains and the West. Pioneers of the Mississippi Valley. Macmillan Company.
Otis, James, Seth of Colorado. American Book Company.
Parsons, E., The Making of Colorado. A. Flanagan Company.
Perry and Beebe, Four American Pioneers. American Book Company.
Pratt, M., American Story for America's Children, Vol. II. D. C. Heath \& Company.
Winterburn, R. V., The Spanish in the Southwest. American Book Company.

\section*{GEOGRAPHY}

Beginning with the home of the child, shelter, food and clothing are studied. A comparison is made of homes in different lands, the method of obtaining articles for shelter, food and clothing is studied; and places from which these different articles are obtained are located.

This is followed by a study of the Plateau States and Pacific Section. This work is developed through studying the industrial, social, civic, and political conditions in these sections. Conditions are created so as to stimulate the child's thinking by the problem method of attack.

\section*{Study of Shelter, Food, and Clothing}
I. How Houses are Built.
A. Lumber.
B. Building Stone.
C. Clay and Brick.
D. Cement and Concrete.
II. The Clothing We Wear.
A. Cotton.
B. Sheep and Wool.
C. Silkworms and Silk.
D. Flazan Linen.
E. Leather.
F. Furs.
G. Rubber.
iII. Our Food and Drink.
A. Corn.
B. Wheat.
C. Oats and Oatmeal.
D. Rice.
E. Fruits.
F. Sugar.
G. Cattle and Meat.
H. Hogs and Pork.
I. Fish and Fishing.
J. Oils.
1. Olive.
2. Peanut.
3. Cocoanut.
K. Coffee.
L. Tea.
M. Cocoa and Chocolate.
I. Surface and General Appearance.
A. Characteristic features.
1. Mountains and Plains.
2. Mountain streams, rivers, lakes.
3. National Parks, forest reserves, canyons, etc.
B. Soil.
II. Climate.
A. Distinctive features.
1. Altitude-atmosphere
B. Weather.
1. Rainfall.
2. Sunshine.
C. West compared with East.
D. Health resorts.

Problem Method of Attack.
1. How did the climate impress the settlers?
2. How does the climate impress tourists of today?
III. Plant and Animal Life. (Correlation with Nature Study)
A. Plant.
1. Grasses, cactus, sagebrush,

Problem Method of Attack.
Russian thistle, etc.
1. Planning a hunting trip.
2. Common flowers.
2. Laws protecting wild animals.
B. Animal life.
1. Common animals, Prarie dog-etc.
2. Wild life in the mountains, Mountain sheep, antelope, etc.
3. Common birds-magpie, house finch, mountain blue jay, grosbeak, etc.
IV. Population. Problem Method of Attack.
A. Census statistics.
B. People.
1. Natives-Indian tribes.
1. The early settlement of Denver, Colo. Springs, Pueblo, Greeley.
2. Why did the early setters select these places?
a. Pueblo Indians.
b. Sioux, Cheyenne, Comanches, Arapahoes, Kiowas.
2. Foreign elements-mining districts, sugar beet districts, etc.
3. White settlers-from the East.
V. Industries.
A. Agriculture.
1. Irrigation and dry farming. 2
2. Sugar beet.
3. Potato.
4. Beans-peas.
B. Fruit raising.
C. Cattle raising.
D. Sheep raising.
E. Mining.
F. Smelting.
G. Granite industry.
H. Cement industry.
I. Salt mining.
J. Manufacturing.
K. Fish hatchery
L. Canning vegetables.
M. Pickle industry.
N. Marketing.

Problem Method of Attack.
1. The advantages of irrigation.
. What are the advantages of sugar beet industry in Greeley?
3. To what points are most of the Greeley potatoes shipped?
Gold-Study of Cripple Creek.
Silver-Study of Aspen.
Lead-Study of Leadville.
Tungsten-Study of Nederlands.
Coal-Study of Trinidad.
Radium-Study of Vanadium.
(The Chamber of Commerce in each of these towns will gladly send literature).
Cement-Study of Portland.
Sugar-Study of Greeley and Brighton.
Flour-Study of Longmont.
Pottery-Study of Colorado Springs.
Condensed and Malted Milk-Study of Fort Lupton.

\section*{Rocky Mountain and Pacific Section}
VI. Railroads.
I. Surface.
A. Characteristic features.
1. A trip over the Royal Gorge.

Problem Method of Attack.

N .
2. Coast ranges-Cascade.
3. Great valleys

Yosemite.
San Luis.
San Joaquin.
Willamette.
3. Plateaus.
4. Crater Lakes.
2. Mountain Passes, Platte Canon, etc.
3. The building of the Union Pacific.
4. How does the scenery along the U. P. compare with the other Railroads in Colorado?

\section*{5. Rivers.}

Problem Method of Attack.
1. A trip to these various points of interest.
2. Follow same method as suggested in Third Grade under III. (Study of Colorado).
B. Comparison with Pacific Slope.
C. Density of forests-forest reserves.
II. Climate.
A. Altitude.
B. Rainfalls and temperature.
C. Contrast-Mildness of climate of Pacific Section with Rocky Mountain Section.
III. Industries.
A. Fruit raising.
1. In California. San Joaquin Valley Southern California. Salt River Valley. Arizona.
2. Contrast with Florida and Colorado.

Problem Method of Attack.
1. A trip to a Fruit Ranch.
2. Why is California called the Fruit basket of the United States?
3. Lumber Camp life.
4. Man's relation to soil and minerals.
5. Life of a salmon fisherman.
6. Comparison with local industries.
B. Lumbering.
C. Agriculture.

Wheat.
Cotton, etc.
D. Mining.

Gold.
Silver.
Lead.
E. Fish Industry.

Catalina Island Fish.
Salmon-Columbia River.
F. Seaweeds-Kelp.
G. Manufacturing.

Condensed Milk.
Lumber.
Flour.
H. Irrigation.
I. Smelting.
J. Commerce.
IV. Spanish Missions.
A. Where located.
(See History outline).
B. History of them taken in history work.

\section*{Bibliography}

Chamberlain, J. F., How We Are Sheltered, How We Are Fed, How We Are Clothed. Macmillan Company.
Frye, A. E., New Geography, Book I. Ginn \& Company.
Rocheleau, W. F., Great American Industries, Three Book Series, (Minerals, Products of the Soil, and Manufacturing). A. Flanagan Company.
Shepherd, E. P., Geography for Beginners. Rand-McNally Company.
Winslow, I. O., The Earth and Its People. D. C. Heath Company.
The United States.

\section*{MUSIC}

\section*{B Class}

The experiences gained thru the Sensory Period are related and associated thru drill. The vocabulary thus required is organized, extended and applied until its use becomes automatic. The "Three T's"-Time-Tone-Theory-are carefully developed in new song material Progressive Series, Book II, pages \(5-40\), by isolating the musical problem and drilling upon it until it can be applied into the reading of the new songs according to the following steps-syllables-loo-words. The major sharp and flat keys thru four; sharp chromatics and the natural or cancel as a sharp chromatic are made special problems. The Two-Part Round is introduced. The following ten Art-Rote Songs are taught together with simple analysis and interpretation of same. The children have books in hands while learning.
1. Children's Hymn.
2. Sandman.
3. Come Thou Almighty King.
4. October's Party.
5. All That's Good and Great.
6. First Fairies.
7. Gather Around the Christmas Tree.
8. From the Starry Heavens High.
9. Algerian Lullaby.
10. A Trip to the Moon.

Class should have ability to recognize and write the names of ten standard compositions from hearing the first few measures of each. These compositions should include both vocal and instrumental.

\section*{A Class}

The purpose of the music work of this class is to perfect the command of the vocabulary of music and the familiarity with the various symbols thru fluent and intelligent sight reading. Musical problems are developed according to the following four steps:
(1) A familiar song embodying the problem is reviewed.
(2) Problem is brought clearly to children's attention.
(3) Mastered problem is applied in reading new songs.

The Natural or Normal Minor is studied. Flat chromatics and the natural or cancel as a flat chromatic, the value of the dot after half and quarter notes, and phrases beginning on the eighth note before the beat are made special problems. The following Art-Rote Songs with simple analysis and interpretation are taught while children have books in hands:
1. What Professor Orol Knows.
2. A Penny to Spend.
3. Easter Rabbit.
4. A Spring Guest.
5. An Arbor Day Song.
6. The Kite.
7. The Train.
8. Devotion.
9. The Swing.
10. The Fairy Folk.

Appreciative Listening should include a repertoire of ten or fifteen standard compositions from which can be evolved the study of the string choir of the orchestra.

\title{
FIFTH GRADE \\ ARITHMETIC
}

B Class
1. Three digit long division.

Notation and numeration thru three groups.
\(000 \quad 000 \quad 000\)

Emphasize place value of numbers as by groups and by figures within the group. Family of units, thousands, millions; each has units, tens, hundreds.
II. Teach divisibility of numbers by \(2-5-3\).
III. Fractions-Reading and writing fractions.

Reducing to higher and lower terms, by graphical illustrations. Use construction paper and cut squares into halves, fourths; to show \(1 / 2=2 / 4\).
The pie or circle is also very good. Be sure the pupil sees this before the abstract work in fractions is done. Much oral drill in \(1 / 2=2 / 4,4 / 8=1 / 2,3-6=1-2\).

The larger the denominator the smaller the parts; \(1 / 2\) compare \(1 / 4\). The smaller the denominator the larger the parts, \(1 / 2\) compare \(1 / 8\).
1. Much drill in changing improper fractions to whole or mixed numbers.

Show pupil that this is one form of division.
\(88 / 2=44,81 / 2=40\) 1-2. Prove.
2. Mixed numbers to improper fractions. \(61 / 2=13 / 2,5 \frac{1}{2}=11 / 2\).

Prove in fractions just the same as in integers.
Addition and subtraction of fraction. Use graphical illustrations, construction paper show \(1 / 2=2 / 4\). Then add \(1 / 2\) and \(2 / 4\).

This should have plenty of oral drill. Work out a set of combinations for addition of fractions and drill on them. Also separation of fractions for drill.

Find all common denominators by inspection. Make word objective by graphs. Use circle, square, rectangle and lines.

First, add and subtract fractions of like denominations. Much oral work. \(1 / 2 \div 1 / 2+1 / 2+1 / 2\).

Second. Mixed numbers whose fractions have like denominators, use column form.

Third. Fractions unlike denominators.
\[
\begin{array}{rl}
1 / 2+1 / 4 & 1 / 2
\end{array}=2 / 4,1 / 4=\frac{1 / 4}{3 / 4}
\]

Keep fractions simple and denominators small. Use only practical problems.

Fourth. Teach fractions where borrowing is necessary.
Subtract integers from mixed numbers
\(6 \mathrm{CI} / 2\)
\(2 \overline{2 / 2}\)
\(21 / 2\)

Prove all fraction problems. One long division problem a day till accuracy is at least \(90 \%\). Test often for accuracy on addition, subtraction, multiplication of integers.

Assignment light; hence plenty of time for socialized problems. Terms and symbols that should be known.
\begin{tabular}{llll}
\(=\) equal & addend & remainder & common denominator \\
+ plus & sum & difference & proper fraction \\
- minus & minuend & dividend & similar fraction \\
\(\times\) multiply & multiplier & divisor & improper fraction \\
( divide & product & quotient & mixed number \\
fractions & subtrahend & reduction & integer \\
numerator & improper fraction & & denominator
\end{tabular}

To be avoided. The idea that pupils have mastered the fundamentals. G. O. D., Least Common Multiple as a topic and all impractical fractions.

\section*{A Class}

\section*{Review.}

Reduction-addition and subtraction of fractions. Divisibility of numbers by \(2,5,3\). Find common denominator by inspection. Speed in reduction to lower terms, improper fractions to mixed numbers and mixed numbers to improper fractions.
\[
60 / 80=3 / 4 \quad 60 / 2=30 \quad 75 / 2=15 / 2
\]

Have these mastered before introducing multiplication and division of fractions.
New Work.
I. Multiplication and division of fractions.
II. Square measure, finding areas, perimeter.

Multiplication of fractions.
1. Fraction by integer, \(1 / 2 \times 4=4 / 2=2\).
2. Integer by fraction, \(6 \times 1 / 2=6 / 2=3\).
3. Fraction by fraction, \(1 / 2 \times 1 / 2=1 / 4\).
4. Mixed number by fraction, \(21 / 2 \times 1 / 3=5 / 2 \times 1 / 3=5 / 6\).
5. Fraction by mixed number, \(1 / 3 \times 21 / 2=1 / 3 \times 5 / 2=5 / 6\).
6. Integer by mixed number, \(4 \times 21 / 2=4 \times 5 / 2=20 / 2\) or 10 .
7. Mixed number by integer, \(21 / 2 \times 4=5 / 2 \times 4=20 / 2\) or 10 .
8. Mixed number by mixed number, \(21 / 2 \times 21 / 2=5 / 2 \times 5 / 2=25 / 2\) or \(6 \frac{1}{2}\).

Teach cancellation when needed.
Before beginning division of fractions review long division. Be sure to have the child see that the smaller the divisor the larger the quotient.

203
8) 1624
4)1624

Then:
\begin{tabular}{ll}
\(6 \div 6=1\) & \(6 \div 6=1\) \\
\(6 \div 3=2\) & \(6 \div 3=2\) \\
\(6 \div 2=3\) & \(6 \div 2=3\) \\
\(6 \div 1=6\) & \(6 \div 1=6\) \\
\(6 \div 1 / 2=12\) & \(6 \div 1 / 3=18\)
\end{tabular}

Do a number of these then orally:
\[
\begin{array}{lr}
4 \div 1 / 2= & 10 \div 1 / 2= \\
6 \div 1 / 3= & 7 \div 1 / 3=
\end{array}
\]

Then fractions divided by integer-4/8 divided by 2. Graphs to be used. At all times fractions must be reduced to their lowest terms and not left as 2/8.

Talk divisor so that pupil will know the importance of knowing the divisor, \(6 \div 6=1 \quad 6 \div 1=6 \quad 6 \div 1 / 2=12 \quad 1 / 2 \div 6=1 / 12\).

Note the difference in result in using same numbers but changing divisors. Fraction by a fraction, \(1 / 2 \div 1 / 2=1 / 2 \times 2 / 1=1 / 2\) or 1.

Integer by a mixed number, \(6 \div 21 / 2=6 \div 5 / 2\) or \(6 \times 2 / 5\) or \(22 / 5\).
Mixed number by an integer, \(21 / 2 \div 3=5 / 3 \times 1 / 3\) or \(5 / 9\).
Fraction by mixed number, \(1 / 2 \div 21 / 2=1 / 2 \times 2 / 5\) or \(1 / 5\).
Mixed number by mixed number, \(31 / 2 \div 21 / 2=7 / 2 \times 2 / 5\) or \(7 / 5\) or \(12 / 5\).
1. Form of analysis.
\(\$ 31 / 2\) cost of a hat.
7 number of hats.
What is cost of 7 hats?
\(7 \times \$ 7 / 2=\$ 49 / 2\) or \(\$ 24 \mathrm{I} / 2\).
2. 1 hat cost \(\$ 6\).

6 hats cost \(6 \times \$ 6=\$ 36\).
6 hats cost \(\$ 12\).
1 hat costs \(1 / 6\) of \(\$ 12\) or \(\$ 2\).

Use statement rather than long drawn out analysis.
Making and footing bills an excellent plan for reviewing multiplication fraction. \(6 \mathrm{I} / 2 \mathrm{lbs}\). meat at \(47 \mathrm{I} / 2 \mathrm{c}\) a lb .

Applied measurements, use graph.
Linear, square, weight, liquid, U. S. money.
Perimeters of squares, rectangles and triangles.
Technical term, factor, divisor, common denominator, prime, perimeter, area, divisibility, composite, bills, debtor, creditor, receipt, footing of bills, area. Teach cancellation.

Omit: Formal analysis, Decimal fractions, Drawing to scale, Cubic measure, all complex fractions.

\section*{ART}
I. Representation.

Object Drawing: Perspective of circle developed through drawing of symbolic forms, namely, circle, eclipse, cylinder as used in illustration of industrial and commercial geograghy of North America and in selections from literature.
1. Vehicles of transportation.
-2. Tools and utensils.
3. Polly Put the Kettle On, Old King Cole, and similar selections. Also riddles and stories.
Explain meaning of ellipse, eye level, center of vision. Effect of distance and position upon apparent size and shape of objects.
Nature: Recognition of beauty in nature forms. Search for beauty of line and form as evidenced in proportion, beauty, curves, symmetry, measure rhythms.
Animals: The horse developed from study of various incidents depicted in stories of King Arthur and Joan of Arc. Use drawings for construction of problem in compo-board. Squirrels and other fur-bearing animals. Correlate with reading material.
Animals suggested by study of commerce and industry of North America-Burros, mules, Eskimo dogs, cattle, sheep, poultry.
Develop action, proportion and structure through use of rectangle, simple lines expressed in crayon and brush drawing, and silhouette.
Birds: Bluebird, heron, kingfisher, killdeer and other Colorado birds possessing widely differing characteristics.
Figure: Proportion and form of the human figure. Develop symbolic figure to be used as basis for illustrative drawing and costume design. Draw the figure in action. Construct jointed figures in various poses as class models.
Color.
Use problems in illustration, nature drawing, costume and design as means of developing the following color study: Definition of the terms, hue, value, intensity. Hues and values of gray. Use of light, middle and dark values of color. Recognition and use of complementary color schemes.
III. Design.

Decoration of Construction Problem.
Develop flowers, bird, and animal motifs on cross section paper for border and surface patterns. Aim to increase the appreciation of good spacing in dark and light.
Lettering: Practice in freehand lettering applied to mechanical drawing problems. Study a good style of simple poster letters. Develop on cross section paper.

Costume: Clothe symbolic figure to represent historical charac-ters-Columbus; Spanish, French and Dutch explorers; Revolutionary soldier; Indian. This may be done through the mediums of drawing, painting or paper cutting.
Illustration: Subjects suggested by history: Voyage of Columbus
and discovery of America, events in the life of Lincoln, the uses of steam.
Subjects from reading: Illustrate events and incidents from the following stories: King Arthur, Joan of Arc, Little Lame Prince, The Bluebird.
Interior Decoration: Distinction between good and poor types of furniture. Selection of furniture suitable for various purposes.
IV. Construction.

Paper and Cardboard Construction: Portfolios and envelopes of convenient size for preservation of school work. Construction of booklets involving principles of elementary bookbinding.
Table Problems: Supplement work in geography, history and reading. Show geographical characteristics of climatic regions of North America, voyage of Columbus, and discovery of America, subjects from stories of Joan of Arc, Little Lame Prince, King Arthur, The Bluebird.
Compoboard Toys: Mechanical horse developed from study of Joan of Arc, and King Arthur. Burro, rooster (see animal study).
Clay Modeling: Clay modeling for construction of sand-table figures and for form study.
V. Picture Study.

Oath of Knighthood, Abbey.
End of Day, Adan.
Autumn, Mauve.
Christmas Chimes, Blashfield.
Kabyl, Schryer.
Oxen Going to Work, Troyon.
Spring, Corot.
Avenue of Trees, Hobbema.
The Horse Fair, Bonheur.
Madonna of the Chair, Raphael.
Joan of Arc Listening to Voices, Lipage.
Joan of Arc, Statue by Chaper.

\section*{ENGLISH}

\section*{Reading}

The children of this grade should continue wide reading in all content subjects with the emphasis on silent reading habits. The reading should broaden their world, awaken their sympathies and give them a many sided interest in conditions and peoples. Their interpretation of characters should grow more accurate and the conclusions drawn for reading more reliable.
I. Give Comprehension or Intelligent Interpretation.
a. By relating material to child's experience.
b. By effective habits of study.
c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.
1. Relate new material to previous experience.
2. Find central thot or selections and show relations to title.
3. Describe characters in selections, showing why certain conclusions were drawn.
4. Pupils' answers to thot-provoking questions.
5. Pupils make thot-provoking questions to use in class discussion.
6. Discuss relative importance of statements.
7. Determine meaning of words from context and use dictionary to find further information.
8. Make an outline of a story for reproduction.
9. Find author's aim or purpose in a selection.
10. Dramatize some selections or parts of selections for oral interpretation.
11. Have some reading units in connection with other subjects as lumbering or how our arid lands are made productive.
12. Use of flash cards to test thought-getting and mechanics of reading.
II. Give Thorough Mastery of the Mechanics.
a. For oral interpretation.
b. For effective silent reading habits.

Suggestions for accomplishing above points.
1. Increase amount of silent reading in content subjects.
2. Continue study of dictionary until pupils can use readily. (See spelling).
3. Carry on systematic work analysis, using new prefixes and roots as encountered.
4. Continue use of speed drills.
5. Locate pupils especially weak in rate or comprehension and provide for a special help period for them.
6. Have some motivated oral reading.
7. Post class standards and encourage pupils to work toward them.
III. Give Effective Use of Books.

Pages and chapters.
Tables of content.
Glossary.
Reference books.
Encyclopedia.
How to use a library-Card index.
Suggestions for accomplishing above points.
1. See that pupils use tables of content to locate material in reference books.
2. Discuss aids in new books used in this grade, maps, charts, tables, graphs and glossary.
3. Use reference books to supply material for their reading units.
IV. Give Knowledge of Reading Materials and Permanent Interests in Reading.
\begin{tabular}{ll} 
Literature. & Travel. \\
History. & Industry \\
Biography. & Geography.
\end{tabular}

Suggestions for accomplishing above points.
1. Bring in clipping for history or geography books.
2. Post lists of books under the different types to be drawn from library.
3. Keep a record of books read and give credit.
4. Bring in and discuss some good magazines as Nature Study Review or Youths Companion.
5. Interest pupils in some author and have them read as many selections from his works as possible.
The standard rate for the fifth grade is about 170 words per minute. The comprehension standard varies with the test, but informal tests can be given in reproduction or questions that will locate the pupils low in comprehension.

\section*{Literature}

Selections in display type are for extensive study; all other material is extensive reading related in idea to the central unit.
King Arthur and His Knights. Warren
King Arthur and His Knights............................................ (Scrib.)
Coming and Passing of Arthur. ..... (R.-Mc.)
The Lady of Shalott: "Let the King Reign!"; The Knights' Vow
Boy's King Arthur ..... Lanier (Scrib.)
Knights of the Round Table ..... Frost (Scrib.)
Ballads:
Boy's Percy ..... (Scrib.)
Marriage of Sir Gawaine
Legend of Sir Guy King and the Miller Child ..... (H. M.)
King Arthur and King Cornwall
Tales of Chivalry. Rolfe (B. M.)
Stories from English History ..... Church (Mac.)
Lanier's Froissart ..... (Scrib.)
The Cid
(Famous Men of the Middle Ages).....Haaren \& Poland (Am. B. Co.) Frithjof and Roland Ragozin (Put.)
The Story of Roland ..... Baldwin (Scrib.)
The White Ship ..... Church (Mac.)
Stories from the Crusades Kelman
St. George and the Dragon
Lanier (Scrib.)
(Poems related in theme, as: Opportunity-Edward Rowland Sill.)
The Merry Adventures of Robin Hood Pyle (Scrib.)
Robin Hood Ballads Gayley and Flaherty
Poetry of the People (G. \& Co.)
Enriched by poetry of nature, of free life in the open, the forest, ofbravery, helpfulness, honesty, simplicity.Ex: A Song of Sherwood, Noyes; Meg Merrilies and Robin Hood
-Keats; Under the Greenwood Tree, Blow, Blow, Thou Winter Wind-Shakespeare.
Book of Bravery Collins
Book of Golden Deeds. ..... Yonge
Joan of Arc (Aunt Kate's Story) Carpenter (L. L. \& S.)The Maid of OrleansStevenson (H. M.)
Jeanne d’Arc Boutet de Monvel (Cen.)Joan of ArcMark Twain (Harp.)Verse and tales inspired by the Great War, such as Theodosia Garri-son's Soul of Jeanne D'Arc, and Charlotte Crawford's Vive La France, ina Treasury of War Poetry (Clarke)(H. M.)Little Lame Prince.Craik (H. M.)
Story of My Life (Letters)
Snow Image ..... Hawthorne(Poems revealing the reality of the life of the imagination, as Caoch
O’Lynn-Arthur Stringer; The Daffodils-Wordsworth; One, Two, Three-Bunner; The Happy Little Cripple-Riley.)At the Back of the Northwind
The Blue Bird ....Maeterlinck (D. M. \& Co.)(Such related stories as The Search for the Beautiful and TheKnights of the Silver Shield-Raymond MacDonald Alden; The Housewith the Golden Windows-Richards.)
The Wonderful Chair. Browne (Scrib.)
Thy Kingdom Come (an Easter Miracle play)................ Fiorence Converse
Atlantic Monthly, Mar. '21.
Fanciful Tales Stockton (Scrib.)
Christmas Every Day in the Year. ..... Howells (Scrib.)
Heidi Spyri (G. \& Co.)
Moni the Goat Boy Spyri (G. \& Co.)
Hans Brinker ..... Dodge
The Wind Among the Willows ..... Grahame (Scrib.)
Master SkylarkBennett (Cen.)Kipling
Squirrels and other Fur Bearers Burroughs (H. M.)
Among the Farmyard People. ..... Burson
Animals at Home Bartlett (Am. B. Co.)
Wood Folks at School Long (G. \& Co.)
Little Brother to the Bear ..... Long (G. \& Co.)
Rago-Lobo and Vixon ..... E. J. Seton (Scrib.)
Wilderness Ways ..... Long (G. \& Co.)
The First Book of Birds. ..... Miller (H. M.)
The Second Book of Birds. ..... Miller (H. M.)
Birds Every Child Should Know. Doubleday (D. P. \& Co.)
Our Birds and Their Nestlings
Our Humble HelpersFabre (Cen.)Bird Legends and Life.
Cor
One Hundred Anecdotes of Animals. Walker (D. P. \& Co.)
The Training of Wild Animals
Billinghurst (Lane)
Bear StoriesBillinghurst (Lane)
Carter (Cen.)The Story of a CatAldrich
The Oregon Trail ..... Parkman
Flamingo Feather Monroe (Harp.)
Grandfather's Chair HawthorneJohnny Appleseed\(\cdots \times{ }^{-a}\) Atkinson
Johnny Appleseed (poem) Atkinson (Harp.) (G. \& D.)
Santa Fe Trail Vachel Lindsay (Mac.)
Story of a Thousand Year Pine .Mills (H. M.)
Cambridge Book of Poetry for Young People Kenneth Grahame (Put.)(Also much poetry in romantic and patriotic vein, relating to the
history interests of the grade, as: Columbus, Defense of the Alamo, andCrossing the Plains-Miller;Drake's Drum-Newbolt; Landing of thenilgrims-Hemans; Paul Revere's Ride-Longfellow.)
Readers: Bolenius Fifth, Riverside Fifth.

\section*{Language and Composition}

A definite time is still set aside in the program of the fifth grade for oral and written composition, but every piece of spoken English in every class is English work and every piece of copying from dictation, copying from the blackboard or original writing is written English. In this way the items enumerated below are covered. In language the teacher will use the geography material one day for the idea upon which to base the written language paragraph, another day upon nature study, another upon history, etc.
1. Picture study.
2. Story telling.
3. Dramatization.
4. The writing of business and friendly letters, and of informal social notes.
5. Descriptions of persons, places and things.
6. Giving directions.
7. Expressing a thought in different ways.
8. Writing biographical sketches.
9. Copying from dictation.

Additional Technical Items.
1. The use of the complex sentence and the punctuation appropriate to that type of sentence.
2. The writing of conversation and the use of quotation marks
3. The conquest of a group of speech-faults belonging to the pupils of this grade.

\section*{Grammar.}

Thruout the grades from the fifth upward reasons are given when corrections are made and the grammatical terms are freely used where explanations are made.

No systematic teaching of grammar is attempted, but incidentally all the facts of grammar that have any useful bearing upon children's speech will be covered in a reasonable length of time.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, pages 4 to 38 and pages 90 to 103.
Sheridan-Speaking and Writing English, pages 1 to 46 and pages

\section*{SOCIAL SCIENCE}

\section*{Civics}
1. Aims in Teaching:
a. To help the children appreciate themselves as members of the political groups that do work for them.
b. To encourage a community interest in keeping the streets, the school yard, and the neighborhood generally clean.
c. To teach the children to appreciate the purpose of the police.
d. To show the children how they may co-operate with the fire department in preventing fires.
e. To show the children that there are various ways of cooperating with and sacrificing for the good of the community, which means in reality the good of the individual citizen.
2. Outline of Material-Life in the community outside of the home, with some of its relations; such as:
a. The cleanliness of the streets: means for cleaning the streets -sweeping, hose flushing, vacuum cleaning; removing ashes, garbage, and snow; and the disposal of waste.
b. Protection by the police department: duties of the depart-ment-protecting life and property, prevention of crime, regulation of traffic, keeping order; attitude of the citizens toward the police; and the protection which is desirable.
c. Fire protection: equipment, members of the department, finances, co-operation of the citizens-fire prevention; fire alarm boxes and hydrants; fire drills in schools.
d. Recreation and community improvements: parks-location, uses, support; playgrounds, schoolyards, gymnasiums, theater and moving pictures, and concerts for the public.
e. Current community activities: previously mentioned interests may be continued.
3. Procedure: While much of the interest of the civics work in this grade finds expression incidentally, more time should be given to direct teaching of the principles of good citizenship.
4. Bibliography.

United States Bureau of Education, Bulletin No. 23, 1914, The Teaching of Community Civics.
Department of Public Instruction, Colorado, War-modified Course of Study.
Gulick, L. H., Town and City.
Field, J., and Nearing, S., Community Civics.
Hughes, R. O., Community Civics.
Beard, C. A., American City Government.

\section*{HISTORY}

The history in this grade is based upon Beard and Bagley, "First Book in American History," and Southworth, "Building Our Country."

The purpose of this year's work is to give a bird's-eye view of the history of our country through a study of great personalities.
I. The Age of Discovery.
(a) The Early Life of Columbus.
(b) First Voyage of Columbus.
(c) The later voyages of Columbus.
(d) The discovery of America.
II. How to Reach Asta by Way of the New Lands.
(a) The English King, Henry VII, takes part in exploration.
(b) Magellan's voyage around the World.
(c) The King of France sends out explorers.
iif. Rivalry Between Spain and England.
(a) Deeds of Sir Francis Drake.
(b) The battle with the Armada.
(c) The way prepared for English settlements.
IV. Finding Settlers for the New World.
(a) Founding of Virginia.
(b) New England Colonies.
(1) Winthrop, Roger Williams, Anne Hutchinson, Thomas Hooker.
(d) Henry Hudson and The Hudson Valley.
(e) William Penn-Pennsylvania and Delaware.
(f) James Ogelthorpe and Georgia.
V. The Clash of Empires in America.
(a) French Ambitions and La Salle.
(1) Lake Region.
(2) Ohio and Mississippi, Louisiana.
(b) George Washington and the French and Indian Wars.
(c) William Pitt, the great empire builder.
VI. The Spirit of American Independence.
(a) British restrictions and American energy.
(b) Samuel Adams-The man of the town meeting.
(1) Stamp Tax.
(2) Other oppressive laws.
(3) Boston Tea Party.
(4) First continental congress.
(c) Patrick Henry, the orator of the Revolution.
(1) Henry and the Stamp Act.
(2) Calls upon Virginia to take up arms.
(3) Patrick Henry's Oration.
(4) Second Continental Congress.
(d) Edmond Burke-The British friend of America.
(1) Burke on taxation and conciliation.
(2) England's sympathy with Americans.

Vil. American Revolution.
(a) How to win Independence against great odds.
(b) Washington as Commander.
(1) Bunker Hill.
(2) Trenton.
(3) Valley Forge.
(4) West Point.
(5) Saratoga.
(6) York Town.
(c) Heroes of the Navy.
(1) Beginners of the American Navy.
(2) John Paul Jones.
(3) John Barry.
(d) Thomas Jefferson, the author of the Declaration of Independence.
(e) Other civil leaders-Gadsden, Morris, Sherman, Schuyler.
(f) Brave Women of the Revolution.
(1) Betsy Ross.
(2) Molly Pitcher.
(g) Benjamin Franklin-an American hero abroad.
(1) In England.
(2) In France.
(3) Peace Treaty.
(4) The Constitutional Convention.

Viil. The Beginning of a New Government.
(a) Union or Quarreling States.
(b) The new Constitution.
(1) Alexander Hamilton.
(c) The New Government of the United States.
(1) Washington, the first president.
(2) Jefferson and Hamilton clash.
(3) John Adams, second president.
IX. Expansion Westward.
(a) Louisiana Purchase.
(b) Lewis and Clark expedition.
X. The Second War With Britain.
(a) Madison Driven into the War of 1912.
(b) Battle of New Orleans.
(c) Peace with England.
(d) Opposition to the War in New England.
(e) James Monroe and the Monroe Doctrine.
XI. The Old East and the New West.
(a) Shall the Eastern States Control the Nation?
(b) Andrew Jackson-the Man from the West.
(c) Jackson as President.
XII. Making an Industrial Nation.
(a) The Inventors.
(1) Eli Whitney and the Cotton Gin.
(2) Cyrus McCormick and the Reaper.
(3) Elias Howe and the Sewing Machine.
(4) John Fitch and the Steamboat.
(b) Transportation.
(1) The Three Uses of Steam.
(2) Robert Fulton and the Clermont.
(3) De Witt Clinton, the Canal Builder.
(4) The Canal and the Railway.
(c) The Telegraph.
(1) Samuel Morse.
XiII. Winning Texas and California.
(a) The Fate of the Southwest.
(1) Frontiersmen on the Mexican Border.
(2) Western Margin of American Civilization.
(b) Texas and the Mexican War.
(1) Sam Houston.
(2) The Independence of Texas.
(3) War with Mexico.
(c) California and John C. Fremont.
(1) Captain John A. Sutter.
(2) Independence of California.
(3) California, a Free State.
XIV. The Overland Trail.
(a) How can Oregon be Won for the United States?
(1) The Fur Traders; John Jacob Astor.
(2) Relations with England.
(3) The Majors; Jacob Lee, Marcus Whitman.
(4) The First Great Migration.
(5) The Oregon Boundary Question.
(6) Washington Territory.
XV. Slavery.
(a) The Clash of Sections.
(1) Slavery not Suited to Northern Climates.
(2) Slavery Makes two Sections.
(b) John Calhoun and the Southern View.
(c) William Lloyd Garrison Against Slavery.
(d) Henry Clay, the Compromiser.
(1) The Missouri Compromise.
(2) Clay's Second Great Compromise.
(3) The Crisis of 1850 .
(e) Daniel Webster-"The Union at all Costs."
(1) Robert Haynes-Favors Nullification.
(2) Webster-Hayes Debates.
XVI. Abraham Lincoln-The Voice of the North.
(a) The Life of Lincoln.
(1) Lincoln's Early Political Career.
(2) The Lincoln-Douglas Debates.
(b) Lincoln and the Slavery Question.
(1) No interference with Slavery in Slave States.
(2) Lincoln Against Slavery in the Territories.
(c) Election of 1860 .
(1) Break-up of the Democratic Party.
(2) Stephen A. Douglas.
(3) John C. Breckenridge.
(4) Election of Lincoln.
XVII. Jefferson Davis and the South.
(a) How Should Southern Interests be Produced.
(b) The Secession and Jefferson Davis.
(1) Life of Jefferson Davis.
(c) Secession as a Last Resort.
(1) Davis for President of the Confederacy.
XVIII. Lincoln and the Union.
(a) Will the Union be Maintained.
(b) Lincoln's Measure for Saving the Union.
(1) The Call to Arms.
(2) The Blockade of Southern Ports.
(3) Slavery at Stake.
(4) Proclamation of Emancipation.
(5) The Abolition of Slavery.
(c) General U. S. Grant-Commander of the Armies of the United States.
(1) Life of Grant and his Military Career.
(d) Robert E. Lee-Commander of the Confederate Armies.
(1) Life of Lee and his Military Career.
(e) The End of Lincoln's Career.
(1) Lincoln's Plan for Restoring the Union.
(2) The Death of Lincoln.
XIX. An American Industrial Romance.
(a) How to use Electricity for Light and Transportation.
(b) Thomas Edison.
(c) Electricity for Lighting and Transportation.
(1) Electric Lamps.
(2) A Central Electric Station.
(3) Electric Railroads.
XX. The New South.
(a) Could a Democratic Party be Restored.
(b) The rise of Grover Cleveland.
(c) Grover Cleveland as president.
(1) Civil Service Reform.
(2) Hawaiian Islands annexed.
XXI. United States Among the World Powers.
(a) William McKinley and the Spanish-American War.
(1) Dewey at Manilla Bay.
(2) Peace in new Territories.
(b) William Jennings Bryan.
(c) New Territories in Far East.
(1) Phillipine Islands.
(2) The Boxer Uprising-China.
XXII. Women and Human Welfare.
(a) Woman's part in the Civil War.
(1) Clara Barton and the Red Cross.
(2) Francis Willard and Prohibition.
(b) Women Winning Voice in the Government.
(2) Federal Suffrage Amendment.
XXiII. President Roosevelt and Modern Questions.
(a) Life of Roosevelt.
(b) Modern Problems.
(1) Natural Resources.
(2) Reclamation.
(3) Labor Unions.
(4) Panama Canal.
XXIV. President Wilson and the World War.
(a) America's part in the World War.
(b) League of Nations.
(c) Treaty of Versailles.
(d) Results of the War.
(e) Present European Conditions.

\section*{GEOGRAPHY}

\section*{Southern States}
I. Location and Position of States.
II. Surface and General Appearance.
A. Mountains.
1. Appalachian.
2. Blue Ridge.
B. Plains, hills.
1. Atlantic Coastal Plain.
a. Sand reefs.
b. Sand dunes.
c. Coral Islands.
2. Piedmont Belt.
3. Gulf Coastal Plain.
C. Coastline.
D. Rivers, lakes, etc.
1. James.
2. Potomac.
3. Savannah
E. Oceans.
1. Atlantic.
2. Gulf of Mexico.
G. Soil.
iII. Climate.
A. Temperature.
B. Short mild winters; long warm summers.
C. Rainfall.
IV. Characteristic Products.
A. Tobacco.
B. Cotton.
C. Sugar Cane.
D. Rice.
E. Fruits.
4. St. Johns.
5. Mississippi.

Problem Method of Attack. other sections of the U. S.?
1. Extent to which South raises the same farm products as the North.
2. Why is the South better suited to the production of tobacco than
3. Why has the South almost a monopoly of cotton?
4. Why has production of cotton in South decreased to such an extent in past two years?
5. A visit to a cotton plantation in South Carolina.
6. Comparison of Sugar Cane and Sugar Beet as used in making sugar.
7. Visit to sugar cane plantation in Louisiana.
8. Why is there a promising future for rice production in the South?

Problem Method of Attack.
1. Peaches, apples.
2. Tropical and subtropical 1. Why can tropical and subtrop-fruits-Oranges, pine-ical fruits be raised in Florida? apples, grapefruits, lem- 2. A visit to the orange groves of ons, limes, etc. Florida.
F. Vegetables.

Problem Method of Attack.
1. What special opportunities does the South offer to farmers, especially truck farmers?
G. Fish.
H. Cattle, hogs.
I. Forests.
1. Hardwoods, oak, gum, chestnut, hickory, walnut, etc.
2. Southern pine.
a. Naval stores.
b. Lumber.
J. Minerals.

Problem Method of Attack.
1. Coal, natural gas, petrol- 1. Why has Birmingham, Alabama, eum. been called the Pittsburgh of the South?
3. Stone-marble, limestone, granite.
4. Aluminum or bauxite.
5. Sulphur.
6. Phosphate.
V. Industries.
A. Agriculture.
1. Farming.
2. Fruit Raising.
B. Fishing.
C. Quarrying.
D. Mining.
E. Lumbering.
F. Manufacturing.
G. Commerce.
Vi. Winter Resorts.
A. Palm Beach.
B. Miami.
C. St. Augustine, etc.

Vil. Important Cities.
A. New Orleans.
B. Louisville.
C. Atlanta.
D. Birmingham.
E. Richmond.
F. Memphis.
G. San Antonio.
H. Dallas.
I. Houston.
J. Nashville.

Our Neighbor on the North, Canada and Newfoundland
I. Location.
II. Surface Features and General Appearance-Compared With U. S.
A. Plains.
B. Plateaus.
C. Mountains.
D. Valleys.
E. Rivers.
1. St. Lawrence.
2. Saskatchewan.
3. Mackenzie.
F. Lakes.
1. Great Lakes.
2. Winnipeg.
3. Great Bear Lake.
G. Gulfs and Bays, etc.
1. St. Lawrence.
2. Hudson Bay.
3. Queen Charlotte Sound.
H. Coast.
I. Oceans.
J. Soil.
III. Climate--Compared With Northern U. S.
A. Climatic Divisions.
B. Rainfall.
C. Snow.
D. Temperature.
E. Long hours of sunlight.
F. Long severe winters, short Canada have a much milder climate cool summers.

Problem Method of Attack.
1. Canada is much larger than \(U\). S. Why can it never be as important a nation?
2. Why does the western coast of than the eastern coast?
G. Japanese current, Labrador. current.
H. Winds.
IV. Characteristic Products.
A. Grains.
1. Wheat.
2. Oats.
3. Barley.
4. Flax.
5. Rye.
C. Cattle and Sheep raising.
D. Dairy Products.
E. Fruits-Apples, berries.
F. Vegetables.
G. Lumber.
1. Hard wood.
2. Pulp wood.
H. Fish.
I. Furs.
J. Mines.
1. Copper. 7. Silver.
2. Nickel. 8. Lead.
3. Cobalt. 9. Asbestos.
4. Iron. 10. Salt.
5. Coal. 11. Oil.
6. Gold.
V. Industries.
A. Agriculture.
B. Ranching.
C. Fishing.
D. Trapping.
E. Lumbering.
F. Manufacturing.
G. Mining.

Problem Method of Attack.
1. Which section of Canada is growing in importance most rapidly?
2. Canada's present population is \(8,000,000\) but it has been predicted that by end of this century it will be \(80,000,000\). What is the possible growth of Canada in the future? Along what lines? What natural resources does Canada have which are as yet not being developed to best advantage?
3. Why are we particularly interested in Canada?
VI. Government-Compared With U. S.

Problem Method of Attack.
1. Compare government of Canada with that of U . S .

Problem Method of Attack.
1. Why are there no forts or other fortifications along the boundary line of U. S. and Canada?
2. Why are Ontario and Quebec the most thickly settled provinces of Canada?

Dependents of the U. S.

\section*{I. Location.}
II. Surface and General Appearance.
A. Mountains.
B. Plains, plateaus, hills, valleys.
C. Rivers.
D. Ocean.
E. Soil.
III. Climate.
A. Severe winters, short summers.
B. Temperature.
C. Snow.
D. Rainfall.
E. Midnight Sun.
IV. Characteristic Products.
A. Grain.
B. Vegetables.
C. Berries.
D. Forests.
E. Fish.
F. Reindeer herds.
G. Furs.
H. Minerals.
V. Industries.
A. Mining.
B. Fishing.
C. Canning.
D. Trapping.
E. Manufacturing.
F. Lumbering.
G. Agriculture.
VI. People-Eskimos, Americans.
VII. Important Cities.
A. Juneau.
B. Sitka.
C. Wrangell.
D. Fairbanks.
E. Nome.

\section*{West Indies}
I. Location of Important Islands.
A. Cuba.
B. Porto Rico.
C. Jamaica.
D. Haiti.
II. Surface and General Appearance.
A. Mountains.
B. Plains.
C. Ocean.
D. Harbors.
E. Soil.
III. Climate.
A. Even temperature. Influence of ocean.
B. Rainfall.
C. Trade Winds.
IV. Characteristic Products.
A. Sugar cane.
B. Bananas.
C. Coffee.
D. Tobacco.
E. Tropical fruits-pineapples, 2. What are our relation with these cocoanuts, spices.
F. Vegetables.
G. Woods-cabinet woods, dye woods.
H. Minerals.
1. Iron Ore.
2. Asphalt.

Problem Method of Attack.
1. Why is the S. E. section the most developed section of Alaska.
2. What are the prospects for the development of northern and western sections of Alaska?

Problem Method of Attack.
1. Has Alaska been worth the \(\$ 7,200,000\), what it cost, to the U. S.? Why? How?
2. A visit to Alaska to see its fish, fur and minerals.

Problem Method of Attack.
1. What should the U. S. government do to protect and develop Alaska so that it will be of more value in the future?
V. Industries.
A. Agriculture-farming, fruit raising.
B. Mining.
C. Lumbering.
D. Manufacturing.
1. Cigars and cigarettes.
ViI. People.

Americans, English, Spanish, Natives.
Vili. Important Cities.
A. Havana.
B. Kingston.
C. San Juan.
D. St. Thomas.

Central America
I. Location. Problem Method of Attack.

Names of important countries. 1. What is the question of chief Panama Canal Zone. interest to us in this region?
II. Surface Features and General Appearance.
A. Mountains, volcanoes, earthquakes.
B. Plateaus.
C. Plains.
D. Coast.
E. Soil.
III. Climate.
A. Temperature.
B. Rainfall.
C. Altitude.
IV. Characteristic Products.
A. Bananas.
B. Coffee.
C. Cocoa.
D. Sugar Cane.
E. Rubber.
F. Some Cotton.
G. Forests.
1. Mahogany.
2. Rosewood.
3. Logwood.
V. Industries.
A. Lumbering.
B. Agriculture.
VI. People.
ViI. Important Cities.
A. Panama.
B. Colon.

Problem Method of Attack.
1. What were some of the difficulties that were met in building Panama Canal?

\section*{III. Climate.}
A. Temperature.
B. Rainfall.
C. Winds.
IV. Characteristic Products.
A. Sugar Cane.
B. Rice.
C. Corn.
D. Cocoanuts.
E. Tobacco.
F. Manila Hemp.
G. Timber.
1. Gum.
2. Resen.
3. Dyewoods.
4. Tanbark.
5. Rattan.
6. Bamboo.
7. Rubber.
H. Minerals.
1. Gold.
2. Copper.
3. Silver.
4. Platinum.
5. Petroleum.
6. Sulphur.
7. Iron ore.
V. Industries.
A. Agriculture.
B. Lumbering.
C. Mining.
D. Manufacturing.

\section*{1. Cigars..}
VI. People.
A. Americans.
B. Natives.
1. Aborigines of Negritos.
2. Malays.
ViI. Important Cities.
A. Manila.

Problem Method of Attack.
1. Of what value are the Philippine Islands to the U. S.?

Problem Method of Attack.
1. What benefits has our government brought to the Philippines?

Problem Method of Attack.
1. Some Filipinos think they should have their independence. What do you think about it? What are the reasons for and against the independence of the Filipinos?

\section*{Hawail}
I. Location.
II. Surface and General Appearance.
A. Mountains-volcanoes.
B. Coast.
C. Ocean.
D. Bays.

E Soil.
III. Climate.
A. Even temperature year around.
B. Influence of Ocean.
C. Rainfall.
IV. Characteristic Products.
A. Sugar cane.
B. Pineapples.
C. Bananas.
D. Coffee.
E. Forests.
V. Industries.
A. Agriculture. Problem Method of Attack.
B. Lumbering
C. Fishing.
VI. People.
A. Americans.
B. Natives.
C. Japanese.
D. Chinese.
E. Filipinos.
F. Spaniards.
VII. Important Cities.
A. Honolulu.

\section*{MUSIC}

B Class
The basic work for this grade is found in Progressive Series, Book II, Pages 65-96. Sight reading is encouraged with persistency and drill by singing with loo, syllables and words. A careful study of the song should be made by the children before attempting to sing with the neutral syllable. The object desired is not a guessing at tones but a real tone thinking. The children must have a correct mental basis for judging the character of the coming tone group before attacking the sight reading with loo. To develop this correct mental basis sufficient, accurate work in tone, time and theory drills should be insisted upon. These drills should involve first, the training of the ear and later a correlation of the effect as distinguished by the ear with printed effect as seen thru visualization drills, conducted from the blackboard and book. Two-Part Singing should be established; Interval Drills; Harmonic Minor Mode are made special problems. Song analysis and interpretation, together with a study of the composer's life are made special study both in music sung and standard compositions heard. Study of the orchestra-woodwind, brass and percussion instruments is continued. Comparison of band and orchestra. The following Art-Rote Songs (Book II) are taught for beauty of performance and tonal appreciation of word context.
1. Portuguese Hymn.
2. In the Cornfield.
3. After Vacation.
4. Oh, Worship the King.
5. Two Kinds of People.
6. The Blacksmith.
7. The Joy of Harvest.
8. Fairyland.
9. Auld Daddy Darkness.
10. The Three Kings.
11. Christmas Carol.
12. Noel.
13. A Snowy Day.
14. In Story Land.
15. Wishing.

\section*{A Class}

Continued work in Progressive Series, Book II, Pages 96-129, should include sight reading involving interval studies including skips to sharps, sharps resolving upward, flat chromatics resolving downward and chromatic half-steps both ascending and descending in three tone groups. A great deal of work is done in Two-Part Singing; more complicated rhythmic types are introduced and drilled upon, including the dotted eighth and sixteenth. Study of the Harmonic Minor Mode is continued thru participation in and listening to compositions exemplyifying its
beauty. Rounds introducing Three-Part Singing are begun. Work in Chamber and Orchestral Music is the main feature of the Listening Lesson. The various dance forms leading up to the development of the sonata. The reiteration of a motive and the recurrence of themes leading to a definite unity. The following Art-Rote Songs, Book II, are taught.
1. The Star Spangled Banner.
2. Boy Scouts.
3. A Little Philosopher.
4. Hoof Beats.
5. The Month of March.
6. The Orchestra.
7. Rhyme of the Rail.
8. This Little Fat Goblin.
9. The Blackbird.
10. Rock-a-bye Lullaby.
11. Foreign Children.
12. The Mill Fairy.
13. The Brass Band.
14. Little Birdie.
15. The Little Big Woman and the Big Little Girl.
16. What Becomes of the Moon.
17. The Daisy.
18. A Meadow Song.
19. Wishing and Working.

\section*{HOME ECONOMICS}
I. Clothing.

The thought centers about the following:
1. Essential articles for a sewing box.
2. A cleaning outfit.
3. Bedroom articles.
(a) Laundry bag.
(b) Dresser scarf.
(c) Shoe case.
(d) Pin cushion.
(e) Glove or handkerchief case.
4. Textiles.
(a) Cotton.
(b) Linen.
5. Care and repair of clothing.
6. Laundering articles made.
7. Personal hygiene.
II. House Management.

The thought centers about a bedroom. .
1. Furnishings.
(a) Essential articles.
(b) Suitability of styles.
(c) Arrangement.
(d) Appropriate decorative features.
2. Care.
(a) Ventilation.
(b) Cleaning.
(c) Dusting.
(d) Care, order and arrangement clothes closet.

\section*{WOODWORK}

In this grade the pupil is to get his first introduction in the art of handling tools and in the use of such materials as are used in the school shop.

The pupil is taught the names and uses of such tools as saws, planes, hammers, gauges, squares, chisels, etc.

Samples of some few of our common lumbers are introduced and the student is taught how to tell the different kinds of lumber shown.

The first lesson in handling tools embraces the use of such tools as saws, planes, try squares, gauges, chisels, etc. The first exercises should take up such work as the facing, jointing and squaring of medium sized pieces of lumber. After this has been accomplished to a fair degree some simple project can be introduced; these should consist of not more than from one to three pieces. For example: Such articles as pencil sharpeners, garden stakes, broom holders, spool holders, paper files, small shelves, etc. In some cases where the student is large and strong and shows the ability much more elaborate work can be taken up.

The student should be taught from the start to respect tools and to regard them as friends.

\section*{Practical Characteristics of Projects.}
1. Processes must be varying.
2. They must be simple and therefore easily comprehended and such as may be applied by the pupils themselves without too much technique and oversight by the teacher.
3. The projects must be of such a nature that the pupils can judge readily as to the degree of excellence of the results attained.
4. The projects must be such as can be completed in a reasonably short time.
5. They must be such as can be designed or modified easily by the children themselves so that each pupil may have what amounts to an individual problem.

\section*{SIXTH, SEVENTH AND EIGHTH GRADES}

The sixth, seventh and eighth grades are organized on the departmental plan for the purpose of exploring and diagnosing, earlier than usual, the interests, attitudes, and abilities of pupils, and at the same time provide better for individual differences. This organization affords a splendid opportunity for studying junior high school problems.

\section*{ART}

\section*{Sixth Grade}
I. Representation.

Object Drawing: Review perspective of circle in drawing of Greek vases. Develop parallel perspective through study of roads and streams; Greek and Roman interiors.
Nature: Detailed drawing of flowers, fruits and plants in various stages of development with color notes for suggestion in design.
Animal: Animals of South America and Europe-Elephant, monkey, alligator, llama, alpaca.
Expression by means of many different mediums, such as pencil drawing, silhouette, brush strokes, crayon and water colors. Develop sense of action, proportion and form.
Birds: South American birds of brilliant plumage.
Figure: Stress the study of proportion and action of the figure. Draw from pose and use drawings as basis for illustration and costume design.
II. Color.

Color study developed through nature drawing, costume, illustration and design. Review points covered in first grade. Study analogous and complementary harmonies.
III. Design.

Decoration of Construction Problem: Give practice in the selection of ideas symbolic of a given subject and in expression of design suitable for a given purpose. Emphasize good spacing of dark and light. Use geometric and nature motif. Cut motif from paper and apply to block print or stencil problem. Basket design developed from Greek symbolism.
Lettering: Freehand lettering used in connection with mechanical drawing problems. Poster lettering.
Posters: Design posters for school advertisement.
Costume: Customs of dress in European countries. Represent by means of drawing, painting or paper cutting. Greek simplicity of line and decoration applied to present day costume.
Illustration: Industries and life habits of people in different European countries: Holland-dairying. France-silk industry. Italy-fruit industry.
Interior Decoration: Study of color and furniture design in relation to room arrangement.
IV. Construction.

Paper and Cardboard Construction: Portfolios, booklets for school work, simple bookbinding process, special day projects.
Process of allover pasting presented by means of construction of note book cover, blotter pad or similar problem.
Table Problems: Subjects from Greek and Roman history, physical characteristics and life of people in various countries in South America and Europe, adventures of Ulysses.
Compoboard Toys: Venetian galley, jointed Greek warrior.
Clay Modeling: Study and practice methods of pottery making. Emphasize characteristics of Greek vase forms.
V. Picture Study.

Madonna of the Harpies-Del Sarto.
Sir Galahad-Walts.
Aurora-Reni.
The Mill-Ruisdael.
Christ and the Rich Young Man-Hoffman.
Watching for the Relief Ship-Boughton.
Fog Warning-Homer.
Fighting Tremeraire-Turner.
Dance of the Nymphs-Corot.
Sistine Madonna-Raphael.
Holy Grail-Abbey.

\section*{Seventh Grade}
I. Representation.

Object Drawing: Composition of beautiful shapes, of still life and nature objects forming groups which have unity of spacing and value. Review parallel perspective.
Oblique perspective developed through illustration of stories and poems-A House by the Side of the Road.
Nature: Composition of nature objects in beautiful relation to still life groups as regards unity of spacing, value and color quality. Local trees, tree characteristic of various countries studied in geography. Interpretation through medium of decorative design.
Animals: Animals of Africa, Asia, and Australia. Drawings serve as a basis for development of wooden mechanical toys-Elephant, giraffe, kangaroo, monkey.
Birds: Decorative composition from birds of Africa, Asia and Australia.
Figure: Continue study of proportion and form of the human figure. Distinguish between and express various types of figure-
man, woman, boy, girl. Study of head size in securing correct proportions.
Costumes: Development of costume through English and Early American history as background for study of present day costume.
Use nature color notes in planning dress suitable for various occasions.
Illustration: Activities characteristic of various social classes of Europe. Progress of early explorations in America. Stages in settlement and growth of different colonies. Homes, dress, occupations.
II. Color.

Application of good color arrangement to problems in costume design and interior decoration.
III. Design.

Appreciation of the application of design principles to all space arrangements as well as to decoration. Decorative arrangement of interiors. Expression of design principles in landscape composition and still life groups. Distinguish between symmetrical and occult balance. Make use of both types. Translation of designs into patterns suitable for application to different mediums such as weaving, cross stitch, bead weaving.
Lettering: Rapid, freehand lettering using both capital and lower case letters. Poster letters of varied proportions. Extension and compression of letters to fit given spaces.
Posters: Design posters for school advertisement.
IV. Construotion.

Paper and Cardboard Construction: Portfolios, elementary bookbinding.
Interior Decoration: Booklet of period furniture arranged chronologically as an ougrowth of English history study.
Compoboard Toys: Mechanical birds and animals.
Clay Modeling: Pottery for the home. Candlesticks, inkstand, tiles, bulb bowl, paper weight.
Textiles: Black print design applied to scarf, pillow top, drapery or other problem for home decoration.

\section*{V. Picture Study.}

The Golden Stairs-Burne Jones.
The Water Carrier-Millet.
Adoration of the Magi-Driver.
The Music Lesson-Terborch.
Last Supper-Da Vinci.
Christ and the Fishermen-Zimmerman.
Whistler's Mother-Whistler.
Morning-Corot.
Virginia, Infant Jesus and Saint John-Botticelli.
Recognition of and distinction between various types of pottery
for the home such as Van Briggle, Rookwood, Crubi and Teco.

\section*{Eighth Grade}
I. Representation.

Object Drawing: Review perspective of circle, one, two or three point perspective.
Objects used for interior decoration.
Nature: Detail drawing from plants to be used as a source of design. Value study of trees and plants in decorative composition. Animals and Birds: Translation of familiar animal and bird forms into composition and decorative design.
Illustration: Correlate with work in English, history, geography and social science. Illustrations to be used as basis for poster design.

Figure: Study of the figure for purpose of adaptation of beautiful lines in costume.
II. Color.

Application to costume, interior decoration and design. Ways of combining color for brilliant and quiet harmonies.
III. Design for Construction Problems: Designs derived from flowers, birds and animal motifs used for decoration of construction problems. Study principles of radiation and measure.
Posters: Posters for school and community advertisement. Eniphasize civic betterment.
Lettering: Rapid freehand lettering used on working drawings, cards, programs, and booklets. Varied styles of poster lettering. Decorative initial letters.
Interior Decoration: Selection of furniture, arrangement of rooms applying knowledge of design principles as regards balance of color and spacing. Correct use of gray colors in planning an interior.
Costume: Study costumes of the Civil War period and compare with costumes of present day. Consider the suitability of style, color and material of costumes for different types of people.
Mechanical Drawing: Working drawings for construction problems.
IV. Construction.

Paper and Cardboard Construction: Portfolios, special day projects, elementary bookbinding.
Table Problems: Correlate with study of social science by working out suggestions for community betterment. A model city street, a model farm, garden plans.
Compoboard Toys: Mechanical toys to represent characters contributing to civic improvement enterprises, street sweeper, policeman, fireman.
Clay Modeling: Pottery for the home. Modeling of figure and animals. Bas relief modeling and casting as illustration medium. Textiles: Block print or stencil design applied to textile and combined with stitchery, for home decoration.
V. Picture Study.

Pot of Basil-Alexander.
Automedon with Horses of Achilles-Regnault.
Two Princes in the Tower-Delaroche.
Niche of Samothrace.
Supper at Emmaus-Gari Melchiors.
Supper at Emmaus-Rembrandt.
Infants Marguerita-Valesquez.
The Mill-Rembrandt.
MATHEMATICS

\section*{Sixth Grade, B Class}

\section*{Review:}
1. The work of grade five stress fundamentals of integers, fractions and U. S. money, \(\$ 5.44, \$ .05, \$ .50\). Measurements taught in 5 A.

Note: The review not only helps to fix the principles taught, but aids in unifying the arithmetic work,
2. Finding of area and volumes.
\(621 / 2\)
4
248
a. Care in development of tables,
b. Making of cube-large and small
c. Tables learned thru application.
3. Finding perimeters.
4. Notation, numeration.
5. Bills-teach tables of aliquot parts and use in buying and making accounts.
6. Factors.
7. Cancellations.
8. Bring out 1. Multiplying the numerator multiplies the fraction.
2. Multiplying the denominator divides the fraction and the reverse of these.
New Work: Concrete problems involving the use of fundamentals in integers, fractions and U. S. money. These problems must be within the reach of pupils. The socialized problem is best. The concrete problems test the ability to make practical use of facts learned in the abstract.

Decimal Fractions.
Decimal fractions are nothing new; merely old material in a new dress
\[
1-10=.1 \quad 1-100=.01 \quad 1-1000=.001
\]

It takes ten of each to make the one higher. Then show this 666.666 .
Read and write decimal fractions before your class; see that all know where to place the point.

Then: \(661-10=66.1\)
\(661-100=66.01\)
\(661-1000=66.001\)
Then \(9-10+1-10=10-10=1 . \quad .9+.1=1.0\).
In addition show that ten of one makes one of the next higher.
Use term decimal fraction and NOT decimal.
Make clear explanation. Show relation to common fractions.
Reading. Writing decimal fractions thru three places; tenths, hundredths, thousandths.

Comparative value: \(.1 \& .01,1-10 \& 1-100\).
Addition and subtraction (three places only). All rules made after problems have been explained: rule should follow and not precede work.

Speed in changing decimal fractions to common and common fractions to decimal fractions.

Checking for accuracy.
New terms.
\begin{tabular}{lll} 
Ratio & volume & footing \\
cubic & decimal point & receipts \\
area & ", means inches & equivalent \\
equation & means foot. & decimal fraction
\end{tabular}

Such abbreviations as are needed in measurements.

\section*{Sixth Grade, A Class}

\section*{Review:}
1. Using concrete problems involving fundamentals in integers. common fractions and in adding and subtracting decimal fractions.
2. Buying, selling, using aliquot parts.
3. Practical problems including accounts, living expenses and transportation.
4. Stress mental work in this class.
5. Practical measurements, squares, triangles, parallelograms, rectangles, and volumes.
6. Test knowledge of tables thru practical problems and not mere repeating of tables. Make it necessary for child to know the linear table.
a. Have child make his own rod measure, square foot, square yard.
7. Be sure he knows how the square and cubic tables are developed. a. Making of 2 in . cube and several 1 in . cubes will help much in solving the cubic problem.

New Work:
1. Multiplication and division of decimal fractions, percentage and interest. Have pupils make all rules governing the pointing of decimal fractions by using common fractions.
\[
\text { a. } \quad 2 / 10 \times 2 / 10=4 / 100=.6+.64=1.2
\]

Make rule, tenths \(X\) tenths makes hundreths.
Make rule, sum up decimal points for product.
\(6 / 10 \& 6 / 10=12 / 10\)
\(.6 \& .6=1.2\)
\(2 / 10 \times 2=4 / 10\)
\(.2+.2=.4\) (make rule)
\(2 / 10 \times 2 / 10=4 / 100\)
\(.2 \times .2=.04\) (make rule)
Say tenths \(X\) tenths make hundredths and not one decimal place in multiplication and one multiplier makes two places in products.
\[
\text { b. } 2 / 10 \div 2 / 10=1 \quad \frac{1}{2}
\]

This fraction work will not be necessary after it is once understood.
2. Decimal and common fractions as applied to areas, volumes, decimals, and fractions on relation to percentage.
3. Common fraction to be used in developing the mechanics of percentage and loss and gain.

Case 1. \(331 / 3 \%\) of 60 , \(1 / 3\) of \(\$ 60\) is \(\$ 20\).
This gives more chance for mental work. More problems can be worked in less time. Fractional method is used in business.
4. Table of equivalent to be made by children, then used.
\begin{tabular}{|c|c|}
\hline \(1 / 2=.50-50 \%\) & \(4 / 5=.80\) \\
\hline \(1 / 3=.331 / 3-331 / 3 \%\) & \(1 / 6=.162 / 3\) \\
\hline \(2 / 3=.66-2 / 3 \%\) & \(5 / 6=.831 / 3\) \\
\hline \(1 / 4=25 \%\). & \(1 / 8=.121 / 2\) \\
\hline \(3 / 4=.75\) & \(8 / 8=.371 / 2\) or .375 \\
\hline \(1 / 5=.20-20 \%\) & \(5 / 8=.621 / 2\) or .625 \\
\hline \(2 / 5=.40\) & \(7 / 8=.871 / 2\) \\
\hline & \\
\hline
\end{tabular}
5. The decimal method may be explained thus: \(1 / 4\) of \(40=10\). \(.25 \times 40=10.00\) (say 25 hundredths times 40 ). Such as \(9 \%, 7 \%\) must be worked by the decimal form: 864
6. Interest is merely introduced. Stress should be placed on difference on time between dates and on relation of interest to decimal fraction work. "Teach the new through the old."
\(6 \%\) interest as .06 of the sum. 6 hundredths \(\times 864\).
New Terms: Volume; Angle; Interest; Equivalent per cent.

\section*{Seventh Grade, B Class}

In the first six grades the pupil has completed the arithmetic of ordinary computation; has learned how to use the common tables of measures and how to find a given percent of a number.

In the first half of the seventh grade a study is made of the most important application of arithmetic-those which relate to home, the store, the farm, the most common industries and the bank.

In taking up these applications of arithmetic a review is made of the operations with numbers; particular attention is paid to short cuts in computation. The important subject of percentage which enters into every kind of business is reviewed and treated from the beginning.
I. The Arithmetic of the Home.
(a) Cash accounts, household accounts, the need for knowing about percents.
(1) Finding percents.
(a) Percents and common fractions.
(b) Percents as decimal fractions.
(c) Decimal fractions as percents.
(b) Home Problems.
(1) Reading the Gas Meter, Electric Meter.
(2) Problems of percentage.
(3) Expense accounts.
(c) Household Economics.
(1) Heating the House.
(2) The Family Budget.
II. Arithmetic of the Store.
(a) Oral Subtraction.
(1) Making change.
(b) Oral Multiplication.
(1) Short cuts in multiplication.
(c) Use of aliquot parts in multiplication.
(d) Cash Checks-discounts, list price, net price, cost discount, trade discount.
(e) Bills-receipted bills, invoice.
iII. Arithmetic of the Bank.
(a) Savings Banks.
(b) Bank account essentials.
(c) Interest.
(d) Postal Savings Bank.
(e) Bank of Deposit.
(1) Deposit slip.
(2) Check book.
(f) Promissory note.
(g) Bank discount.
(h) Commercial paper.
(i) Six Percent Method.
IV. Insurance and Taxes.

\section*{Seventh Grade, A Class}

The work of 7A consists of intuitional, observational and constructive geometry paralleled with related work in arithmetic, mensuration, ratio and proportion, practical measurements, etc. The geometry adapted to this grade is geometery of form, size and position.
I. Geometry of Form.
(a) Geometric figures.
(1) Square, triangle, circle, arc and cube.
(b) Simple construction work.
(c) Construction of triangles, perpendiculars; bisecting a line; bisecting an angle; parallel lines; dividing a line.
(d) Geometric patterns.
(e) Drawing to scale.
(f) Similar figures and symmetry.
(1) The triangle.
(2) Outdoor work.
II. Geometry of Size.
(a) Practical measurements of length.
(1) Outdoor work.
(b) Estimates of areas.
(1) Area of a rectangle, parallelogram, triangle, trapezoid.
(c) Ratio and proportion applied to similar figures and proportional lines. Outdoor work.
(d) Study of the circle.
(1) Area of circle; circumference, diameter, and radius.
(e) Study of volumes.
(1) Volume of a rectangular solid.
(2) Volume of a cylinder.
(f) Metric measure.
(1) Length, weight, capacity.
III. Geometry of Position.
(a) Fixing positions.
(1) Positions on Maps.
(2) Map drawing and location.
(b) Locating Points.
(1) Points equidistant from two points.
(2) Distance of a point from a line.
(3) Position fixed by two lines.
(4) Problems in locating points.
(c) Use of angles to determine position.
(1) Drawing angles of various degrees.
IV. Supplementary Work.
(a) Square root.
(b) Volume of a prism.
(c) Lateral surfaces and volumes.
(d) Volume of a sphere, cone.

\section*{Eighth Grade, B Class}

Algebra furnishes the material for the first half of the year, the second half being devoted to those topics of business arithmetic which are appropriate to the student's maturity.

The use of the formula in algebra has already been shown in the seventh grade. The work in algebra is such as every boy and girl should become familiar with; the formula is needed in reading books and articles of various kinds. The graph is used in many lines of business and study, and the negative number is commonly used.
I. The Formula.
(a) Abbreviations and symbols.
(b) Simplifying.
(c) Evaluating formulas.
(d) Formulas used in shops, business and the home.
II. The Equation.
(a) Unknown quantity.
(b) Equations requiring addition, subtraction, multiplication and division.
(c) Unknown quantity.
III. The Graph.
(a) Value of Graph.
(b) Use of Graph.
(1) Pictogram.
(2) Squared paper.
(c) Kinds of graphs.
(1) Interest graph.
(2) Wage graph.
(3) Curves as graphs.
(4) Temperature graph.
IV. Negative Numbers.
(a) Need for negative numbers.
(b) Addition, subtraction, multiplication and division of negative numbers.
V. Algebraic Operations.
(a) Addition, subtraction, multiplication and division.
VI. Further Use of Algebra.
(a) Simple machines.
(b) Problems in business.

Eighth Grade, A Class
I. The Arithmetic of Trade.
(a) Ordering goods.
(b) Invoice and bills.
(c) Accounts.
(d) Profit and Loss.
(e) Commercial discount.
(f) Metric System.
II. The Arithmetic of Transportation.
(a) Passenger rates.
(b) Freight rates.
(c) Express rates.
(d) Parcel Post.
III. The Arithmetic of Industry and Building.
IV. The Arithmetic of Banking.
(a) Depositing and drawing money.
(1) Use of Bank Book, deposit slip, check.
(b) Borrowing from a bank.
V. Arithmetic of Corporations.
(a) Stocks and Bonds.
(1) Common and preferred stock.
(2) Registered and coupon bonds.
(b) Mortgage.
(c) Profit sharing.
(d) Workmen's sharing.
VI. Arithmetic of Community Life.
(a) Insurance.
(1) Property.
(2) Accident.
(3) Personal.
(b) Building and Loan Associations.
VII. Arithmetic of Civic Life.
(a) Expenses of Government.
(b) Taxes.
(1) Local, state, national.
(2) Illustrations of each.
VIII. Review.

\section*{ENGLISH}

Literature
Selections in Display Type are for intensive study; selections starred to be presented by the teacher; all other material is extensive reading related in idea to the central unit.

Sixth Grade, B Class
The Dog of Flanders \(\qquad\) Ouida (H. M.)
Pierrot, a Dog of Belgium. Dyer (D. P. \& Co.)
Stories of Brave Dogs. Carter (Cen.)
Beautiful Joe Saunders
Buck, an Alaskan Husky. London Bolenius VI (H-M)

Billy, the Dog That Made Good....................................................................... Seton Bolenius VI
Cuff and the Woodehuck.
Rab and His Friends Brown
The Wonder Book of Horses
Midget, The Return Horse . Mills Riverside VI (H-M)
The Bell of Atri
Longfellow

\section*{Riverside VI}


Kipling Stories and Poems Every Child Should Know (H-M)

(Poet Lore, VI. 25)
Church (Mac.)
Lamb (H. \& Co.)
The Adventures of Ulysses. Tennyson
Ulysses
The Story of Ulysses Elson Gram. Sch. R. II
Tanglewood Tales ........... (S. \& Co.)
Hawthorne
Wonder Book Harnand Hawthorne
Story of the Aeneid Con Church (Mac.)
Frithjof The Bold .... Holb
The Story of Nansen . Oo. Ole Bull


The Sea .......
The Inchcape Rock... Southey
The Wreck of the Hesperus
The Chambered Nautilus Holma
*Casabianca .an Hemans
Sir Patrick Spens (Poetry of the People) Gayley (G. \& Co.)


Around the World in the Sloop Spray... Slocum (Scrib.)
Around the World in Eighty Days \(\quad\) V
Twenty Thousand Leagues Under the Sea

*Travel ... Bates
The Dragon; a Wonder Play Lady Gregory (Put.)
Sixth Grade, A Class
The Iliad
*Bryant's Iliad (Selections)
*Pope's Iliad (Selections)
Brooks Story of the Iliad
*Paris and Helen (Hero Tales) ) -a. Baldwin (Scrib.)
*Iphigenia
Stories of Old Greece
Stories of Old Greece and Rome \(\quad\) Baker (Mac.)
Story of the Greeks. \(\quad\) Guerber (Mm. B. Co.)
Book of Godden Deeds \(\quad\) Yonge
The Golden Fleece \(\triangle\) Baldwin (Am. B. Co.)

*Masque of Pandora Longfellow
The Story of Achilles Elson Gram. Sch. R. II (S. F. \& Co.)
The Story of the Trojan War Riverside VI.
(H-M)


Lays of Ancient Rome \(\quad\) MacCaulay
The King of the Golden River.
Why the Chimes Rang. Alden

The Happy Prince.....an
A Pot of Broth (a Folk Play) Wm. Butler Yeats (Mac.)
Ballads:
Robin Hood and Little John Gayley and Flaherty (G. \& Co.)
Death and Burial of Robin Hood Gayley and Flaherty ..... (G. \& Co.)
Sir Patrick Spens. Gayley and Flaherty ..... (G. \& Co.)
The Douglas Tragedy Gayley and Flaherty ..... (G. \& Co.)
The Two Corbies Gayley and Flaherty ..... (G. \& Co.)
Helen of Kirconnell Gayley and Flaherty ..... (G. \& Co.)
The Wife of Usher's Well Gayley and Flaherty ..... (G. \& Co.)
Thomas RymerGayley and Flaherty (G. \& Co.)(G. \& Co.)
The Demon Lover.Gayley and Flaherty(G. \& Co.)
Lord RandallGayley and Flaherty(G. \& Co.)
King Lear and His Three Daughters Gayley and Flaherty ..... (G. \& Co.)Kinmont WillieGayley and Flaherty
(G. \& Co.)
Poems Resembling Ballads:
John Gilpin's Ride. Cooper
Lochinvar ..... Scott
La Balle Dame Sans Merci ..... Keats
The Singing Leaves ..... Lowell
King Cophetua and the Beggar Maid. ..... Percy's Reliques
The Inchcape Rock ..... Southey
The Wreck of the Hesperus Longfellow
Sixth Grade Readers:
Bolenius VI (H-M)
Riverside VI Van Sickle \& Seegmiller (H-M)
Winston Silent Reader VI (J. W. Co.)
Seventh Grade, B Class
The Courtship of Miles Standish ..... Longfellow (S. L. S)(R. L. S.)
The Gentle Boy Longfellow
Giles Corley Longfellow
Mabel Martin ..... Whittier
Conquest of the Old Northwest. ..... Baldwin (Am. B. Co.)
The Landing of the Pilgrims. ..... Hemans
The Building of the Ship Longfellow
A Hunting of the Deer. ..... Warner (R. L. S.)
Lady of the Lake (Prelude) ..... Scott
Wabb: The Story of a Grizzly......................................................................
Johnny Bear ..... Seton (Scrib.)
Twin Babies ..... Joaquin Miller
Baby Sylvester ..... Bret Harte
Riverside VI. (H. M. Co.)

Redruff ..... Seton (Scrib.)
Tito ..... Seton (Scrib.)
The Mother Teal ..... Seton (Scrib.)
Reynard the Fox ..... John Masefield (Mac.)
DonaldBrowning
Loveliness. Elizabeth Stuart Phelps (H. M.)
A Christmas CarolDickens (R. L. S.)
The Post Office (a Drama)Tagore (Mac.)
The Story of Scotch ..... Mills(Wild Life in the Rockies (H-M)
An Adventure with Stickeen. ..... MuirRiverside VIII (H-M)
The Call of the Wild London (Mac.)
Before Adam ..... London (Mac.)JerryLondon
Bob, Son of Battle Oliphant

Seventh Grade Readers
Riverside VII Van Sickles and Seegmiller (H-M)Winston Silent Reader VII.(J. W. Co.)
Wild Life in the Rockies. ..... Mills (H-M)
Story Hour VII-Hartwell ..... ABC
Eighth Grade, B ClassRip Van WinkleIrving
Knickerbocker Stories (S. L. S.)
Legend of Sleepy Hollow
Tam O'Shanter ..... Burns
Goblin Market Christina Rossetti
Treasure Island Stevenson (G. \& Co.)
KidnappedStevenson
Letters to "Cunny" and Tomarcher. ..... Stevenson
Riverside VII (H-M)
Shakespeare (H-M)
Tempest

Chas. \& Mary Lamb

Chas. \& Mary Lamb Riverside VII (H-M)
Tempest
Tempest
Coaly-Bay, the Outlaw Horse. ..... Seton
J. H. Lit II (S. F. \& Co.)Hawkes
J. H. Lit II (S. F. \& Co.)Seton (Scrib.)
LoboSeton (Scrib.)
Lives of the Hunted
Dickens (G. \& Co.) ..... Dickens (G. \& Co.)
David Copperfield
Ten Boys from Dickens
Ten Girls from Dickens
Oliver Twist
Dickens...
Tom Sawyer Tom Sawyer Mark Twain
Huckelberry Finn Mark Twain
PenrodTarkington (G. \& D.)
The Story of a Bad Boy. ..... Aldrich
At Dotheboys Hall ..... Dickens
Riverside VI (H-M)
Tom Brown's School Days
The Varmint Wister
Jan of the Windmill. ..... Ewing
Captains Courageous ..... Kipling
The Man Without a Country. ..... Hale
Love of Country ..... Scott
*Present Crisis ..... Lowell
Gettysburg Address ..... Lincoln
Flanders Field. ..... McCrae
J. H. Lit II (S. F. \& Co.)
The Perfect Tribute ..... M. R. Andrews
Abraham LincolnWilson
Letter to Mis. Bixby. ..... Lincoln
Abraham Lincoln Walks at Midnight Lindsay
Abraham Lincoln (a Drama) John Drinkwater (H. M.)Lincoln

Lincoln ..... Stoddard
Lincoln ..... Choate
O Captain, My Captain. ..... Whitman
Definition of a Gentleman Newman
Wilson's Address to Congress, April, 1917
"Selections from Washington, Lincoln and Grant"
Lee's Farewell Address
Rules of Conduct Washington
Poor Richard's Almanac. ..... Franklin
Riverside VII (H.-M.)
Grandmother's Story of Bunker Hill Holmes
Concord Hymn ..... Emerson
Barbara Frietchie ..... Whittier
Boys of '76 ..... Coffin (Harp.)
Up From Slavery Booker Washington (D. P. \& Co.)
RecessionalHazelton and Benrimo (B. M.)
Eighth Grade, A Class
Midsummer Night's Dream Shakespeare (H. M.)
The Culprits Fay ..... Drake
*Christabel (Knick. Pr.)
Coleridge
A Bunch of Herbs Burroughs (R. L. S.)
Apples ..... Burroughs
Strawberries ..... Burroughs
Weeks ..... Burroughs
Sharp Eyes ..... Burroughs
Winter Neighbors ..... Burroughs
Camping ..... Warner
Being a Boy ..... Warner
The Blue Jay ..... Miller
Bobo ..... Lamb
John Burroughs Riverside VII (H.-M.)
Julius CaesarShakespeare
William Tell ..... Schiller
Lady of the Lake ..... Scott
Tales of a Grandfather. ..... Scott
The Talisman ..... Scott
Kinmont Willie Gummere (Mac.)
English Ballads
English Ballads ..... Child (H-M) ..... Child (H-M)
Jock O' the Side
Archie O'CawfieldHobie Nobe
Dick O' the Cow
Adam O'Gordon(and others)
The Gold Bug ..... Poe (H.M.)
Buccaneers and Pirates of Our Coast ..... Stockton
The Great Carbuncle Hawthorne Tales of the White Hills ( \(\mathrm{H}-\mathrm{M}\) )
The Purloined Letter ..... Poe
Masque of the Red Death ..... Poe
Incident in a French Camp ..... J. H. Lit. II (S. F. \& Co.) ..... Browning
Riverside VI (H-M)
Anon
The First Grenadier of France ..... Co.)
Byron
The Charge of the Light Brigade Tennyson
* Charge of the Heavy Brigade ..... Tennyson
Defense of Lucknow Tennyson
Herve Riel Browning
Puck of Pook's Hill. ..... Kipling
Drums of the Fore and Aft. Kipling
Story of a Short Life. ..... Ewing
Ballad of East and West ..... Kipling
Ballad of the White Horse. .Chesterton
Poems from Kipling and Fletcher's Hist. of Eng.Tommy AtkinsKipling
Fuzzy Wuzzy ..... Kipling
The Sons of the Widow. ..... Kipling
The Recessional ..... Kipling
Abraham Lincoln ..... Drinkwater
The Kipling Readers for Upper Grades. ..... (Ap. \& Co.)
Pantaloon (a Play) (Half Hours) ..... Barrie
How They Brought the Good News from Ghent to Aix. ..... Browning
Lochinvar ..... Browning
Skipper Ireson's Ride ..... Whittier
The Deacon's Masterpiece. ..... Holmes
Sheridan's Ride ..... Reade
John Gilpin's Ride. ..... Cowper
Tam O'ShanterPaul RevereLongfellow
The Leap of Roushan Beg. Longfellow
Song of the Chattahoochie. ..... Lanier
The Brook ..... Tennyson
The Cataract of Lodore. ..... Southey
Miscellaneous Humor.Cervantes
A Yankee in King Arthur's Court. Mark Twain
Ransom of Red Chief o. Henry
Pigs Is Pigs. ..... ButlerNonsense Verse
Nonsense Novels Leacock (Lane)
GoopsBurgess (S. Co.)
Jabberwocky ..... Carroll
The Little Peach ..... Field
New Eng. Weather ..... Mark Twain
Ballad of the New England Oysterman. ..... Holmes
A Yankee in King Arthur's Court Mark Twain
Eighth Grade Readers:Winston Silent Readers VIII.Story Hour VIII
J. H. S. Literature No. II.
PUBLISHERS
(Ap. \& Co.)-Appleton and Co. New York
(Am. B. Co.)-American Book Co. ..... Chicago
(At. M. \& Co.)-Atchinson, Mentgee \& Co. ..... Chicago
(B. \& Co.)-F. D. Beatty and Co. ..... New York
(B. M.)-Bobbs-Merrill. ..... Indianapolis
(Cen.) - Century Co. ..... New York
(Co.)-T. Y. Crowell Co ..... New York
(D. M. \& Co.)-Dodd, Mead and Co. ..... New York
(D.) -Dutton Co. ..... New York
(D. P. \& Co.)-Doubleday, Page and Co. ..... New York
(Ed. Pub. Co.)-Educational Publishing Co.
(Flan.)-Flanagan Chicago
(G. \& Co.)-Ginn and Co. ..... Chicago
(G. \& D.)-Grossett \& Dunlap. ..... New York


\section*{LANGUAGE AND COMPOSITION}

\section*{Sixth Grade}

The same procedure is followed in the sixth grade as has been suggested for the fifth. It must not be supposed that there is no systematic language study in these grades. The systematic direction of speech and writing is relentless, never-ending. It must go on in every class, every day.
Grammar.
By the time the pupil has reached the end of the sixth grade he should have met every functioning grammar-fact. He should have had all his English "why's" explained in terms of grammar. He should have met all the parts of speech and should know their functions, and should also be able to recognize the parts of any type of sentence so as to analyze it without going into minute details.
Punctuation.
At the end of the sixth grade the pupil should be accurate in the ten or a dozen uses of the comma and semicolon that occur in ordinary writing. These are:
1. The use of the comma in writing an address and in the formal parts of a letter.
2. The comma to separate the clauses of a compound sentence when these are joined by and, but, for, and or and nor.
3. The comma to separate words, phrases, or clauses arranged in a series.
4. The comma to set off appositives.
5. The comma to set off the adverbial clause in a complex sentence when it precedes the main clause.
6. The use of commas to set out a semi-parenthetical expression.
7. The use of commas to set out non-restrictive clauses.
8. The semicolon to separate the clauses of a compound sentence when no conjunction is used.
9. The semicolon to separate the parts of a compound sentence joined by a conjunction if either of the parts has a comma within itself.
10. The semicolon to separate the parts of a compound sentence whenever one of the conjunctive adverbs happens to be the first word of the second clause, and as however, therefore, nevertheless, moreover, etc.
Paragraphs and Whole Compositions.
Beginning in the fifth grade and continuing through the sixth systematic instruction should be given in the construction of simple paragraphs and the arrangement of two to five of these into a logical whole composition. The technical study of the paragraphs should not be undertaken at all in the elementary school. All that the elementary school pupil needs to know about a paragraph is that it is a group of sentences arranged in a logical order each sentence of which says something about the one thing of which the paragraph treats.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, pages 4 to 38 and pages 104 to 119.

Sheridan-Speaking and Writing English, pages 1 to 46 and 109 to 120 .

\section*{Seventh Grade}

In the first half of the seventh year the procedure for oral and written English is a continuation of that of the sixth grade. Every class is a language class. Every piece of formal written work is English composition, to be prepared as such and marked as such. The war against speech-faults is kept up with a new catalog of the errors of this grade and these individuals. If the teachers in the lower grades have done their duty, there should be pupils in the seventh grade whose place in the account book is a clean page. But with the shifting of the school population, and new pupils coming into each grade, who have not been in the school before, the teacher will find always that the work of correction must go on. She will never need to sigh in vain for other errors to conquer.

\section*{Grammar.}

The grammar for the first half of the year is incidental, and consists mainly in the rough analysis of sentences to determine what form is correct when the pupils are in doubt about what to say. This should be done over and over, week after week, until each child can test for himself the function of any word, phrase, or clause he is using in his own speaking and writing. This is never the minute hair-splitting and logic chopping of the old grammar, but merely an inquiry into the function of a word, phrase or clause whenever a doubt arises about what to say. For example, shall I say, "Father expects Mary and I (or Mary and me) to meet him at four o'clock." The objective form is used after a transitive verb. Therefore, I should say "Mary and me." Punctuation.

Insist upon the pupils using the simple working punctuation marks as systematically and accurately as they use their knowledge of capital letters or spelling.
Paragraphs and Whole Compositions.
See the instruction under the Sixth Grade section of this course.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, pages 4 to 38 and pages 120 to 135.
Sheridan--Speaking and Writing English, pages 1 to 46 and 120 to 132 .

\section*{Eighth Grade}

When the child reaches the second half of the eighth year he should be taught in an ordered series of lessons and in a special period for grammar all the grammar facts that actually assist one in determining how he should speak and write or help him to judge the correctness of what he has already said or written. All these facts have already come to the child incidentally in the grades below the eighth. Here the purpose is to review them through a new intensive teaching of the facts arranged in a logical order. By cutting out every item of grammar except those that function in shaping the child's speech and writing the whole matter can be reduced to an easy half year's work, and it can be taught so that it will actually be done and usable when the class finishes the study.

\section*{References.}

Brown-How the French Boy Learns to Write, Chapter 3.
Mahoney-Standards in English, pages 4 to 38 and pages 136 to 156.
Sheridan-Speaking and Writing English, pages 1 to 46 and pages 132 to 145.

\section*{GEOGRAPHY}

\author{
Sixth Grade, B Class
}

\section*{Latin America}
A. Introductory.

Definition and location of Latin America. Why is this region called Latin America? What is included in Latin America? It should be pointed out that Mexico, Central America, and South America are included in this region because the early settlements were made by Europeans from the Latin speaking nations.
B. What are our points of contact with Latin America?
I. What is our trade with Latin America?
1. What things that we use or need come from Latin America?
a. To what extent does the sugar used in the United States come from Latin America?
1. What kind of sugar is it?
2. What are the important regions raising and exporting it to the U. S.?
3. What are the climate, soil, and surface features necessary for its production?
4. Where in the U. S. is the same kind of sugar raised?
5. How does a sugar plantation of Latin America differ from a Colorado sugar beet farm?
6. Who are the people who do the work of the sugar plantations in Latin America?
b. Other products which are shipped in sufficient quantities to warrant their study and which should be studied in a manner similar to that suggested for sugar are: coffee, rubber, cocoa products, manioc, fruits, nuts, cereal products such as wheat, meats, leather, hides, and furs, mineral products, such a nitrate, petroleum, and precious stones.
For those soil products with which we are unfamiliar, study in particular, these points.
1. How do we use this product?
2. What regions produce it?
3. What is the plant like?
4. What climatic conditions and surface features are necessary for its production?
5. How is it produced and prepared for market?
6. What people do the work of raising it? How do they live?
7. What use do the Latin Americans make of this product? In studying wheat, the following points should be emphasized:
1. What are the characteristics of a good wheat-growing country?
2. What regions raise wheat?
3. Why can these regions export wheat to us?
4. What differences would we see between a wheat farm in Latin America and in our own country?
For the animal industry, study these points:
1. What use do we make of the animal products?
2. What are the regions producing them?
3. What are the conditions of soil, climate. and topography that govern the production of live stock?
4. What differences are there between a cattle or sheep ranch of Latin America and one of our own country?
5. What regions produce the fur-bearing animals which we use?
For the mineral products, study particularly these points:
1. What regions produce this mineral?
2. What climatic conditions enable Chile to export such quantities of nitrate?
3. What are the hardships of securing nitrate?

In studying those products exported to the U. S. it must be remembered that throughout, the climatic conditions and topography which influence its production must be emphasized. At the completion of the study of these products, a thorough review of climate and topography should be given.
2. How important is our export trade with Latin America?
a. What are the chief articles which the U. S. can supply to the Latin American countries?
b. To what countries do we export in large amounts?
c. How can we improve our trade with these countries?
3. What are the present trade routes between the U. S. and Latin America?
a. What are the most important ocean routes?
b. How valuable is the Panama Canal in shortening distances between Latin America and the U. S.?
c. How are trade routes affected by Latin America's lack of many good harbors?
1. What are the important harbors?
2. Why does Latin America have so few good harbors?
d. What use is made of railroads in transporting goods between Latin America and the U. S.?
1. What are the difficulties of railroad building in Latin America?
(Study here in particular two regions, the Andes region and the Central American region).
2. What regions are adequately supplied with railroads?
3. What particular points of interest or interesting things would be seen in traveling on the Trans-Andean railroad?
e. Where do the rivers furnish transportation?
1. What are the large rivers of Latin America?
2. In what countries are they?
3. What are the natural hindrances to transportation on these rivers?
f. How is transportation carried on where there are neither rivers nor railroads?
g. How can a thorough understanding of the difficulties of transportation help our trade with Latin America?
II. Why have the Latin American people not developed industries and resources more extensively?
1. Where have conditions of soil, climate, and topography made progress difficult?
2. How much have characteristics such as race hindered progress?
3. To what extent has the lack of coal, iron, and water power limited their progress?
a. What are the coal and iron resources?
b. Where can the rivers furnish water power?
4. Where has the lack of transportation hindered progress?
5. Where has the sparseness of population and scarceness of skilled labor restricted the development of natural resources?
III. What must we know about the people of Latin America so that we and they may be friends?
1. Who are the people of Latin America?
a. Who were the natives when the country was discovered?
b. From what European countries did the early settlers come?
c. What European peoples have recently made their home in Latin America?
d. What is the present relation between white people and Indians?
e. What are the chief languages spoken there?
2. Where do the people live?
a. What are the important cities?
b. What are the regions where only a few people live?
3. How do they differ from us in their customs and manner of living?
a. What is their religion?
b. How do their homes differ from ours?
c. In what ways does the dress of the peasant class differ from our dress?
d. What food do they eat? (Note:-It must be clearly pointed and kept before pupils that the great differences in social rank make a decided difference in manner of living and customs.)
4. To what extent have they made achievements in art, music, and education?
a. How do their cities compare with ours in arrangement and buildings?
b. Who have written their stories and poems?
c. How well educated are they? What are their schools like?
d. Do the different countries have national music?
5. What form of government do the different nations of Latin America have?
6. What is the Pan American Union doing to help make better relations between Latin America and the U. S.?
3. At the completion of the study as indicated above, a thorough review should be made of Latin America, emphasizing in particular the following:
1. People.
2. Climate.
4. Surface features.
3. Rivers and railroads.
5. Products and industries.
6. Cities and harbors.

\section*{Sixth Grade, A Class}

\section*{Europe}

What are our points of contact with Europe?
I. What is our commerce with Europe?
II. How greatly do our citizens travel in Europe?
III. What use is made by our students of the eduational institutions of Europe?
IV. What interests do we have in the people of Europe?
V. Why do so many European people come to the U. S. to make their homes?
1. What is our trade with Europe?
(1) What do we import from the European nations?
(2) What things does Europe buy from us?
(3) How are these articles transported?

Study the individual articles of commerce and the industries which make this commerce possible in the same way in which they are studied under Latin America. Emphasize conditions of production, such as climate, topography, and natural resources.
Suggestive problems.
a. Why can England export so much textile goods, when she must import the raw materials?
b. Why do the people of western Europe engage in manufacturing and commerce, rather than in agriculture?
c. Why can northwestern European countries be able to manufacture toys so cheaply?
d. Why do the people of Europe use their rivers so much more extensively for transportation than we do?
e. Why does Europe need to import foodstuffs?
f. How does the yield of wheat in western Europe compare with that of the U. S.?
g. Why is there at present such a shortage of food in many parts of Europe?
2. How greatly do our citizens travel in Europe? Study the routes and means of travel and the places of particular interest which the tourist visits, emphasizing natural scenery. Suggestive problems:
a. Why are people attracted to the Alps Mountains?
b. What are the attractive things about a trip on the Rhine River?
c. Why is Holland such an interesting place in which to travel?
3. What use is made by our students of the educational institutions of Europe? Study the places which are famous for learn-ing-indicate the particular phase of education presented in each; as art in Paris, music in Berlin or Vienna, science in German universities, etc. Suggestive problems:
a. How does the life of a school boy in Germany or England differ from ours?
b. What education do the girls of the different countries of Europe get?
c. How do the European countries compare with us in public schools and compulsory education?
4. What interests do we have in the people of Europe?

Study the following problems in general for Europe, giving special attention to differences in different nations.
(1) Who are the people of Europe?
(2) Where do they live?
(3) How do they differ from us in their customs and manner of living?
(4) What progress have they made in art, architecture, litera. ture, and music?
Suggestive problems:
a. How are we related to the people of Europe?
b. What are the interesting things in the life of the Irish, Spanish, Dutch, Italians, Russians?
5. Why do so many of the European people come to America to make their home?
(1) From what countries do they come?
(2) In what places do they settle in the U. S.?
(3) What are the conditions in their native homes which make them want to change?
(4) What new things must they learn when they come to the U. S.?
(5) What things should we know about their European life and homes so that we can help them become good citizens?
As a conclusion to the study of Europe, review carefully the following topics:
1. Industries and Commerce.
2. Climate.
3. Topography.
4. Rivers and railroads.
5. People.
6. Cities and harbors.
7. Natural resources.

\section*{Seventh Grade, B Class}

Asia
The problem of our relationship with Asia may be divided into four major divisions.
I. What is our commerce with Asia?
II. What should we know about the people of Asia so that we may be better friends?
III. Why have the people of Asia not developed their resources more fully?
IV. Why are the inhabitants of some Asiatic countries coming to the U. S. to live?
1. What is our commerce with Asia?
(1) What things do the Asiatic countries sell to us?
(2) What articles do they buy from us?
(3) How are these articles transported?

Study with care the different articles of commerce and the industries which make this commerce possible. The plan used for studying commerce between Latin America and the U. S. should be followed here. Particular care needs to be given to the question, "Why is this article exported from or imported into Asia?"
Suggestive problems:
a. Why does Asia export so much unmanufactured material and import chiefly manufactured material?
b. How do the people of China and Japan make the wonderful silk goods they send us?
c. Why can the people of China export such large quantities of rice, when the country is so densely populated?
d. What differences in labor would there be between a potato farm in Colorado and a rice farm in China?
e. How is work of raising rice done?
f. How do the boats used in the rivers of China and India differ from those used on the Mississippi?
g. Why must camel caravans be used in some regions?
h. How are the trains different from ours?
2. What should we know about the people so that we may be better friends?
(1) Who are the people of Asia?
(2) Where do they live?
(3) How do they differ from us in their manner of living and customs? (Study the people of each country.)
(4) What progress have they made in art, architecture, literature, and music?
Suggestive problems:
a. What differences are there between the religions of Asia and ours?
b. Why are boys better liked than girls in Chinese families?
c. How does the education of boys of Persia and Arabia differ from that of boys in the U. S.?
d. What difficulties would we have if we tried to eat a meal with a Chinese family and followed their customs?
e. Why do so many of the Chinese people live along the coast of China?
f. Why was the Great Wall of China built? Of what use is it now?
g. How has the progress in civilization been influenced by the topography of the continent?
3. Why have the people of Asia not developed resources and industries more fully?
(Study the problem for Asia in the same way in which it is studied for Latin America.)
Suggestive problem:
How the religion of China influenced the development of mineral resources?
4. Why are the inhabitants of some Asiatic countries coming to the U. S. to live?
(Follow the plan given for the study of immigrants under Europe.)
Review the study made of Asia, and emphasize:
1. People.
2. Climate and surface features.
3. Natural resources.
4. Commerce and industry.
5. Rivers and railroads.
6. Cities and harbors.

\section*{Seventh Grade, A Class}

\section*{Australia and the Pacific Islands}

The regions to be studied intensively are Australia, New Zealand, the East Indies, the Hawaiian Islands, and the Philippines. The smaller groups of islands in the Pacific Ocean should be studied, but due to their relative unimportance, do not need such intensive study. The Hawaiian and the Philippine Islands, because of their relationship politically to the U. S. have been studied in fifth grade, but will bear continued study at this time, due to the similarity of population.

Following the study of Asia, the study will lead most easily into the study of the East Indies, following that to a consideration of the smaller groups of islands, then to the study of Australia and New Zealand, the Hawaiian and Philippine Islands. Study the following points for each region:
1. What are the products and industries which give rise to commerce?
2. What should we know about the people that we may be better friends?
3. To what extent are the people developing their resources?

Make the same intensive study of articles of commerce, of industries and of products that has been followed in the study of other continents.
I. What are the products and industries which give rise to commerce?
1. What are the climate conditions and topography which control these products and industries?
2. What are the most important articles exported from this region? Imported into this region?
3. With what foreign nations does this region carry on commerce?
II. What should be known about the people that we may be better friends?
1. Who are the people of this region?
2. Where do they live?
3. What are their manner of living and customs?
(Study each region, carefully pointing out differences between their manner of living and ours. Emphasize homes, furnishings, food, occupations, social life, means of traveling.)
III. To what extent are the people developing their resources?
1. What are the mineral resources? Soil resources?
2. What use is being made of these?
3. Why is so little manufacturing done here? How is the manufacturing done, carried on?
4. How have racial characteristics influenced development of resources?
5. How have climatic conditions and topography influenced development?
Suggestive problems:
Australia.
a. Why has the northern part of Australia remained undeveloped?
b. How has the settlement of Australia by Europeans influenced her development?
c. Why can Australia have such a great amount of animal products?
d. How does Australia compare with the U. S. in education, government, death rate, and progressiveness in city life?
e. Where did we get our present system of balloting?

New Zealand.
a. How does the location of New Zealand influence its climate?
b. Why can New Zealand be so successful in producing dairy products?
c. How do these people compare with the people of the U. S. in the care they give to education, welfare of the people and government?
East Indies.
a. Why is Java such a densely populated region?
b. Why do so few white people go to the East Indies to live?
c. Who owns the different islands in this group?
d. How long have these islands contributed products which were used by the rest of the world?
Hawatian Islands.
a. How did we acquire these islands?
b. Why is the tourist travel so heavy from the U. S. to these islands?
c. What conditions of living would a tourist from the U. S. find unusual and interesting?
d. For what reasons are we glad that these islands form a part of our territory?
Philippine Islands.
a. How did we acquire these islands?
b. What is their political relation to the U. S.?
c. What is the importance of the hemp industry in the Philippines?
d. How do the people of the Philippines carry on rice culture? How do they make use of the rough country?
e. What progress have these people made in civilization?

Eighth Grade, B Class

\section*{Africa}

In this grade, the study of the continents will be completed with the study of Africa. The study of the home state, Colorado, should be completed during the last quarter of the term given to 8 B work.

For the study of Africa the plan should be followed which has been suggested for the study of the other continents.

What are the points of contact with Africa?
1. What is our commerce with Africa?
2. What is our interest in the people of Africa?
3. Why is Africa called the Dark Continent?
I. What is our commerce with Africa?
1. What things that we use or need come from Africa?
2. What articles do the African countries use which we can supply?
3. How are these articles transported?

Study the individual articles of commerce and the industries underlying this commerce. The plan used for studying commerce between Latin America and the U. S. should be followed here. Particular care needs to be given to such factors of production of any articles as climate and topography. The climate and topography which make the production of certain articles in some regions impossible and bring about their importation should be pointed out.
Suggestive problems:
a. What importance to commerce will the completion of the Cape-to-Cairo railroad have?
b. What regions of Africa furnish the great amount of exports?
c. Why does the greater part of the exports of Africa consist of raw products?
d. Why does Africa do so little manufacturing?
e. How has the restricted means of transportation hindered development of industries and commerce?
f. To what extent can Africa furnish products of great demand in the world?
g. Why are European nations so anxious to leave colonies in Africa?
h. How would an elephant hunt differ from elk hunting in Colorado?
II. What is our interest in the people of Africa?
1. Who are the people of Africa?
2. Where do they live?
3. How do they differ from us in their customs and manner of living?
4. What achievements have they made in art, literature, and music? Suggestive problems:
a. How has climate influenced the progress of the African people?
b. Why are the African people content to live so much more simply than we do?
c. What progress have the missionaries made in Africa?
d. What progress have the people of Liberia made in civilization and government?
e. Why has the Nile valley been such a field of historical investigation and tourist travel?
III. Why is Africa called the Dark Continent?

Study particularly the reasons for the lack of progress in Africa. Suggestive problems:
a. How have surface features hindered progress in Africa?
b. Where are the mountains of Africa?
c. Why is the interior of Africa so difficult to reach?
d. What has been the work of Livingstone and Rhodes in developing Africa?
e. To what extent can the native resources such as mineral resources and latent water power be developed and help in overcoming the backwardness of the continent?
f. To what extent has Africa's location and coast line retarded her progress?
Review carefully the continental study, and emphasize these points:
1. Climate.
2. Topography.
3. People.
4. Industries and commerce.
5. Transportation.
6. Cities and harbors.

\section*{Colorado}

Why do people from the East and from the Pacific coast find Colorado an interesting place to visit? Why are we justified in telling people that Colorado is a splendid state in which to live?
1. Why is Colorado's climate so delightful?
2. How do the mountains help to attract people?
a. How were the mountains formed?
b. How do they differ from mountains in other parts of the U. S.?
c. What are the interesting places of the mountains?
d. What uses do we make of these mountains?
3. What national parks are located in Colorado?
4. What are the chief industries of the state?
a. Why is the mining industry so important?
b. Where is agriculture carried on?
c. What facts could be learned about the grazing industry?
5. How well does Colorado provide for the education of her people?
6. Who are the people of Colorado?
7. What are the important cities of Colorado?
8. How easily can travel and transportation be carried on in Colorado?

\section*{Eighth Grade, A Class}

The work taken up in this grade is the geography of the world, emphasizing those phases of progress which are determined by geographic factors. The study of each phase is organized into problems. The particular phases studied are as follows:
I. Population.
II. Soil Products.
III. Mineral Resources.
IV. Manufacturing.
V. Commerce.
VI. Transportation and Means of Communication.
VII. Education and Recreatory Activities.
I. Population.
1. Where do the people of the world live?
a. Where are the regions of densest population?
b. Where are the regions of sparsest population?
c. Why are some regions so densely populated and other regions so sparsely populated?
d. What is the manner of living in regions very sparsely popu lated? Very densely populated? Moderately densely populated?
2. What are the different races of the world.
3. What is the distribution of each race over the earth's surface?
II. Soil Products.
1. Where are the regions where the soil is carefully cultivated?
a. What products are raised in these regions?
b. Which of these products are raised most generally?
c. Why are some products raised in one part of the world and other products in other regions?
d. Which products are most necessary to the people?
e. What is the difference in the methods of production of these soil products in the different parts of the world?
f. What are the conditions of soil and climate that govern the production of each?
2. What use is made of the soil in regions where the surface is rugged or of high altitude?
a. Where are the grazing regions of the world?
b. What is the manner of living in grazing regions?
c. Where are the forests of the world?
d. What are the different kinds of forests?
e. How does the forest area of the world at present compare with the area fifty years ago?
f. What is the effect upon the region which has been deforested of the cutting of the forests?
g. Of what importance is it that the forests be protected and preserved?
3. Why is it necessary to keep the soil in a high state of productivity?
III. Natural Resources.
1. What are the mineral products of the world?
2. In what regions of the world is each of these located?
3. How are these mineral products of use to people?
4. What are the different methods of obtaining these minerals?
5. What is the topography of the region where these minerals are found?
6. What is the life of the people who do the actual work of mining?
7. What is the importance to a region of the presence of mineral resources? What effect upon the progress of a country may the absence of minerals have?
IV. Manufacturing.
1. What are the characteristics of a good manufacturing region?
2. Where are the regions where manufacturing is the chief occupation?
3. What determines the things which will be manufactured in any community?
4. What are the different stages in manufacturing?
5. Where is the simplest form of manufacturing carried on?
6. What is the manner of living among people who work in factories?
7. How does manufacturing influence the density of population?
8. What are the means of providing power for manufacturing?
V. Commerce.
1. What conditions make commerce necessary and possible?
2. What nations are famous as commercial nations?
3. What are the characteristics of a good commercial center?
4. How does climate, soil and topography influence the commerce of any region?
5. How does the life in any commercial region differ from that of an agricultural or mining community?
6. What conditions determine the location of a commercial center?
7. What are the most important articles of commerce?
a. Where are these articles produced?
b. What regions use them in large amounts?
c. Why do these regions not produce them?
VI. Transportation and Communication.
1. What are the chief means of transportation?
a. What are the chief railroad routes of the world?
(Study the transcontinental lines of North America, the Pan-
American railroad as proposed, the trans-Andean, the trans-
Siberian, the proposed Berlin to Bagdad and Cape-to-Cairo lines.)
b. What regions are the centers of rail transportation?
c. What conditions determine the location of railroads?
1. How does the density of population influence the building of railroads?
2. To what extent do surface features and climate influence the location of railroads?
3. How much do soil and mineral resources influence the building of railroads?
d. What are the important ocean routes?
1. What oceans are most used for transportation?
2. What canals are very important in shortening ocean routes? (Study the Panama and Suez Canals.)
3. To what extent are the location of ocean highways influenced by climatic conditions?
4. How is transportation carried on on the oceans?
e. What are the inland water routes?
1. In what regions have canals been constructed?
2. What are the rivers which are highly important for transportation?
3. What continent has made extensive use of its inland water routes?
4. What articles are transported on these various routes?
5. What are the native features which restrict the use of rivers for transportation?
f. What means other than water routes and railroads are used for transportation?
1. What regions have lead in constructing highways?
2. How has the automobile helped in making transportation more rapid?
3. Why is it necessary to use pack trains and caravans?
4. What regions use pack trains or caravans?
g. What is the advantage to a nation of good harbors? What makes a good harbor? What are the most important harbors of the world?
2. How is communication between regions carried on?
a. In what regions are the telephone and telegraph used extensively?
b. Why are there regions where there are no telephones or telegraphs?
c. How are messages sent in regions where telegraph and telephone are lacking?
d. How are messages sent across oceans?
e. What are the routes for sending mail?
f. How is the mail transported?
VII. Education and Recreation.
1. What are the important ways by which children get an education?
a. Where in the world do public schools provide for the education of the boys and girls?
b. How do these schools in the U. S. differ from those of Sweden or France?
c. How do the children of the native people of Africa or the Islands of the Pacific secure an education?
d. How many different things can we learn to do in our schools? What things can the Eskimo children learn to do? Why are our schools so much larger than the schools in the polar regions?
2. How well educated are the people of the world?
a. What regions of the world have the fewest illiterates in their population?
b. What regions have the most illiterates in their population?
c. Where can we go for very careful education in art or in music? In science?
3. What do people do to get recreation?
a. What are the different forms of outdoor recreation?
1. In what parts of the world is swimming and boating very popular?
2. What people are particularly noted for skill in snow and ice sports?
3. Where do people go who wish to hunt or fish?
4. What parts of the world have been particularly attractive to people who love mountain vacations?
5. What are the most important games played? How do the track and field meets of today compare with those of ancient Greeks?
b. What indoor amusements have become most important?
1. How important is the movie industry?

\section*{HISTORY}

\section*{Sixth Grade}

\section*{Crvics}
1. Aims in Teaching:
a. To teach the forms of government, its agencies and functions.
b. To show children how the government serves community interests and the interests of the children; and how the government is dependent upon individuals in promoting its best interests and operation.
2. Outline of material-The work of the grade centers around the necessity for government, the relations between government and the citizen, and the government of the local community.
a. As a preparation for understanding government, consider the government in the home, the school, the playground, and the clubs.
b. The privilege of voting and its responsibilities; methods of voting in the past and at present; majority rule and political parties.
c. Services of the community to the citizen through the organization of the city, the state, and the nation:
(1) The local community serves the citizen by providing for protection of health, care of property, and education.
(2) The state serves the citizen by aiding in the construction of roads, by controlling the use of alcoholic liquors, and by providing for general education.
(3) The nation serves the individual by carrying the mails, by operating the railroads and telegraphs, and by providing for the rights of citizenship.
d. The duties of the citizen to the communities which serve him: obedience to law, honest voting, payment of taxes as provided by law, and response to any call of the community for service.
e. Organization of the local government.
f. Services of the local government for the citizen.
g. Comparison of local government with other forms of government: the commission form of government of cities, the city manager type, European government for cities (some type forms).
h. Special organizations within the city to meet temporary needs such as the council of defense, the food administration, the home service section of the Red Cross, etc.
3. Procedure: In this grade as in the preceding one, the work is done by means of formal study of problems; it is also accomplished by observation and investigation by the children themselves.
4. Bibliography.

City Charter, Laws and Ordinances.
Gulick, L. H., Town and City.
Munro, W. B., The Government of European Cities.
Dunn, A. W., Community Civics.
(See bibliographies for grades IV and V).

\section*{OLD WORLD BACKGROUND}

The purpose of the history in the sixth grade is to provide an intelligent background for a more detailed and intensive study of American History; to give some definite impression of the civilization of ancient and modern Europe and the efforts leading to the transplanting of those civilizations to America. The course of study is based upon Beard \& Bagley "Old World Background."
I. America and the World: Ancient and Modern.
a. America's mixed inheritance.
1. People.
2. Language.
3. Government.
4. Civilization.
b. The changing background of American History.
1. The expansion of Europe.
2. The awakening of the Orient.
3. The trade of Europe.
c. The foreground of history-America to the front.
1. American influence on Europe.
2. American government.
3. Influence of immigrants.
4. American trade with the world.
5. Growth of American territory.
6. American relations with European countries.
II. The Early Ages of Mankind.
a. The prehistoric age-from stone to metals.
1. The old stone age.
2. The new stone age.
3. The bronze age.
4. The iron age.
b. Life Among Primitive People.
1. The earliest people.
2. Men, the hunters and warriors.
3. Women and the arts of peace.
c. The beginnings of human society.
1. The savage society.
2. Domestic animals and tribal society.
3. Art of planting and reaping.
4. Beginnings of settled life.
III. The Great Nations of Antiquity.
a. Nations of the Orient.
1. Oriental despotism.
b. Greece and Rome.
1. City, states of Greece.
2. Rome: kingdom, republic, empire.
c. Social classes in the ancient world.
1. Antiquity of classes.
2. Nobles.
3. Farmers.
4. Artisans or skilled workmen.
5. Merchants and professional classes.
6. Slaves.
d. Great cities of antiquity.
IV. Culture of the Ancient Nations.
a. The practical arts.
1. Agriculture.
2. Domestic arts.
b. Architecture and art.
1. Egyptian and Babylonian architecture.
2. Greek architecture.
3. Roman architecture.
4. Art under the Oriental despots.
5. Greek art.
6. Roman art.
7. Modern studies of ancient architecture and art.
c. Literature and education.
1. Origin of writing.
2. Subject matter of early literature.
3. Oriental literature.
4. Greek literature.
5. Román literature.
6. Influence of the Greek and Latin languages.
7. Education in ancient times.
8. Ancient ideas about government.
d. Ancient religions and Christianity.
1. Religion.
2. Ideas of right conduct.
3. The idea of one God.
4. Origin of Christianity.
5. Mission of the Apostles.
6. Reasons for the spread of the new faith.
7. Persecution of the Christians.
8. Triumph of Christianity.
V. Middle Ages: Feudalism and the Church.
a. Feudalism.
1. Decline of Rome.
2. Germanic invasions.
3. Feudal princes.
4. The serf and the manor.
5. Village.
6. Castle.
b. Medieval Church.
1. Conversion of the Barbarians.
2. Pope.
3. Clergy.
4. Monks and nuns.
5. Laymen.
6. Unity of Christendom.
7. Church as a check on government.

\section*{Vi. The Arts and Town Life in the Middle Ages.}
a. Architecture, art, and learning.
1. Medieval architecture.
2. Art.
3. Literature.
4. Schools and universities.
5. Revival of ancient learning.
6. Invention of printing.
b. Town life in the middle ages.
1. Growth of towns.
2. Merchants.
3. Merchant guilds.
4. Artisans.
5. Rise of democracy in towns.
6. Progress in the towns.
ViI. Rise of Nations.
a. King's part in history.
b. Rise and growth of France.
1. Frankish kingdom.
2. Carolingians.
3. Holy Roman Empire.
4. France under the Capetians.
c. Rise of Spain.
1. Goths and Arabs in Spain.
2. Formation of modern Spain.
d. Making of the English nation.
1. Coming of the Anglo-Saxons.
2. Early English unity.
3. Alfred the Great and the Danish conquest.
4. Norman conquest of England.
5. King John and Magna Charta.
6. Rise of the English Parliament.
7. Growth of the national English literature.
8. Chaucer and the Canterbury Tales.
9. William Caxton and the printing press.
ViII. Growth of World Commerce and Exploration.
a. Growth of trade from early times.
1. Commerce in ancient times.
2. Commerce in the Middle Ages.
3. Crusades and commerce.
b. European attention fixed upon the East.
1. Steady growth of Oriental trade.
2. Old trade routes.
3. Travelers to the East.
4. Spread of knowledge about the East.
c. Service of science and learning.
1. Making of geographies.
2. Toscanelli.
3. Knowledge of the earth's shape.
4. Science of navigation.
d. Navigators, explorers, and conquerors.
1. Navigators.
2. Great explorers.
3. Spanish conquerors.
IX. Protestant Reformation.
a. Protestant reformation in Germany.
1. Early criticism of the church.
2. Martin Luther and the revolt against the Pope.
3. Lutheran church.
b. Protestant reformation in England.
1. Henry VIII and the break with the Pope.
2. Growth of protestantism in England.
3. Established church of England.
4. Puritans and Separatists.
5. Increase in religious sects.
c. Results of the protestant revolt.
1. Religious wars.
2. Religious persecutions.
3. Growth of toleration.
4. Translations of the Bible.
5. Spread of education.
X. Great Political Revolution in England.
a. The old political and social classes in England.
1. The king and the established church.
2. Nobility.
3. Country gentlemen and merchants.
4. Other ranks.
b. A century of revolution.
1. Arbitrary conduct of things-divine right.
2. House of Commons opposes the king.
3. Civil war-Oliver Cromwell.
4. Religious revolt.
5. Dictatorship of Oliver Cromwell.
6. Charles II.
7. James II and the second revolution.
c. Results of the revolutions.
1. Supremacy of Parliament.
2. English constitution.
3. Meaning of the Revolutions for America.
4. How the ideas of American independence took form.
5. Europe aroused.
XI. Rivalry of European Nations.
a. Influence of discovery and world commerce.
b. Commercial triumph of England.
1. Victory over the Spanish.
2. Triumph of the English over the Dutch.
c. Conflict between England and France in India and North America.
1. India in the year 1600 .
2. English and French gain a foothold.
3. Decline of the Mogul Empire.
4. English conquest of India.
5. Triumph of the English in Canada.
d. Balance of power in Europe.
1. How the idea arose.
2. England and the balance of powers.
3. Grand Alliance of 1689 against France
4. Grand Alliance of 1901 against France and Spain.
5. England and Prussia against France, Austria and Spain.
6. The American colonies, France, Holland and Spain against England.
7. England's combinations against France (1793-1815).
XII. French Revolution.
a. Old order in France.
1. French king.
2. Nobility.
3. Clergy.
4. Third Estate.
5. Newspapers, books and public opinion.
b. People revolt.
1. Opening scenes.
2. Estates general.
3. Peaceful revolution.
4. Americans hail the new day in France.
5. France slipping into disorder.
6. Reign of terror.
7. Reaction against terror.
8. American opinion on the French Revolution.
9. United States involved.
10. French Revolution and European opinion.
c. Napoleonic wars.
1. Remarkable career of Bonaparte.
2. Bonaparte as consul and emperor.
3. Napoleon's conquests.
4. Napoleon's downfall.
5. America and the Napoleonic wars.
6. Results of the French Revolution.
XIII. Age of Steam and Machinery.
a. Steam power.
1. James Watt and the steam engine.
2. Steamship.
3. Steam railway.
b. Invention of machinery.
1. Old ways of spinning.
2. Old fashioned loom.
3. Spinning jenny.
4. Factory system.
5. Power loom.
6. Flood of inventions.
c. Meaning of the Industrial Revolution.
1. Era of business men.
2. Industrial workers.
3. Growth of industrial cities.
4. Industrial panics.
5. Contest of industry and agriculture.
6. Influence of railways.
7. Influence of steamship.
8. Contest for natural resources.
XIV. Nationalism in the Nineteenth Century.
a. How Germany and Italy became nations.
1. German Confederation.
2. Movement for national unity.
3. Bismarck and Prussia.
4. Franco-Prussian War.
5. Italy in 1815.
6. Mazzini and the spirit of Italian Nationalism.
7. Cavour and Victor Emmanuel.
8. Garibaldi and his "Red Shirts."
9. Unity finally achieved.
b. Nationalism in Eastern Europe.
1. Rule of the Turk.
2. Rise of Independent Balkan States.
3. Balkan troubles.
4. Nationalism suppressed in Austria-Hungary.
5. Nationalism in Russia.
6. Nationalism and immigration to America.
XV. Growth of Democracy.
a. Democracy in France.
1. Revolution of 1830 .
2. Revolution of 1848 .
3. Crisis of 1870 and third republic.
b. Democracy in England.
1. Old parlimentary system.
2. Demand for reform in England.
3. Four great reform bills.
4. Modern England system.
c. Democracy in Italy.
1. King.
2. Italian parliament.
d. Democracy in Germany.
1. Prussian monarchy.
2. Prussian system.
3. German empire.
e. Democracy in southeastern Europe.
1. Austria Hungary.
2. Balkan States.
f. Rise of democracy in Russia.
1. Despotism of the Romanoffs.
2. Revolution of 1905 .
g. Democracy in the Orient.
1. Japan.
2. China.
h. Democracy and civil liberty.
1. Rights of man.
2. Rights of women and children.
XVI. Imperial Rivalry of European Nations.
a. Europe in the Orient.
1. Awakening of the Far East.
2. China and Japan contracted.
3. "Open Door" policy.
b. European occupation of Africa.
1. Exploration.
2. Partition of Africa.
c. European interest in Latin America.
1. Revolt of the Spanish colonies.
2. Monroe Doctrine.
3. Sources of difficulty in Latin America.
4. Caribbean.
d. World War, 1914-18.
1. Background of the war.
2. Outbreak.
3. Belgium.
4. England and Belgium.
5. World War.
6. Course of the war.
7. America and the World War.
8. End of war.
9. Treaty of peace.
XVII. Europe in Our Own Time.
a. Domestic affairs of the Nations.
1. German revolution of 1918.
2. Revolution in Russia.
3. Collapse of Austria-Hungary.
4. Rebirth of Poland.
5. Balkan region.
6. Revolt of the Irish.
7. Debts, taxes and money.
b. International relations.
1. Armed peace.
2. Trade hampered by rivalries.
3. United States and demoralized Europe.
4. Orient.
5. Great international conference at Washington.
XViII. Culture of the Modern Age.
a. Modern knowledge.
1. Natural science.
2. Knowledge of the human race.
3. How knowledge is distributed and used.
b. Idea of progress and reform.
1. Literature and art.
2. Art and architecture.
c. Unity of the modern world.
1. International law.
2. Union of the nations.
3. America and the future.

\section*{Seventh Grade}

The history in \(7 \mathrm{~B}, 7 \mathrm{~A}\) and 8 B is based upon Beard and Bagley, "History of The American People."
1.* The Old World Background.
A. Our debt to the Old World.
B. Conditions in Europe in the fifteenth century.
1. Differences between eastern and western Europe.
2. Social classes in Europe; peasants; artisans; traders and merchants; the clergy; nobles; kings.
3. Development of trade; sea-route to Asia.
II.* Early Explorations and Conquests.
A. The explorations of the Italians and the Portuguese.
B. Columbus, Da Gama, Vespucci, Balboa, and Magellan.
C. Spanish conquests in North and South America.
D. Early French explorations.
E. Early English explorations.
F. The conflict between England and Spain.
iII. The Settlement and Development of the Colonies.
A. European conditions which led to American colonization.
1. Religious changes.
2. The cruel treatment of the peasants.
3. The development of the art of printing.
4. The new supply of gold from the Spanish possessions.
B. The English colonies.
1. The colonies first settled by English immigrants.
a. Virginia.
b. The New England colonies; Plymouth; Massachusetts Bay; Connecticut; New Hampshire.
c. Maryland; Pennsylvania; the Carolinas; Georgia.
2. Other settlements that become English colonies: New York; New Jersey; Delaware.
3. Type of settlers in the English colonies.
a. Immigrants seeking religious freedom.
b. Immigrants seeking relief from poverty.
c. Involuntary immigrants-slaves and criminals.
d. Bond servants.
C. The French settlements and colonies.
1. The settlements at Quebec, New Orleans, and St. Louis.
D. The struggle between the French and the English for the control of the continent.
1. Differences between the French and English colonial policies.
2. The three early colonial wars.
3. The final struggle; the French and Indian War in America; the Seven Years' War in Europe.
4. The Treaty of Paris and its results.
*Headings I and II are for the purpose of a hasty review.
E. The Spanish colonies in Louisiana and the Southwest.
F. Russian settlements in the Northwest.

Important names which should be remembered in connection with one or more of the above topics:

Explorers: Columbus, Da Gama, Magellan, Balboa, DeSoto, Coronado, Verranzano, Cartier, Champlain, Marquette, LaSalle, Hudson, Cabot, Raleigh.

Colonial Pioneers: John Smith, William Bradford, John Endicott, Roger Williams, Thomas Hooker.

Proprietors and Governors: Penn, Baltimore, Berkley, Carteret, Lord De la Ware, Oglethorpe, Stuyvesant, Sir Edmund Andros.

Soldiers: Standish, Washington, Braddock, Wolfe, Montcalm.
Important dates: 1492; 1497; 1498; 1519-22; 1588; 1607; 1619; 1620 ; 1754; 1763.

British sovereigns during the periods of exploration, settlements, and colonization:

Henry VII, 1485-1509.
Henry VIII, 1509-1547.
Edward VI, 1547-1553.
Mary, 1553-1558.
Elizabeth, 1558-1603.
James I, 1603-1625.
Charles I, 1625-1649.
Charles II, 1660-1685.
James II, 1685-1688.
William and Mary, 1689-1694.
William III, 1694-1702.
Anne, 1702-1714.
George I, 1714-1727.
George II, 1727-1760.
Puritan Revolution and Cromwell, 1649-1660, George II, 1760-1820.
IV. The Condition of the Colonies on the Eve of the Revolution.
A. Elements of strength in the colonies.
1. The development of the spirit of independence and selfreliance.
2. The growth of the population.
3. The development of farming.
4. The beginnings of manufacturing.
a. Manufacturing in the home.
b. The iron industry.
c. Shipbuilding.
5. The development of trade and commerce.
6. The principal cities.
B. Differences between the North and the South.
1. Differences in surface and climate and their relation to differences in social life and customs.
2. Local self-government in New England, the town as the unit of government.
3. The larger units of government in the middle colonies.
4. The county as the unit in the South.
C. Likenesses between the North and the South.
1. Few differences in language, religion, and laws.
2. Representative government common to both sections.
D. Education in the colonies.
V. Causes of the American Revolution.
A. The attempt of England to control American trade.
1. Objectionable laws enforced by England after the Seven Years' War.
2. Other objectionable policies of England.
a. The decree limiting westward expansion.
b. The Stamp Tax.
B. The protest of the colonies against taxation without representation.
1. Patrick Henry's speech.
2. The Stamp Act Congress.
3. The Stamp Act repealed.
C. More vigorous protests following the passage of the Townsend Acts.
1. The Boston Massacre.
2. The Boston Tea Party.
3. The First Continental Congress.
D. English friends of America: Pitt and Burke.
VI. The War for Independence.
A. The beginning of the struggle.
1. Lexington and Concord.
2. The Second Continental Congress.
B. The northern campaigns.
1. The siege of Boston and the battle of Bunker Hill.
2. Washington assumes command of the army.
3. Crown Point and Ticonderoga.
4. The evacuation of Boston by the British.
5. The Quebec expedition.
C. The Declaration of Independence.
D. The Middle states campaigns.
1. Occupation of New York City by the British forces.
2. Washington's retreat through New Jersey.
3. The battles of Trenton and Princeton.
4. Occupation of Philadelphia by the British forces.
5. The winter at Valley Forge.
6. The Burgoyne expedition: Bennington and Saratoga.
E. The French alliance.
F. The southern campaigns.
1. Capture of Savannah and Charleston.
2. Cornwallis' Campaign in the South.
a. Camden.
b. King's Mountain and Cowpens.
c. Guilford.
3. The siege of Yorktown and the surrender of Cornwallis.
G. The war at sea: John Paul Jones and John Barry.
H. The war in the Mississippi Valley: George Rogers Clark's expedition and the capture of Vincennes.
I. The Treaty of Paris.
J. Some of the causes of American success in the war.
1. Washington's character, skill, and leadership.
2. Franklin's diplomacy.
3. The work of Robert Morris in financing the war.
4. The work of the women.
VII. The "Critical Period" between 1781 and 1789 ; the Constitution
A. Government under the Continental Congress during the Revolution.
B. The articles of Confederation proposed (1777) and adopted (1781).
C. New constitutions of the states and their principal provisions.
D. Government under the Articles of Confederation.
1. Discontent throughout the country: Shay's Rebellion.
2. The Ordinance of 1787 , the most important legislation under the Articles of Confederation.
E. The Constitutional Convention.
F. The Constitution.
1. Its compromises.
a. Between large and small states.
b. Regarding the counting of slaves in apportioning representatives.
c. Regarding commerce and the slave trade.
d. Regarding the direct share of the voters in the government.
2. Contrasts between the Constitution and The Articles of Confederation.
3. The four important powers of Congress.
G. The adoption of the Constitution.
H. Washington the first President.

Important names:
Statesmen and Leaders in Civil Life.
American English
Patrick Henry.
Samuel Adams
William Pitt. Edmund Burke.
James Otis.
Benjamin Franklin.
Robert Morris.
Thomas Jefferson.
James Madison.
Alexander Hamilton.
\begin{tabular}{lc}
\multicolumn{1}{c}{ American } & English \\
Washington. & Howe. \\
Greene. & Cornwallis. \\
Gates. & \\
\begin{tabular}{l} 
Schuyler. \\
Jones.
\end{tabular} & French \\
& Layafette. \\
Rochambeau.
\end{tabular}

Important dates: \(1765 ; 1775\); July 4, 1776; 1777; 1778; 1781; 1783; 1787; 1789.
VIII. Starting the New Government.
A. The first amendments.
B. Hamilton's measures for financing the government.
C. Opposition to Hamilton's measures: the Whisky Rebellion.
D. The development of the political parties.
E. Relations with Europe.
1. Troubles with England due to the French Revolution: Jay's Treaty.
2. Troubles with France.
a. The X. Y. Z. Mission.
b. The "informal war" with France.
F. Domestic problems growing out of the French Revolution: The Alien and Sedition laws.
IX. The Expansion of the New Nation.
A. The attitude of Jefferson's party toward western development.
B. The Louisiana Purchase.
1. Reasons for the purchase.
a. The desire for more land and for a free water route to the Gulf of Mexico.
b. The danger of French dominion in the West.
c. Napoleon's willingness to sell the territory.
2. Results of the purchase.
a. Criticism immediately following the purchase.
b. Expeditions to explore the new territory.
C. The Florida Purchase.
X. The Organization and Settlement of the Middle West.
A. Surrender by the older states of their claims to western territory.
B. The organization of the Northwest Territory: the Ordinance of 1797.
C. The organization of the region south of the Ohio.
D. The gateways to the West and the four eras of travel.
E. The settlement of the Middle West.
1. The settlement of the region south of the Ohio.
2. The settlement of the region north of the Ohio.
3. The movement down the Ohio and Mississippi.
4. The National Road and its effect upon settlement.
F. The new states.
G. The life of the people on the frontier.
XI. The Events Leading to the War of 1812 and to the War Itself
A. Events leading to the war.
1. War between England and France and its effect on American commerce.
2. Attempts by Congress to remedy the situation.
a. The Embargo Act and its results.
b. The non-Intercourse Act.
3. The impressment of American seamen.
4. The Chesapeake affair.
B. The War of 1812.
1. The declaration of war.
2. The attitude of New England: the Hartford Convention.
3. American disasters on land.
4. The naval exploits.
5. Jackson's victory at New Orleans.
6. The Treaty of Ghent.
C. Political results of the war.
XII. The Spanish-American Republic and the Monroe Doctrine.
A. The Spanish colonies win their independence.
B. The Holy Alliance formed: the danger of this alliance to the U. S.
C. The Monroe Doctrine.

\section*{Important Names:}

Presidents: Washington (1789-1797), John Adams (1797-1801), Jefferson (1801-1809), Madison (1809-1817), and Monroe (1817-1825).

Political Leaders: Alexander Hamilton and John Jay.
Military and Naval Leaders: Oliver Hazard Perry and Andrew Jackson.

Pioneers and Explorers: Daniel Boone, Meriwether Lewis, William Clark, and Zebulon Pike.

European Leader: Napoleon Bonaparte.
Important dates: \(1803,1812,1823\).
XIII. Political Development between 1815 and 1845.
A. Important political issues of the period.
1. The protective tariff.
2. Internal improvements.
3. The sale of public lands.
4. The United States Bank.
B. Political leadership.
1. The administration of James Monroe and John Quincy Adams.
2. Andrew Jackson's administration.
3. Webster, Hayne, Clay, and Calhoun.
C. The rise of the Whig party.
1. The campaign of 1840; Harrison and Tyler.
2. Tyler's unpopularity: the Ashburton Treaty.
XiV. The Settlement of the Territory West of the Mississippi.
A. Missouri, Arkansas, and Iowa.
B. The Texas problem: the admission of Texas.
XV. The War with Mexico: Cause, Campaigns, and Terms of Peace.
XVI. The Settlement of the Far Western Country.
A. Oregon, California, and Utah.
B. Summary of the far western movement.
XViI. The Industrial Revolution.
A. England's early leadership in industry.
B. The development of manufacturing in America.
1. The cotton industry: the cotton gin.
2. The woolen industry.
3. The invention of the sewing machine.
4. The iron industry: development in Pennsylvania.
C. The development of farm machinery.
D. Means of transportation and communication.
1. Canals.
2. The steamboat.
3. The railroad.
4. The express business.
5. The telegraph: the Atlantic cable.
6. Ocean navigation.

XViil. The Effect of the Industrial Revolution upon American Life.
A. The division of labor and the separation of the worker from his tools.
B. Women in the factories, child labor.
C. Immigration stimulated to bring new supply of labor.
D. The labor movement.
E. The growth of the cities.
F. Foreign trade.
G. The South and the industrial revolution.
XIX. The Growth of Political Democracy.
A. The struggle for universal manhood suffrage.
B. The struggle for women's rights.
XX. The Development of Popular Education in the First Half of the Nineteenth Century.
A. The religious character and purpose of colonial schools.
B. The removal of the schools from the control of the church.
C. The development of free elementary schools.
D. The development of high schools.
E. The development of higher education; state universities.
F. The development of the newspapers, magazines, and political pamphlets.
G. The early American novels, American poetry.

Important Names:
Presidents: John Quincy Adams (1825-1829), Jackson (1829-1837), Van Buren (1837-1841), Harrison and Tyler (1841-1845), and Polk (18451849).

Other Political Leaders: Clay, Webster, Calhoun.
Pioneers: Moses Austin, Marcus Whitman, Brigham Young.
Inventors: Slater, Whitney, Fulton, Howe, McCormick, and Morse.
Educational Leaders: Mann, Barnard, Clinton, Mary Lyon and Emma Willard.

Labor Leaders: Robert Owen and Frances Wright.
Writers: Paine, Cooper, Irving, Hawthorne, Poe, Bryant, Longfellow, Whittier, Lowell and Harriet Beecher Stowe.

Military Leaders: Taylor and Scott.
Important dates: 1846-1848.
XXI. Slavery Becomes a National Problem.
A. Constitutional provisions regarding slavery.
B. Abolition of slaves in the Northern states.
C. The "balance of power" between the slave states and the free states.
XXII. Events Leading to the War Between the States.
A. The Missouri Compromise.
B. The abolition movement and its leaders.
C. The development of cotton raising in the South.
D. The Compromise of 1850 .
1. California admitted as a free state.
2. The Fugitive-slave Law: the "Underground Railroad."
E. The Kansas-Nebraska Act.
1. The Republican party organized.
2. Border warfare in Kansas.
F. The Dred Scott Decision.
G. The Lincoln-Douglas debates.
H. John Brown's Raid.
XXIII. The Political Situation on the Eve of the Crvil War.
A. The tariff and homestead issues.
B. The rise of Lincoln.
C. The division in the Democratic party.
D. The political campaign of 1860: Lincoln elected.
XXIV. The Civil War.
A. The Secession of seven Southern states and the organization of the Confederate states of America.
B. Divided opinion in the North: the proposed Crittenden Compromise.
C. Lincoln's first inaugural.
D. Fort Sumter surrendered.
1. The North aroused.
2. Four additional states join the Confederacy.
E. Preparations for war: relative advantages of the North and South.
F. The campaigns of 1861 and 1862.
1. Early Union reverses in the East.
2. Union successes in the West.
G. The Emancipation Proclamation.
H. The War on the water.
I. The campaigns of 1863 .
1. Renewed disasters in the East.
2. The battle of Gettysburg.
3. Vicksburg surrendered.
4. The battles of Chickamauga and Chattanooga.
J. The campaigns of 1864 and 1865.
1. Grant in command of all Union armies.
2. Sherman's march.
3. Grant in Virginia.
K. The assassination of Lincoln.
L. The cost of the war.
M. Women and the war.
XXV. Reconstruction in the South.
A. Problems of reconstruction.
B. The Fourteenth Amendment to the Constitution.
C. Military rule in the South and its consequences.
D. The struggle between President Johnson and Congress: the impeachment, trial, and acquittal of Johnson.
E. The campaign of 1869: Grant elected.
F. The Fifteenth Amendment.
G. The rule of the "carpet-baggers"; the Ku Klux Klan.
H. Laws depriving the negro of the vote.

Important Names:
Presidents: Taylor and Fillmore (1849-1853), Pierce (1853-1857), Buchanan (1857-1861), Lincoln (1861-1865), Lincoln and Johnson (18651869), Grant (1869-1877).

Other Political Leaders: Davis, Douglas, Garrison, Fremont, Seward, Alexander H. Stephens, Greeley.

Military and Naval Leaders: Grant, Lee, Sherman, McClellan, "Stonewall" Jackson, Sheridan, Johnston, Farragut, Meade, Hooker, Thomas, Early.

Important dates: \(1820 ; 1850\); 1854; April 14, 1861; January 1, 1863; July 1-3, 1863 ; April \(9,1865\).
XXVI. The Rise of the New South.
A. The situation at the close of the Civil War.
B. The reconstruction of the planting system.
C. The development of farming.
D. The industrial Revolution in the South.
XXVII. The Growth of the Far West.
A. The Far West in 1860.
B. New Western states and territories.
C. The problem of the public land.
XXVIII. The Triumph of Industry.
A. The development of mining and manufacturing.
B. The development of transportation: railroads and ships.
C. The army of industry: inventors, business men, wage earners.
D. The results of industrial development.
1. Development of the export trade.
2. Disappearance of the frontier.
3. Business and industry gain on farming.
4. The growth of the cities.
5. Evils of industrial development.
XXIX. Immigration.
A. Principal sources of immigration before 1890.
1. Early immigration.
B. Later changes in immigration.
1. The influx from Southern Europe.
2. Settlement of immigrants in the cities.
3. The enormous increase in immigration.
4. Many immigrants not permanent.
C. Effort to restrict immigration.
XXX. Combinations of Capital and Labor.
A. Competition leads to the formation of "trusts."
B. The results of combinations of capital.
1. The "soulless" corporation.
2. Protective organizations of employees.
3. Employers' organizations.
C. The great strikes.
D. The rise of Socialism.
XXXI. Parties and Political Issues.
A. The Republican and Democratic parties.
B. The tariff and income-tax issues.
C. The currency problem.
D. Other political problems and issues.
XXXII. Foreign Affairs.
A. Controversies with Great Britain.
B. Controversy with Germany over Samoa.
C. The Hawaiian question.
D. The growth of foreign trade.
XXXIII. The Spanish-American War and the Boxer Difficulties.
A. The Cuban revolt and the destruction of the Maine.
B. The war with Spain.
C. The results of the war.
D. Military activities in China.
E. Imperialism a political issue.
XXXIV. Advances in Popular Education.
A. Development of schools and colleges.
B. The growth of vocational education.
C. Educational extension.
D. The higher education of women.
E. Other educational agencies.

Important Names:
Presidents: Johnson (1865-1869) ; Grant (1869-1877) ; Hayes (18771881); Garfield and Arthur (1881-1885); Cleveland (1885-1889); Harrison (1889-1893); Cleveland (1893-1897); McKinley (1897-1901).

Other Political Leaders: Tilden, Blaine, Bryan.
Inventors: Edison, Bell, Wilbur and Orville Wright.
Leaders of Business and Industry: Rockefeller, Carnegie, Morgan.
Military and Naval Leaders: Dewey, Sampson, Schley, Shafter.
Important dates: 1877, 1894, 1898.
XXXV. The New Democracy.
A. Causes of the increasing interest in the machinery of government.
1. Popular education.
2. Wrong doing on the part of public officers.
3. Criticism of faithless officials.
4. Problems of the cities.
5. The education and employment of women.
B. Political reforms.
1. Civil-service reform.
2. Ballot reform.
3. The initiative, referendum, and recall.
4. The "commission" form of city government.
5. The "city-manager" plan.
6. Reforms in the organization of political parties.
7. The direct primary.
8. Woman suffrage.
XXXVI. The Early Years of the Twentieth Century.
A. Roosevelt a new type of president.
B. The conservation movement.
1. Its leaders.
2. The reclamation Act.
3. The Forest Reserves.
C. The Panama Canal.
1. Early history.
2. Treaty with Great Britain.
3. Dispute over routes.
4. The Panama "revolution" and the cession of the Canal Zone.
5. The building and opening of the canal.
D. Foreign affairs.
1. The Treaty of Portsmouth.
2. The journey of the fleet around the world.
E. The election of 1908.
F. Taft's administration.
1. Tariff revision and the income tax.
2. Postal savings banks.
3. The parcel post.
4. Dissolution of the "trusts."
G. The campaign of 1912 .
1. Dissatisfaction with Republican rule.
2. The organization of the Progressive party.
3. The nomination of Woodrow Wilson by the Democrats.
H. Wilson's first administration.
1. New laws: tariff, income tax, anti-trust, Federal Reserve banks.
2. Troubles with Mexico.
a. Civil war in Mexico.
b. The Vera Cruz expedition.
c. The difficulties with Villa.
3. American protectorates in Haiti and San Domingo.
4. The purchase of the Virgin Islands.
XXXVII. The Great War.
A. Europe on fire.
B. American neutrality.
1. The President's proclamation.
2. Reasons for American neutrality.
3. Difficulties in the way of strict neutrality.
C. The submarine outrages.
1. The Lusitania torpedoed and sunk.
2. America's protest and Germany's agreement to modify her practices.
D. The campaign of 1918: President Wilson re-elected.
E. War with Germany and Austria.
1. Germany renews unrestricted submarine warfare.
2. German intrigue in the United States.
3. War declared.
F. The German Autocracy.
1. Nature of the German empire.
2. Prussia practically an absolute monarchy.
3. The Hohenzollern rule and its dreams of world domination.
4. The need of crushing German militarism.
G. A democracy at war.
1. The draft.
2. War taxes.
3. National control of food, fuel, and transportation.
4. Adjustment of industrial disputes.
5. Encouragement of ship building.
6. Soldiers' insurance.
7. Americans on the high seas and on the battle front.
8. Steps leading up to the armistice.
9. Present situation.

Important Names:
Presidents: Roosevelt (1901-1909), Taft (1909-1913), Wilson (1913).
Important dates: 1914; April 6, 1917; Nov. 11, 1918.

\section*{Elementary Social Science}

The purpose of this course in the last half of the eighth grade is to develop an intelligent interest in the practical phases of social, civic and economic questions and to establish the point of view that will enable pupils to examine existing conditions and to consider the problems that they suggest.
I. Some Elementary Economic Facts.
A. What we know about our wants.
1. Individual wants.
2. Community wants.
B. The satisfaction of economic wants.
1. An opportunity to help in the production of wealth.
2. An opportunity to share in the wealth that his been produced.
C. Wealth and Poverty.
1. Wealth has to be produced.
2. Possessions of wealth and ability to control the means of production may lead to wealth.
3. Absolute lack of both makes for poverty.
D. Agencies of production.
1. Land.
2. Labor.
3. Capital.
4. Management.
5. Man is wealthy because he can control one or more of these agencies or is poor because circumstances do not permit him to do so.
E. Property.
1. Real Estate.
2. Personal Property.
F. The economic ideal.
1. The ideal economic community is that in which the general economic level is reasonably high rather than where some have great wealth and others are suffering extreme poverty.
II. Lands.
A. Private ownership of land.
1. Deeds and titles.
2. Free public lands.
B. Private ownership has hastened civilization.
2. Has taught men how to live at peace with each other.
3. Has helped to keep us more stable.
C. Private ownership in land brings wealth.
1. Sale.
2. Rental.
3. Farming.
III. Labor.
A. Earning a living.
1. Working for one's self.
2. Working for an employer.
B. Slave labor and free labor.
1. Free labor is labor given by one who is free to choose what he will do and for whom he will work.
C. Employers and employees.
D. Rewards of labor.
1. Opportunity to work.
2. Increasing earning power.
3. Leisure.
4. Satisfaction.
5. Safety in old age.
IV. Capital.
A. What is capital.
1. Money not the same thing as capital.
2. The use to which money is put determines whether it is or is not capital.
3. Money is capital only when it is used in production or when it is available for production.
B. The Capitalist.
1. What is a capitalist.
2. Popular conception of a capitalist.
3. The right conception of a capitalist.
C. Capital as important as labor.
1. Capital and labor, the two necessary elements of production, should bear relation to each other such as we see in other pairs of words such as "friend and companion," "peace and plenty," "light and liberty," "safety and happiness,"" "union and strength."
D. The power of capital must be highly regarded.
1. We must have as fair a distribution of wealth and means of getting it as is possible.
2. Need for cheaper money.
3. The Federal Farm Loan Act.
E. The importance of saving.
1. Capital means saving and investment.
V. Management.
A. Why management is necessary today.
B. Representatives of management, representatives of labor. representatives of capital.
C. Large industries and extensive business enterprises are coming to be managed by representatives of capital and labor.
D. Management through the control of money.
1. By means of banks.
2. By means of stock companies.
E. Management through control of market opportunities.
1. By means of combination.
2. By means of special privileges.
Vi. The Modern Business of Production and Distribution.
A. Modern business-production.
1. Farming, mining, lumbering, grazing, fishing.
2. Manufacturing the finished product.
B. Distribution.
1. Transportation.
2. Selling to the consumer.
C. The modern farm.
1. Extensive farming-the farm equipment and co-operation.
2. Conditions of labor in extensive farming.
3. Intensive farming-Location and co-operation.
4. Intelligent labor needed-agricultural education profitable.
D. A modern factory.
1. The building and mechanical equipment.
2. The employees.
3. The product produced.
E. The railroads.
1. Financing the railroads.
2. Interstate regulations.
3. Interstate commerce commission.
4. The common carrier.
5. Intra-state regulations.
F. The modern department store.
1. The building.
2. The employees.
ViI. Some Elementary Social Facts.
A. The social sciences.
1. Sociology.
2. Political Science.
3. Economics.
4. History.
B. Society controls all for the benefit of all.
1. Society must regard both the individual and the compensation of the individuals.
C. Methods of control.
1. Control by laws, customs and institutions.
2. Society has two means for promoting its own welfare. a. Compulsion and persuasion.
b. Prevention of ignorance, poverty, disease and crime.

Vili. Public Education-the Cure for Ignorance and Poverty.
A. Universal education needed for democracy.
1. Importance of literacy.
2. Importance of ability to earn a living.
B. Compulsory.
1. Compulsory school attendance.
2. Child labor laws.
3. Compelled support of public schools.
C. Education through persuasion.
1. Public and private schools.
2. The elementary school.
3. The secondary school.
4. The evening school.
5. The continuation school.
D. Other means of free, public education.
1. Libraries.
2. Museums.
3. Art galleries and exhibits.
4. Extension departments.
IX. Promotion of Public Health-a Cure for Diseases.
A. An ancient enemy.
1. Diseases.
B. Health and Democracy.
1. The necessity for health among all its members.
C. Securing health by compulsion.
1. Compulsory medical attendance.
2. Compulsory segregation of diseases.
3. Prohibition of acts that endanger public health.
4. Proper maintenance of unsanitary conditions.
D. Securing health by persuasion through health departments.
1. Vital statistics.
2. Inspectors.
3. Hospitals.
4. Distribution of information.
5. Public health nurses.
E. State regulations.
1. The workman's compensation law.
2. Acceptable prevention.
F. National health measures.
G. Individual responsibility.
X. Promotion of Morality-the Cure for Crime.
A. Dealing with the wrong-doer.
1. Restraint and punishment.
2. Proper methods of punishment.
B. Agencies for investigating the law.
1. The courts.
2. Police powers.
C. Reformation of the wrong-doer.
1. Due to social and economic conditions.
2. Duty towards philanthropic organizations.
a. United Charities.
b. Children's aid societies.
c. National child aid committee.
d. Y. M. C. A.
XI. A Few Facts of Political Science.
A. Political Science.
1. A study of the principles of government.
B. Constitutional rights.
1. The right of self government.
2. The right of acquiring and holding property.
C. How society governs itself.
1. Self government.
2. Representative government.
3. Federal government.
4. State government.
5. Local government.
D. The branches of government.
1. The legislative department.
2. The judicial department.
3. The executive department.
E. Important function of the government is to carry on the problems of the nation.
1. Direct taxes.
2. Indirect taxes.
3. Federal taxes.
4. State and local taxes.
F. An important feature of federal import customs.
1. Protective tariff.
2. Tariff for revenue.
3. Business and politics.

\section*{HOME ECONOMICS}

\section*{Sixth Grade}

Domestic Science-Two Days per Week Domestic Art-Three Days per Week

\section*{Motives.}

Promote home helpfulness, form right health habits, awaken an interest in the economics of clothing and food, and train in the performance of certain household operations.

Correlate with English, arithmetic, art, geography and general science. Foons:

The thought centers about the preparation and serving of meals good for children.
Subjects to be Considered:
1. Foods suitable for breakfast, lunch, dinner.
2. Preparation, cooking and serving of:
(a) Cocoa.
(b) Fruits.
(c) Eggs.
(d) Cereals.
(e) Quick breads.
(f) Vegetables.
(g) Cream soups.
(h) Salads.
(i) Simple desserts.
(j) Cookies
(k) Meats.
3. Meal planning.
4. Serving a type breakfast, luncheon and dinner.
5. Jelly making.
6. Preservation of food materials.
7. Visit markets.

Home Management.
The thought centers about the dining room and kitchen:
1. Furnishings.
(a) Essential articles.
(b) Cleaning.
(c) Dusting.
(d) Care of plumbing.
(e) Care, order, and arrangement of pantry, linen closet.

Clothing.
The thought centers about the following:
(a) A cooking outfit.
(b) A set of underwear.
(c) Simple summer dress.
(d) Dining room articles.

Subjects to be considered for the working out of A, B, C, D:
1. Selection and buying of appropriate material.
2. Suitability of styles.
3. Making.
4. Cost.
5. Care and repair.
6. Laundering and removal of stains.
7. Textiles.
(a) Cotton.
(b) Linen.
(c) Wool.
8. Household insects that injure clothing.

\author{
Seventh and Eighth Grades \\ Domestic Science-Two Days per Week Domestic Art-Three Days per Week
}

Motives.
Health, home helpfulness, thrift, efficiency in household occupations to establish good workmanship and to awaken social consciousness. Correlate with personal hygiene, work in color and design, English, geography, arithmetic, and general science.
Foods.
The thought centers about the preparation and study of foods and adapted to simple-
1. Breakfasts.
2. Luncheons.
3. Dinners.

Projects and topics to be considered:
1. Selection, buying and preserving of materials.
2. Canning and jelly making.
3. Preparing cooking and serving of-
(a) Beverages.
(b) Fruits.
(1) Cooked.
(2) Uncooked.
(c) Cereals.
(d) Breads.
(e) Meats.
(f) Soups.
(g) Vegetables.
(h) Fish.
(i) Salads.
(j) Relishes.
(k) Desserts.
4. Making dinner, luncheon and breakfast menus good for children.
5. Serving a breakfast, luncheon and dinner.
6. Estimating cost per person.
7. Preparing and serving refreshments for social occasions.
8. Marketing.
9. Home projects.
10. Correct eating habits.

Household Management.
The thought centers about the living room and bathroom:
1. Furnishings.
(a) Essential articles.
(b) Suitability and desirability of styles.
(c) Selection.
(d) Arrangement.
(e) Appropriate decorative features.
2. Care.
(a) Ventilation.
(b) Cleaning-daily, weekly and seasonally.
(c) Dusting.
(d) Care of plumbing.
(e) Care of fireplace.
(f) Care and order of cloak closet.
(g) Care of medicine closet.
3. Household insects and their control.
4. Advantages and disadvantages of labor-saving devices.
5. Decorative plants for the home.

Housing.
The thought centers about the house. Subjects to be considered:
1. Situation.
2. Plan.
3. Construction.
4. Finish and equipment.
5. Heating, lighting, ventilation.
6. Water supply.
7. Care, maintenance, and use.
8. Family budget.

Clothing.
The thought centers about:
(a) Articles for night wear.
(b) Underwear.
(c) A simple summer dress and its accessories.
(d) An outing costume.

Subjects to be considered in the working out of \(\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}\) :
1. Selection and buying of material.
2. Suitability of styles.
3. Study and use of commercial patterns.
4. Making.
5. Care and repair.
6. Study of machine.
7. Laundering and removal of stains.
8. Economic features.
9. Standards in buying ready-made garments.
10. Cost of articles under "C."
11. Cost to dress an eighth-grade girl each season.
12. Comparison of standards of workmanship and material and cost of ready-made and home made garments.
13. Hygiene of clothing.
14. Renovating and pressing of ribbons.

Illeness.
Subjects to be considered:
1. Care of the room.
2. Care of the patient.

The thought centers about the home care of the sick.
3. Food suitable for the sick.
4. Emergencies and accidents.

At the end of the third year's work the pupil should be able to make, repair and care for the simple garments of her wardrobe; prepare and serve simple meals; understand the care of her own room, kitchen, bathroom, dining room, and living room. She should understand the more elementary facts concerning the right choice of food, correct food habits, care and use of foods, personal hygiene and household furnishings. Also be able to wash and iron light articles of cotton and linen. This may be accomplished by intensive work in clothing, foods, house management, and home care of the sick.

\section*{MUSIC}

\section*{Sixth Grade, B Class}

Progressive Series, Book III. The emphasis in the work of this grade is placed in the development of three-part, treble-voice singing. A great deal of drill in humming of three-part chord exercises in both major and minor should be given, alternating the parts. Sight reading should aim to train the children to sing at sight new music with words. If this cannot be done revert back to use of neutral syllable, loo; and with the more difficult passages to syllables. The Appreciation and Listening Lessons should deal with Folk music, the Folksong; Nationality as exemplified thru the Folk Dance, Folksong and national instruments and music. A project development will include the selection, arrangement and performance of a Folksong Program.

\section*{Sixth Grade, A Class}

Progressive Series, Book III. Three-Part Singing is continued. The Melodic Minor Mode is introduced. Studies in modulations to nearlyrelated keys are undertaken. Sight reading-words, loo, syllables-continues. Complicated rhythms in the eighth note beat are developed. National Songs and their origin are studied as well as Secular Vocal Music including the Folk Song; Near Folk Song; Ballad and the Art Song and Art Ballad. A project development will include the selection, arrangement and performance of a Secular Vocal Program.

\section*{Seventh and Eighth Grades}

The purpose of music in the seventh and eighth grades should be to develop an intelligent appreciation of good music thru participation in Chorus Singing and listening to and establishing an acquaintance with the literature of good music. The basic work of the course is found in "Junior Songs," Hollis Dann. This is supplemented with selections taken from Book IV, Progressive Series. Four features are constantly kepr in mind in presenting this work: (1) Music Appreciation, (2) Voice Culture, (3) Sight Reading, (4) Interpretation. Special emphasis is placed upon the Hygiene of the Voice for both the boy and the girl. The Presentation and Arrangement of Voices in the Junior High School is made a special study thru Listening Lessons in which famous artists are heard either individually or in combination. Opera and oratorio are studied only as choruses selected from either are studied in the class.

\section*{WOODWORK}

\section*{Sixth Grade}

The sixth grade work should begin by carefully reviewing the work done in the fifth grade. A more elaborate study should be made of different kinds of lumber and this coupled with a study of nails, brads, screws, etc.

In the study of nails the pupil should be taught how to know the different kinds of nails such as spikes, common nails, casing nails, finish nails and also how to determine a nail by the common term "penny."

The sixth grade pupil should begin to branch out in the use of such tools as bevels, mortice gauges, compasses, coping saws, etc.

Short talks on shop discipline should begin in the sixth grade.
The sixth grade pupil should begin to sharpen a few simple tools such as plane irons, chisels, etc.

The regular shop work should be begun by a short course in the construction of a few simple joints and later followed up with projects which require making the mortice dado and lap joint. These projects might consist of such articles as book racks, book ends, foot stools, match safes, knife trays, tool boxes, flower boxes, etc.

\section*{Seventh Grade}

The seventh grade students should be given a thorough drill on how to find projects on which they can work. These can be gathered from a study of the room, the school, the farm and the students' own needs.

The pupil should make a drawing of his project and be allowed to use some of his own ideas and these coupled to the ideas of the teacher. This method trains the student to think out a problem and at the same time he learns to work according to given instructions.

In the seventh grade considerable stress should be laid on the finishing of the articles constructed. The use of stains, shellacs, varnish, paint, etc., should be taken up and made an important part of the work of this grade.
Practical Characteristics of Projects.
The work of this grade should be carried on in such a way as to reduce class instruction to a minimum and consequently to afford considerable latitude to individual pupils in the choice of projects. In most instances models should be selected from an approved list, the instructor being careful to see that each model is well adapted to the abilities and needs of the individual pupil in question. Community and group work should be encouraged and visits to industrial plants should be contemplated in the plan of work.

\section*{Eighth Grade}

The work in the eighth grade should begin with a study of shop mathematics. This should consist of problems in computing the number of board feet in different kinds of lumber, computing the amount of lumber necessary to construct different articles. The use of fractions in the laying out of a piece of work and the keeping of an accurate account of the student's own work.

In this grade each student should be required to keep all his own edge tools in working condition. The application of the steel square should enter into many of the problems in the work of this grade.

Particular stress should be placed on accuracy in laying out and the execution of work.

Joining, tonguing and grooving, and gluing should be an important part of the eighth grade work.

Suitable projects for this grade might be such articles as fern stands, tabourettes, magazine racks, clock shelves, doll furniture, picture frames, bird houses, poultry fixtures, dog houses, kites, etc.


\section*{COLORADO}

\section*{STATE TEACHERS COLLEGE BULLETIN}
SERIES XXII. No. 9

Published Monthly by State Teachers College, Greeley, Colorado.
Entered as Second-Class Matter at the Postoffice at Greeley, Colo., under the Act of August 24, 1912.

Welcomes all those who seek an opportunity to spend able quarter or half quarter in study under the instruc faculty of the foremost educators, ors and classroom lecturers gather the leading colleges and universiti country and Europe.
(4n addition to the regular facul whom will serve during the qua offer all the courses usually given, faculty comprising twenty-eight women, all of them leaders in th particular fields of education, will

"THROUGH THE TREES," TO THE COOL HALLS OF THE ADMINISTRATION BUILDING

\section*{SCHOOL}
(1] An especially strong program of courses ha pared - one that makes a particular appeal trators, supervisors, and school teachers who the urge of the tremendous advances in educ


BI,EDSOE 1] The special faculty has been secured with a view to providing for stude Summer School an intensive course covering the big problems of the day in education. The lecturers includes such eminent educators as Dr. Edward H. Reisner, Dr. John W. Wither Horn, Dr. John Adams (University of London), Dr. Edward Howard Griggs, Dr. William A Dr. Emanuel Sternheim, Dr. Dallas Lore Sharp, Mrs. Cora Wilson Stewart, Dr. Earl D. Bru ward A. Steiner, Miss Alma B. Caldwell, Dr. Alfred L. Hall-Quest, Dr. John J. Tigert, and II Under a new arrangement for the two halves of the Summer Quarter this year, students opportunity to complete core subjects for the two-year course in either half of the quarter. - T The great evening assembly of the College will permit every student to hear each of the vis and lecturers. Students may get the benefit of these inspirational lectures, as well as the c lectures by the visiting teachers, in addition to taking a full program of sixteen hours.
(]) Located at the very gateway to the Rocky Mountain (Estes) National Park State Teachers College is the ideal place at which to spend the summer months in study. Th


\section*{COLORADO STATE TEACHERS COLLEGE}

\section*{BULLETIN}


Summer Quarter

June 12 - August 23
1923

Greeley, Colorado

\section*{IMPORTANT ANNOUNCEMENTS}

\section*{THE SUMMER QUARTER OPEN TO ALL}

Any person twenty years of age or over, whether a high school graduate or not, may enroll in the College for the Summer Quarter and take such subjects as he is interested in and able to carry. A record of attendance and a list of the subjects taken will be kept. College credit toward graduation is given only to those who meet the entrance requirements as stated on page 11. Students who attend the summer quarter without submitting high school credentials may later present these and have their marks previously earned transferred to the regular credit records of the College.

The College, as usual, divides the Summer Quarter into two equal half quarters for the convenience of the few students who can attend for only a part of the time. Only those courses which are designated "First Half," "Second Half," or "Either Half" carry credit for less than the full quarter. All other courses must be carried for the full quarter, if taken for college credit.

\section*{REGISTRATION-PAYMENT OF FEES}

All students who expect to be in attendance for the full quarter should make up a program for the whole quarter. The quarter fees may be paid all at once or for the student's convenience in two parts-one-half June 12 and the second half July 19.

Late Registration-Students registering after June 12 (for the first half quarter) or July 19 (for the second half) pay a fee of \(\$ 2.00\) for late registration. Except by special permission of the Dean of the College, no student, after his first quarter of school work during any given school year, who registers after the first day of the quarter shall, under any consideration, be allowed to take more than sixteen hours of work, and no additional credit for A's or AA's will be allowed such student for the work of the quarter in which he has registered late. If the student is more than three days late the total number of hours on his program will be reduced in proportion to the time lost.

Any student absent from class on the last day of the quarter will have his quarter report for that class turned in as incomplete unless he has a written permit from the President or Dean to leave before the close of the quarter. No teacher has authority to excuse a student from one of his courses before the close of the quarter.

\section*{EVENING LECTURES AND SPECIAL LECTURE COURSES}

See the notice concerning the evening and the noon open lectures on page 56.

Class programs will be sent on application.

\section*{COLORADO STATE TEACHERS COLLEGE}

\section*{BULLETIN}

\section*{Summer Quarter}

\section*{1923}

\title{
COLORADO ST'ATL TGACHEHS COLLEOK Grealey, Colo.
}

First Half:
June 12-July 18

Second Half:
July 19-August 23

\section*{THE FACULTY}

\section*{SUMMER QUARTER, 1923}

JOHN GRANT CRABBE, A. B., A. M., Pd. M., Pd. D., LL. D., President. WINFIELD DOCKERY ARMENTROUT, A. M., Director of the Training School and Professor of Student Teaching.
GRACE M. BAKER, Professor of Fine and Applied Arts.
GEORGE A. BARKER, M. S., Professor of Geography, Physiography and Geology.
SAMUEL CLAY BEDINGER, LL. B., Assistant Professor of Penmanship.
RUTH BEEM, Pd. B., Manager of Book Room.
JOHN R. BELL, Ph. B., A. M., D. Litt., Director of Extension Service.
MAY BERE, A. B., A. M., Associate Professor of Psychology.
RALPH T. BISHOP, Associate Professor of Industrial Arts.
HAROLD G. BLUE, A. B., Social Science, High School.
LESTER W. BOARDMAN, A. B., A. M., Professor of Literature and English.
WILLIAM GRAY BOWERS, Ph. D., Professor of Chemistry.
ALBERT E. BROWN, A. M., Professor of Secondary Education.
MARGARET BRYSON, M. D., Medical Adviser to Women.
MARK BURROWS, A. B., Professor of Rural Education.
J. Deforest CLINE, Director of Conservatory of Music, Professor of Public School Music.
VERA CAMPBELL, A. B., Assistant Librarian.
ALBERT FRANK CARTER, A. B., M. S., Librarian; Professor of Library Science.
EUGENE SHAW CARTER, Instructor of Violin.
JEAN CAVE, Assistant Professor of Physical Education.
ELIZABETH CLASBEY, Assistant Professor of Household Science.
AMBROSE OWEN COLVIN, B. C. S., Professor of Commercial Education.
GEORGE E. COOPER, Pd. B., Pd. M., Associate Professor of Physical Education.
NELL C. CRATES, A. B., A. M., Assistant in Latin, Spanish and French.
ETHAN ALLEN CROSS, A. B., A. M., Dean of the College. Professor of Literature and English.
HELEN C. DAVIS, A. B., A. M., Training Teacher, Junior High School, Geography.
HULDA A. DILLING, B. E., Training Teacher, Third Grade.
EDWIN STANTON DuPONCET, A. B., Ph. D., Professor of Modern Foreign Languages.
GEORGE WILLIAN FINLEY, B. S., A. M., Professor of Mathematics.
CHARLES M. FOULK, Pd. B., Pd. M., Professor of Manual Training.
GEORGE W. FRASIER, A. B., A. M., Ph. D., Dean of the Graduate School and Professor of the Art and Science of Education.
HELEN GILPIN-BROWN, A. B., Dean of Women.
SAMUEL MILO HADDEN, Pd. B., A. B., A. M., Dean of Practical Arts; Professor of Industrial Education.
WILLIAM HENRY HARGROVE, B. S., Professor of Agriculture.
JOSEPHINE HAWES, A. B., A. M., English, High School.
JACOB DANIEL HEILMAN, A. B., Ph. D., Professor of Educational Psychology.
FRED L. HERMAN, B. S., Science, High School.
RUTH M. HILLER, A. B., A. O., High School Dramatics.
RAYMOND HILL, Instructor in Fine and Applied Arts.
IRA WOODS HOWERTH, A. M., Ph. D., Professor of Sociology and Economics.
RAYMON H. HUNT, A. B., Assistant in Music, Orchestra and Band Instruments.
MRS. JAMES \(\vec{A}\). HUGHES, Assistant in Music, Piano.

FRANK C. JEAN, A. B., A. M., Professor of Biology.
ELIZABETH HAYS KENDEL, Pd. B., Pd. M., A. B., Training Teacher, Sixth Grade.
MARGARET JOY KEYES, A. B., Assistant in Physical Education and Dramatic Interpretation.
WINFIELD LEROY KNIES, Commercial Education.
EDWIN W, KNOWLES, M. D., Medical Adviser of Men.
E. GERTRUDE LEE, Instructor in Girls' Campfire Work.

ROYCE REED LONG, A. B., Director of Hygiene and Physical Education. GENEVIEVE LYFORD, B. S., Kindergarten.
FLORENCE LOWE, Pd. M., Instructor in Fine and Applied Arts.
ARTHUR E. MALLORY, A. B., Mathematics, High School.
ANNIE McCOWEN, A. B., B. S., A. M., Training Teacher, Fifth Grade.
IAN MERRIMAN, Assistant Professor of Commercial Arts.
SONORA METSKER, B. S., M. S., A. M., Training Teacher, Eighth Grade.
IRVING MILLER, Instructor in Voice.
INIZ NICHOLSON, Assistant in Hygiene and Physical Education.
BERNICE ORNDORFF, Ph. B., Training Teacher, Seventh Grade.
WILLIAM B. PAGE, M. D., Assistant Librarian.
ORA B. PEAKE, A. B., A. M., History; High School Preceptress.
ETHEL B. PICKETT, B. S., Assistant Professor Household Science.
LOUISE W. PUTZKE, Ph. B., Training Teacher, First Grade.
HEDWIG ELIZABETH ROESNER, A. B., B. Mus., Instructor of Public School Music.
OTTO W. SCHAEFER, Associate Professor of Bookbinding.
MARGARET M. ROUDEBUSH, A. B., Director and Professor of Home Economics.
JOHN H. SHAW, Editor of Official Publications, and Instructor in Journalistic Writing.
BELLA BRUCE SIBLEY, Pd. B., Pd. M., A. B., A. M., Training Teacher, Second Grade.
EDWIN B. SMITH, B. S., A. M., Ph D., Professor of History and Political Science.
EDITH STEPHENS, A. B., Assistant Librarian.
FRANCES TOBEY, B. S., A. B., Professor of Oral English.
'MATTIE TAYLOR, A. B., Instructor in Literature and English.
CORA M. THOMAS, Assistant Librarian.
SUSAN VAN METER, Training Teacher, Fourth Grade.
EDWARD I. VARVEL, D. D. S., Dental Examiner.
EDITH GALE WIEBKING, Assistant Professor of Household Arts.
GRACE H. WILSON, Pd. B., A. B., Assistant to the Dean of Women.
FRANK LEE WRIGHT, A. B., A. M., Professor of Education.
M. EVA WRIGHT, Piano and Pipe Organ.

DAVID L. ZYVE, A. B., M. S., Professor of Physics.

\title{
SPECIAL TEACHERS AND GENERAL LECTURERS
}

\section*{SUMMER QUARTER, 1923}

Following is a partial list of the eminent educators and lecturers made up at the time this Bulletin went to press. Negotiations with a dozen others equally prominent in their respective fields were under way, and the complete list will number about thirty. The special faculty for the Summer Quarter is one of the big features of this quarter. The College spares no effort or expense in securing the best talent.
DR. EDWARD HOWARD GRIGGS, Author and Lecturer on Literature and Philosophy, New York.
DR. EDWARD H. REISNER, Associate Professor of Education, Teachers College, Columbia University.
DR. ALFRED L. HALL-QUEST, Professor of Secondary Education, Teachers College, University of Cincinnati.
MISS ALMA B. CALDWELL, General Supervisor in the Public Schools of Cleveland, Ohio.
DR. JOHN W. WITHERS, Dean of the School of Education, New York University, New York City.
MR. FRED H. BAIR, Superintendent of Schools, Colorado Springs, Colorado.
DR. EDWARD A. STEINER Professor of Social Sciences, Grinnell College, Grinnell, Iowa.
DR. EARL D. BRUNER, Superintendent George Junior Republic, Grove City, Pennsylvania.
PROF. J. M. BLEDSOE, Head of Department of Mathematics, East Texas State Normal School, Commerce, Texas.
DR. EMANUEL STERNHEIM, Lecturer University of New York and Extension Lecturer, University of Minnesota.
DR. J. H. BEVERIDGE, Superintendent of Schools, Omaha, Nebraska.
DR. ERNEST HORN, College of Education of the University of Iowa.
DR. WILLIAM MATHER LEWIS, Chief of the Educational Service of the United States Chamber of Commerce, Washington, D. C.
MRS. CORA WILSON STEWART, Chairman of the Illiteracy Commission of the National Education Assocaition.
DR. JESSE R. NEWLON, Superintendent of Schools, Denver, Colorado.
DR. C. R. FOSTER, Superintendent Latimer Junior High School, Pittsburg, Pennsylvania.
DR. J. H. Risley, Superintendent of Schools, Pueblo, Colorado.
MR. G. E. BROWN, Superintendent of Schools, Greeley, Colorado.
DR. JOHN ADAMS, Professor of Education, University of London.
MR. THOMAS C. TRUEBLOOD, Dean of Public Speaking in the University of Michigan.
DR. DALLAS LORE SHARP, Professor of English and Lecturer, Boston University.
MR. GEORGE MELCHER, Assistant Superintendent of Schools, Kansas City, Missouri.
MR. RODNEY A. PUFFER, Director of Vocational Guidance, Denver Public Schools.

\section*{THE SUMMER QUARTER}

Plans for the Summer Quarter, 1923, while primarily following the basic principles laid down several years ago will be on a more ambitious scale than ever before attempted. A more pretentious program is made necessary to meet the ever increasing demands, to meet the problems in education that are constantly arising with more and more frequency with the progress of the times, and to satisfy the eagerness of administrators, supervisors, and all students of school life, and to enable them to meet those problems and handle them satisfactorily and successfully.

The regular college faculty has continued to grow until today it numbers seventy-four. This large faculty will serve through the Summer Quarter, offering all the materials in the separate courses handled by each one, and giving full time; and in addition the special faculty which has come to be recognized as the most forceful group of educators gathered together on any campus for a Summer School, will be added in even greater numbers than heretofore. The entire country has been combed for the best men and women in their respective fields to handle class room work, and for the now renowned evening lectures. Thirty lecturers and teachers from leading universities and colleges of the country will give the best they have to the students in the Summer School at Greeley this year.

By a carefully arranged schedule for the quarter, a big advantage is offered students to complete the core subjects of the two-year course in either half. This will be found to be of extraordinary advantage to those students who find it impossible to spend full time in the Summer School. It should be remembered, however, that the College authorities advise all who can do so to remain for the full quarter.

At the same time careful attention has been given to the conveniences of the students, and the closing date of the quarter is fixed so that students who spend the full time in the Summer School will be able to reach their homes in time to take up their work with the opening of their schools in September.

\section*{TWENTY-TWO HUNDRED STUDENTS ENROLLED}

Beginning with a small group of students, less than 200, and a small faculty group-that was in 1905-the Summer School at Colorado State Teachers College has grown to mammoth proportions from the standpoint of students enrolled, faculty engaged, and the work covered. In the school last year there were 2208 active college students enrolled.

Five years ago the Summer Quarter was placed on an academic level with the other quarters of the College year, and at the same time the College entered upon the four-quarter year. Since then, the College attendance has grown rapidly, evidencing the popularity of the change.

The character of the work furnished in the Summer Quarter has had the larger influence in attracting students, until it is now coming to be the custom for superintendents to recommend that their teachers attend Summer School at Colorado State Teachers College, at Greeley, and these superintendents set the example by themselves enrolling as students. Superintendents, supervisors, principals and administrators
increase in numbers on the campus at Greeley each succeeding year, and teachers come from all over the United States, and from foreign countries.

The student body last summer counted its students from thirty-one different states outside of Colorado, and there were present students from Canada, Hawaii, Alaska and the Philippines. They came from the southland, and from the north, and from the Pacific Coast, and from New England. More than one hundred teachers were enrolled each from the states of Missouri, Texas and Kansas.

\section*{ADMISSION REQUIREMENTS FOR SUMMER QUARTER}

Realizing that enforcements of the requirements which govern entrance to the College at other times of the year would bar large numbers of experienced teachers from attending the Summer School, the College waives those rules and makes it possible for all those engaged in school work to profit by the things presented by the College faculty and visiting instructors.

Any student twenty years of age or over may be enrolled in Colorado Teachers College for the Summer Quarter without reference to meeting the College requirements for admission. The College believes it can render a valuable service to the teachers of Colorado and surrounding states by allowing any mature man or woman who is teaching or expecting to teach, but who has not graduated from a high school, to enroll in the College for the Summer Quarter and take from the complete College program such work as he or she may be able to carry.

No college credit will be recorded, however, for any student until the requirements for College entrance have been fully met. A record of attendance and work done will be kept. This may later be transferred to the permanent records and counted toward graduation when the entrance requirements have been complied with.

\section*{FEES AND EXPENSES}

Board-Students board in private houses, and in the College Cafeteria. The cafeteria was started to enable students to keep the outlay for board down to a figure of approximately cost. Last summer the average cost of board for 600 students in the cafeteria was \(\$ 5.00\) a week. It will not be higher than that this year. In private boarding houses the rate averages \(\$ 6.00\) per week.

Rooms-Private houses in the vicinity of the College provide rooms for students. With two students in a room the cost is seven, eight, or nine dollars a month for each student.

Dormitories-The first three units in the Dormitory Triangle, opened for use early in the Fall Quarter of 1921, provide accommodations for 110 women students. Each room is provided with two beds, with complete accommodations for two students. Rooms in the Dormitories cost from \(\$ 18.00\) to \(\$ 24.00\) for the quarter. Students in the Dormitories are required to furnish their own bedding and towels.

Light Housekeeping-A limited number of rooms for light housekeeping are available at a reasonable rental. The assistant to the dean of women, Miss Grace Wilson, will supply prospective students with lists of rooms upon request.

Reservations-Students expecting to register for the Summer Quarter should make reservations early. Write to Miss Wilson, and state specifically what you want, whether it is a single room, double room, housekeeping rooms, in the Dormitories or in private homes. It would be well to name first and second choices. State whether you want accommodations for full quarter or half quarter.

College Fees-The state provides funds for the maintenance of the College for three quarters in the year. The Summer Quarter has the use of the College buildings and equipment but finds it necessary to draw its financial support largely from student fees. Each student pays \(\$ 15.00\) for a half quarter, or \(\$ 30.00\) for the full quarter. Students not citizens of Colorado pay an additional fee of \(\$ 5.00\) for the full quarter.

All students who expect to be in the College for the full quarter are expected to make out their programs of studies for the full time. The fees, however, may be paid in two parts, one-half on June 12, and the other, July 19.

Books-Books may be bought from the College book room. At the end of the quarter any book in good condition and still to be used as a college text book, may be resold to the book room at a slight discount.

Students may check towels from the book room upon the deposit of \(\$ 1.50\). Clean towels may be drawn by returning the soiled ones. When all towels are returned, 50c will be returned to the depositor.

The table below represents a median of expense-neither the least possible nor the highest-and covers the three large items of college expense.

\section*{APPROXIMATE EXPENSE FOR TEN WEEKS}


\section*{DIPLOMAS, CERTIFICATES AND DEGREES}

The Colorado State Life Certificate is granted to all graduates of any of the two-year or three-year courses of study. This certificate is honored as a state life certificate for elementary school teachers in pratically all Western states and in many Southern and Eastern states as well. The degree of Bachelor of Arts in Education is granted to candidates who complete any of the four-year couses. The degree of Master of Arts in Education is conferred on candidates who carry their school studies with distinct success one full year beyond a recognized bachelor degree. A thesis is also required for the master's degree. Both the bachelor's and master's diplomas are also state life certificates under the laws of Colorado.

\section*{LOCATION OF THE COLLEGE}

Teachers and students who have attended Colorado State Teachers College know what a beautiful campus is there, and how ideally located is the College. For the benefit of thousands of others into whose hands this issue of the bulletin is sent, the following brief information is set forth:-

The College campus covers forty acres, on an eminence overlooking the city of Greeley. . Greeley is a beautiful city, with 15,000 population. The streets are wide and graveled, and great, spreading trees on practically all of the streets in the city form continuous avenues of shade. Attractive home and beautiful lawns add to the appearance of the city.

The city is located on the Union Pacific and the Colorado \& Southern railways, fifty-two miles from Denver, and just thirty miles from the gateway to Estes (Rocky Mountain National) Park. The latter forms the playground each week-end for many students at Colorado State Teachers College.

The location of the College so close to the Rocky Mountains is in itself a distinct advantage. This, together with the altitude of the city - 4567 feet above sea level-makes this an ideal location for Summer study. Clear, dry air, sunny days and cool nights distinguish Greeley from other communities where the summer heat and humidity make work in the summertime almost unbearable. The cool snow-laden air from the mountains sweeps over Greeley and the College campus, cooling \({ }^{\text {th }}\) air and making the days pleasant, even in the middle of 'Summer. Seldom does the night temperature go above 70 degrees, and 60 and 65 degrees at night is usual.

\section*{RECREATION}

The week-end excursions to the Rocky Mountain National Park, conducted under the direction of the Outing Committee of Colorado State Teachers College, have become widely known; they are now a part of the institutional work.

Teachers College Mountain Club now possesses more than seven hundre? dcla s worth of camping equipment, tents, sleeping bags ands camp fixtures, etc., that make possible an outing that measures up to all possibilities that heart could desire.

The most unusual and from many points of view, the most interesting experience, is the night spent at timberline, just three hundred feet from one of the mightiest snowdrifts in the mountains.

Starting from this point of vantage, each week-end group moves in the early dawn through the mysterious and awe-inspiring region where no trees can live to the summit of the Rocky Mountains and at the "Keyhole" locks down on a hundred square miles of mountain peaks, snowfilled gorges, beautiful lakes and waterfalls and majestic forests. It is really the experience of a lifetime.

Summary of Week-End Trip-The autos start from the west gate of the college at 7:00 a. m. each Friday of the Summer Quarter, plans for lunch at Camp C. T. C. in Estes Park, and then proceed to Long's Peak Inn.

The cars are left a mile above the Inn and the party climbs in the late afternoon and early evening to Camp Timberline, where tents and bonfires are in readiness.

The first day is devoted to the trip to timberline and the second to the mountains above timberline, and the third to the scenic points in the Rocky Mountain National Park.

Cost and Equipment-The entire charge for the 150 miles covered in the three days is \(\$ 10.00\)-less than 7 cents a mile. The seven meals cost \(\$ 4.00\). Two nights lodging costs \(\$ 1.50\). The total cost to those who go as far as Long's Peak Inn is \(\$ 15.50\). Those who wish to spend the day at Long's Peak must pay an additional \(\$ 2.00\) to cover the cost of establishing and maintaining Camp Timberline.

All persons expecting to make this trip must provide themselves with warm underwear, common work dresses (outing suits preferred), heavy soled shoes, that they are willing to have scuffed and a rain coat.

\section*{BUILDINGS AND EQUIPAENT}

Profiting by a continuing appropriation for building purposes made by the General Assembly of the State some time ago, the College has been able to add from time to time new buildings, a condition which is.
very fortunate, for the growth of the student body, and especially the summer attendance, has made more accommodations imperative. Consequently the Campus is now dotted with many large buildings, imposing in appearance and serviceable in their rooming accommodations and equipment. At the present time new wings are being added to the Training School building.

Quite naturally, the Administration Building stands out as the pivotal point of all activities. This building, a large red brick structure with red sandstone trimmings, the oldest on the campus, in addition to housing the administrative offices, contains a large number of class-rooms, the chapel and another large assembly hall, the Conservatory of Music, the Y. W. C. A. hall, museums and science laboratories.

The Library, adjoining the Administration Building on the east, is a handsome building of gray stone, with beautiful stained glass windows. The entire first floor is used for library purposes. On the shelves are 55,000 volumes, one of the most complete libraries of its kind in the country. The volumes have been selected with especial attention to the needs of students in education, and for research work. The basement of this building is given over to classrooms, text book and student supply department, bird and wild animal museum, taxidermy shop and the department of agriculture.

In the Home Economics Building, a magnificent structure in the classic style of architecture, is housed one of the most complete laboratories for complete instruction in home economics in all its phases. The classrooms are large and flooded with light. In the basement of this building is located the College Cafeteria which serves students at cost. And on the top floor the Commercial Department is located.

Guggenheim Hall of Industrial Arts is a building similar in style of architecture to the Home Economics Building. In this building students majoring in fine and applied arts get their training, while the departments of industrial arts occupy the two lower floors with complete equipment.

The Training School, a large building similar in structure to that of the Administration Building, houses a complete graded public school system, from Kindergarten to Junior High School. With the completion of the alterations and additions now going on, this building will be a model in complete school plants. The changes will provide room for the addition of the State High School of Industrial Arts, bringing the entire system from Kindergarten to High School under one roof.

The Dormitories form the latest completed building adjunct to the institution. That is, they are completed to the extent of three separate houses for the accommodation of the girl students. The plans call for seven buildings on the Dormitory Triangle. The three buildings now in use provide accommodations for 111 voung women. The buildings are arranged on the cottage plan. They are built of concrete and stucco, with red brick foundations, with white woodwork surmounted by green outside shutters and slate roofs. In fact, they are quite colonial in their general appearance. The interiors are finished in ivory woodwork, with mahogany trimmings. Each buildinल is supplied with a large living room, with open fireplace, and attractive and comfortable wicker furniture. Each room contains two beds, and accommodations are provided for two students in a room.

The dormitories are really the center of much student life on the campus. The buildings have been apnropriately named, Decker Hall, Gordon Hall and Belford Hall, in honor of well known clubwomen of Colorado who have shown more than ordinary interest in young women students of the state.

The Model Cottage is what its name implies. and it serves an important mission to those yound women who are studying home economics.

Located alongside the Model Cottare is the Club Honise Here in a building that has won the admiration of everyone who has ever crossed
the threshold of its inviting doors, students find the social life on the campus centered. On the spacious veranda, which extends about three sides of the building, afternoon teas are frequent, and in the evenings brilliant social gatherings fill the building. There is a large music room, rooms for writing and for the private tete-a-tete, a well appointed dining room, and a completely equipped kitchen; showers, and a large play room, where dancing parties are held.

Then there is the President's house, nestling amid trees, shrubs, and foilage, the center of many social gatherings for students and faculty during the College year, and the large gymnasium, a wooden structure, erected temporarily during wartime, but still in use, and packed every night during the Summer Quarter by crowds to hear the special lectures.

Another gymnasium is located in the basement of the Administration Building, and both of these places are in almost constant use. In addition, there is provision for outdoor gymnasium work, which is made possible the greater part of the year at Colorado State Teachers College by reason of the equable climate.

\section*{THE CAMPUS}

The entire campus of forty acres is covered with velvety grass, adorned with shade trees, shrubbery and flowers, the whole combining to make a real garden spot. The campus at Colorado State Teachers College is regarded by those who are in position to know to be one of the most attractive college campuses in the country.

During the Summer and Fall Quarters the faculty receptions are held on the campus, when the beauties are heightened by the use of Japanese lanterns and electric lights. The commencement exercises in the Spring are also held on the campus.

In the rear of the buildings is a large playground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which is secured from a grandstand, which will accommodate more than a thousand spectators. On the portion of the ground adjacent to the buildings there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts and the garden theater.

During the summer, courses on the organization of playgrounds will be given and demonstration of how to carry on these courses in the public schools will be made on the campus.

\section*{COLORADO STATE TEACHERS COLLEGE}

Function-The purpose of the College is to train teachers for public school service. Being supported by public taxation of all the property of the State of Colorado, the College aims first to prepare teachers for all kinds of public schools maintained within the State of Colorado. This includes rural schools, kindergartens, primary, intermediate grade, upper grade, junior high schools and high schools. The College also accepts the responsibility of training supervisors for rural schools, principals, superintendents, teachers of home economics, industrial arts, fine and applied arts, critic teachers, teachers of defective and atypical children, teachers for adult night schools, etc.

While the College is supported for the training of Colorado teachers, it welcomes students from any state or country and sends its teachers anywhere that they may be called. Students come to Colorado State Teachers College from many states and its graduates go in large numbers into distant states and countries.

The College recognizes as its plain duty and accepts as its function the training of students to become teachers in every type of school at present supported by the state, to meet actually all the demands of the best in the nublic school system of the present, to forecast those improvements and reforms which the evolution of public systems of education is to bring about in the immediate future, and to train teachers to be ready to serve in and direct the new schools which are in the process of being evolved.

Organization-The College is an institution for the training of teachers. It graduates students upon the completion of a two-year course. Advanced students are graduated upon the completion of courses covering three, four or five years.

\section*{ADMISSION}

Regular Admission-Admission to Colorado State Teachers College up to September 1, 1923, is granted to those who present a certificate of graduation showing the completion of fifteen or more units in an acceptable high school maintaining a four-year course above the eighth grade. This certificate must be presented at the time of matriculation in the College, and should be accompanied by a transcript of the high school recold, showing what subjects were studied and the number of units or the fraction of a unit made in each. A "unit" is a subject pursued for thirty-six weeks, with five recitations a week.

Conditional Admission-An applicant who is twenty years old or over, who is not a high school graduate, but who is credited with fourteen high school units, may be admitted to the College upon presenting a transcript from a reputable high school, showing the completion of fourteen units. This admission is conditioned. Such students are limited to a maximum program of twelve hours per quarter and must make up the deficient high school unit in the Industrial High School during the student's first year in the College. The student could not be enrolled for the second year until the entrance condition had been removed.

School for Adults-Mature students over twenty years of age who have less than fourteen high school units of credit will be assigned
to the School for Adults-a division between the high school and the College. As soon as they have completed the equivalent of fifteen high school units, or shown the learning power which such completion usually gives, they maye be granted a certificate of high school graduation and admitted to the College.

Special Registration for the Summer Quarter Only-Many students come to the College for the Summer Quarter only and do not wish to go through the formality of presenting credentials for entrance. They do not expect to graduate and so do not care to have a permanent record of their credits made. Such students are permitted to enroll for the Summer Quarter only and to take any subjects they desire. A record is kept of the work done; but this work is not recorded as college credit until the student has met the regular entrance requirements. After regular matriculation any of this summer work may be transferred to the regular College record of the student who has completed such work.

Unclassified Siudents-Any student who can meet the entrance requirements may enroll in the College and take any subjects he may elect without taking the prescribed subjects in any of the outlined courses of study. This provision make it possible for students whose interests are in other types of work than teaching to live at home and get one year or more of general cllege work before going away to college. Such general academic work is accepted by the leading colleges of the country and applied upon the various courses which they offer.
Formal Notice of Change of Policy Concerning Admission and Grad-
uation to go into Effect September 1, 1923
On September 1, 1923, Colorado State Teachers College will put into practice the following regulations concerning admission and graduation:

\section*{I. Admission.}
1. Graduates of high schools accredited by the North Central Association will be required to present a transcript showing the completion of three units of English, and twelve or more units chosen from at least four of the following groups:
a. The Social Sciences (History, Civics, etc.).
b. Foreign Languages (Not less than two units in any one language to be accepted).
c. Mathematics.
d. The Physical Sciences (Physics, Chemistry, Biology, Botany, Zoology, Physical Geography, Physiology, Hygiene, and Agriculture.)
e. Music and Art.
f. Commercial subjects.
g. Home Economics and Manual Arts.
2. Graduates of non-accredited high schools will be required to meet the same conditions, except that a standard college entrance test will be required in addition to the transcript.
3. Conditional admission will be granted to students who can present only 14 units in the groups indicated. But these students will be limited to a 12 -hour college program and required to carry one unit in the high school until the deficiency is removed.
4. Adult students 20 years of age or over may be admitted to the College upon passing an English test and the standard college entrance test provided the score is sufficiently high to assure the College that the student has the ability to carry on college work, even though he may have had no high school training or only a partial high school course.

\section*{II. Graduation.}

Students coming up for graduation after September 1, 1924, will be required to meet standard requirements for the certificate or degree no matter what the requirements might have been at the time the student first enrolled in the College. This will mean that the student must meet the entrance requirements outlined in section \(1,2,3\) or 4. It will also mean cutting off credit for life experience, teaching experience; penmanship, art and music certificates; private lessons in art, music, etc.; and cutting down excessive credit for a quarter's work and especially the excssive credit formerly given for the summer term of six weeks.

Until that date the College will continue to grant the two year certificate under the conditions which prevailed at the time a student entered the College, or the A. B. degree under the conditions prvalent at the time the student entered the senior college, or the A. M. degree under the conditions current at the time the student was admitted to the graduate school, provided that this regulation shall not obligate the College to extend the time farther back than four years for the completion of the Junior College work and another four years for the completion of the Senior College.

\section*{ADVANCED STANDING, CREDITS, ETC.}

Advanced Standing-Students who come to the College after having done work in another college, normal school or university will be granted advanced standing for all such work which is of college grade, provided that the college or normal school in question has required high school graduation as a condition for admission. Those who receive advanced standing are required to take here all the prescribed "core" subjects in the course they select, unless these prescribed subjects or their substantial equivalents have been taken already in the normal school or college from which the student comes. Only the heads of the departments involved have the power to excuse students from taking these prescribed "core" subjects. No advanced standing is granted for additional units above the usual sixteen earned in the four-year high school course. If college subjects have been studied in a fifth year in a high school, such credit as these subjects deserve will be allowed.

On September 1, 1921, the College discontinued giving credit for all kinds of work except that certified as having been taken in recognized normal schools, teachers colleges, colleges or universities.

Those who expect to attend the Summer Quarter of Colorado State Teachers College and who desire advanced standing, should write for application blanks for advanced standing at their earliest convenience, and should return these as soon as possible, together with credentials, to the College, so that they may be considered before the opening of the quarter. It is exceedingly important that full credentials relative to all the work for which credit is expected be forwarded. This saves the student much delay and inconvenience.

The Unit of College Credit-All credit toward graduation is calculated in quarter-hours. The term quarter-hours means a subject given one day a week through a quarter of a year, approximately twelve weeks. Most of the college courses call for four recitations a week. These are called four-hour courses. A student usually selects sixteen quarterhours, the equivalent of four courses, each meeting four times a week, as his regular work.

Forty-eight quarter-hours are a student's regular work for the usual school year of nine months, or three quarters.

Maximum and Minimum Hours of Credit-A student registers usually for fifteen, sixteen or seventeen hours each quarter. Unless the student has a permit to carry more than sixteen hours, he will enroll for fifteen, sixteen or seventeen. His average for any consecutive three quarters must not be over sixteen. If the work is to count as resident work, the student must carry at least twelve quarter-hours.

A student who wishes to take a larger program than sixteen hours must take one of the standard mental tests. Applications for permission to take more than sixteen hours are made to the Committee on Student programs. This committee will decline to grant permission to students to take more than eighteen hours, on the ground that it is better for the most brilliant student to do extended and careful work on eighteen hours, rather than to do twenty hours or more superficially.

It is a part of the duties of the Committee on Student Programs to learn at the close of the first half of each College quarter the quality of the work of each student carrying more than sixteen hours, and reduce the number of hours in each and every case regarding which any instructor reports the student's work as either weak or unsatisfactory.

Minimum Residence Requirement-The College does not grant any certificate or diploma for less than three full quarters of resident study, during which time the student must have earned at least forty-eight quarter-hours of credit. Students who have already taken the twoyear diploma must spend in residence at least one quarter out of each year required for the three-year or four-year courses in the College. Extension group classes, conducted by members of the College faculty, are considered as resident work and may be counted as such to the extent of one quarter out of each six quarters required for the student's graduation.

The Grading System-A student who takes a four-hour course may earn a little more than four hours of credit by doing unusually good work. On the other hand, less than four hours will be granted for work of poorer quality than reasonable expectation. The system is as follows:

A mark of AA for a course gives 20 per cent above the number of hours indicated as normal for the course.

A gives 10 per cent above normal.
B gives normal credit.
C gives 10 per cent below normal.
D gives 20 per cent below normal.
F indicates failure.
For example:
4B on a student's permanent record means that a student has taken a four-hour course and made the normal credit in it.

4AA would indicate most excellent work in a four-hour course and would carry 4.8 hours credit.

4A gives 4.4 hours credit on a four-hour course.
4B gives 4 hours credit on a four-hour course.
4 C gives 3.6 hours credit on a four-hour course.
4D gives 3.2 hours credit on a four-hour course.
These marks, both figure and letter, go on the student's permanent record for later reference to indicate the quality of the work done.

A student who enters school late in the quarter or is compelled to leave may receive partial credit for the course in such a way as to indicate both the quality and the amount of credit. For example: A student may complete with exceptional distinction but two-thirds of a threehour course. The mark should be 2AA, and not 3 C. Each mark would give 24 hours, but the first mark would indicate the qualite of the work as well as the amount of credit.

The School Year-The school year is dividea into four quarters of approximately twelve weeks each. These are:
1. The Fall Quarter.
2. The Winter Quarter.
3. The Spring Quarter.
4. The Summer Quarter.

This division of the year is especially well suited to a teachers college, for it gives teachers in active service an opporunity equal to any of securing a complete education while actually teaching.

Shortening the College Course-The quarter plan, the extension work, and the grading system make it possible for students who are physically strong enough to stay in school with only short vacations to complete a coilege course in a shorter time than that usually required in other colleges. Ninety-six quarter-hours constitute the usual twoyear college course, and one hundred and ninety-two quarter-hours make up the four-year course required for the A. B. degree. By carrying an average of seventeen hours a quarter and making an average grade of "A" a strong student can earn 18.7 hours each quarter. At this rate he could complete the course for the two-year life certificate in five quarters, from the middle of June of one year to the end of August of the next. Or such student could complete the course for the A. B. degree in two and a half years-ten quarters. By doing some work in extension courses through the school year while teaching, it is possible for students in service to reduce the time of their courses also.

Student Teaching-Teachers who have had less than two years of college training take their student teaching in the Elementary School. Those who have had two years of college training may choose between the Elementary School and the High School, according to their own personal needs and interests. Most students are required to do two quarters of student teaching before being granted the diploma of graduation from the two-year course. Experienced public school teachers may be excused from one quarter of this student teaching by presenting to the director of the Training School satisfactory evidence warranting such exemption.

Students who expect to teach in the Training Department, either the Elementary School or High School, during the summer session, are asked to correspond with the Director of the Training School before the opening of the quarter.

Application for Graduation-The application of every student for graduation from the College must be approved by the State Board of Examiners before the Life Certificate can be issued to the applicant.

Application for graduation must be filed in the Dean's office at least 30 days before the diploma is granted.

\section*{THE DAILY PROGRAM}

For the Summer Quarter the class periods are arranged as follows:
7:00 to 7:50-First Class Period.
8:00 to 8:50-Second Class Period.
9:00 to 9:50-Third Class Period.
10:00 to 10:50-Fourth Class Period.
11:00 to 11:50—Fifth Class Period.
12:00 to 12:50-Sixth Class Period.

The afternoon is open for study in the Library and on the Campus and for Physical Education classes and informal recreation.

7:00 to 8:00 p. m. the General Lectures in the Gymnasium-Auditorium.

\title{
TRAINING SCHOOLS
}

\section*{ELEMENTARY SCHOOL}

The Elementary Training School is an educational laboratory where useful educational problems are being worked out under the direction of skilled experts. New methods that save time, new schemes for better preparing the children for life, new curricula and courses of study are continually being considered by this school and are tried out, provided they are sound educationally. The aim is not to develop a school that is entirely different from the elementary schools of the state, but to reveal conditions as they are and as they should be. The elementary training school strives to be the leader in the state in all that is new and modern. Effort is made to maintain such standards of excellence in the work that it may at all times be offered as a demonstration of good teaching under conditions as nearly normal as possible in all respects.

The Elementary Training School is a complete elementary school unit containing Kindergarten, First, Second, Third, Fourth and Fifth grades. The Sixth, Seventh and Eighth grades are organized on the departmental plan for the purpose of exploring and diagnosing earlier than usual the interests, attitudes and abilities of pupils and at the same time to provide better for individual differences. This organization affords splendid opportunity for studying Junior High School problems. In the elementary training school the training teacher spends approximately one-half of her time teaching and the other half observing student teaching. The work of the student teacher consists of observation, supervision and teaching under the direction of the training teacher.

Students are free to observe any of the training teachers in elementary or secondary training school on certain days set aside for observations.

Students desiring to do student teaching during the Summer Quarter should make an early application to the Director of the Training Schools, stating the grade or subject and training teachers they desire to teach with.

\section*{SECONDARY SCHOOL}

The primary function of the Secondary Training School is to train that group of teachers who intend to enter the field of secondary education. The State High School of Industrial Arts, the Secondary Training School of Colorado State Teachers College, is being built upon the theory that the highest interests of the pupils and the highest interests of the secondary training school can be made to harmonize.

Student teachers are to spend two-fifths or more of their time in teaching under the training teacher and the remainder in observing the training teacher. Student teachers are to be assigned teaching in terms of problems or units. Each problem requires at least five consecutive recitations or as many more as the training teacher may think necessary. Student teaching in the secondary training school consists of teaching, observing, lesson plans, readings, individual conferences with the training teacher.

\section*{SCHOOL OF REVIEWS}

To the elementary school teacher of Colorado the School of Reviews of the State High School of Industrial Arts offers an opportunity to strengthen one's grip on the subject matter of instruction. It does more than that. It affords a chance to observe good teaching and to receive
sound instruction in teaching technique. The teachers thus receive a thorough review of the subject matter (with some amplification and expansion of the subject matter), and expert instruction in methods. Elementary teachers who are desirous of preparing for examinations or of improving their proficiency in their work will find in the School of Reviews a real opportunity.

Courses will be given in Geography, Grammar, Arithmetic, Primary Methods, American History, General Science, School Management and Law, Rural Life and Education, General Methods, Hygiene and Reading Circle books. Rates of tuition are \(\$ 18.00\) for the Summer Quarter. The School of Reviews opens Tuesday, June 12, and closes Friday, August 23. For further information address A. E. Brown, Principal State High School of Industrial Arts, Greeley, Colorado.

\section*{RURAL, CONSOLIDATED AND VILLAGE SCHOOLS}

It is the aim of the Department of Rural Education to awaken an interest, and to develop initiative and constructive thinking toward solving the problems met with in rural, village and consolidated schools. Special attention will be given in the Summer Quarter to the problems of curricula, school organization and administration.

Observation and practice: Two two-teacher rural schools and the Windsor Consolidated Schools are used for practice and observation. One or more of these will be in session the second half of the quarter. A limited number of student teachers will be accepted. These schools are also open for student teaching during the month of September. This enables some who expect to attend Teachers College the following October to arrange for student teaching and earn this credit in advance of the regular quarter's work and in addition to it. For those not doing practice or observation, but who wish to study the consolidation problem a number of excursions have been planned for Windsor and other nearby consolidated schools.

County examinations and certification: In the summer school of 1922 there were 22 courses offered in the nature of reviews or new work that could be taken by those wishing to make specific preparation for examinations. A still larger number is now offered. A number of these can be completed the first half of the quarter and in time for the examinations. Those interested in such courses can obtain further information of Mr . Burrows, and, on enrolling, should consult with him in making up their programs.

Special students: A number of classes leading to the county examinations will be organized for high school students and those not regularly admitted to college classes. The work may be completed before the August examinations.

\section*{THE GRADUATE SCHOOL}

The Graduate School offers advanced instruction leading to the degree of Master of Arts in Education. The principal aim of graduate study is the development of power of independent work and the promotion of the spirit of research. The various departments of the College which offer graduate courses are willing to offer not only the courses regularly scheduled but others of research and advanced nature which the candidate wishes to pursue. Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work.

Persons holding the degree of Bachelor of Arts, Philosophy, Science or other four-year degree, from a reputable institution authorized by law to confer these degrees and approved by this institution, may be admitted as graduate students in Colorado State Teachers College upon the presentation of official credentials, including transcript of records of undergraduate work.

The prospective student should obtain the blank "Application for Admission" and send it to the Committee on Advanced Standing for its approval before the opening of the quarter. Such blanks may be secured by addressing Colorado State Teachers College, Greeley, Colorado. Original credentials should be submitted with the application for admission.

\section*{GENERAL PLAN OF WORK FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION}

Residence-Three quarters of work is required in residence at the College in advance requirements for the A. B. degree. This is three quarters of work beyond a four-year coursc.

Units of Work-A year's work shall be interpreted as forty-eight quarter-hours. Thirty-eight hours credit will be given for graduate courses pursued and ten hours for the Master's thesis which is required. Sixteen hours credit a quarter during the regular school year is the maximum, inclusive of the research involved in the thesis requirement.

Admission to Candidacy for Degree-Admission to the Graduate School does not guarantee admission to candidacy for the Master of Arts degree. The student shall not be admitted to candidacy for the degree earlier than the close of his first quarter's work (completion of sixteen credit hours). Such admission shall be determined by a committee consisting of the President of the College, the Dean of the College, the Dean of the Graduate School, the head of the department in which the student is majoring, and two professors with whom the student has had work, these to be chosen by the Dean of the Graduate School. The merits of each student shall be the basis for the decision of this committee; personal fitness, the ability to use good English, both oral and written, and the ability to do superior work in the field of specialization are among the important things to be considered by the committee.

\section*{THE NATURE OF GRADUATE WORK}

Specialization-In keeping with the function of a teachers college, graduate work shall be confined largely to professional lines of work.

It shall represent specialization and intensive work. As soon after enrollment as possible, the graduate student shall focus attention upon some specific problem which shall serve as the center for the organization of his year's work, including courses to be taken and special investigations to be conducted. No graduate credit will be given for scattered and unrelated courses.

Thesis-Research culminating in the writing of a thesis upon some vital problem of education shall be an integral part of the work for the Master's degree.

Breadth and Range of Professional Outlook-In addition to the intensive and specialized work which is required of candidates for the Master's degree, they are expected to know the fundamentals of professional education.

Final Examination Upon the Whole Course-There shall be a final examination, oral or written, upon the whole course. An oral examination of two hours duration is customary. This examination will cover the following ground: (a) The field of the thesis and special research, including topics closely related thereto; (b) The fields covered by the courses taken by the candidate; (c) The general fields of Education, Psychology, Sociology and Biology.

\section*{GENERAL INFORMATION}
1. All courses taken by graduate students must be approved in advance by the Dean of the Graduate School.
2. No graduate student may enroll for more than sixteen hours of work in any quarter. This regulation is essential to the maintenance of the standard of intensive work for the Master's degree. In determining the maximum amount of work permitted, research upon the thesis topic must be included within the limit stated. To this end, the student doing research upon his thesis tonic must enroll for the same.
3. Twelve hours shall be the minimum number of hours considered as a term in residence. If for any reason a student cannot carry more than twelve hours a quarter, the remaining hours may be taken in extension when approved in advance by the Dean of the Graduate School.
4. In order that the standard of intensive and specialized work for the Master's degree may be maintained, no graduate credit will be given for elementary courses, for scattered and unrelated courses, for public platform lectures or public platform lecture courses, or for courses in which the element of routine is large as compared with the theoretical and professional aspects.
5. Excess A. B. work may be applied toward the Master of Arts degree only when arrangement is made in advance with the Dean of the Graduate School so that he may see that the work is of Master of Arts standard, and that it is in line with the specialization necessary for the Master of Arts degree. Such credit will be granted only to students in their fourth year who do not need all their time for the completion of their undergraduate work.
6. The courses which may be taken for graduate credit must be of an advanced character, requiring intensive study and specialization. Certain approved undergraduate courses may be pursued for graduate credit; but when so taken, the character of the work done and the amount of ground to be covered must be judged by a higher standard than that which applies to the regular undergraduate student. The standard of intensive work set for the graduate student must be maintained even if
special additional assignments have to be made to the graduate student who works side by side with the undergraduate.
7. No teaching, either in a regular school or in the Training School, will count on the Master of Arts degree.
8. Sixteen hours of credit toward the Master of Arts degree shall be the maximum amount allowed to be earned in a regular school year by any one who is employed on full time, except upon the recommendation of the Dean of the Graduate School.
9. Before the Master of Arts degree may be conferred, a student must have had at least seventy-two hours of college work in his major and not less than thirty-two hours of professional work in Education and related fields which is acceptable in the various states as requirements for certification.
10. All work for the Master of Arts degree shall be done with distinction; work barely passed (marks of \(D\) and \(C\) under the present marking system) shall not be considered worthy of such an advanced degree.
11. The thesis subject of the graduate student must be approved in advance by the Dean of the Graduate School and by the head of the department concerned. Before the degree is conferred, the thesis, as a whole and in detail, must be approved by the head of the department or the instructor under whose direction the thesis work has been done and also by the Dean of the Graduate School. Two typewritten copies of the thesis, properly bound, must be placed on file with the Dean of the Graduate School.
12. Before the candidate for the Master of Arts degree is admitted to final examination the thesis requirements must be met in full, and the thesis must he in such a state of readiness at least three weeks previous to final examination, that only minor reconstructions need to be made, which will not delay its being put in final typewritten form for filing before the end of the quarter in which graduation falls.
13. The final examination will be presided over by the Dean of the Graduate School and conducted by the head of the department in which the candidate has done the main part of his work. Other members of the faculty may be given an opportunity to participate in the examination. An official visitor, or official visitors, from outside the department in which the candidate has specialized, shall be appointed to attend the examination.

\section*{DIRECTIONS AS TO FORM OF THE THESIS}

The thesis must be presented typewritten upon paper of grod quality, size \(81 / 2 \times 11\), and properly bound.

The title page of the thesis must be arranged as follows:

\title{
The State Teachers College of \\ Colorado
}
(Title of Thesis)
A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Education by
(Student's Name)
(Name of Major Department)
(Date)

The thesis must contain a table of contents at the beginning; give footnote references to literature quoted by author, title of book or article, and exact page; and must contain at the end a bibliography of the literature of the subject.

\section*{FEES FOR GRADUATE COURSES}

Fees for graduate students in the Summer Quarter and in the regular school year will be on the same basis as fees for all others.

\section*{GRADUATE SCHOLARSHIP}

For the encouragement of research and scholarship, several scholarships are available for graduate students for the second year 1922-23. These range from \(\$ 100\) to \(\$ 600\) in value. Except in a few instances where a certain amount of time is required in return for the stipend offered, the student will be expected to devote all of his time to graduate work. Applications for scholarships should be filed with the Dean of the Graduate School not later than May 15.

\section*{THE COURSES OF STUDY}

\section*{Throughout this catalog, courses numbered 1 to 99 are primarily first and second year subjects; 100 to 199 are third and fourth year. Those numbered 200 and above are Graduate School.}

Colorado State Teachers College is a technical school like a medical or engineering school. Its business is to train teachers for all types of schools maintained by the state. The college has abandoned the idea that there is a possibility of training teachers for the various kinds of teaching through the medium of a single course of study or a scattered elective course.

To meet the requirements for teachers of all kinds of schools the College provides the following courses of study, and asks each student entering October 1, 1918, or after, to select a course definitely and to consult as a permanent adviser the head of the department directing that course of study. Students who register previous to that date may continue with the old course of study and complete that course if they can do so within four years from the time the course was begun by the student in residence; but all who can readily make the adjustment are advised to select one of the new courses and complete their work under the new plan.

Length of Course-Each course is planned to occupy twelve quarters (a quarter is approximately twelve weeks in length). Upon the completion of the course the degree of Bachelor or Arts in Education will be granted. The diploma is a Colorado Life Certificate. Each course is so arranged that it may be divided in the middle. The first part of each course may be completed in six quarters. The student who chooses to be graduated at the end of a two-year course receives the Colorado Life Certificate, but no degree. Students who come to the College with advanced standing, and those who gain time by doing work of exceptional quality, may shorten the course somewhat.

Two-year and four-year courses of study for teachers are arranged for in the following departments:

Agriculture (2 years only)
Biology
Chemistry.
Commercial Arts
Education
Superintendents, H. S. Principals and Teachers
Kindergarten
Primary
Intermediate
Junior High School
County School
Educational Psychology

Fine and Applied Arts
Geology, Physiography and Geography
History and Political Science
Home Economics
Hygiene and Physical Education
Industrial Arts _-
Literature and English
Mathematics
Music
Physics
Romance Languages and Latin
Sociology

The complete courses of study are shown in the Year-Book

The Professional Core-Each of the courses differs somewhat from the others in the subjects required by the department, but each course contains the following subjects:

First Year: Biology 2, English 4 (unless excused for proficiency), Hygiene 7, Ethics 1 (for women), Sociology 3, Education 1, Education 8, and a physical exercise course each quarter.

Second Year: Psychology 2a and 2b, Education 2a and 2b (student teaching), Education 10, and a physical exercise course each quarter.

Summary-Core subjects 42 hours. Departmental requirements 30 hours. Free electives 24 hours. Total 96 hours.

Third and Fourth Years: (For majors in elementary school work, supervision, etc.) Education 103 (student teaching), Education 111, Hygiene 8, Psychology 104 and 108a, and Sociology 105.

Third and Fourth Years: (For majors expecting to become high school teachers, supervisors and principals.) Education 101, 102 (student teaching), 116 and 111, Hygiene 8, Psychology 105 and 108b, and Sociology 105.

Summary-Core subjects 23 or 27 hours. Departmental requirements 49 or 45 hours. Free electives 24 hours. Total 96 hours.

Summary for the Four Years-Core subjects 65 or 69 hours. Departmental requirements 79 or 75 hours. Free electives 48 hours.

Use of Free Electives-The student is urged to use his free electives to broaden his education so as to acquaint himself somewhat with one or two fields outside his major interest. He is at liberty, however, to use part or even all of his free electives in his major department.

\section*{REQUIREMENTS FOR GRADUATION}

The Two-Year Course-A student must do full work in residence during at least three quarters before being granted a certificate of graduation from the two-year course. Thus, at least forty-eight of his ninety six hours may be granted on advanced standing or for extension courses. Applications for graduation must be filed with the registrar at least 30 days before the close of the quarter in which the diploma is to be granted.

Group Courses-Each student is required to select one of the group courses given in detail under the departments of the College. If a student has taken courses elsewhere similar to those specified in his group course, he may, with the consent of the head of the department in which he is taking his course, be allowed to substitute the work he has already had for Colorado State Teachers College work. The student may not, however be excused from the "core required subjects" except by the heads of the departments giving those courses.

Diploma-The diploma granted upon the completion of the two-year course is a life certificate to teach in any kind of school in Colorado, and is honored in many other states.

The Three-Year Course-A student who comes to the College with two years of advanced standing from another college or normal school may secure the Colorado Life Certifiacte by doing three quarters of residence work and meeting the requirement of the group course in which he or she is specializing.

The Four-Year Course-At least three quarters of residence study are required for the A. B. degree. For graduates of the two-year course in this College, two quarters of additional residence study are required.

\section*{The Five-Year Course-See the Graduate School, pages 18 to 21.}

Diploma and Degree-At the end of the fourth year of study, and upon completion of 192 quarter hours of credit, the degree of Bachelor of Arts (A. B.) in Education will be conferred, and a diploma, which is a life license to teach in the public schools of Colorado, will be granted to all students who have completed the requirements of the course they are pursuing.

Time Limits for Completing a Course-A student is allowed four years after beginning resident work on a two-year course in which to complete that course, and another four years to complete the work of the third and fourth years after having enrolled in the third year of one of the group courses. This extension of time is made to take care of those who must teach between the years of resident work. Thus, a student selecting the General Course in September, 1916, would have until the end of the summer quarter of 1920 to complete the two-year course thus selected. Failing to complete the course within that time he or she would be required to complete one of the courses of study in effect in the Year Book current at the time of his or her application for graduation. If such a student completed the two-year course on or before September, 1920, then he or she would be required to elect one of the Senior College courses of the year 1920-21 and complete all requirements of the course thus selected for the A. B. degree. This course would have to be completed within another four years (that is, September, 1924).

Transfer of Credits from Other Colleges-Since Colorado State Teachers College is a college for training teachers, its courses of study are technical courses. Those who come from universities or liberal arts colleges with one, two or three years of advanced credits may find that some of these will not apply upon the course of study they may select here. Colorado State Teachers College accepts all credits from standard colleges at face value to apply as electives in its course of study, but does not guarantee that a-student having had a year's work in another school will be able to complete a two-year course here in three more quarters. Many students are able to apply their previous work upon the courses selected here without loss of time, but often students find it necessary to remain in Colorado State Teachers College somewhat longer than they had expected because of the number of required technical courses in a given curriculum.

Regulation Concerning Overlapping of A. B. and A. M. Work-No student will be granted the A. B. degree who has not completed 48 or more hours (three full quarters) in residence in the College. Twelve or more hours done in the group courses conducted in Denver. Pueblo and other neighboring cities by the resident faculty of the College may be counted as one (but only one) of the resident quarters. Three additional quarters in residence are required for the Master of Arts degree, with the same provision concerning outside group courses.

To prevent overlapping of time and consequent misunderstanding the Advanced Standing Committee grants advanced standing never in excess of 144 hours to applicants who fall short of admission to the graduate school. Students transferring to Colorado State Teachers College when they are within one or two quarters of the A. B. degree must expect to lose some time by making the transfer.

\section*{AGRICULTURE}

The courses in Agriculture given in the Summer Quarter are designed to prepare teachers to teach the subject in rural, village, and
town high schools. Subject matter is emphasized, but methods and principles of teaching are adequately treated along with subject matter. Field and laboratory practice is given as much as possible.

\section*{4. Farm Crops-Four hours.}

An introductory course dealing with the most important farm crops, with special reference to Colorado conditions.

\section*{5. Soil Physics and Soil Fertility-Four hours.}

A study of the soil with reference to its formation, fertility and relation to plant growth.

\section*{1a. Animal Husbandry-Four hours.}

A study of breeds of farm animals with special reference to market grades and classes and how to meet the market demands.

2a. The Teaching of Agriculture-Four hours.
This will be a study of the "What and How" to teach of the subject in the different types of school in which the subject is being built. Much time will be spent in outlining courses and selecting subject matter for the student's special type of school in which he expects to teach.

\section*{BIOLOGY}
2. Bionomics-Four hours. Core subject for first year students.

A study of some of the fundamental facts and laws of biology that have a bearing on education. It forms a basis for the intelligent study of other educational subjects. It considers: Differentiation, specialization, adaptation, the metabolism of animals, evolution, and heredity, including Mendel's Laws.

This course will be given both as a full quarter and a half quarter subject.

\section*{BOTANY}
101. Advanced Systematic Botany-Four hours.

Treats of the morphological relation of flowering plants and their classification. Especially designed to acquaint nature study, botany and biology teachers with the summer flora of Colorado.

This course may be taken for the full or for the first half of the quarter. It may also be taken the second half with the first half of the course as a prerequisite.

\section*{ZOOLOGY}

\section*{1. Invertebrate Zoology-Four hours.}

Morphology and natural history of the invertebrates. Their relation to man will constantly be stressed. Especially designated for teachers of nature study, biology and zoology.
3. Bird Study-Four hours.

A study of Colorado birds. The course is not a scientific study of birds, but rather, as the name impies, a study that should enable the student to identify the common birds and to know something of their life histories, habits and economic importance. This course is especally designed for nature study and biology teachers.

\section*{NATURE STUDY}

\section*{1. General Nature Study-Four hours.}

An elementary study of trees, insects and birds for the purpose of equipping the student to teach this subject in the grades. It also considers the aims, materials, and methods of nature study toaching.
2. Problems in Nature Study-Two or four hours-by appointment.

A course designated for teachers who may have special problems in nature study which they wish to work out. May be taken either half of the quarter.

\section*{BACTERIOLOGY}
1. Bacteria, Yeasts and Molds-Four hours.

Morphology, classification, cultivation, observation, fermentative, processes and pathogenicity of micro-organisms. Designed especially for Biology and Household Science Majors.

\section*{BIOTICS}
101. Bi tics-Heredity and Eugenics-Three hours.

The first half of this course deals with the physical basis of heredity and the second half treats of the application of the laws of heredity to human society. It is of interest to all teachers, and especially so to those having administrative functions.

\section*{CHEMISTRY}

The increasing importance of the applications of chemistry to the industries since the European War has led to intensified interest in this subject. More comprehensive and practical courses in Chemistry are being given in the High Schools than heretofore, and more Chemistry is being given in connection with the courses in Home Economics since the realization of the magnitude of the world's food problems. Likewise, teachers of Chemistry, and teachers of Home Economics with some knowledge of Chemistry, are being demanded. It is the duty of every teacher to know something of the source, preparation, and properties of foods, dyes, poisons, etc.

In the program offered by the Chemistry Department, the teacher of Chemistry will find an opportunity to augment his or her knowledge of this subject. The prospective student of Chemistry will find the program suited to his or her needs; and Home Economics students of the regular school year will be enabled to pursue one or more of the required chemistry courses.
1. General Chemistry-Three hours. Fee \(\$ 3.00\).

Two lectures and one laboratory period on the theory of chemistry and non-metals.

\section*{2*. General Chemistry-Three hours. Fee \(\$ 3.00\).}

Two lectures and one laboratory period. A continuation of Course 1.
3*. General Chemistry-Three hours. Fee \(\$ 3.00\).
Two lectures and one laboratory period on the chemistry of metals. A continuation of Course 2 .

\section*{4. General Chemistry-Four hours. Fee \(\$ 3.00\).}

This course covers the same text book work as Course 1, but requires more laboratory work. Two lectures and two laboratory periods.

\section*{5*. General Chemistry-Four hours. Fee \(\$ 3.00\).}

A more extensive course than Course 2. Two lectures and two laboratory periods. Continuation of Course 4.

6*. General Chemistry-Four hours. Fee \(\$ 3.00\).
A continuation of Course 5. Two lectures and two laboratory periods.
Courses 4, 5, 6 are required of all science students (excepting those specializing in biology, who may elect 1, 2 and 3 instead; and of Home Economics students taking the four-year course).

\section*{7. Qualitative Analysis-Four hours. Fee \(\$ 3.00\).}

A laboratory and consultation course on the separation and identification of the common elements. Eight hours attendance. Prerequisite Courses 1, 2, and 3 or 4,5 and 6.
108. Organic Chemistry-Three hours. Fee \(\$ 3.00\).

Two lectures and one laboratory period. A study of the hydrocarbons and their derivatives.

109*. Organic Chemistry-Three hours. Fee \(\$ 3.00\).
Two lectures and one laboratory period. A continuation of course 108. A study of carbohydrates, proteins and benzine derivatives.

Prerequisites for 108 and 109 are \(1,2,3\), or 4, 5, 6. Recommended to. students specializing in biology or physics.
110. Organic Chemistry-Four hours. Fee \(\$ 3.00\).

Two lectures and two laboratory periods. Same text book work as Course 108, but more extensive laboratory work.

111*. Organic Chemistry-Four hours. Fee \(\$ 3.00\).
Two lectures and two laboratory periods. A continuation of Course 110. Prerequisites for Courses 110 and 111 are Courses 4, 5, 6. Required of students specializing in chemistry and of four-year Home Economics students.

112*. Food Chemistry-Four hours. Fee \(\$ 3.00\).
Two lectures and one laboratory period. A study of foods, detection of adulterants, metabolism and dietary lists. Recommended as a general cultural course. Prerequisite for course 112 is 1, 2, 108 and 109.

\section*{113*. Fo d Chemistry-Four hours. Fee \(\$ 3.00\).}

A more comprehensive course than 112. Required of students specializing in chemistry and of four-year Home Economics students. Prerequisites 4, 5, \(6,110,111\).

114 and 114b. Qualitative Analysis-Four or eight hours. Fee \(\$ 3.00\).

Gravimetric and volumetric analysis. A laboratory and consultation course. Eight or sixteen hours attendance. Prerequisites, Courses 4, 5, 6, 7.

\section*{117. The Teaching of Chemistry-Three hours. Fee \(\$ 3.00\).}

Discussion and reports on the teaching of high school chemistry, and practice in setting up demonstration apparatus. Required of chemistry students specializing to teach the subject.

\section*{COMMERCIAL ARTS}

Courses in the Commercial Department divide themselves into two groups: 1. Accounting. 2. Stenographic. Students who expect to major in the department and secure a two-year certificate should elect courses accordingly. The two-year stenographic course should be followed as outlined in the year book, with possibly some electives from the accounting course, or vice versa. Mixing courses from the two groups with no attention to the requirements in the year book might make it necessary for the student to remain in school longer in order to satisfy either of the requirements of the two-year certificate. A combination of the two-vear courses referred to above constitutes the requirements for the A. B. degree. Either of them may be taken in the first two years.

\footnotetext{
*2 and 5 or 3 and 6, 109 and 111, or 112 and 113, to be offered, depending on which is in the greatest demand.
}
1. Beginning Shorthand-Required of Majors in Commercial Arts. Four hours. Full quarter.

A study of the first ten lessons in Gregg Shorthand with supplementary exercises.

2*. Intermediate Shorthand-Required of Majors in Commercial Arts. Four hours. Full quarter.

A study of the last ten lessons of Gregg Shorthand with supplementary exercises. This course completes the study of the principles of shorthand.
3. Beginning Shorthand Dictation-Required by Majors in Commercial Arts. Four hours. First half or full quarter.

A brief review of word signs, phrasing, and the vocabulary of the Gregg Manual, after which dictation will be given of both familiar and unfamiliar matter. Enough work will be given in this course to make one proficient in taking accurately ordinary dictated correspondence.
11. Beginning Typewriting-Required of Majors in Commercial Arts. Four hours. First half or full quarter.

Beginning work in touch typewriting, covering position at machine, memorizing of keyboard, proper touch and correct fingering, with instruction in care of machine.
12. Intermediate Typewriting-Required of Majors in Commercial Arts. Four hours. First half or full quarter.

Study of approved and circular letters, addressing envelopes, manifolding and tabulating.
13. Advanced Typewriting-Required of Majors in Commercial Arts. Three hours. First half or full quarter.
17. Office Practice-Required of Majors in Commercial Arts. Four hours. Either half or full quarter.

This course consists of intensive practice in a "Model Office." Students are required to do five hours of continuous work daily, five days per week, taking dictation and transcribing. This course also includes the operation and use of modern office appliances such as the mimeograph, Mimeoscope, dictaphone, adding machines, filing systems, etc. This work is very carefully systematized and consists of actual correspondence. This comes from the president's office, the deans, and heads of departments. Outside work from churches and charitable institutions is solicited also.

\section*{40. Business English-Four hours. Full quarter.}

The elementary principles involved in writing correct English. The sentence, the paragraph, grammatical correctness, effectiveness, clearness, punctuation, etc., applied in commercial correspondence.
50. Elementary Accounting-Required of Commercial Majors. Four hours. Full quarter.

\begin{abstract}
A general introduetion, giving the historic background of the subject and a brief statement of the profession. The foundation of double entry bookkeeping. Assets, liabilities, proprietorship, the balance sheet, income, expenses, profit and loss statement. The entire class-period is given to discussion and an average of one hour daily is required for laboratory work.
\end{abstract}

51*. Intermediate Accounting-Required of Commercial Majors. Four hours. First half or full quarter.

Partnerships, introduction to corporation accounting, and many miscellaneous accounting and business methods. Two complete sets of books are written up in this course, one illustrating a partnership and another some features of corporation accounting.
53. Business Mathematics-Required of Commercial Majors. Four hours. First half or full quarter.

A thorough treatment of arithmetic from the modern commercial point of view.

\footnotetext{
*To be offered in case of sufficient demand.
}
56. Beginning Penmanship and Methods-Required of Majors in Commercial Arts. Two hours. First half or full quarter.
Drill in rapid, arm-movement, business writing. The Palmer system to be used. This course also includes methods of teaching.
54. Commercial Law-Required of Commercial Majors. Four hours. First half or full quarter.

A treatment of the general principles of common law as applied to business, together with a study of the Colorado statutes and decisions bearing on commercial interests. Contracts will be treated the first half and negotiable instruments the second half.
150. Bank Accounting-Required of Majors in Commercial Arts. Four hours.

This includes a study of state and national banking laws, loans, discounts, commercial paper, methods and principles of banking and saving accounts. A set of books illustrating several days of business will be written, including use of the Burroughs Bookkeeping Machine.
220. Seminar-Full quarter.

An opportunity will be given for research on problems in the commercial field. Problems to be selected in conference with the head of the department. This course is planned as a conference course.
4. Advanced Shorthand Dictation-Required of Majors in Commercial Arts. Four hours. Full quarter.

This is a course in advanced dictation requiring transcriptions. The object of this course is to develop speed in taking and transcribing new matter. A speed of 120 words per minute is desired.
6. Principles and Methods in Commercial Education-Required of Majors in Commercial Education. Two or Four hours. First half or full quarter.

A course dealing with the aims and purposes of commercial education. A study of the commercial curriculum is included. Attention is given to equipment, helpful books, magazines, and other periodicals that will help commercial teachers.
57. Advanced Penmanship and Methods for Teachers and Super-visors-Two or four hours. Either half or full quarter.

The major portion of time in recitation will be spent in discussing writing problems that confront teachers and supervisors of penmanship.
151. Cost Accounting-Required of Majors in Commercial Education. Four hours. Full quarter.

A complete set of books is written up with this course. The set deals with problems of distribution of overhead and burden expenses in connection with a concern manufacturing gas engines. This is a very thorough and complete treatment of the problems involved in cost distribution.
213. The Commercial Curriculum-Two or four hours. First half or full quarter.

This course deals with the commercial curriculum in High Schools, and is: a general study of Education for Business.

\section*{EDUCATION}
1. Principles of Teaching-Three hours. Full quarter three times: a weck or first half quarter five times a week.

This course will consist of readings, discussions and observations of classroom work in the elementary training school. It will deal with such topics as types of classroom procedure; standards for judging both the subject matter and classroom instruction; development and use of lesson plans; socialized recitations and the project method; the ideas of enrichment, development and control of experiences and the methods appropriate to a realization of these-
ideas in the various grades of the elementary school from the kindergarten to the eighth grade.

\section*{2. Student Teaching in Elementary Training School-Four hours.} Full quarter.

This will include observations, conferences, supervision, and teaching on the part of student teachers.
3. Primary Methods-Either half or full quarter. Two or four hours.

This course is based on the needs of the child between the ages of seven and eight years. This course leads up to the selection of subject matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are giver.

\section*{4. Intermediate Grade Methods-Either half or full quarter. Two} or four hours.

The course is based on the needs of the child between the ages of ten and twelve. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the intermediate grades.

\section*{7. Practical Projects in Primary Grades-Either half or full quarter. Two or four hours.}

This course will deal with practical problems and projects in the work of primary grades.
8. Educational Values-Three hours. Required of all students, first year. Full quarter three times a week or first half quarter five times a week.

The purpose of this course is to give the student a critical attitude toward the material presented in the various school subjects. Each subject of the elementary school will be considered as to the reason it has for a place in the curriculum today; how it has been justiffed in the past; and how it may be presented now so to be more fully justified. Recent magazine articles and textbooks will be studied with a view to developing the attitude of looking for the material which is of greatest educational value to the child.
10. The Elementary School Curriculum-Three hours. Full quarter.

This course will deal largely with the objectives of elementary education. The main subjects of the elementary curriculum will be studied from the standpoint of objectives to be attained in each and the place and importance of each in the public schools of today. Each subject will also be studied to determine what additions and eliminations of subject matter are desirable.

\section*{13. The Teaching of Spelling-Two hours. Second half.}

The purpose of this course is to present the most reliable and certain facts in teaching of spelling and to present them in their relation in the practical problems which the teacher has to face every day in the class room. The following problems will be discussed: The selection and classification of words; testing for word difficulty; a psychological basis of spelling; the presertation of words; the prevention and treatment of errors; the measurement of spelling ability; factors affecting spelling ability.
15. Vocational Guidance-Two hours. Second half quarter.

In this course a study will be made of the various vocational guidance systems thruout the country. The history of the movement, vocational guidance thru the attendance office, employment supervision, juvenile employment agencies, charting vocational aptitudes, use of psychological tests, industrial surveys and other problems will be studied.

\section*{15a. Study of Occupations-Two hours. Second half quarter.}

This course will present in detail methods for the study of occupations in junior and senior high schools. Any system of vocational guidance must be
founded on a study of occupations. This course will include a discussion of how the study of occupations may be made to vitalize the work in English, civics, and geography.
16. Training Course for Camp Fire Guardians-One hour. Each half quarter.

This course is intended for those who wish to become Camp Fire Guardians. Groups will be organized into regular camp fires and do the work usually required of girls in such groups.

16a. Training Course for Camp Fire Guardians-One hour. Each half quarter. Open to students who have had the elementary course in Camp Fire.

\section*{17. Boy Scout Work-One hour. Each half quarter.}

This course is intended for those who wish to become Boy Scout Masters.
21. County School Problems-First half quarter. Three hours. Five times a week.

This course considers the problem of the county school, the teacher, the child, the school board, and the community.
22. Student Teaching in County Demonstration Schools-Two hours. Second half quarter.

A two-teacher rural school will be available for observation and teaching. The work is intended to meet the needs of those who expect to work in rural schools.

26a. The County School Curriculum and the Community-First half quarter. Three hours. Five times a week.

This course will present the problems of the teacher who desires to instruct country children in terms of their environment. The Colorado courses of study and methods and materials for such instruction will be outlined and discussed. Special attention will be given to ways and means for vitalizing the subjects in the course of study.
27. The General Lectures-Required of all undergraduate students.
33. History of Modern Education-Three hours. Full quarter three times a week or last half quarter five times a week.

This course will be introduced by a brief review of the Education of the Renaissance to furnish the setting for the study of the trend of modern education. The main part of the course will be devoted to such subjects as the development of the vernacular schools, the early religious basis of elementary and secondary schools, and the transition to a secular basis, together with the educational philosophy of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbert, and Froebel.
51. Literature, Songs and Games for Kindergarten and Primary Children-Either half or full quarter. Two or four hours.

A study and classification of the different types of stories, songs and bames according to their fitness for various ages and purposes.
52. The Kindergarten Curriculum-Four hours. Full quarter.

A study of the educational possibilities of the natural activities of childhood.
101. Principles of High School Teaching-Either half or full quarter. Two or four hours.

This course is designed to develop those principles of teaching and features of methodology which are particularly applicable to high school teaching. A text-book is used as a basis, but this is supplemented by individual reports, class discussions, and special papers. There will also be directed observation of high school teaching. Some of the topics to be considered are: Characteristics of adolescence; types of disciplinary control: economical classroom management; types of instruction; lesson planning and supervised study.
102. Advanced Student Teaching in Elementary Training SchoolFull quarter. Four hours.
103. Student Teaching in the Secondary Training School-Full quarter. Four hours.

This course will include conference, observations, supervision and teaching under the direction of the training teacher.
104. The Project Method of Teaching-First half quarter. Two hours.

The purpose of this course is to study and define the project and project method from a critical point of view and to discuss the reorganization of the curriculum on the project basis. A study and criticism of current definitions will be made, also the historical development.
106. Methods of Improving Instruction in the Primary GradesEither half or full quarter. Two or four hours.

An advanced course, dealing with methods of improving instruction in primary grades. Emphasis is placed upon the following subjects; silent reading, literature, spelling, language and arithmetic.
108. Educational Supervision-Either half or full quarter. Two or four hours.

This course will deal with problems of supervision in school systems. It will be of especial value to those who expect to become superintendents or supervisors.
110. Supervised Study-Two hours. First half quarter.

This course will deal with the entire field of supervised study. Model supervised study classes will be available for observation.
11. Philosophy of Education-Four hours. Full quarter. Required fourth year.

This course is designed to study the underlying philosophy of education.
111a. Educational Theory and Its Influence on Method and Prac-tice-Two hours. Second half quarter.

The purpose of this course is to show the necessity of correlating method and practice with sound educational theory. This course will be given with the conviction that educational theory and practice have been vitiated by pre-conceptions which were historically inevitable but which are unjustifiable in the light of modern knowledge.

\section*{112. School House Construction-Two hours. Second half quarter.}

This course will deal with the practical problems in the planning and building of school houses.
113. Organization and Administration of the Junior High SchoolEither half or full quarter. Two or four hours.

In this course the following points will be considered: Organization; standards for judging junior high schools; historical development; the program of studies; the daily schedule of classes; courses of study for the various subjects; the qualification of teachers, etc. After many representative junior high schools of the United States have been considered from the above mentioned standpoints, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.
114. Primary Supervision-Either half or full quarter. Two or four hours.

This course is intended to meet the needs of kindergarten and primary supervisors.
116. The Organization and Administration of a Senior High School -Either half or full quarter. Two or four hours.

This course will deal with the senior high school from the standpoint of organization, programs, teaching, course of study, social life, athletics, and a.l general problems arising in the administrating of a senior high school.

\section*{131. Visual Education-Two hours. First half quarter.}

A conference course in visual education is open to superintendents, principals and teachers who are planning to make a wider use of pictures in teaching. Among the topics considered will be the place of picture collections, the use of the sterescopic lantern, and motion picture machine. Instruction will be given in the installation, care and operation of projection apparatus; the making of lantern slides and motion pictures. Lists of films and lantern slides will be furnished. The school has a complete photographic laboratory, two motion picture machines, and a number of lanterns and projectoscopes. Weekly conferences will be held, and one hour of credit is offered to those regularly enrolled.
135. Educational Classics-Three hours. Second half quarter.

Such classics as Plato's "Republic," Rousseau's "Emile," Pestalozzi's "Leonard and Gertrude," and Spencer's "Education'" will be considered (a) as interpretations of educational practices of the various periods of history represented and (b) as representations of theory related to present day education.
142. City School Administration-Either half or full quarter. Two or four hours.

This course is designed primarily for students preparing themselves to be principals, supervisors or superintendents. All phases of city school administration will be dealt with. Particular emphasis will be placed on such subjects as employment, pay and promotion of teachers, and making of the school budget, the planning of a building program, and the development of a course of study.
143. National, State and County Educational AdministrationEither half or full quarter. Two or four hours.

This course deals with the fundamental principles of educational administration as they apply to the nation, state and county. Federal aid to education will be studied. The correct organization of a state department of education and the state's relation to certification, finance, attendance, etc., will be a part of the course. The county as a unit of administration will aisn be dealt with.

\section*{144. School Publicity-Two hours. Second half quarter.}

This course will study such problems as school papers, bulletins, house organs and publications for patrons. How to get material ready for the newspapers and how to handle such community projects as clean-up week, American education week, know your schools week, music week, bond-elections, Parent-Teacher associations and other community enterprises will be a part of this course. Given by the department of education and the de; artment of English jointly.

\section*{147. Educational Surveys-Two hours. Second half quarter.}

In this course an opportunity will be given to study the technique of conducting surveys, the surveys which have been made, and the application of these surveys to educational thought and practice.
152. Prizaiples Underlying the Education of Children in the Kindergarten and Primaxy Grades-Either half or full quarter. Two or four hours.

This course is intended to be of help to kindergarten and primary teachers and supervisors.
220. Educational Finance-First half quarter. Two hours.

This course deals with budget making, taxation, financial reports and other subjects that relate to financing the public schoos. A study will also be made of cost units, and financial comparisons of schools.
223. Research in Education-Hours dependent upon amount of work done. Open only to students who are present the full quarter.

This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of breatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Conference course at hours convenient to instructor and student.
229. Current Educational Thought-Either half or full quarter. Two or four hours.

This course will consist of reviews and discussions of recent books and magazines in the various flelds of education. Prospective members of the class will aid greatly in the work if they will bring 1923 to 1923 books with thera for use in this course.

\section*{EDUCATIONAL PSYCHOLOGY}

The courses of this department have been arranged with the general purpose of making the student familiar with the important contributions which psychology has made to such phases of education as school organization and administration, the aims of education, and the best means and methods of realizing these aims. The whole public school system is viewed from the standpoint of the nature and needs of the child. An attempt is made to point out what the schools should be in order to preserve the child's physical and mental health, respect his native capacities and tendencies, secure his normal development, utilize his most natural modes of learning, and promote and check up the efficiency of his responses. More specific statements of the purposes of the department are given below in the descriptions of the courses.

The department offers two curricula, the one in Psychology and the other in Special Schools and Classes. The first prepares the student to teach psychology in normal schools and high schools and to fill such positions in clinical psychology and tests and measurements as are developing in connection with public school systems. The second prepares the student to take charge of special schools and classes, especially such as are designed for backward and feeble-minded children. Students who elect either of these curricula are advised to take at least six courses of the curriculum of some other department.

\section*{1. Child Hygiene-First year. Three hours. Full quarter.}

The main purposes of this course are: (a) to point out how the child's school progress and mental and physical development are arrested, and how his health and behavior are impaired by the physical defects which are very prevalent among school children: (b) to discuss the causes of defects, the methods of preventing and detecting them, and the measures which are required for an effective amelioration or cure.

The following topics will be treated: educational and economic values of health; the need of health conservation; deformities and faulty postures: air requirements; malnutrition and school feeding; hygiene of the mouth; enlarged adenoids and diseased tonsils; defective hearing; defective vision.

\section*{2. Educational Psychology-}
a. Three hours credit, four hours recitation. Required of all students. Second year. Either half quarter.

The purposes of this course are: (a) to make the student familiar with the child's capacities, tendencies and native responses and to show him how they, and the nature and order of their development, are involved in the process of educating the child; (b) to discuss such conditions of the school room and school activities as will ayoid fatigue and promote work.

The following topics will be treated: The child's native equipment; mental work and fatigue.
b. Threc hours credit, four hours recitation. Required of all students. Sccond year. Either half quarter.

Purposes of the course: (a) to acquaint the student with the various modes of learning and the conditions which facilitate learning; (b) to discuss the nature of individual differences and point out their significance for instruction and the arrangement of school work.

General topics: The psychology of learning; individual differences.

\section*{3. Child Development-Second year. Four hours. Full quarter.}

The purposes of this course are: (a) to point out the child's requirements during the different stages of his physical development; (b) to describe the nature of the child's mental development and discuss the kind of school work which is adapted to him in any stage of development.

The following topics will be treated. Purposes and methods; anthropometrical measurements and growth; the development of attention and senseperception; instruction in observation; the development of memory, imagination and thinking; the psychology of lying; the growth of feelings and ideas: volition, suggestion and interest.
104. Psychology of Elementary School Subjects-Third year. Four hours. Required. Either half or full quarter.

The purposes of this course are (a) to make an analysis of the school subjects with the object of determining what mental processes, and modes and conditions of learning are involved in studying them; (b) to review the results of experimental studies on the methods of teaching and learning the school subjects; (c) to discuss the necessity of varying the methods of teaching and learning the school subjects with the progress made and with individual differences in children; (d) to criticise methods of instruction in the light of individual requirements, the result of experimental studies, and the mental processes involved in a given subject.

Topics treated: The elementary school subjects.
105. Psychology of the High School Subjects-Third year. Four hours. Required of students preparing to teach in high school in lieu of Course 104. Either half or full quarter.

The purposes of this course are the same as those enumerated in Course 104.

Topics treated: The high school subjects.
107. Mental Tests-Four hours. Full quarter.

The purposes of the course are: (a) to make the student familiar with the means and methods which are employed to determine the child's general intelligence and the efficiency of his individual mental processes; (b) to point out the social, educational, psychological and vocational significance of tests.

Topics treated: Various forms of individual tests, such as the Binet series and its modifications; various forms of group tests, such as the Army, Otis, National and Pressey tests; tests of perception, memory, imagination, thinking, attention, psycho-motor control, and various combinations of mental processes.

108a. Educational Tests and Measurements-Four hours. Fourth year. Required. Either half or full quarter.

Chief purposes of the course: (a) to give the student a working knowledge of the best instruments for measuring the child's school progress and his performance level in the school subjects; (b) to discuss the methods of using the educational tests and tabulating the results; (c) to point out their educational significance in all of its phases.

Topics treated: Tests and standards of reading, writing, spelling, arithmetic, geography, and all the other elementary school subjects.

108b. Educational Tests and Measurements-Four hours. Fourth year. Required of students who will teach in the Senior High School. Either half or full quarter.

The purposes of this course are the same as those for 108a. The topics treated will be tests and standards of the high school subjects.
111. Speech Defects-Two hours. First half.

Purposes: (a) to make the student acquainted with such speech defects as aphasia, stuttering and lisping; (b) to show how these defects handicap the child in school and in life; (c) to discuss and demonstrate the methods of remedial and curative treatment.

\section*{112. Vocational Psychology-Three hours. Full quarter.}

The purpose of this course is to make the student acquainted with employment psychology, personnel work in industry, the psychological aspects of vocational guidance, and the application of psychology to industry and the vocations in general.
212. Psychological and Statistical Methods Applied to EducationFour hours. Full quarter.

Purposes: (a) to give school officials the technique necessary for the solution of educational problems involving the accurate measurements of mental processes; (b) to present the statistical methods employed in the treatment of educational data.
213. Conference, Seminar, and Laboratory Courses-Hours depending upon the amount of work.

Purposes: To make possible more intensive and exhaustive work by the student on problems of special interest to him.

Topics: Formal discipline; sex hygiene; retardation; mental tests; learning; retinal sensations; space perception, etc.

\section*{ETHICS}

In the courses given below it is hoped that two essentials in the training of a teacher-Character and Personality-may be fostered and improved. The young woman who starts out upon her teaching career with a good ethical foundation, and the advantage of a character, developed through the right ideals of conduct and appreciation, has assets which are invaluable.
1. Ethics-Personal Talks on Right Living-Two periods. One hour credit. Full quarter.

In this course it is the aim of the dean of women to get in touch with the personal side of each student. Living conditions will be taken up, and all matters pertaining to conduct will be open to friendly discussion.
2. Ethics-Ethical Culture-Two hours. Full quarter.

A course designed for instruction in etiquette of every day life; a general appreciation of culture and its necessity in the training of a teacher. Lectures, book and magazine articles, reviews and reports.

\section*{FINE AND APPLIED ARTS}

The department of Fine and Applied Arts aims to prepare teachers to meet all the demands made upon regular teachers in public schools from the kindergarten through the high school in all branches of drawing, and to train special students to act as departmental teachers and supervisors in Fine and Applied Arts. The courses are open as electives to all students of the College.

The department is well equipped. In addition to the regular equipment there is a museum of ceramics, original paintings, reproductions, and copies of masterpieces.
2. Methods of Teaching, Drawing and Design in Primary GradesFour hours. Either half or full quarter.

Freehand drawing, elementary perspective adapted to illustrations, color, elementary design, drawing from animals and nature, picture study, blackboard drawing.
13. Methods oí Teaching Applied Art in Primary Grades-Four hours. Either half or full quarter.

Weaving, folding, cutting, stick printing, probiems for special days, clay modeling, sand table projects, interiors, tools, toys.
1. Methods of Teaching Drawing and Design in Intermediate Grades and Junior High School-Four hours. Either half or full quarter.

Freehand drawing perspective color, composition, design, lettering, art appreclation.
14. Methods of Teaching Applied Art in Intermediate Grades and Junior High School-Four hours. Either half or full quarter.

Application of design and color to paper, and card board construction, basketry, block-print, clay, toys, costume, interior and table problems.

\section*{3. Freehand Drawing-Four hours. Either half or full quarter.}

Perspective drawing from objects añủ n̄âtu: ond animals. Sketching; mediums, charcoal, pencll, colored chalk.
5. Water Color Painting-Three hours. Either half or full quarter. Studies from still life, nature and landscape.
6. Art Appreciation-One hour.

The purpose of this course is to increase the student's appreciation of beauty and his power to select good examples of art.
7. Constructive Design-Four hours. Either half or full quarter.

Design applied to the construction and decoration of problems in tooled leather, block print, basketry, batik. Decoration of common objects.

Pottery-Four hours. Either half or full quarter.
History and appreciation of pottery modeling and decorating tiles, vases, bowls. Casting, glazing.
11. History of Architecture-One hour. Full quarter.

Illustrated lectures on the development of architecture; interpretations of famous buildings. An appreciation course.
102. Commercial Art-Four hours. Either half or full quarter. Lettering, posters and pictorial advertising, design and color.
16. Antique-Four hours. Either half or full quarter.

Charcoal drawing from antique casts in outline and in light and shade.
9. History of Art-Three hours. Full quarter.

Growth of the great schools and their influence; study of important masters and their work. Lectures with related readings.
12. Household Art Design-Four hours. Either half or full quarter.

Study of periods in furniture makiug and modern adaptation. Development of design and color for interiors and costumes.

4b. Design-Four hours. Either half or full quarter. Development of the principles of design and color.
105. Oil Painting-Four hours. Either half or full quarter. Still life, landscape composition.

\section*{ROMANCE LANGUAGES}

\section*{SPANISH}
1. Beginning Spanish-Three hours.

Wilkins' First Spanish Book. The first 25 lessons will be completed.
4. Second Year Spanish-Three hours.

For students who have one or more years of Spanish. Considerable conversation will be done, and original themes on Spanish life. Text: El Tesoro de Gaston, by Pardo Bazan.

\section*{103. Third Year Spanish-Three hours.}

The following works of Pedro de Alarcon will be studied: El Escandalo, El Sombrero de Tres Picos and El Final de Norma.

\author{
205. Fourth or Fifth Year Spanish-Three hours. \\ Selections from Mesonero Romanos and Linares Rivas' El Abolengo and Cruz and Kuhne's Don Quijote.
}

\section*{FRENCH}

\section*{1. Beginning French-Three hours.}

Grammar and easy texts.

\section*{4. Second Year French-Three hours.}

Text: Trente et Quarante, by Edmund About. Much conversation and composition work done.

\section*{103. Third Year French-Three hours.}

Ursule Mirouet by H. De Balzac, and le Comte Kostia by Cherbuliez, will be the first texts used. Others will be chosen for the second half.

\section*{205. Fourth Year French-Three hours.}

The complete works of Voltaire will be undertaken, beginning with Zadig or tales of the Orient. Outside readings from the leading works of this author.

\section*{LATIN}

Four courses in Latin will be offered, among which will be one on the Teaching of Latin in secondary schools. These courses will be listed in full in regular program.

\section*{GEOLOGY, PHYSIOGRAPHY, AND GEOGRAPHY}

The courses listed in this department are not review courses covering the material taught in the elementary schools. Such review courses are listed in the High School department and no credit is given in them toward graduation from the College.

Geography is a definite science, in which the superstructure of commercial and human factors is built upon the underlying climatic and geologic causes. It is from this point of view that the work of the department is given.
12. Geography Method-Two hours. Half quarter, repeated second half quarter.

A course in which the history of geography teaching is taken up, followed by a discussion of the relative values of the various methods of presentation. The materials suitable for each school grade will be discussed
100. Geology-Four hours. Full quarter.

Not so much a text-book course as an endeavor to get the kind of geology that will enable our Colorado teacher of mountain and plain to understand her environment in geologic terms and to incorporate this understanding in her nature study and geography teaching.

\section*{113a. Mathematical Geography-Two hours. First half quarter.}

A recitation course designed to cover such problems as proofs of the earth's rotation and revolution, the tides, the international date line, standard time belts, calendars, etc.
122. Biography-Two or four hours. Either half or full quarter.

The distribution of plants and animals, emphasizing the main climatic and geologic controls in such distribution.
179. Geographic Influences in American History-Two hours. Second half quarter.

A course taking up the physiographic controls of American history, especially in Eastern United States.

\section*{HISTORY AND POLITICAL SCIENCE}

\section*{4. Western American History-Four hours. Full quarter.}

The westward movement is treated as an historical process, including the social, economic, and political interests associated with the various stages. Some general topics suggest the nature of the work: migration from the Atlantic coast to the Mississippi Valley, the Trans-Mississippi West, Colorado as a part of the westward movement, the Pacific coast and the dependencies.
25. Comparative Government-Four hours. Full quarter.

The federal government of the United States is studied in comparison with the governments of other important countries. The English and French systems furnish the basis of general comparison; but the others which are considered include the new governments of Germany the Czech Republic, and the Soviet System, and the older monarchical form of Japan.

\section*{40. Contemporary World History-}
a. Two hours. First half quarter.

This is a discussion of current conditions in which enough of the comparatively recent past is introduced to give an understanding of conditions as they are. The consequences of the Great War are especially stressed, such as the operation of the League, the Near Eastern controversy, the crises in the British Empire, etc.
b. Two hours. Second half quarter.

This is a continuation of the work outlined above.
13. The Teaching of History-Two hours. First half quarter.

The nature of the course is suggested by the following topics: the history of history instruction in the schools; the aims and values of history instruction; the course of study; methods and materials for the several grades of instruction; the testing of results; and school problems, such as the place of history in the curriculum, the relation to the other subjects, etc.
26. The Teaching of Civics-Two hours. Second half quarter.

The discussion includes the following: the development of civics instruction from the study of the Constitution to the present community civics; the value of civics in education for citizenship; the purpose of instruction in government; courses of study; and methods and materals for the several grades of instruction.

\section*{215. Research in History.}

Students doing graduate work in history and political science may arrange work as desired.

\section*{HOME.ECONOMICS}

The Home Economics course not only trains teachers, but also trains homemakers in the selection, use and care of materials for the home. It has as an ideal the establishment of sane standards of living, including the economic, social and esthetic sides of life.

It is the policy of the Home Economics Department to recommend as teachers of the subject only those students who have completed the four year course.

\section*{HOUSEHOLD ARTS}
1. Textiles-Four hours:

The course includes the history and development of the textile industry; the study of the commonly used fibres and fabrics; and the standard tests.

4a. Millinery-Four hours.
The designing and making of hats to suit the individual. Open to majors only.

4b. Millinery-Four hours.
This course is largely a duplication of 4 a except the omission of moldconstruction. Open to anyone who can sew well.
5. Pattern Making-Four hours.

The making of patterns by drafting, modeling, designing. Open to majors.
109 Advanced Dressmaking-Four hours.
This course includes problems too difficult for the inexperienced student. One afternoon dress is made in the course-preferably a crepe or a satin. HA5, HA6, and HA107 are prerequisites.
110. Advanced Textiles-Two hours.

This course includes a study of artistic textiles; also laces, rugs and tapestries. The other two hours are given in the Chemistry department.

\section*{HOUSEHOLD SCIENCE}

1 or 2. Food and Cookery-Four hours. Fee, \(\$ 3.00\).
ed, A study of food and its preparation. Either or both courses will be offered, according to the demand.
3. Food and Cookery-Four hours. Fee, \(\$ 3.50\).

A continuation of 1 and 2.
4. Demonstration Cookery-Four hours. Fee, \(\$ 3.50\).

This course presupposes at least three quarters of previous training in cookery. It is planned to increase skill and confidence and enable students to do community work as a demonstrator.

\section*{106. Home Nursing-Four hours. Fee, 50 cents.}

The course is a thorough one in the care of patient and room in case of illness in the home. First aid is included.

\section*{107. Household Management-Four hours.}

The study of the problems most commonly met by every housewife.

\section*{HYGIENE AND PHYSICAL EDUCATION}

Students registering for the first time should make an appointment on registration day for the required health and dental examinations. Registration is not completed until these examinations have been made and recorded. These examinations are for the purpose of assisting students with their personal health problems and are free. The Medical and Dental Advisers keep regular office hours for free consultation regarding individual health problems of students. The College does not, however, undertake any medical or dental treatment.

Students registering for practical (exercise) courses should dress in gymnasium costume and be ready for work at the first meeting of the class. Students coming to class in street clothing will be marked "absent."

The courses offered by this department are divided into two classes as follows:

\section*{I. Informational Courses in Hygiene, Physical Training and Play.}

Courses in group one do not fulfill the college requirement for an activity course each quarter during the first two years. Hygiene and Physical Education 7 is required of all students during the first or second year. Hygiene and Physical Education 108 is required of all students during the third or fourth year. Other courses listed in this division are primarily for students who are specializing in Physical Education but are open to others.

\section*{II. Exercise Courses in Physical Training, play, and Athletics.}

One course in group two is required each quarter during the first and second years.

\section*{GROUP I. INFORMATIONAL COURSES}
1. Physiology and Hygiene of Exercise-Five periods. Three hours. First half quarter.

Lectures, demonstrations, recitations. A required course for Physical Education Majors, but open to others who have had biology.
2. Anatomy and Kinesiology-Five periods. Three hours. Second half quarter.

Lectures, demonstrations, recitations. Use is made of skeleton, manikin, charts, and anatomical atlases in connection with text book assignments.

Required of Physical Education Majors during the first year. Open to others who have had biology.
3. Anthropometry and Physical Examinations-Four periods. Four hours. Full quarter.

A lecture, recitation practice course. Principles and methods of making
physical measurements; the determination of norms for different age groups; applications of principles to physical education problems; the detection and correction of common physical defects. Required of Physical Education Majors the second year. Open to others who have had biology.
5. History of Physical Training-First year. First half quarter. Five periods. Two hours.

The place given to Physical Education in the life of different nations. Beginnings of modern physical education; recent rise of play and recreation movement; effect of the World War on development of physical education in the United States and other countries, are among the topics considered.

\section*{6. Research in Physical Education.}

Qualified third and fourth year and graduate students may select a subject for research in Physical Education. By arrangement. Three or more hours, depending on the amount of work accomplished.
7. General Hygiene-Five periods. Two hours. Either half. Required of all students at some time during the first two years. Men and women.

A lecture, discussion course on general hygiene. Many lectures are illustrated. Consideration is given to : (a) mortality statistics as a basis for effective hygiene; (b) agents injurious to health; (c) Carriers of pathogens;; (d) contributory causes; (e) defenses of health; (f) producers of health; (g) the teaching of Hygiene.
9. Child and School Hygiene-Four periods. Four hours.

A course in Child and Educational Hygiene (see Education Psychology 1).
12. First Aid-Five periods. Two hours. Either half quarter.

A course covering the essentials of first aid treatment in cases of accident or illness. The Red Cross Text Book is followed. Those who complete the course may receive the Red Cross Certificate in First Aid.
108. Individual Hygiene-Five periods. Two hours. Either half quarter. Required of all students during the third or fourth years.

An informational course on the essentials of individual health conservation and improvement. Different sections for men and women.

\section*{GROUP II. EXERCISE COURSES}

In order to secure credit for a full quarter in fulfilling the administrative regulation requiring "physical education exercise courses during each quarter in residence" during the first two years, it is necessary to carry one practical course throughout the entire Summer Quarter. These courses are listed below.
55. Heavy Apparatus and Tumbling-(Men) Three Periods. One half or one hour. Either half or full quarter.
56. Singing Games and Elementary Folk Dancing-Three periods. Either half or full quarter. First year students. One half or one hour.

A course for those desiring rhythmic material for the lower grades.
57. Folk and National Dances-Three periods. One half or one hour. Either half or full quarter.

A selected list of folk and national dances suitable for school and playground use, especially for upper grade and high school groups. Two sections.
58. Esthetic Dancing-Three periods. One half or one hour. Half or full quarter. Students entering second half must secure approval of instructor.

Technic of the dance; the development of bodily co-ordination and rhythmical responsiveness are the aims of the course.
59. Classical Dancing-Four periods. One hour. First half. Advanced technic and classical dances. Pre-requisite Course 58.
60. Interpretative and Natural Dancing-Four periods. One hour. Second half quarter. Pre-requisite Course 59.
61. School Gymnastics-Three periods. One half or one hour. Either half or full quarter.

Class organization and conduct, marching, free, dumb-bell, wand, and Indian club drills, principles of selection and arrangement of exercises, practice in organizing and leading drills, working out daily programs for different grades under school conditions.
62. Plays and Games-Three periods. One half or one hour. Half or full quarter.

A selected list of plays and group games suitable for use in the lower and intermediate grades.
63. Playground Organization and Supervision-Five periods. Two hours. First half quarter.

A lecture discussion and practice course. Two lectures and three practice periods each week. Theories and applications of play in modern education; play and athletics as training for citizenship; the practical administration of play and athletics from an educational point of view are among the topics considered. A second year course for students majoring in Physical Education but open to others interested in this phase of school work.
64. Athletics for Wcmen-Three periods. One or two hours. Half or full quarter. Second year students.

\footnotetext{
A course in group and team games. Play material suitable for upper grades and high schools will be presented.
}
65. Recreation Course-Three periods. One half or one hour. Half or full quarter. Open to all.

A recreational activity course for men and women. This course wil offer opportunity for instruction in swimming and tennis especially. A special fee will be charged for the swimming lessons. This fee is to cover cost of transportation and the privileges of the swimming facilities.

\section*{66. Athletic Coaching-}

A group of courses designed to give those who are now engaged in teaching athletics, or those who are planning to enter this field, the fundamentals of the major athletic sports. Lectures, field practice, competition, administration of athletics, athletic budgets and equipment, the selection, training and conditioning of teams, discipline, etc., will be among the topics discussed.
(a) Footbal- Five periods. Finst half quarter. 2 hours.
(b) Baseball-Five periods. First half quarter. 2 hours.
(c) Basket Ball-Five periods. First half quarter. 2 hours.
(d) Football, Basket Ball, and Track and Field Sports. These sports will be treated in a combination course during the second half quarter. Five periods. 2 hours.

\section*{68. Corrective Gymnastics.}

A course for those who are unable, because of physical disability, to take the other courses. Students, however, are not admitted to this course except upon the recommendation of the College Medical Advisers or the Director of this Department.-No credit.

\section*{LITERATURE AND ENGLISH}

The courses offered in Literature and English fall into three classes: 1. Courses in grammar and composition. 2. Courses in methods of teaching Literature and English in elementary and high schools. 3. Literary courses, cultural in nature, or intended to equip a high school teacher of English with the teaching materials and a literary background.

\section*{1. Material and Methods in Reading and Literature-Two hours.}

A study of motivation in the field of reading, oral and silent, for children; the consideration of principles governing the choice of literature in the grades; practice in the organization and presentation of type units, including dramatization and other vitalizing exercises. A somewhat flexible course, affording opportunity for intensive work within the scope of any grade or grades, according to the individual need or preference.

\section*{2. The Teaching of Written English-Two hours.}

This course takes up the problems of teaching formal English, both spoken and written, in the intermediate grades, and the junior high school. The functional teaching of grammar is included.

\section*{3. Public Speaking and Oral Composition-Three hours.}

The endeavor of this course is to establish the student in habits of accurate speech and to encourage fluency, vigor and logical marshaling of his thought in discourse of varied types, including exposition, description, narrative, oratory, argumentation, free dramatization.
4. Speaking and Writing English-Required of all students unless excused by the head of the English department. Three hours.

Grammar, and oral and written English, from the point of view of their function in guiding the student in the correct use of English in speaking and writing. Practice in sentence making, sentence analysis, recognition of speech faults, and the means of correcting them; and practice in both oral and written composition.

\section*{6. American Literature-Four hours.}

A course in American literature following the plan of Courses 89 and 10 in English literature.

\section*{8. The History of English Literature-Four hours.}

A reading course following the development of our literature from 670 to 1625.

\section*{11. A Study of English Words-Four hours.}

No greater help in speaking and writing can be offered a student than a course in English Etymologies, word origins, connotations, etc. The study of Latin formerly offered this information to students. Now that only a few study Latin, the English department recommends this course to all students who wish to use exact meanings of words with assurance and accuracy.

\section*{13. The Art of Story Telling-Three hours.}

A study of the main types of narrative, with emphasis upon the direction and manner suitable for each. Practice in the art of story telling.

\section*{15. Types of Literature-Two hours.}

A reading course looking toward an appreciation of literature and covering all the types of literature that can be made interesting to young people and to contribute to the formation of good taste in reading. This would include English, American, and Foreign literature which has become classic. But no matter how "classic" it is, it still must be attractive. The types covered will be lyric, narrative, and epic poetry, drama, essay, story, novel, letters and biography.

\section*{16. Types of Contemporary Literature-Two hours.}

A second appreciation course similar to Course 15 but dealing with the literature of not more than ten years back. Most teachers of literature leave the impression that literature must age like fiddles and wine before it is fit for human consumption. Such is not the case. Much good literature is being produced every year. After students leave school it is just this current literature that they will be reading if they read at all. We want to help them form a discriminating taste for reading, and to acquire a liking for reading so that they wi:l be alive to what the world is thinking, feeling, doing and saying after they leave the school.

\section*{17. Comedy: A Literary Type-Three hours.}

The consideration of comedy as a type of drama, with intensive and comparative study of a Shakespearean comedy. The group interpretation of a Shakespearean comedy on the campus. Sometimes, when the class is large, other programs of standard plays are also given.

\section*{20. Intermediate \(\mathbf{C}\) mposition-Three hours.}

This course is planned for students who have passed English 4 and wish to get further practice in the usual forms for composition and do not care to go into the newspaper writing provided for in the course numbered 102.

\section*{31. The Short Story-Four hours.}

A study of fifty typical modern short stories to observe the technical methods of modern short story writers and the themes they have embodied in the magazine fiction of the present. The course is based upon Mr. Cross', book. '"The Short Story," supplemented by O'Brien's "The Best Short Stories."

\section*{102 Journalistic Writing-Three hours.}

A course in advanced English composition based upon newspaper and magazine work. Every type of composition used in practical news and journalistic writing is used in this course. This course has been revised, and planned to meet the demands for Journalism in the High Schools. Especial attention is given to school publicity and to the publication of the school and college papers. The practical nature of the course makes it particularly valuable to English teachers who are called on to teach Journalism.
105. Oral English in the High School-Two hours.

The discussion of practical problems concerning the direction of Oral English in the secondary school; oral composition, literary society and debating activities, festivals, dramatics
106. The Teaching of English in the High School-Two hours.

Principles for the selection of literature for senior high school pupils considered critically; illustrative studies in the treatment of selected pieces; study of types of composition work for high schools, with illustrative practice in writing.

\section*{121. Nineteenth Century Poetry-Two hours.}

A study of English poetry from Wordsworth to Tennyson, including Coleridge, Byron, Shelly, Keats, and the lesser writers from 1798 to 1832.

\section*{122. Victorian and Contemporary Poetry-Two hours.}

Tennyson and Browning, and the general choir of English poets from 1832 to 1892, and an attempt to estimate the significance of current tendencies in poetry, English and American; supplemented by sufficient reference to current verse of other literature to afford comparison or analogy.

\section*{125. Nineteenth Century Prose-Four hours.}

\section*{126 The Informal Essay-Four hours. Spring quarter.}

A study of the familiar essay for the purpose of determining the nature and form of this delightful phase of literary composition. The method in this
course is similar to that pursued in the short story; namely, a reading of a number of typical essays as laboratory material for a study of technic and

\section*{127. Selected Plays of Shakespeare-Four hours.}

The life of Shakespeare and a literary study of the plays which are approriate for high school use, with a proper amount of attention to the method of teaching. Shakespeare in high schools. Some account of the theater in Shakespeare's time.

\section*{132. The Development of the Novel-Four hours.}

The development. technic and significance of the novel.

\section*{133. The Recent Novel-Four hours.}

The reading of ten typical novels of the past five years for the purpose of observing the trend of serious fiction; to study the social, educational and life problems with which the novelists are dealing.

\section*{134. Modern Plays-Four hours.}

Reading and class discussion of thirty plays that best represent the characteristics, thought-currents and the dramatic structure of our time.

Note: Only two of the courses numbered 125, 126, 132133 and 134 will be given. These will be the two for which there seems to be the greatest demand.

\section*{GRADUATE COURSES}

Graduate students may take any course in the Department of Literature and English numbered above 104.
230. Conference Course-This course is intended to cover special study in collecting material for the thesis required for the degree of Master of Arts/ in the department of English. The assignments will of necessity be made individually to each student preparing a thesis.

\section*{MATHEMATICS}

There has been a rather wide-spread idea among school administrators that anyone with a knowledge of subject matter could teach mathematics. As a result we have in many of our schools specialists in English, History, Latin, and various other subjects assigned to take classes in Algebra and Goemetry. This again has led to some severe statements as to the value of the whole subject of mathematics in the secondary schools. What we need is a great number of teachers trained to teach mathematics as it should be taught.

The aim of every course given here is to train students to go out and teach this ancient branch of science so that it will have the very highest value to the one taught.

\section*{Solid Geometry-First half or full quarter. Four hours.}

\footnotetext{
This course takes up the ordinary theorems of solid geometry and at the same time emphasizes the main points to be kept in mind by the teacher in presenting the subject of geometry.
2. Plane Trigonometry-First half or full quarter. Four hours.

Of all the secondary mathematics subjects trigonometry presents the greatest number of contacts with actual problems outside of the classroom. This fact is used in presenting the subject here. The surveyor's transit and chain are used freely,
}

\section*{5. College Algebra-Either half or full quarter. Four hours.}

The work begins with a review of the work of elementary algebra with special attention to a clear understanding of the principles involved. The needs of those who expect to teach high school algebra are constantly kept in mind.
6. College Algebra-Either half or full quarter. Four hours.

This course deals with the more advanced topics such as theory of equations, determinants, series, etc.
7. Analytic Geometry-First half or full quarter. Four hours.

Modern high school algebra is of such a nature that no teacher of this subject can come anywhere near reaching full efficiency without a knowledge of analytics. This course gives a clear logical treatment of the subject that can be easily mastered in a quarter's work.

8b. The Teaching of Arithmetic-Two hours. Second half quarter.
This course takes up a discussion of the recent tendencies in the teaching of arithmetic. It attempts to give those things which will actually help the teacher in presenting arithmetic in the class room.

8a. Junior High School Mathematics-Two hours. First half quarter.

The formation of the Junior High School has given rise to a great deal of discussion as to just what sort of mathematics should be taught in the seventh and eighth grades, in particular, and just what methods should be used. This course is given over to a study of these questions from the standpoint of the practical teacher.
100. The Teaching of Secondary Mathematics-Two hours. Second quarter.

In this day of unrest and progress the teacher who stands still is soon far behind his fellows. The object of this course is to consider the recent developments in the teaching of Secondary Mathematics and to give such suggestions and help as will make the teaching of algebra and geometry vital.
101. Differential Calculus-First half or full quarter. Four hours.

It is in the subject of calculus that the student gets his first real glimpse of the almost unlimited power of mathematics. To the teacher of even secondary subjects it gives an inspiration and a breadth of view that means much for his success in the class room. The course as here given covers the usual fundamentals of differential calculus.
102. Integral Calculus-First half or full quarter. Four hours.

This course deals with the problem of integration and its many applications.

More advanced work in the field of mathematics may be arranged for by consultation with the head of the department.

\section*{MUSIC}

The courses offered by the department are of two kinds:
(a) Courses which are elementary and methodical in their nature and meant to provide comprehensive training for teachers of vocal music in public schools.
(b) Courses which treat of the professional, historical, literary, and esthetic side of music, or for those who wish to become supervisors or professional teachers of vocal and instrumental music.

\section*{PRIVATE INSTRUCTION}

The conservatory offers instruction in voice, piano, violin, orchestral and band instruments. Send for special music bulletin.

Student recitals are given which provide the students an opportunity to appear in public recitals. Operas are produced annually by the students.

The Philharmonic Orchestra is a symphony orchestra of fifty members, comprised of talent from the school and community, which gives bi-monthly concerts. The standard symphonic and concert compositions are studied and played. Advanced students capable of playing the music used by the organization are eligible to join upon invitation of the director.

The college orchestra and band offer excellent training for those interested.

The annual May Festival gives the students opportunity to hear one of the greatest orchestras and to study one of the standard oratories presented at that time.

The Teachers College Choral Union presents programs during the year, its closing program being the oratorio given during the Spring music festival. All pupils registered in the Conservatory of Music are eligible for the chorus.

The courses in Instrumental and Vocal Music will be arranged to suit each individual student in consultation with the director.
1. Sight Reading-Five periods. 3 hours. First half.

A course designed for those who wish to become proficient in the rudiments of music and in singing music at sight. A course for beginners. A required course for majors in music.
2. Tone Thinking and Melody Writing-Second half. Five periods. 3 hours.

Introductory course to beginning harmony. Required of all music majors.
3. Introductory Harmony-First half. Five periods. 3 hours.

The writing of melodies and harmonization of same. Required of music majors. Pre-requisite Music 2.
4. Advanced Harmony-Second half. Five periods. 3 hours.

Continuation of Music 3. Required of majors in music. Pre-requisite Music 3.
10. Primary Methods-First half. Five periods. 3 hours.

The teaching of rote songs. How to help monotones, the care of the child's voice. The forming of the repertoire of songs that will be useful out of school as well as in the school. Methods for the first, wecond and third grades. Required of public school majors. Pre-requisite Music 1, 2.
11. Intermediate Methods-Second half. Five periods. 3 hours.

Methods for fourth, fifth and sixth grades. Problems of these grades are considered and practical solutions are offered. Required of all music majors.
Pre-requisite Music 1, 2.
20. History of Ancient and Medieval Music-First half. Five periods. 3 hours.

A cultural course open to all students. From earliest music up to and including Beethoven. Required of majors in music.
21. Modern Composers-Second half. Five periods. 3 hours.

The lives of the composers are studied and the student will become acquainted with the beauty and style of their composition, through the aid of the phonograph and the player piano. Required of majors in music.
22. Appreciation of Music-First half. Five periods. 3 hours.

This course is offered to those who desire to acquire a greater love for good music. The phonograph is used to present the instruments of the Orchestra in solo and in combination. A graded course for the public school is given.
23. Musical Literature-Second half. Five periods. 3 hours.

The best music will be presented and a thorough knowledge of the form of oratorio and opera and other styles of music will be obtained.
30. Individual Vocal Lessons-Full quarter. One-half. One hour.

Correct tone production, refined diction and intelligent interpretation of songs irom classical and modern composers. To arrange for lessons consult head of voice department.
31. Individual Piano Lessons-Full quarter. One-half period. One hour.

Piano work is arranged to suit the needs and ability of the individual. To arrange for lessons consult the head of the piano department.
32. Individual Violin Lessons-Full quarter. One-half period. One hour.

The work will be outlined according to the ability of the student. To arrange for lessons consult the head of the violin department.
33. Individual Pipe Organ Lessons-Full quarter. One-half period. 1 hour.

The work will be outlined according to the ability of the student. The work presupposes some knowledge of the piano. To arrange for lessons consult the head of the organ department.
34. Class Lessons in Voice-Full quarter. One-half period.

Two lessons a week. Lessons will be given to groups of ten. Twentyfive cents will be the charge to each student. This course is of interest to all teachers who expect to have charge of music in the schools under supervision.
35. Class Lessons in Violin-Full quarter. One-half period.

Two lessons a week. Classes will be organized in groups of ten. A course for beginners.
40. Orchestra-Full quarter. One period. 1 hour.
41. Band-Full quarter. One period. 1 hour.
42. Glee Club-Full quarter. One period. 1 hour.
101. Chorus Singing-Full quarter. One period. One hour.

Worth while music and standard choruses are studied and prepared to present in conct.
103. Counterpoint-Full quarter. Three periods. 3 hours.

The principles of harmony are here applied to polyphonic writing.
105. Form and Orchestration-Full quarter. Three periods. 3 hours.

> The principles of composition in the larger forms are studied and the various instruments of modern orchestras are described. Beginning arranging for orchestra. Pre-requisite, Music 101.
110. Supervisor's Course-First half. Five periods. 3 hours.

Material for all grades up to and including Junior and Senior High School will be presented and an opportunity given to members of the class for conducting. Required of majors in public school music. Pre-requisite, Music \(1,2,3,4,10,11\).
120. School Entertainments-Second half. 4 periods. 2 hours.

Practical programs for all occasions. Thanksgiving, Christmas, etc. Quarter concludes with some operetta suitable for use in the grades.
130. Individual Vocal Lessons and Methods-Full quarter. One-
period. 1 hour. half period. 1 hour.
131. Individual Piano Lessons and Methods-Full quarter. One-
period. 1 hour. half period. 1 hour.
132. Individual Violin Lessons and Methods-Full quarter. Onehalf period. 1 hour.
133. Individual Pipe Organ Lessons and Methods-Full quarter. One-half period. 1 hour.

\section*{PRACTICAL AND INDUSTRIAL ARTS}

The Practical Arts Division includes industrial arts, fine and applied arts, and commercial arts. The courses are varied and are organized especially along lines dealing with the technical phases of practical arts education, opportunity being given for study along historical, practical and theoretical lines. An excellent training department, housed in the Training School building, gives full opportunity to put into practice in a teaching way the ideas presented in the various courses. This gives an opportunity for the individual students not only to become acquainted with the underlying principles in the work, but also the added advantage of teaching these branches in the Training School under expert super-
vision.

\section*{WOODWORKING, DRAFTING, PRINTING, AND BOOKBINDING}

The Woodworking, Drafting, Printing, and Bookbinding Departments of State Teachers College are the most modern departments to be found in the Middle West. The departments occupy the first and second floors of the Guggenheim Hall of Industrial Arts. The rooms are large, well ventilated and well lighted. The students in these departments are never crowded for room or hindered in their work from lack of equipment. All equipment is of the latest and best type and is always kept in firstclass working condition. It is the aim of the departments to employ methods in woodworking, drafting, printing, and bookbinding as thorough and practical as are to be found in the regular commercial shops.
5. Vocational Education-Required of all Majors in Industrial Arts. Commercial Arts, and Fine and Applied Arts. Four hours. Either half or full quarter.

The course deals with the historical development and the fundamentals of teaching practical arts subjects in their relations to other subjects of the school curriculum and their application in future activities that the child will enter.
1. Elementary Woodwork-Four hours. Fee \(\$ 2.00\). Either half or full quarter.

This course is arranged for those who have had no experience in woodworking and is designed to give the student a starting knowledge of the different woodworking tools, their care and use. The construction of simple pieces of furniture is made the basis of this course.
2. Intermediate Woodwork-Majors. Four hours. Fee, \$2.00. Either half or full quarter.

This course is a continuation of Course 1 and is designed for those who wish to continue the work, and deals with more advanced phases of woodworking.

\section*{19. Wood Turning-Four hours. Fee \(\$ 2.00\).}

The aim of this course is to give the student a fair knowledge of the woodworking lathe, its care, use and possibilities. Different types of problems will be worked out such as cylindrical work, working to scale, turning duplicate parts, turning and assembling, the making of handles and attaching them to the proper tools. Special attention will be given to the making of drawings such as are used in ordinary wood turning.
12. Elementary Architectural Drawing-Four hours. Either half or full quarter.

This course includes the making of complete designs of simple one-story cottages together with details and specifications of same.
117. Elementary Machine Design—Four hours. Either half or full quarter.

This course includes sketches, drawings and tracings of simple parts, such as collars, face plates, screw center, clamps, brackets, couplings, simple bearings and pulleys. Standardized proportions are used in all drawings.
118. Advanced Machine Design-Four hours. Either half or full quarter.

A study is made of the transmission of motor by belts, pulleys, gears and cams. Sketches, details and assembled drawings are made of valves, vises, lathes, band saws, motors and gas or steam engines.

8b. Art Metal-Four hours. Either half or full quarter.
A continuation of 8 a . The course in general includes the designing and executing of simple, artistic jewelry pieces, such as monograms, simple settings of precious stones, and the development of advanced artistic forms of copper.
109. Advanced Art Metal-Four hours. Either half or full quarter.

The base for this course is the designing, making and finishing of artistic jewelry in semi-precious and precious metals, including all the steps that are fundamental in stone setting and finishing.
201. Seminar-Four hours. On demand. Either half or full quarter.

Individual research work in the field of practical arts. Problems to be selected upon consultation.

This is a conference course. Conference hours will be arranged to meet the demands of students.

Note: Other courses listed in the regular Year Book not listed in the Summer Catalog may be taken by special arrangement with departments in which courses are offered.

\section*{PRINTING}

1a. Elementary Printing-Four hours. Either half or full quarter.
The aim of this course is to acquaint the student with the various tools and materials of a print shop and to teach him the fundamentals of plain typecomposition. He will carry simple jobs through the various stages from composition to making ready and printing on the press.

\section*{2a. Intermediate Printing-Four hours. Either half or full quarter.}

A continuation of elementary printing with a view to making the student more proficient in the fundamentals of the art. The principles of typographic designs will be studied in the designing and composing of letter-heads, tickets, programs, etc. Color study in selection of papers and inks.

3a. Advanced Printing-Four hours. Either half or full quarter.
A continuation of the study of typographic design in the laying out and composition of menus, title, and cover-pages, advertisements, etc. Impositions of four and eight-page forms, advanced press work and a study of plate and paper making will be given.
4. Practical Newspaper Work-Four hours. Either half or full quarter.

The various processes incident to the printing of a newspaper will be performed by the student in this course.

Other courses found in Year Book on demand.

\section*{BINDING ART AND LEATHER CRAFT}

1a. Elementary Bookbinding-Four hours. Either half or full quarter.

This course includes the following: tools, machines, materials and their uses, collating and preparing their sheets for sewing, sewing on tape and cord, preparing end sheets, trimming, gluing, rounding and backing, head-binding, banding and preparing backs for covers, selecting cover materials, planning and making of covers, and all steps necessary for the binding of full cloth, buckram and paper bindings, having spring or loose backs; also the binding of one-quarter loose and tight back leather bindings with plain and fancy edges. The making of small boxesi writing pads, memoranda books, leather cases, cloth portfolios and kodak albums.

1b. Elementary Bookbinding-Four hours. Either half or full quarter.

A continuation of Bookbinding 1a.
1c. Elementary Bookbinding-Four hours. Either half or full quarter.

A continuation of Bookbinding 1b.
2a. Intermediate Bookbinding-Four hours. Either half or full quarter.

This course includes the binding of books in half leather, half morocco, cowhide, calf, sheep and fancy leathers; also the planning and making of full leather travelers' writing cases, music cases and art leather work.

2b. Intermediate Bookbinding-Four hours. Either half or full quarter.

A continuation of Bookbinding 2a.
2c. Intermediate Bookbinding-Four hours. Either half or full quarter.

A continuation of Bookbinding 2b.
3a. Advanced Leather Craft Art Work-Four hours. Either half or full quarter.

This course is a review of both of the other courses in higher grade work and construction. Full leather bindings with raised panels is given in this course. Gilt edging, fancy edges, including starch and agate edges.

\begin{abstract}
Finishing in antique and gold, hand lettering in all its phases, tooling in gold and antique, stamping by stamping machines on cloth, leather and other materials in blind, gold and other metals and foils.
\end{abstract}

Other courses found in Year Book on demand.

\section*{PHYSICS}

The various courses to be given by the Physics. Department have a double purpose in view; first, to give the students an adequate knowledge of theoretical and applied physics; second, to develop in close cooperation with the students more efficient methods of teaching this subject in secondary school and college. Although the former is essential, the latter constitutes the problem proper in a teachers college.

In our century of intense industrialism, the role of physical science has become of such importance that its place in the public school curriculum ought to be carefully reconsidered. The Physical Department of Colorado State Teacher's Colleke is, therefore, facing the two-sided problem.
1. What ought to be the purpose and the organization of physics teaching in a progressive school?
2. What ought to be the best organization of physics teaching under existing conditions?
These two sides of the problem will constantly be kept in view in all courses given by the Physics Department. In these courses topic, problem and project methods will be combined in such a way as to allow the classroom to be organically absorbed by the laboratory. Then only will the motivation become natural; the students will then find a motive where they used to find a text book. Moreover, the students will be placed in the atmosphere of actual teaching in full co-operation with the Physics Department. "Red-letter lessons will be both practiced and observed by the students. This will force them to lead, so to speak, a treble existence: that of a college student, that of a high school pupil, and that of a teacher.

Such is our purpose, our main problem, to which will be subordinated all other purposes, however interesting or useful in themselves.

The two sides of the problem, if correctly approached, will give ample opportunity to the initiative and originality of the students in organizing their own work.

The problem of teaching physics, if correctly solved, will put into their hands a powerful instrumentality for imparting to their own pupils "the methods of experimental inquiry and testing, which give intellectual integrity, sincerity and power in all fields of human activity"; it will moreover, enable them to arous the somewhat slow enthusiasm of the high school pupil for this master science of our century.

\section*{108. Methods of Teaching Physics in Elementary and High SchoolsTwo hours. First half quarter.}

This course is intended for teachers of both Physics and General Science. Its main purpose is the organizatiuon of projects, experiments and "red letter" lessons in elementary physics.
109. Physics of Every Day Life-Either half or full quarter. Two hours credit for each half quarter.

This course is mostly practical. Experiments and projects will include photography, telephone, lighting and heating apparatus, electric and gas motors, wireless, etc.
111. Projects Based Upon the Study of the Automobile.-Two hours. Either half or full quarter.

This course, altho practical, will not enter into the narrow technicalities of a trade school course. The reason why this course is given lies not only in the importance acquired by the automobile in our every day life, but also in the multiplicity of physical principles involved in the gasoline engine, upon which many interesting experiments and projects can be organized. The laboratory is well equipped for this course.

\section*{201. The New Rays.-Two hours. Each half quarter.}

This course will include the study of rays of the invisible spectrum, of cathode rays, X-rays, canal rays, as well as the study of radio activity of alpha, beta and gamma rays, etc. This course includes laboratory work.

\section*{121. Projects Based Upon the Study of Direct and Alternating Cur-rents.-Two or four hours. Either half or full quarter.}

\begin{abstract}
This course will enable the prospective teacher not only to understand the working of electrical instruments and machinery, but to organize electrical experiments which will be most stimulating to the high school or college student. The course will be accompanied by problems, experiments and projects on D. C. and A. C. generators, motors, telephone, telegraph, wireless, etc.
\end{abstract}
202. The Evolution of Modern Physical Theories-Two or Four hours. Either half or full quarter.

This course will begin with the Newtonian concept of the universe and follow the evolution of theories of light, heat and electricity. It will include elements of the electro-magnetic theory of light, the electron theory and radioactivity as well as an outline of the theory of relativity.
203. Organization of Projects in High School Physics.-Two or Four hours. Either half or full quarter,

This course will be of special interest to high school teachers of Physics.
Special courses on any phase of Physics may be given on demand, as the physics laboratory has been substantially enlarged, provided the number of students is not less than 6.

\section*{SOCIOLOGY}

This department regularly offers a series of courses in Sociology, Anthropology and Economics. While designed primarily to meet the practical needs of elementary and high school teachers, supervisors, administrators and social workers, the courses are so arranged as to provide a special preparation for the teaching of the subjects named, and for a liberal training in the field of social thought. A full four-year course is offered.

As a knowledge of sociology is commonly regarded as a necessary
basis of educational theory and practice, courses specially adapted to supply such basis, and to render practical assistance to all grades of teachers, are given in the Summer Quarter. The specific courses offered for the quarter beginnin gJune 12, 1923, are as follows:
1. An Introduction to the Social Sciences-Three hours. Full quarter.

A general conspectus of social evolution, with emphasis upon the origin and development of man, races, language and literature, the sclences, the arts, the state, government, religion, etc. Students are advised to take this course before taking any others in sociology.
3. Educational Sociology-Three hours. Either half. Required of all first year students.

This course presents the sociological conception of education with certain sociological principles and their application in education. Text and special readings.
105. The Principles of Sociology.-Four hours. Full quarter. Required of third year students.

This course is a study of the scope and history of sociology, sketches of the leading contributors to this science, and an exposition of its main principles as set forth systematically in a selected text. Lectures, readings, and reports.

\section*{130. Social Psychology-Two hours. Second half.}

A study of suggestion and imitation, crowds, mobs, fads, fashion, crazes, boons, crises, conventionality, custom, conflict, public opinion, etc. Text, Ross \({ }^{6}\) Social Psychology.

\section*{209. Seminar in Sociology.-Four hours. Full quarter.}

Only graduate students or those capable of doing graduate work will be admitted to this course. The exact nature of the work will be determined after consultation with the class, but it will probably be a study of the means, methods and possibilities of the conscious improvement of society.

\section*{132. The Family.-Three hours. Full quarter.}

A study of the conviction of the family with emphasis on the modern situation. Particular attention will be paid to the relationship of the family to education, industry and ethics.
110. Economics.-Three hours. Full quarter.

A course based on Seager's "Principles of Economics" and covering, in addition to the Principles of Economics, the subjects of the Industrial Revolution in England, the Industrial Expansion of the United States, Tariff, Monopolies, Railroads, Profit Sharing, Trusts, Taxation, the Labor Movement and Legislation, Social Insurance and Socialism.

\section*{THREE SPECIAL COURSES OF LECTURES}

The college is making it possible this year for all students to avail themselves of the large opportunity to hear the eminent teachers and lecturers who are brought from other colleges, universities and vocations. All students may hear both courses of lectures without interfering with their regular programs of sixteen hours. One series of the open day lectures will be given at eleven o'clock and the other at twelve. Attendance at the day lectures is voluntary. Attendance at the evening general assembly of the College is required of all students.

\section*{CREDIT FOR THE GENERAL LECTURE COURSES}

Credit for general lecture courses is not transferable to other colleges. There is no accurate or dependable way of knowing whether a student has attended with sufficient regularity or listened with the attention and profit that would warrant granting credit for such courses. Credit for lecture courses breaks up the student's regular sixteen-hour program. For these reasons and upon the request of many students the credit for such courses is discontinued.

The College Assembly and Evening Lectures:-For twelve years the college has maintained a general lecture course with a series of lectures by the most eminent teachers and lecturers obtainable. This annual series of lectures through these years has been the means, for thousands of progressive teachers of keeping in touch with the newest developments in the evolution of educational philosophy and practice, from year to year. Up to this year credit for attendance upon these lectures has been given. This is not customary in other colleges. The fact that we have done this rather unusual thing has led some colleges to the belief that Colorado Teachers College is not maintaining credit standards in other particulars. The college is now in every way upon a credit basis equal to that of any teachers' college, liberal arts college or university of the United States. Discontinuing credit for general lectures is the final step in reaching that level. Many students doubtless deserve credit for general lectures, but there is no way of measuring what students get from these lectures to determine who should and who should not have credit.

Attendance at the evening assembly of the college will, as in the past, be required of all students. This assembly and lecture course is the one means of developing and maintaining the enviable spirit and intellectual unity of the College and must not be sacrificed or abandoned. Students who neglect this opportunity of keeping in touch with educational progress find themselves out of sympathy with the aims and the life of the College. Unexcused absence from the evening assembly will be regarded as indicating a lack of interest in the purpose of the College and will justify withholding credit in the credit courses.

The lectures for 1923 are up to the high standard set for them in previous years. The lecturers are: Edward Howard Griggs, John W. Withers, Dallas Lore Sharp, Edward A. Steiner, Earl D. Bruner, Emanuel Sternheim, William Mather Lewis, Cora Wilson Stewart, John Adams (University of London), Thomas C. Trueblood, and others equally eminent.

The Open Lecture Courses-The visiting eminent teachers and lecturers will conduct two open lecture courses on Mondays, Tuesdays,

Wednesdays and Thursdays of each week in Room 200 of the Administration Building. Each lecturer will speak to a select audience upon the topic of his special interest and will be able with the smaller audience interested in his particular subject to give more careful and scholarly attention to his theme than is possible with the larger audience of many and varied interests which will hear him at the evening general assembly. A student may attend all of the lectures of the whole series, or only those of the lecturer or lectures in whom he is especially interested. A student who has a class at eleven or twelve on certain days of the week may attend these open lectures on the days when the class does not meet, even if he has only one day per week open to attend the lecture course.


\footnotetext{
A guide to Greeley, showing the location of the streets and their relation to the College. Student securing rooms within the area shown will be within walking distance of the College
}

\section*{Colorado}

\section*{State Teachers College}

GREELEY, COLORADO

\section*{SUMMER QUARTER, 1923}

\section*{The Calendar}

June 12, Tuesday-Registration Day for the Summer Quarter. June 13, Wednesday-Classes begin.

A fee of two dollars is collected for late registration-after Tuesday, June 12.

July 18, Wednesday-The first half of the Summer Quarter closes.

Students, if possible, should enroll June 12 for the full quarter, but they have the privilege of enrolling for either half quarter independent of the other. Many courses run through the first half quarter only. Some run through the second half quarter only. Most of the courses, especially the required courses, must be taken throughout the whole quarter before any credit will be given.

Normal hours of credits: Either half quarter, 8 hours; full quarter, 16 hours.

July 19. Thursday-New enrollment for the second half quarter. Classes begin.

August 23, Thursday-The Summer Quarter closes. Graduation Day.

\title{
COLORADO STATE TEACHERS COLLEGE BULLETIN
}

\section*{PROGRAM OF COURSES}

\author{
FOR THE \\ SUMMER QUARTER, 1923
}

Every student should read the Instructions Concerning Registration before attempting
to make up a program for the quarter

\section*{INSTRUCTIONS CONCERNING REGISTRATION}
1. ALL COURSES FOR CREDIT.-There are no non-credit courses except Phys. Ed. 118. This is taken by students who are exempted from active exercise by the Physical Director upon the recommendation of the College physicians.
2. STUDENT PROGRAM SIXTEEN HOURS.-The normal program of a student is sixteen hours, eight hours for a half quarter. Students whose outside work takes up a considerable part of their time should enroll for twelve to fifteen hours. Any student may make up a program of fifteen, sixteen, or seventeen hours; but if seventeen hours are taken in one quarter fifteen must be taken at a later quarter, so that any three consecutive quarters may not average more than sixteen hours. Those wishing to take seventeen or eighteen hours must take the Extra Hour Test, given at 1:30 p. m. on each registration day in Room 214.
3. TIME AND PLACE FOR REGISTRATION.-All registration takes place in the Gymnasium from 8:00 to \(12: 00\) and from \(1: 00\) to \(4: 00\).
4. LATE REGISTRATION.-A fee of \(\$ 2.00\) is charged for registration after the regular day for registration. Students more than two days late will have their programs cut in proportion to the time they miss from recitations.
5. ORDER OF REGISTRATION.-Present your credentials and get your materials for registration. Study the catalog and program very carefully and then make up a trial program. Take this to the head of the department in which you are majoring. After having your trial program approved by your adviser, take ample time to fill out neatly and carefully your program card and class cards. Fill all the blanks except those for the signature of officers and teachers. Present these cards to your adviser for final inspection and signature. Then go to the Registrar, and finally, pay your fees.
6. UNCLASSIFIED STUDENTS.-Students who can fully meet the requirements for admission may enroll as unclassified students until they are ready to choose a major subject for specialization. Many first year students should remain as unclassified for the first quarter while they are learning the ways of the College and making up their minds as to a major subject.
7. PROGRAM CHANGES.-Changes in students' programs may be made for good reasons during the two days following the registration days. These changes are made by the Registrar.
8. PHYSICAL EDUCATION.-All freshmen and sophomores, including the unclassified students who expect later to become classified, are required to take an active exercise course in physical education each quarter in residence


\section*{STATE HIGH SCHOOL OF INDUSTRIAL ARTS}

Secondary Training School of State Teachers College
Series XXII

\section*{MARCH}

Number 12

\section*{FACIITY}
J. G. CRABBE, LL.D.. President
W. D. ARMENTROUT, A.M., Director of Training Schools
A. E. BROWN. A.M.. Principal of High School. Instructor in General

HAL. G. BLUE, A.B., Instructor in Physical dieography and General Methods MARK BURROWS, A.B., Professor of liural Education, Instruetor in Management
NELLE C. CRATES, A.M., Instructor in Modern Languages
JOSEPHINE HA WES, A.M., Instructor in Grammar and English
W. H. HARGROVE, B.S., Instructor in History of Agriculture

FRED L. HERMAN, B.S., Instructor in Science
ARTHUR E. MALLORY, A.B., Instructor in Mathematics
OUCY N. Mct.ANE, A.B., Instructor in English and Public Speaking
ORA B. PEAKE, A.M., Instructor in History
College instructors conduct a number of courses which are open to mature high school students.

\section*{Foreword}

The Summer Quarter of the State High School of Industrial Arts is designed to serve two rather distinct classes of students. One group consists of adults who have not completed their high school education. Many teachers who have been denied high school opportunities find in the School of Reviews an opportunity to go forward with high school work, and at the same time add to their proficiency as teachers. The other group consists of young people of high school age who desire to spend the summer vacation in profitable work counting toward their graduation.

\section*{THE SCHOOL OF REVIEWS}

The School of Reviews is a special feature of the State High School of Industrial Arts. It is the summer phase of the Ungraded School for Adults. The Ungraded School for, Adults attempts to provide educational opportunity for people who have reached the age of maturity without having completed their high school education. For various causes young people often discontinue their high school work before they complete the four years course, and many of these people after their experience in fighting the battle of life discover that a high :school education is very desirable for purposes of success and self-realization. To such persons the Ungraded School for Adults is indeed a boon. They are admitted with deferred classification and when their ability has been demonstrated they may be allowed some credit for such life experience as appears to have been of educational value.

The following opportunities are to be found in the school of Reviews:
1. Opportunity to obtain credit toward high school graduation.
2. Opportunity to pursue review courses giving both a firmer grip of subject matter and an expanded view of the subjects of instruction.
3. Opportunity to receive instruction in improved methods of presentation of subject matter.
4. Opportunity to take some work along cultural lines, and to enjoy the cultural advantages of a collegiate institution.

\section*{THE COURSES}

The following are some of the subjects of special interest to students in the School of Reviews: Primary Methods, Intermediate Methods, Art for Primary Grades, Art for Upper Grades, Methods of Teaching in Elementary Schools, School Management, Review of Grammar, Review of Arithmetic, Review of American History, Review of Science and Review of Civics.

Only four subjects are permitted, unless the individual passes the intelligence examination.

Those who care to do so may take some academic subjects such as English, History, Mathematics, Science, Commercial subjects, Language, etc.

The requirements for graduation from the School for Adults are as follows:
1. A total of sixteen units required.
2. At least two units of English.
3. Four additional units from the group consisting of English, Mathematics, History, and Science.
4. A total of nine academic units to be required.
5. Not more than four units credit to be allowed for experience.
6. The intelligence test may be allowed to stand for not to exceed four units.
7. Credits in blocks of less than four hours will not be accepted beyond an aggregate of ten hours or two-thirds of a unit.
8. Regardless of the number of credits presented, residence work of one quarter will be required.

\section*{THE REGULAR HIGH SCHOOL COURSES}

During the summer regular high school work is maintained in most of the high school subjects. This gives an opportunity for those to study who prefer to use a part of their summer vacation for that purpose. It also gives an opportunity for those who have some deficiency in their high school work to make up such deficiency. The work will be of the same high quality that is required through the other quarters of the school year. Classes will be maintained in Mathematics, English, History, Science, Art, Commercial subjects, Home Economics, Languages, Mechanical Drawing, Manual Training. Art Metal and Printing. The State High School of Industrial Arts has a high standing as is shown by the fact that it is accredited by the University of Colorado and by the North Central Association of Colleges.

The requirements for graduation from the State High School of Industrial Arts are as follows:

(The term minor refers to two units of work done in proper sequence in a department or in related subjects such as two years of Science, two years of Latin, etc.)

\section*{FEES AND OTHER EXPENSES}

The fees for High School students and for the School of Reviews are as follows


Students who have been in attendance at the State High School of Industrial Arts during the school year \(1922-23\) will be charged the regular rate of \(\$ 4.00\) per quarter.

Other expenses average as follows:
\begin{tabular}{|c|c|}
\hline Board & \$60.00 \\
\hline Room & 25.00 \\
\hline Books & 5.00 \\
\hline
\end{tabular}

\section*{RECREATION}

A number of tennis courts are provided for those who like this form of pastime and recreation, and arrangements are made for other outdoor games, hikes, etc. And there are entertainments, musical and dramatic- in fact, nothing is left undone to make the life of a student pleasant from every standpoint.

A very large number of the teachers attending the Summer Quarter at Colorado State Teachers College take advantage of the opportunity afforded each week-end for trips into the Rocky Mountain National (Estes) Park. Automobiles leave the College campus every Friday afternoon during the quarter for the Park, only fifty-five miles away. They spend Friday night, Saturday, and Sunday there, at home in Colorado Teachers College Camp. A comfortable place is provided for sleeping and eating, and at a very small cost.

\section*{THE SUMMER QUARTER CALENDAR}

Registration begins on Tuesday, June 12. Classes begin Wednesday, June 13. The first half of the Summer Quarter closes Wednes day, July 18. The second half begins Thursday, July 19. The Summer Quarter closes, Thursday, August 23.

For further information concerning the Summer Quarter write A. E. Brown. Principal State High School of Industrial Arts, Greeley, Colorado.
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[^0]:    *On leave.

[^1]:    *Regular college fees will be waived for the holder of any graduate scholarship.

[^2]:    Prerequisites for 108 and 109 are 1, 2, 3, or 4, 5, 6. Recommended to students specializing in biology or physics.
    110. Organic Chemistry-Four hours. Fall Quarter. Fee, $\$ 4.00$.

    Two lectures and two laboratory periods. Same text book work as Course 108 but more extensive laboratory work.
    111. Organic Chemistry-Four hours. Winter Quarter. Fee, $\$ 4.00$.

    Two lectures and two laboratory periods. A continuation of Course 110. Prerequisite for Courses 110 and 111 are Courses 4, 5, 6.
    112. Food Chemistry-Three hours. Spring Quarter. Fee, $\$ 3.00$.

    Two lectures and one laboratory period. A study of foods, detection of adulterants, metabolism and dietary lists. Recommended as a general cultural course. Prerequisite for 112 is 1, 2, 108 and 109.

[^3]:    *Students in this course may receive the Life Certificate to teach in Colorado at the end of the second year of the above course by electing eight to eleven hours of observation and teaching in the second year and by transferring Pysch. 2a, Pysch. 2b, to the first or second year instead of certain other subjects scheduled for those years. The student should understand, however, that she does not meet the requirements for a position in a Smith-Hughes high school until she has completed the full curriculum of four years.

