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Colorado State Teachers College
Bulletins
1918 - 19
Series 18
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STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

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THIS VOLUME was bound in the
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TEACHERS COLLEGE

By HELEN V. FENION

WINTER Quarter, 19 20

Colorado State Teachers College *Bulletin*

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APRIL, 1918

NUMBER 1

YEAR BOOK AND CATALOG

1918-1919



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Announcements and Catalog of Courses

FOR THE YEAR 1918-1919

CATALOG

of the Faculty for 1918-1919
and of Students for 1917-1918

AND

Announcement of Courses for 1918-1919

PUBLISHED JUNE 15, 1918



STATE TEACHERS COLLEGE
Greeley, Colorado

1918

CALENDAR

1918

	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Jan.	1	2	3	4	5	6	7	May	1	2	3	4	5	6	7	Sept.	1	2	3	4	5	6	7
Feb.	8	9	10	11	12	13	14	June	8	9	10	11	12	13	14	Oct.	8	9	10	11	12	13	14
Mar.	15	16	17	18	19	20	21	July	15	16	17	18	19	20	21	Nov.	15	16	17	18	19	20	21
April	22	23	24	25	26	27	28	Aug.	22	23	24	25	26	27	Dec.	22	23	24	25	26	27	28	29

1919

CALENDAR

1919

	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Jan.	1	2	3	4	5	6	7	May	1	2	3	4	5	6	7	Sept.	1	2	3	4	5	6	7
Feb.	8	9	10	11	12	13	14	June	8	9	10	11	12	13	14	Oct.	8	9	10	11	12	13	14
Mar.	15	16	17	18	19	20	21	July	15	16	17	18	19	20	21	Nov.	15	16	17	18	19	20	21
April	22	23	24	25	26	27	28	Aug.	22	23	24	25	26	27	Dec.	22	23	24	25	26	27	28	

THE COLLEGE CALENDAR

FALL QUARTER, 1918

- Sept. 30, Monday—Registration Day for the Fall Quarter.
- Oct. 1, Tuesday—Classes begin.
- Nov. 28 and 29, Thanksgiving Recess.
- Dec. 20, Friday—The Fall Quarter ends.

WINTER QUARTER, 1918

- Jan. 6, Monday—Registration for the Winter Quarter.
- Jan. 7, Tuesday—Winter Quarter Classes begin.
- March 20, Thursday—Winter Quarter ends.

SPRING QUARTER, 1919

- March 25, Tuesday—Registration for the Spring Quarter.
- June 11, Wednesday—Commencement Day.

SUMMER QUARTER, 1919

First Half

- June 16, Monday—Registration Day for the Summer Quarter.
- June 18, Tuesday—Classes begin.
- July 4, Friday—Independence Day.
- July 18, Friday—The first half of the Summer Quarter closes.

Second Half

- July 21, Monday—The second half Quarter begins.
- Aug. 22, Friday—The Summer Quarter closes.

FALL QUARTER, 1919

- Sept. 29, Monday—Registration Day for the Fall Quarter.

The Faculty

FRANCIS CRABBE

President

B.S., A.M., Phi Beta Kappa, Ohio Wesleyan University; Pd.M., Ohio University; LL.D., Berea College; Pd.D., Miami University; LL.D., University of Kentucky. Head of Department of Greek and Latin, Flint Normal College; Superintendent of City Schools, Ashland, Kentucky; State Superintendent of Public Instruction of the Commonwealth of Kentucky; President Eastern Kentucky-State Normal School.

FRANCIS LORENZO ABBOTT

Professor of Physical Science

B.S., A.M., De Pauw University; graduate student Johns Hopkins University. Teacher of Science, Fond du Lac High School; teacher of Science, La Junta, Colorado, High School; teacher of Science and Principal of Trinidad, Colorado, High School.

LYLOYD ACKERMAN

Assistant in Biology

Graduate New Jersey Normal School; Pd.M., A.B., Colorado State Teachers' College; three years teacher Colorado Public Schools.

LEVERETTE ALLEN ADAMS

Professor of Biology

B.A., M.A., Kansas University; Ph.D., Columbia University. Museum assistant in Zoology, Kansas University.

MRS. LELA AULTMAN

Training Teacher, First Grade

Pd.B., Pd.M., Colorado State Teachers College. Teacher, City Schools, Trinidad, Colorado; training teacher, Oregon State Normal School; teacher, County Institutes.

GEORGE A. BARKER

Professor of Geology, Physiography, and Geography

B.S., M.S., University of Chicago; graduate scholarship in Geography; Sigma Xi, University of Chicago. Head of the 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.

MARVIN FOSTER BEESON

Assistant Professor of Educational Psychology

A.B., Meridian College; graduate student University of Jena, University of Berlin, University of Grenoble; Ph.D., University of Leipzig. Instructor Royal Viktoria School, Potsdam, Germany; head department of German and French Meridian College; instructor New Mexico Military Institute.

JOHN RANDOLPH BELL

Principal of High School; Professor of Secondary Education

Pd.B., Colorado State Teachers College; Ph.B., M.A., University of Colorado; Litt.D., University of Denver. Principal, City Schools, Alma, Colorado; Principal of Byers School, Edison School, Denver, Colorado.

RALPH T. BISHOP

Assistant Professor of Industrial Arts

Graduate, Western Illinois State Normal School; Special Manual Arts Diploma, Inland Printer Technical School; instructor of Printing, Western Illinois State Normal School; instructor of Printing, Edmonton (Canada) Technical School.

RAE E. BLANCHARD*

Literature and English, High School

Graduate student, Boston Normal School; student, Harvard University; graduate, Lowell Institute; A.B., Colorado State Teachers College. Story telling instructor, Elizabeth Peabody Settlement House, Boston; training teacher, Rice School, Boston; professor of English and Science, Milton, Iowa, High School; teacher, Durango, Colorado, High School.

CHARLES JOSEPH BLOUT

Assistant Professor of Chemistry

Student, Western Normal School, Bushnell, Illinois; student, Lombard College, Galesburg, Illinois; A.B., Hedding College, Abingdon, Illinois; A.M., Iowa Christian College, Oskaloosa, Iowa. Principal, Wataga, Illinois, High School; principal, Denver Normal and Preparatory School; Science instructor, Denver High School; principal, Colorado Chautauqua Summer School, Boulder, Colorado.

*On leave of absence, 1918-1919.

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Flute, Oboe

ALBERT FRANK CARTER

Librarian; Professor of Library Science

B.E., M.E., B.S., M.S., Indiana, Pa., State Normal School; A.B., Colorado State Teachers College. Graduate student, Chicago University; member Colorado State Library Commission. Teacher, Public Schools, Tyrone, Pennsylvania; assistant professor of Mathematics, Botany and Physiography, Indiana, Pa., State Normal School.

ELIZABETH CLASBEY

Instructor in Household Science

Student, Northwestern Normal School, Maryville, Missouri; graduate, Stout Institute; student, University of Colorado; teacher, Savannah Public Schools.

AMBROSE OWEN COLVIN

Professor of Commercial Education

B.C.S., Denver University. Graduate, Commercial Department, Tarkio College; teacher, Stanberry Normal School; teacher, Coffeyville Business College; teacher, Central Business College, Denver; teacher, Cass Technical High School, Detroit.

JEAN M. CROSBY

High School Preceptress; History

A.B., Colorado State Teachers College. Instructor of English, Telluride, Colorado, High School; assistant principal, Industrial Arts High School, Sterling, Colorado.

ALLEN CROSS

Dean of the College; Professor of Literature and English

Student, Southern Illinois Normal School and Cornell University; A.B., University of Illinois; Ph.M., A.M., University of Chicago. Principal, Sullivan, Illinois, High School; Superintendent of Schools and instructor in High School History, Mathematics and English, Sullivan and Delavan, Illinois. Author: "The Short Story," and "Story Telling for Upper Grade Teachers."

GRACE CUSHMAN

Assistant Librarian; Instructor in Library Science

Pd.B. Library Science diploma, Colorado State Teachers College.

LUCY B. DELBRIDGE

Violin

Student under Hunt, Abramowitz, and Geneva Waters Baker. Fifteen years teacher of violin.

HULDA A. DILLING

Training Teacher, Fourth Grade

Graduate, Oshkosh State Normal School; B.E., Teachers College, Illinois State Normal University; graduate student, University of Chicago; teacher, City Schools, Indianapolis, Indiana; critic teacher, Training School, Eastern Kentucky State Normal School.

W. HECTOR DODDS

Reading, High School

A.B., Kansas University. Two years instructor, Greeley High School.

DU PONCET, EDWIN STANTON

Professor of Modern Foreign Languages

Ph.D., University of Grenoble. Instructor in Romance Languages, University of Missouri; instructor in Latin and Greek, Scarritt College, Ozark College and Red River College; professor of French and German, Memorial University; professor of Modern Languages, Southern State Normal School, University of Utah; associate professor of Latin and Spanish, Throop College; professor of Romance Languages, University of Redlands; head, Department French and German, Salt Lake City High School; graduate student at the Universities of Missouri, Michigan, Heidelberg, Buenos Aires, and Grenoble.

GEORGE WILLIAM FINLEY

Professor of Mathematics

B.S., Kansas State Agricultural College. Student, Kansas State Normal School; student, University of Chicago; teacher, County Schools of Kansas; U. S. Army, Spanish-American War; teacher in City Schools, Wauneta, Kansas; principal of schools, Peru, Kansas; head of the Department of Mathematics, Oklahoma University Preparatory School.

—CHARLES M. FOULK

Professor of Manual Training

Student, Edinboro State Normal School; graduate, architectural course, International Correspondence School; Pd.B., Colorado State Teachers College. Building foreman and superintendent in Pennsylvania, Idaho, Colorado, and Washington; conducted classes in Trade Problems in Pennsylvania, Idaho, and Colorado.

HELEN GILPIN-BROWN

Dean of Women

A.B., Colorado State Teachers College. Teacher, Livermore, Colorado; principal, Private School, Fort Collins, Colorado.

RALPH GLAZE

Director of Physical Education

University of Colorado; B.S., Dartmouth College. Two years "end" on Camp's All-American team; played baseball on Boston team; coached Dartmouth, English High School of Boston, athletic director Baylor University; two years University of Southern California; director of playgrounds of Los Angeles; one year Drake University.

ESTHER GUNNISON

Literature and English, High School

Pd.B., A.B., Colorado State Teachers College. Four years teacher Nebraska Public Schools; one year Colorado Public Schools.

SAMUEL MILO HADDEN

Dean of Practical Arts; Professor of Industrial Education

Student, Cooper Memorial College, Sterling, Kansas; Pd.B., Colorado State Teachers College; A.B., A.M., University of Denver; student, Teachers College, Columbia University; student, Chicago University. Training teacher, Sterling, Kansas; teacher, Tawner, Colorado.

CHARLOTTE HANNO

Modern Foreign Languages, High School

Pd.M., A.B., Colorado State Teachers College.

JAMES HARVEY HAYS

Dean Emeritus of the College; Professor of Latin and Mythology

Student, Miami University; student, Geneva College; A.B., A.M., Monmouth College. Principal of High School, Walton, Indiana; principal of High School, Sheldon, Illinois; principal of High School, Connersville, Illinois; Superintendent of Schools, Afton, Iowa; Superintendent of City Schools, Winfield, Kansas.

JACOB DANIEL HELLMAN

Professor of Educational Psychology

Student, M. E. Keystone State Normal School; A.B., Muhlenberg College, Allentown, Pennsylvania; Ph.D., University of Pennsylvania. Author of "A Clinical Study of Retarded Children," author of "A Study in Addition," Harrison Fellow in Pedagogy; assistant in Psychological Clinic and lecturer in Child Study, University of Pennsylvania.

EMMA T. HEMLEPP

Training Teacher, Eighth Grade

Graduate, Eastern Kentucky State Normal School; student, Summer School of the South; student, Kirksville State Normal School; B.S., George Peabody College for Teachers; graduate student, Teachers College, Columbia University. Teacher, City Schools, Ashland, Kentucky; critic teacher, Training School, Eastern Kentucky State Normal School.

LUCILLE G. HILDEBRAND

Latin and Mathematics, High School

B.A., B.E., University of Colorado; Phi Beta Kappa; student, Columbia University. Instructor in English, Horton, Kansas, High School; instructor in English and History, Douglas County High School, Castle Rock, Colorado.

—AGNES HOLMES

Instructor in Industrial Arts

Student, Colorado College Art School; student, New York School of Fine and Applied Arts; Pd.M., Colorado State Teachers College; student, Art Institute and Chicago University.

ELMER A. HOTCHKISS *Director of Training School; Professor of Elementary Education*

B.S., Ohio Wesleyan University; M.A. and superintendent's diploma, Teachers College, Columbia University. Instructor in Physics, Ohio Wesleyan University; Superintendent of Schools, Mechanicsburg, Ohio; Superintendent of Schools, Ashtabula, Ohio; instructor, Miami University; instructor Teachers College, Columbia University; five years Assistant Superintendent of Schools, Cleveland.

WALTER F. ISAACS *Professor of Fine and Applied Arts*

B.S., James Milliken University, Decatur, Illinois; Art Students' League of New York; student, Art Institute of Chicago. Supervisor of art, Jeffersonville, Indiana.

JOHN C. JOHNSON* *Professor of Biology*

A.B., Colorado State Teachers College; M.S., University of California; Sigma Xi; Phi Delta Kappa; student, University of Chicago. Professor of Biology and Agriculture, Colorado State Normal School, Gunnison, Colorado; assistant in Zoology, University of California.

MILDRED DEERING JULIAN *Training Teacher, Kindergarten*

Graduate, Kindergarten Training School, Dallas, Texas; B.S., Teachers College, Columbia University. Kindergarten director, Wesley Settlement, Houston, Texas.

ELIZABETH HAYS KENDEL *Training Teacher, Sixth Grade*

Pd.B., Pd.M., A.B., Colorado State Teachers College; student, Chicago University; student, Columbia University.

JOHN CLARK KENDEL *Director of the Conservatory of Music; Professor of Public School Music*

Pd.B., Pd.M., A.B., Colorado State Teachers College; student, John C. Wilcox; student, John D. Mehan; student, David Abramowitz. Supervisor of Music, Pueblo City Schools.

JOSEPHINE KNOWLES KENDEL *Instructor in Voice*

Student under John C. Wilcox, Louise Clarke Elliot, Kate Norcross Petrikin, Florence Demorest. Eight years teacher of voice and piano; three years choir director.

MARGARET JOY KEYES *Assistant Professor of Physical Education and Dramatic Interpretation*

Student, Columbia College of Expression; student, Chicago University; A.B., Colorado State Teachers College; student, California Normal School of Dancing. Instructor in Physical Training and Dramatic Art, Prescott School of Music, Minot, North Dakota; instructor in Physical Training and Dramatic Art, Grafton Hall, Fond du Lac, Wisconsin.

JOHN HORACE KRAFT *Professor of Agriculture*

A.B., Oberlin College; B.S., Iowa State College. Head of the Science Department, Alton, Illinois, High School; head, Biology Department, Manual Training School, Washington University, St. Louis, Missouri; teacher of Human Physiology, Manchester College; in charge of Agronomy, State University of Iowa.

NELLIE BELDEN LAYTON *Assistant in Music, Piano*

Student, Denver University; Pd.B., Pd.M., A.B., Colorado State Teachers College.

WILKIE W. LEGGETT *Assistant Professor of Household Science*

B.S., Industrial Institute and College of Mississippi; A.B., University of Illinois. Assistant, Home Economics, Arkansas State Agricultural School; instructor, Household and Institutional Management, State Normal College, North Carolina.

*On leave of absence, 1918-1919.

THOMAS C. McCracken *Dean of the Graduate College; Professor of the Science and Art of Education*

A.B., Monmouth College; A.M., Harvard University; special research student with Women's Municipal League of Boston. Head of Preparatory Department, Monmouth College; assistant principal, Bellefontaine, Ohio, High School; principal, Monmouth, Illinois, High School; director of research in Harvard, Wellesley and Radcliffe for Women's Municipal League; assistant professor of Education, University of Utah.

JOHN T. McCUNIFF* *Assistant Professor of Industrial Arts*

Pd.B., Pd.M., A.B., Colorado State Teachers College. Student, Monotype School, Philadelphia; monotype operator, machinist.

LUCY NEELY McLANE *English, High School*

A.B., Colorado State Teachers College; student, Lexington College; student, Columbia University. Teacher of English and Literature, Cañon City, Colorado, City Schools.

GURDON RANSOM MILLER *Dean of the Senior College; Professor of Sociology and Economics*

Ph.B., Phi Beta Kappa, Syracuse University; A.M., Ph.D., Denver University. Superintendent of Schools, Beacon City, New York; Superintendent of Schools, Binghamton, New York. Author, "Social Insurance in the United States."

WILLIAM BARNARD MOONEY *Director of Extension Service; Professor of School Administration*

Pd.M., A.B., Colorado State Teachers College; A.M., Clark University. Principal of Schools, Rye, Colorado; Superintendent of Schools, LaVeta, Colorado; fellow in Psychology, Clark University; Superintendent of Training School, Spearfish, South Dakota.

WILLIAM B. PAGE *Assistant Librarian*

M.D., University of Michigan; D.O.S., Needles Institute of Optometry, Kansas City, Missouri.

HELEN PAYNE *Director and Professor of Home Economics*

B.S., Kansas State Agricultural College; graduate, Kansas State Normal School. Life certificate course; teacher, Kansas City Schools; director, Home Economics, Parsons, Kansas, High School; head, Home Economics Department, State Agricultural School, Arkansas.

ADDISON LEROY PHILLIPS *Professor of English*

Student, Ohio Wesleyan; Pd.B., Michigan Normal College; A.B., University of Michigan; A.M., University of Chicago. Principal of City Schools, Bronson, Michigan; instructor in high school English, Racine, Wisconsin; instructor in English, University of Missouri; associate professor of English, Kirksville, Missouri, Normal School.

EDGAR DUNNINGTON RANDOLPH *Professor of Sociology*

Graduate, Eastern Illinois State Normal School; A.B., University of Denver; student, University of Chicago; A.M., Teachers College, Columbia University; high school instructor, Mattoon, Illinois. Assistant in Philosophy of Education, Teachers College, Columbia University.

LAURA V. RILEY *Teacher Bracewell Demonstration School*

Pd.B., Colorado State Teachers College. Teacher, Hodgeville, Nebraska; principal, Haxtun, Colorado.

LILA MAY ROSE *Instructor in Music, Public School Methods*

Pd.M., Colorado State Teachers College; student, Campbell College, Halton, Kansas; student, Washburn College, Topeka, Kansas; student, Kansas State Agricultural College. Teacher of Music, Domestic Science and Art, Lindsay, Kansas; teachers of Music, Domestic Science and Art, Herington, Kansas; grade teacher, Denison, Kansas.

FRIEDA B. ROHR *Training Teacher, Fifth Grade*

Pd.B., Pd.M., A.B., Colorado State Teachers College. Training teacher, Denver Public Schools.

*On leave of absence, 1918-1919.

OTTO W. SCHAEFER

Instructor in Book Binding

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

anStudent 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

Student, Teachers College, Columbia University; Ph.B., University of Chicago.

ELEANOR SALBERG

Teacher Ashton Demonstration School

Pd.B., Colorado State Teachers College.

JOSEPH HENRY SHRIBER

Director of County School Administration

Student, Ada Normal University; student, Mt. Union College; A. B., Colorado State Teachers College. Principal Morrison, Colorado, City Schools; Superintendent, Louisville, Colorado, City Schools; Superintendent of Schools, Boulder County, Colorado.

BELLA BRUCE SIBLEY

Training Teacher, Second Grade

Student, Truro Normal School, Nova Scotia; student, Dick's Normal School, Denver; student, Denver University; student, Columbia University; Pd.B., Pd.M., A.B., Colorado State Teachers College; A.M., Denver University. Instructor in High School, East Halifax, Nova Scotia; training teacher, Denver Public Schools.

EDWIN B. SMITH

Professor of History and Political Science

Graduate, State Normal School, Oneonta, New York; student, Syracuse University; B.S., Columbia University; graduate student, University of California; A.M., University of Denver. Assistant in History, Teachers College, Columbia University; principal, Pacific Grove Academy, California; professor of History and Economics, California State Polytechnic.

EDITH STEPHENS

Assistant Librarian

A.B., Colorado State Teachers College.

FRANK W. SHULTIS* *Assistant Professor of Mathematics; Business Education*

Graduate, Marion County Normal School; M.Di., A.B., Iowa State Teachers College; A.M., Colorado State Teachers College; student, Iowa State College; student, University of Colorado; student, University of California. Principal, City Schools, Story City, Iowa; principal, City Schools, Albion, Iowa; principal, City Schools, Dallas Center, Iowa; Superintendent of Schools, North English, Iowa; principal, Lincoln School, Cañon City, Colorado.

FRANCES TOBEY

Dean of the Junior College; Professor of Oral English

B.S., Western Normal College; A.B., Colorado State Teachers College; graduate, Emerson College of Oratory, Boston. Member faculty, Emerson College of Oratory, Boston; chair of English and Reading, Denver Normal School; editor, Emerson College Magazine.

JENNIE L. TRESSEL

High School Teacher, Training Courses

A.B., Colorado State Teachers College. Ten years teacher and principal in Ohio Public Schools; Principal of Schools, Stratton, Colorado; six years County Superintendent of Schools, Kit Carson, Colorado.

EDNA F. WELSH

Commercial Education, High School

Pd.B., Colorado State Teachers College.

CLARA M. WHEELER

Training Teacher, Third Grade

Graduate Bridgewater Normal School; B.S., Columbia University. Critic teacher Providence Normal School; principal of elementary department Hyannis Normal School; instructor Horace Mann School Teachers College; principal Spuyten Duyvil School.

*On leave of absence, 1918-1919.

JEHU BENTON WHITE*

Professor of Commercial Education

B.S., Southern Normal School; student Western Kentucky State Normal School; student Bowling Green Business University; graduate student, Colorado State Teachers College. Principal, Summer Shade, Kentucky, High School; teacher of Accounting, Barnes Business School, Denver; principal, Young Men's Christian Association Business School, Denver, Colorado.

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.

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.

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 Old Bruton Parish Church, Williamsburg, Va.; twelve years' experience as teacher in William Woods College, Bollenger Conservatory, Alfred University and Norfolk, Va.

THE COUNCIL OF DEANS

ALLEN CROSS, Dean of the College.
 HELEN GILPIN-BROWN, Dean of Women.
 FRANCES TOBEY, Dean of the Junior College.
 GURDON RANSOM MILLER, Dean of the Senior College.
 THOMAS C. MCCRACKEN, Dean of the Graduate College.
 SAMUEL MILO HADDEN, Dean of Practical Arts.

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HON. GEORGE D. STATLER, Greeley	Term Expires 1921
HON. WILLIAM P. DUNLAVY, Trinidad	Term Expires 1919
HON. ROSEPHA PULFORD, Durango	Term Expires 1919
HON. MARY C. C. BRADFORD, Denver	Term Expires 1919

State Superintendent of Public Instruction

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HON. WILLIAM P. DUNLAVY	Vice-President
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Library: Mrs. Bradford, Mrs. Pulford, Mr. Dunlavy.
Buildings and Grounds: Mr. Statler, Mr. Steele, Mr. Kepner.

STATE BOARD OF EXAMINERS

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 MISS EMMA T. WILKINS, County Superintendent of Schools, Larimer County,
 Fort Collins.
 THE PRESIDENT, Colorado State Teachers College.

OFFICERS OF ADMINISTRATION

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 GEORGE D. STATLER, Treasurer.
 A. J. PARK, Registrar.
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 EDITH STEPHENS, Assistant Librarian.
 R. G. DEMPSEY, Superintendent of Grounds.
 CHAS. D. STEPHENS, Superintendent of Buildings.
 J. P. CULBERTSON, Secretary to the President.
 GEO. P. WILLIAMS, Bookkeeper.
 *RALPH S. BAIRD, Stenographer.
 FRANCIS M. ERICKSON, Stenographer.
 ERMA COONS, Stenographer.
 FLORENCE WILLIAMS, Stenographer.

FACULTY COMMITTEES

The President of the College is, ex-officio, a member of each committee.

Committee on Advanced Standing

The Dean of the College, the Principal of the High School, Mr. Smith, Mr. Randolph.

*On leave of absence, 1918-1919.

Alumni Committee

Mr. Mooney, Mr. Bell, Mr. Foulk, Miss Crosby, Miss Rohr, Mr. Hadden.

Arts-Crafts Committee

Mr. Isaacs, Miss Holmes, Miss Scharfenstein, Mrs. Kendel.

Committee on Chapel Specials

Fall Quarter: Mr. Kendel, President of the Student Body, Mr. Miller.

Winter Quarter: Mr. DuPoncet, Miss Leggett, Miss Julian.

Spring Quarter: Mr. Phillips, Mr. Kraft, Miss Wright.

Committee on Class Officers

First Year: Mr. Blout.

Second Year: Mr. Adams.

Committee on Course of Study

Mr. Wright, Mr. Heilman, Mr. Randolph, Mr. Cross, Mr. Smith, Mr. Barker, Mr. Hotchkiss.

Committee on Duplications

Mr. Miller, Mr. Cross, Mr. Hotchkiss, Mr. Bell, Mr. Heilman, Mr. Randolph.

Committee on Educational Progress

Mr. Shriber, Mr. Carter, Miss Julian, Mrs. Sibley.

Committee on Entrance

The Principal of the High School, The Dean of the College.

Faculty Club Committee

Mr. Carter, Mrs. Gilpin-Brown, Mr. Smith, Mr. McCracken, Mr. Heilman, Miss Dilling.

Committee on Lyceum

Mr. Blout, Mr. Phillips, Mr. Finley, Mr. Colvin, Mr. Wolfe, Mr. Ward, Mr. Camfield, Mr. Bull, Mr. Henderson, Mr. Culbertson, Secretary.

Committee on Men's Welfare

Mr. Finley, Mr. Bishop, Mr. Glaze, Mr. Barker.

Museum Committee

Mr. Hadden, Mr. Adams.

Committee on Official Publications

Mr. Cross, Mr. Colvin, Mr. Randolph.

Committee on Press Bureau

Mr. Barker, Mr. Wolfe, Mr. Bishop, Miss Crosby, Mr. Shriber, Mr. Blout.

Committee on Physical Education

Mr. Glaze, Mrs. Gilpin-Brown, Miss Keyes, Mrs. Sibley, Mr. Bell, Mr. Ackerman.

Committee on Public Exercises

Miss Tobey, Mr. Kendel, Miss McLane, Mr. Phillips, Miss Welsh, Mr. Wright, Mr. Dodds, Miss Keyes, Miss Rose, Mrs. Layton, Mr. DuPoncet.

*STATE TEACHERS COLLEGE***Committee on Research**

Mr. Heilman, Mr. Randolph, Miss Town, Mr. Hotchkiss, Mr. Smith.

Committee on School Calendar

Miss Tobey, Mrs. Gilpin-Brown, Mr. Kendel.

Committee on Student Programs

Mr. McCracken, Mr. Randolph, Mr. Kraft, Mrs. Aultman, Miss Clasbey.

Committee on Student Receptions

Mr. Abbott, Miss Payne, Mrs. Aultman, Mr. Adams.

Committee on Special Funds

Mr. Miller, Mr. Cross, Mr. Park.

Committee on Scholarships

Mr. Bell, Mr. Mooney.

Committee on Survey

Mr. Randolph, Mr. Cross, Mr. Heilman, Mr. Miller, Mr. Mooney, Mr. Wright, Mr. Hadden, Miss Hemlepp.

Committee on Teachers' Bureau

Dean of College, Mr. Mooney, Mr. Hotchkiss, Mr. Bell, Mr. Culbertson, Secretary.

Committee on Text Books

Librarian, Dean of College, Heads of Departments in Question, plus President's approval.

Vocational Committee

Mr. Foulk, Mr. Schaeffer.

Committee on War Council

Mr. Smith, Miss Tobey, Mrs. Gilpin-Brown, Mr. Wolfe, Miss Payne, Mr. Kraft.

Committee on Women's Welfare

Dean of Women, Miss Gunnison, Miss Hanno, Miss Hildebrand, Miss Hemlepp, Miss Wilson, Miss Tressel.

Committee on Woman's Building

Mrs. Gilpin-Brown, Miss Tobey, Miss Hildebrand, Mr. Kendel.

Committee on Y. M. C. A.

Mr. Bishop, Mr. Blout, Mr. Finley, Mr. Wright.

Committee on Y. W. C. A.

Miss Wilson, Miss Tobey, Mrs. Gilpin-Brown.

Committee on Honorary Societies

Mr. Miller, Mr. Adams, Mr. Barker, Mr. Cross, Miss Hildebrand, Miss Tobey.

Committee on Clubs

Mr. Smith, Miss Tobey, Mrs. Gilpin-Brown, Mr. Hadden, Mr. Kraft, Mr. Mooney, Mr. Cross, Mr. Abbott.

Colorado State Teachers College

Location—Teachers College is located at Greeley, in Weld County, Colorado, on the Union Pacific and the Colorado & Southern, 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 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. It is a thoroly prohibition town. There are about 10,000 inhabitants.

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. For the convenience of administration the College maintains three divisions: 1. **The Junior College**, for students pursuing the two-year courses; 2. **The Senior College**, for students doing work of an advanced character corresponding to the third and fourth years of the usual colleges or universities; and 3. **The Graduate College**, for students doing work beyond the bachelor's degree.

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 school departments, and high schools. The College also accepts the responsibility of training supervisors for rural schools, principals, superintendents, teachers of home economics, practical 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 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, and 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—Admission to the College is granted to those who present a certificate of graduation showing the completion of fifteen or more units in an acceptable high school. This certificate must be presented at the time of matriculation in the College.

Mature students, not high school graduates, may be assigned to the Ungraded School for Adults. As soon as they have completed the equivalent of fifteen high school units, or shown the learning power which such completion usually gives, they may be granted a certificate of high school graduation and admitted to the College.

Experienced teachers, not high school graduates, who have attained marked success in their profession may be admitted as **Special Students** upon the recommendation of the Committee on Entrance. Special stu-

dents will be admitted regularly to the College only after having met all the requirements set by the committee. Special students who fail to meet the College requirements and to do work of College grade will be assigned to the Ungraded School for Adults.

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 Junior College subjects have been studied in a fifth year in a high school, such credit as these subjects deserve will be allowed.

Credit may be granted for private lessons in music, art, language, business courses, penmanship, etc., etc., or for courses in such subjects in private or special schools not of collegiate rank only upon a recommendation, after careful examination, by the heads of departments giving such work in the college. Whenever thus recommended the work must be certified as similar to, and as a substitute for, certain specified courses which such departments offer or recognize as a part of the training of a teacher in that particular field.

Recognition of what is usually termed "life experience," such as travel, housekeeping, experience in a profession or trade, private reading, club work, etc., etc., is given only in connection with the usual credit granted for teaching.

The total amount of credit granted for teaching experience in the Junior, Senior, or Graduate College course shall never exceed twelve hours, but additional credit for extended and successful supervision of teaching up to a maximum of eight hours may be granted.

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 thru 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. In addition to a regular program of sixteen hours any student may add one or two of the following one-hour courses to his program without special permission: Bible Study, Community-Cooperation, Debating, Conservatory Music Lessons, Library Science, or Physical Education.

A student who wishes to take a larger program than sixteen hours made up of any other additions than those mentioned above must have been in residence at least one quarter and have shown ability to do work of "A" or "AA" quality. Applications for permission to take more than sixteen hours are made in writing to the Committee on Students' 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.

In case a student makes more than two grades below "B" during a given quarter, he will be limited to fourteen hours the following quarter.

It shall be 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.

Exceptions to Rules—Rules are made to meet the needs of the greatest number, and not to stand in the way of progress. If a rule is found to impede the progress of genius it will be waived or modified.

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:

A mark of AA for a course given 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-hours 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.
- 4C 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 three-hour course. The mark should be 2AA, and not 3C. Each mark would give 2.4 hours, but the first mark would indicate the quality of the work as well as the amount of credit.

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 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 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 thru the school year while teaching it is possible to reduce the time still further.

The Summer Quarter—Colorado State Teachers College this year has made an important change in its summer school plans, by which the former six weeks' session has been lengthened to two half quarters of five weeks each, to be known as the Summer Quarter. This change will give teachers an opportunity to spend the entire summer vacation in college work if they so desire, and thus accomplish materially more than under the former arrangement.

Students who wish to spend less than the full ten weeks in school may, of course, enroll for either the first or the second half of the summer quarter, instead of both.

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.

THE CLIMATE

Colorado sunshine is a proverb. The altitude of Greeley is 4,650 feet. The combination of a moderate elevation and sunshiny days produces an almost ideal condition for school work thruout the year. In summer, the middle of the day is usually warm, but in the shade the temperature is never unpleasant. The cool evenings are all that the student could desire.

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 46,000 volumes bearing on the work of Teachers College. 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 thru 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 the Administration building, the Library building, the residence of the Presi-

dent, the Training School and the Industrial Arts building. The main, or administration building, is 240 feet long and 80 feet wide. It has in it the executive offices, class-rooms, and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art, which make them very pleasing.

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

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.

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 is on the campus among the trees. In this beautiful home are held many social gatherings for faculty and students during the school year.

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 furnishing 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 has just been 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 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, which give it the appearance of a natural forest. During the summer, birds, rabbits, squirrels and other small animals make the campus their home, thus increasing its value as a place of rest, recreation, or study.

During the summer and fall quarters the faculty gives its evening reception to the students on the campus. At this time it presents a most pleasing appearance, being lighted, as it then is, by electric lights and Japanese lanterns.

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 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 snow-drop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in 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

A material reduction in necessary expenses for students is shown in the following schedule for the year. The usual incidental fee is cut almost one-half. Students buy their own text-books. Certain laboratory courses demand a small fee to help defray the cost of materials used. These fees are noted in the description of these courses. No library deposit fee is required.

Board and Room—Table board costs from \$2.75 to \$4.50 per week. Room rent costs \$6.00 to \$10.00 per month. Rooms equipped for light housekeeping cost from \$6.00 to \$10.00 a month.

- Tuition**—1. Tuition is free to Colorado students.
2. Tuition to non-Colorado students is \$5.00 per quarter.
3. Fee for diploma to non-Colorado students is \$5.00.

Fees—The incidental fee (except in the Summer Quarter) is \$6.00 per quarter. This includes matriculation, enrollment, graduation, diploma, library, gymnasium and physical education fees; also a season ticket to all regular athletic events. This fee is paid by all and is never refunded. After the opening day, late comers pay \$1.00 extra fee.

Special private lessons in Piano, Organ, Violin and other musical instruments, and Voice are extra in the College Conservatory of Music.

The regular training of teachers in public school music, supervision of music, etc., is free.

Text-Books—Students may secure the regular text-books at the College Co-operative Book Store at a reduction from the publishers' list prices. These books will be bought back from the student if in good condition, and still regularly used as text-books.

Necessary Expenses for a 12-Week Term

Board	\$33.00
Room	18.00
Incidental Fee	6.00
Total	\$57.00

Add to this your own laundry and a small fee for books.

MAINTENANCE OF THE COLLEGE

The maintenance of the College comes from a state mill tax and from special appropriations made by the legislature. The session of 1917 levied a special tax to run for a period of ten years to provide money for buildings and permanent improvements.

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 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 school. 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 attaining 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 advisors, 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 hamper the student with too many rules and regulations, it is necessary to emphasize the fact that the general conduct of young women students 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 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 with her at any time, in regard to their moral and physical well-being.

THE STANDARD OF THE SCHOOL

It is the purpose of the trustees and faculty of State Teachers College to maintain a high standard of scholarship and professional training. Those who are graduated shall be thoroly prepared and worthy of all for which their diplomas stand. It is the policy of the school, by

making all graduates "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.

TEACHERS' BUREAU

It is the purpose of the Bureau to secure such information as will insure the selection of the best available person for a given position. Boards of Education wishing to employ teachers are invited to make their wants known. All correspondence should be addressed to the Secretary of the Teachers' Bureau.

DEPARTMENTAL MUSEUMS

The museums of 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.

THE CHRISTIAN ASSOCIATIONS

Y. W. 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. 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.

Y. M. C. A.—An active organization of the Young Men's Christian Association was organized in December of 1917. It has done effective work in co-operation with the International Y. M. C. A. in its work for the war.

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 two 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 the Teachers College. Perhaps Colorado 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 this year 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. This year 250 students have availed themselves of the opportunity of Bible Study under this plan. A student may register for the regular number of hours in the College and then take either the Bible Study or Community Co-operation work in addition. The amount of credit given for either of these two pieces of outside work is one hour a quarter.

COMMUNITY CO-OPERATION PLAN

The College has instituted a plan in which provision was 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 Com-

munity 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.

The College believes that the plan is worth while and hopes for its extension until all students may have had such training before going into actual work in the teaching profession.

GIRLS' CAMP FIRE MOVEMENT

Something new, something big, something destined to grow! The Camp Fire Girls' Movement is new, having been given definitely to the public, March 17, 1912. It is already an organization large in numbers, having at the last Annual Report 5,848 Camp Fires in good standing with a total membership of 85,988, an increase of 20,022 in one year. Emphasis is placed on the home, the out-of-doors, and the spirit of service. That the movement is destined to grow, is shown by the recognition given it, not only in summer camps, but also in universities and colleges where the Camp Fire Girls' work is beginning to be introduced into the curriculum. During the summer of 1916 the University of California provided such a course with marked success and now Colorado State Teachers College is offering a similar opportunity.

LOAN FUNDS

The following are a number of loan funds that are designed to help needy students to complete courses in State Teachers College.

Students' Relief Fund—The object of this fund is to afford pecuniary assistance to meritorious students who have exceptional need of such help. It not infrequently happens that a promising student who has entered upon his work with the expectation of carrying it thru until graduation, meets with an unexpected loss, thru sickness or other causes, which compels him either to leave the school or to continue the work under conditions that are not conducive to the best results. To meet the need of these students, a fund has been established, called the Students' Relief Fund, from which money is lent to such students until they are in a position to repay it.

The money constituting this fund consists of contributions from persons and organizations disposed to help in the work, and of the interest derived from loans. The treasurer of the Board of Trustees of the College is the custodian of the fund.

Applications for loans are made to the Loan Committee, which is composed of members of the faculty of the school. 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, and will be in a position to repay the money within a reasonable time. No loan is made unless the student has already completed the greater part of his course in the school, and is consequently well known to the teachers. The treasurer accepts the student's note and collects it when it becomes due.

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 stu-

dents who need small sums to enable them to finish a term or a course. The fund is in charge of a committee composed 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.

Senior College Scholarship Fund—The Senior College Fund is an accumulation of money contributed by Senior College graduates and others who may be interested in creating a fund for those who pursue courses in the Senior College. This fund now approximates one thousand dollars, from which loans are made to Senior College students only. It has already helped many worthy students to continue to the end of their Senior College courses. This fund is in charge of a Board of Trustees now headed by the Dean of the Senior College.

Junior College Scholarship Fund—The Junior College Fund is an accumulation of money contributed by Junior College graduates and others who may be interested in creating a fund for those who pursue courses in the Junior College. This fund is in charge of the Secretary of the Board of Trustees and is subject to the control of the students of the Junior College department.

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 The 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 the College, without interest; but it is the desire of said donor that no student shall be pressed for the payment 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.

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 obligations to all these donors, and invite any who may feel so inclined, to make similar donations.

Extension Department

WILLIAM BARNARD MOONEY, *Director*

ERMA L. COONS, *Secretary*

The Extension Department of the Colorado Teachers College is organized and exists for the following purposes:

To assist, thru cooperative effort, State, County, and District school officials in their efforts to improve the efficiency of their schools.

To give instruction to teachers in service and to extend the service of the institution to all persons who wish to work under its guidance.

The Department is ready to render service to State, County, and District school officials. A request for assistance in any work connected with education in Colorado will receive prompt attention.

Systematically organized instruction is given to teachers under the following plans:

The Group Plan—A person who possesses at least the degree of A.B., or its substantial equivalent, and has had professional training and experience that would justify his appointment as a regular instructor in the College, may be appointed an Extension Instructor. He gives the Course under the general direction of the College, but his relations to his students are about the same as they would be were he giving instruction to them within the institution. He receives a percentage of the fee paid by his students for his services. Members of the College faculty give instruction to outside groups under this plan.

A person who does not possess the above qualifications may be appointed a Class Leader. The Class Leader keeps the required records of the members of his group, leads in the work of the Class and otherwise acts as the director of the work his group is studying under the direction of the College. The Class Leader is allowed the same credit as other members of his group. He does not pay a fee for his course.

The Individual Plan—Under this plan any person who desires to study alone or who cannot join a study group may do work under the direction of the College. All of this work is done by Syllabus. Fifteen syllabi or study units constitute a five-hour course, twelve study units a four-hour course, nine study units a three-hour course, six study units a two-hour course, and three study units a one-hour course. Thus one of these study units equals four recitation lessons in residence.

By the Group and Individual Plans of Study a student may take practically any course offered in residence by the College.

Write for the Extension Hand Book.

The Junior College

FRANCES TOBEY, A.B., *Dean*

The scope of the Junior College is the work of the first two years of the College proper. The student completing one of the courses in this division, having earned credit for ninety-six quarter hours, is granted a diploma which is a life certificate authorizing him to teach in the public schools of Colorado.

Requirements for Graduation—A student must do full work in residence during at least three quarters before being granted a certificate of graduation from the Junior College. Thus, at least forty-eight of his ninety-six required hours must represent resident work; the remaining forty-eight hours may be granted on advanced standing or for extension courses.

The Senior College

GURDON RANSOM MILLER, A.M., Ph.D., *Dean*

This division includes the third and fourth years of the work of the State Teachers College.

The graduates of the Senior College take high professional rank in the school systems of Colorado and neighboring states. Our A.B. graduates are especially in demand, and we find it impossible to supply all calls for candidates with the baccalaureate degree.

The Senior College furnishes special advanced preparation for normal school critics and teachers. It offers superior opportunities for the training of supervisors of all elementary school work. High school

teachers will find here superior professional and scholastic courses adapted to their professional aims. Principals and superintendents will find in the program of the Senior College an unusual opportunity for mature students of wide professional interests.

The College is exerting its best efforts toward an expansion of the advanced work of this institution. The emphasis we are placing on our Senior College is an indication of the rapid advancement of our professional standards.

Admission to the Senior College—Graduates from the Junior College, and graduates from standard normal schools are admitted without examination to the Senior College. Graduates from standard colleges are admitted without examination, and will receive advanced standing on application. Students who have completed two full years of work in standard colleges will be received without examination, but may be conditioned on such professional subjects as the Advanced Standing Committee may determine.

Minimum Residence and Minimum Hours—No diploma of the Teachers College is granted unless the student has done at least three quarters of resident work with the College. No diploma is granted to any student who has earned less than forty-eight hours in this institution, or one year of credit.

No person who has already received one diploma or certificate from this institution will be permitted to receive another diploma or certificate until such person shall have earned the full number of hours required for such recognition, and completed not less than one additional quarter of resident work in this institution.

Requirements for Graduation—Ninety-six hours in addition to those required for graduation from the Junior College are required for the A.B. degree. The total required credit for this degree is 192 hours.

A certificate which is a life license to teach in Colorado, and which is accepted by most states of the West, is granted upon completion of the third year, if applied for by the student.

Diploma and Degree—At the end of the fourth year of study, 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 Senior College.

The Graduate College

THOMAS C. MCCrackEN, A.M., *Dean*

The Graduate College 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. Every department of the College is 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, Letters, Philosophy, Science, or other four-year degree, from a reputable institution authorized by law to confer these degrees, may be admitted as graduate students in the Colorado State Teachers College upon presenting official credentials.

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

GENERAL PLAN OF WORK FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION

Residence—Three quarters of work are required in residence at the College in advance of 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. Forty hours credit will be given for graduate courses pursued and eight 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.

THE NATURE OF GRADUATE WORK

1. It shall be in professional lines of work. In keeping with the function of a teachers college, graduate work shall be confined to professional lines of work.

2. 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.

3. **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.

4. **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.

5. **Final Examination Upon the Whole Course**—There will 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 field covered by the special courses taken by the candidate; (c) The general fields of Psychology, Sociology, Biology and Education.

The Courses of Study

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 thru the medium of a single course of study or a scattered elective course.

To meet the requirements for teachers of all the kinds of schools the college provides the following courses of study, and asks each student entering in June, 1918, or after, to select a course definitely and to consult the head of the department directing that course of study as a permanent adviser. Students who registered previous to that date may continue with the old course of study and complete that course if they can do so within reasonable limits of time; 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 of Arts in Education will be granted. The diploma is a Colorado life certificate. Each course is so arranged that it may be divided into Junior College (two years) and Senior College (two additional years). The Junior College course may be completed in six quarters. The student who chooses to be graduated at the end of the Junior College 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.

1. County Schools.

Directed by.....Mr. J. H. Shriber.

Planned for those who expect to teach in one or two room schools and for those who are, at the time of enrolling, in doubt about what phase of teaching they wish to take up.

2. Education.

Directed by.....Mr. T. C. McCracken.

Planned for students majoring in Education and for those who expect to become Superintendents and Supervisors.

3. Psychology.

Directed by.....Dr. J. D. Heilman.

Planned for students who expect to pursue Psychology as a major subject for the purpose of doing special work in this field in public and normal schools.

4. Kindergarten.

Directed by.....Mr. E. A. Hotchkiss.

Planned for students who expect to become kindergarten teachers or supervisors of kindergartens in public and normal schools.

5. Primary Grades.

Directed by.....Mr. E. A. Hotchkiss.

Planned for students who expect to become primary teachers.

6. Intermediate Grades.

Planned for students who expect to become teachers in the intermediate grades.

7. Grammar Grades.

Directed by.....Mr. E. A. Hotchkiss.

Planned for students who expect to become grammar grade or junior high school teachers.

8. **Biological Sciences.**
Directed by.....Dr. L. A. Adams.
9. **Physics.**
Directed by.....Mr. F. L. Abbott.
10. **Chemistry.**
Directed by.....Mr. C. J. Blout.
11. **Geology, Physiography and Geography.**
Directed by.....Mr. G. A. Barker.
12. **Mathematics.**
Directed by.....Mr. G. W. Finley.
13. **Social Sciences.**
Directed by.....Dr. G. R. Miller.
14. **History and Political Sciences.**
Directed by.....Mr. E. B. Smith.
15. **Latin and Mythology.**
Directed by.....Mr. J. H. Hays.
16. **Literature and English.**
Directed by.....Mr. Allen Cross.
17. **Oral English.**
Directed by.....Miss Francis Tobey.
18. **Modern Foreign Languages.**
Directed by.....Dr. E. S. Du Poncet.
19. **Music.**
Directed by.....Mr. J. C. Kendel.
20. **Household Science.**
Directed by.....Miss Helen Payne.
21. **Household Art.**
Directed by.....Miss Helen Payne.
22. **Industrial Art.**
Directed by.....Mr. S. M. Hadden.
23. **Fine and Applied Art.**
Directed by.....Mr. Walter F. Isaacs.
24. **Commercial Arts.**
Directed by.....Mr. A. O. Colvin.
25. **Agriculture.**
Directed by.....Mr. J. H. Kraft.
26. **Physical Education and Playground.**
Directed by.....Mr. Ralph Glaze.

General Requirements.—The College requires of all students a group of courses which form a foundation for all teacher-training. These are called **The Professional Core**. In addition to these it requires another group which it regards as essential in the training of young people for the teaching profession. Each course, therefore, is made up of the following subjects, plus the departmental requirements listed separately in the sections of this Year Book devoted to each department.

JUNIOR COLLEGE

First Year

1. The Professional Core:	Hours.
Biol. 2.—Educational Biology (Bionomics).....	4
Ed. 8.—Educational Values.....	4
Soc. 3.—Educational Sociology.....	4
2. Other Required Subjects:	
Eng. 4.—Speaking and Writing (Students may be excused by proving proficiency).....	4
Hyg. 1.—Personal Hygiene (required only of women students).....	1
Phys. Ed.—Physical Exercise (required of all students at least two-thirds of the quarters they are in residence).	
3. Subjects Required by the Department, and Elective Subjects.....	31

Second Year.

1. The Professional Core:	Hours.
Psych. 2a.—Educational Psychology.....	4
Psych. 2b.—Ed. Psychology (continued).....	4
Ed. 10.—The Elementary School Curriculum.....	4
Pol. Sc. 30.—Political Adjustment.....	4
2. Other Required Subjects:	
Phys. Ed.—Physical Exercise Courses (at least two-thirds of the number of quarters in residence).	
The following three courses are required of all students who expect to take the Junior College diploma:	
Tr. Sch. 1.—Methods and Observation.....	4
Teach. 1.—Practice Teaching in the Elementary School.....	4
Teach. 2.—Practice Teaching in the Elementary School.....	4
3. Subjects Required by the Department, and Elective Subjects.....	20 or 32

SENIOR COLLEGE

Third Year.

1. The Professional Core:	
Psych. 104.—Psychology of the Elementary School Subjects, or	
Psych. 105.—Psychology of the High School Subjects.....	4
2. Other Required Subjects:	
Phys. Ed.—Physical Exercise Courses (at least two-thirds of the number of quarters in residence).	
3. Courses Required by the Department, and Elective Courses.....	40
4. In the Third or Fourth Year.	
The following courses are required of those who expect to teach in high schools:	
H. S. 105.—Principles of High School Teaching.....	4
H. S. 103.—Practice Teaching in the High School.....	4

Fourth Year.

1. The Professional Core:	Hours.
Ed. 111.—Principles of Education.....	4
Ed. 116.—The High School Curriculum.....	4
Psych. 108.—Educational Tests and Measurements.....	3
(Ed. 116 may be omitted by students who expect to become High School teachers.)	
2. Other Required Courses:	
Phys. Ed.—Physical Exercise Courses (at least two-thirds of the number of quarters in residence).	
3. Courses Required by the Department, and Elective Courses.....	37

Junior College.

Summary:	
The Professional Core.....	28
Observation and Teaching.....	12
English and Hygiene.....	5
Major Subject and Electives.....	51

Senior College.

The Professional Core.....	19
Observation and Teaching.....	8
Major Subject and Electives.....	69

Total	192
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Majors.—A student completing any one of the courses of study catalogued in this Year Book will have a notation on his diploma showing that the given subject was his major. This notation will appear only on the Senior College Bachelor of Arts diploma, or the diploma of Masters of Arts.

Minors.—A student earning a major notation may, if he so desires, select some other subject as a minor. He must elect at least twenty-four hours within the four years to earn the minor notation.

Education

THOMAS C. McCracken, A.M.
 FRANK L. WRIGHT, A.M.
 WILLIAM B. MOONEY, A.M.
 SAMUEL MILO HADDEN, A.M.
 JOSEPH H. SHRIBER, A.B.
 JOHN R. BELL, A.M.
 ELMER A. HOTCHKISS, A.M.
 HELEN GILPIN-BROWN, A.B.
 GRACE WILSON, A.B.

The purpose of the courses offered in the Department of Education is to give to the student a broad acquaintance with the most essential fields of educational activity. Although the work of the department must necessarily deal largely with the fundamental theories underlying the educative process, 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.

MAJOR IN EDUCATION—SUPERINTENDENT'S AND SUPERVISOR'S COURSE.

The work outlined for the first two years is for those who want to major in Education. The work of the last two years is for the prospective superintendent or principal. The work of the third and fourth years, however, does not presuppose that the student has had the work of the Education major, the first and second year. In fact, two years of work in any department will be accepted as a basis for the third and fourth years of work as outlined below and will lead to the A. B. for superintendents, principals and supervisors. One who completes the four years' work below will be granted the A. B. degree in Education and may choose whether his diploma be denominated Major in Education or Supervision.

A. B. graduates from this or other institutions will be given opportunity for a wide choice of election from the last two years if the degree of Master of Arts is selected in Education or Supervision.

		First Year.	
1. Professional Core:			Hours.
	Biology 2.—Bionomics		4
	Education 8.—Educational Values.....		4
	Sociology 3.—Educational Sociology.....		4
2. Required by the Department of Education:			
	English 4.—If needed (Functional English).....		4
	Education 12.—Current Movements in Social Education.....		3
	Education 13.—Current Movements in Social Education.....		3
	Education 15.—Vocational Guidance		2
	Education 24.—School Administration.....		3
	Library Science 1.....		1
	Psychology 3.—Child Development.....		4
	Education 32.—History of Education in Ancient, Medieval and Renaissance Times.....		3
3. Electives			16
		Second Year.	
1. Professional Core:			
	Psychology 2a.—Educational Psychology.....		4
	Psychology 2b.—Educational Psychology.....		4
	Political Science 30.—Political Adjustment.....		4
	Education 10.—The Elementary School Curriculum.....		4

2. Required by Department of Education:	
Tr. Sch. 1.—Methods and Observation.....	4
Teaching.—(If the student does not take the two-year diploma, he may teach but 4 hours in the Training School).....	8
Education 33.—History of Modern Education.....	3
Education 135.—Educational Classics.....	4
Select two courses from the following:	
History 13.—Teaching of History.....	3
Geography 12.—Teaching of Geography.....	2
Mathematics 8.—Methods in Arithmetic.....	2
Reading 9.—Teaching of Reading.....	2
History 25.—Teaching of Civics.....	2
Physics 110.—The Teaching of Science.....	2
English 12.—Functional Grammar Teaching.....	2
English 6.—The appreciation of Literature.....	2
English 106.—The Teaching of Secondary English.....	2
Math. 100.—Teaching of Secondary Mathematics.....	2
Music 10.—Methods in Appreciation.....	2
3. Electives	8 or 9

Third Year.

1. Professional Core:	
Sociology 105.—Social Maladjustments.....	4
Psychology 104 or 105.—Psychology of the School Subjects.....	4
2. Required for Major in Education or Supervision:	
Education 113.—Organization and Administration of Jr. H. S.....	3
Sociology 124.—Problems of Child Welfare.....	6
Education 142.—Educational Administration and Supervision.....	4
High School 103.—Practice Teaching in the High School.....	4
High School 105.—Principles of High School Teaching.....	4
Bacteriology 2.—Bacteria, Hygiene, Prophylaxis.....	3
Tr. School 193.—Elementary School Supervision.....	4
Education 120.—High School Administration.....	4
3. Electives	9

Fourth Year.

1. Professional Core:	
Education 116.—The High School Curricula.....	4
Psychology 108.—Educational Tests and Measurements.....	3
Education 111.—Principles of Education.....	4
2. Required for Major in Education or Supervision:	
Select 26-33 hours from the following:	
Education 200.—The Making of a Curriculum.....	4
Education 201.—City School Administration.....	3
Education 223.—Research in Education.....	4
Education 228.—Comparative School Systems.....	5
Education 229.—Current Educational Thought.....	4
Education 245.—Educational Tests and Measurements.....	3
Psychology 107.—Mental Tests	4
Psychology 212.—Statistics in Education.....	2
Training School 204.—Training School Research.....	4

Throughout this catalog courses numbered 1 to 99 are primarily Junior College; 100 to 199 are Senior College. Those numbered 200 and above are Graduate College.

8. Educational Values—Four hours, each quarter. Required of all students, first quarter.

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 to developing the attitude of looking for the material which is of greatest educational value to the child.

10. The Elementary School Curriculum—Four hours, Spring Quarter. Required of all students, second year.

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.

12. Current Movements in Social Education—Three hours, Fall Quarter.

The purpose of this course and 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.

13. Current Movements in Social Education—Three hours, Winter Quarter.

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, and the Junior High Schools.

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.

24. School Administration—Three hours, Winter Quarter.

This course will deal with school and class-management and is designed primarily to meet the needs of those students who have had little or no teaching experience. Some time will be given to a study of the co-operation between the teacher and the school principal in instruction and discipline. A brief study will be made of the school law of Colorado.

25. Administration of Rural and Village Schools—Three hours, Winter Quarter.

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, teachers, 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.

32. History of Education in Ancient and Medieval and Renaissance Times—Three hours, Winter 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 ideals 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, Spring 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.

37. Ethical Culture—Two hours, Every Quarter.

A course designed for instruction in the etiquette of everyday life, and a general appreciation of culture, and its necessity in the training of a teacher. The Dean of Women hopes to get in touch with the personal side of each student. Questions will be requested from the members of the class, and there will be a friendly exchange of ideas with reference to conduct. Lectures, book and magazine reviews and reports.

38. Vocations for Women—Two hours, Winter Quarter.

This course is 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 lectures, discussions, readings and reports.

44. Social Education—One hour, Fall, Winter and Spring Quarters.

This course is planned to give students theory and practice in club organization, in community life, in citizenship classes, in Sunday school classes and in efficiency classes for business people.

45. Girls' Camp Fire Work—Non-credit, 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. The expense of costume, beads, music, etc., will approximate five dollars.

111. Principles of Education—Four hours, Each Quarter. Required of all persons completing any course in 1918-1919 who have not had its equivalent.

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.

113. Organization and Administration of the Junior High School—Three hours, Fall Quarter. Required of Grammar Grade Majors and in the Supervisor's Course.

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 stand-points, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.

115. Ethics—Two hours, Spring Quarter.

This course will treat of the genesis and function of the moral ideal in the history of the race, with special reference to the scientific interpretation of the moral life of today. Attention will be paid also to the principles underlying the development of the moral consciousness of the child and the problem of moral training in the public school.

116. The High School Curriculum—Four hours, Winter Quarter. Required fourth year.

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.

120. High School Administration—Four hours, Fall Quarter. Required of Superintendents.

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, the work of the teachers, and other similar matters of high school administration.

125. Education for the Physically Handicapped—Two hours, Spring Quarter.

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

130. Rural Education—Three hours, Fall Quarter. Required for County School Major.

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 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.

134. American State Schools System—Three hours, Fall Quarter.

A careful study will be made of typical methods of meeting educational needs in the colonies and how these methods were dependent upon conditions in Europe at the time of the settlement of the American colonies. 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 the various educational institutions.

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 and Supervision—Four hours, Winter 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, Fall Quarter.

This course treats of the efforts of the Federal Government to aid the states in education.

147. Educational Surveys—Three hours, Winter 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.

200. The Making of a Curriculum—Four hours, offered any quarter demanded.

This course is for students doing advanced work in education or supervision. Material on the making of a curriculum will be discussed and principles formulated. Standards for judging the curriculum will be determined and typical curricula judged by these standards. Members of the class will be expected to make a curriculum, utilizing the principles and standards formulated earlier in the course.

201. City School Administration—Three hours, Spring Quarter.

This course is designed for superintendents and principals of city systems. Among the problems considered will be school boards, business administration, buildings and their equipment, the organization of supervisory corps, the training of teachers, inspection and supervision, the progress of children thru schools, including retardation, acceleration, and elimination, school records, and school reports, supplementary and special education, including night, industrial, and vocational schools, and special classes for the mentally or physically deficient.

217. Vocational Education—Three hours, Winter and Summer Quarters.

A discussion of the main factors essential in vocational education.

- (a) Demands and needs interpreted in the social life of people.
- (b) The ability of the public school to meet and solve 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, 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.

228. Comparative School Systems—Five hours, Winter Quarter.

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 educational 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.

241. Master's Thesis Course—Hours dependent upon the amount of work done. Any Quarter.

The student who expects to work on his Master's thesis will register for this course no matter for which department the thesis is being prepared.

245. Measurements of Results in Education—Four hours. Fall Quarter.

There are some kinds of standardized tests which measure certain kinds of results in education. They may be used by the teacher to check up his work and the standing of each of his pupils in reading, writing, arithmetic, language, drawing, spelling, and some other subjects. The purpose of this course is to give the teacher and supervisor a working knowledge of educational tests.

246. Educational Problems—Four hours, Winter Quarter.

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 operation; the place of method in the school room; the school as a unit of supervision; practical correlation of school and community work.

Educational Psychology

JACOB DANIEL HEILMAN, Ph.D.

MARVIN F. BEESON,*Ph.D.

The main 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 natural modes of learning.

MAJORS IN PSYCHOLOGY.

First Year.		Hours.
1. Professional Core:		
Biology 2.—Bionomics	4	4
Education 8.—Educational Values.....	4	4
Sociology 3.—Educational Sociology.....	4	4
2. Courses Required by the Department of Psychology:		
English 4.—Functional English.....	4	4
(Required of students who need practice in speaking and writing English.)		
Second Year.		
1. Professional Core:		
Psychology 2a.—Educational Psychology.....	4	4
Psychology 2b.—Educational Psychology.....	4	4
Pol. Sc. 30.—Political Adjustments.....	4	4
Ed. 10.—El. School Curriculum.....	4	4
2. Courses Required by the Department of Psychology:		
Psychology 3.—Child Development.....	4	4
Training School 1.—Principles of Teaching.....	4	4
Teaching.—Practice Teaching	8	8
Third Year.		
1. Professional Core:		
Psychology 104 or 105.—Psychology of School Subjects.....	4	4
Sociology 105.—Social Maladjustments.....	4	4
2. Courses Required by the Department of Psychology:		
Psychology 107.—Mental Tests	4	4
Psychology 110.—General Psychology	4	4
High School 105.—Principles of Teaching.....	4	4
High School 103.—Teaching	4	4

Fourth Year.

1. Professional Core:
 - Psychology 108.—Educational Tests 3
 - Education 116.—High School Curriculum..... 4
 - Education 111.—Philosophy of Education..... 4
2. Courses Required by the Department of Psychology.
 - Psychology 106.—Clinical Psychology 4
 - Psychology 109.—Psycho-clinical Practice 8
 - Psychology 212.—Psychological and Statistical Methods Applied to
Education 4
 - Psychology 213.—Laboratory and Conference Courses..... 4-8

Majors in Psychology are advised to take a minor of at least 24 hours in another department.

MAJOR IN SPECIAL SCHOOLS AND CLASSES.

The requirements for the first and second years will be the same as those for the Major in Psychology.

Third Year.

- | 1. Professional Core: | Hours. |
|--|--------|
| See Major in Psychology. | |
| 2. Courses Required by the Department of Psychology: | |
| Psychology 111.—Speech Defects | 2 |
| Psychology 112.—History of Auxiliary Education..... | 2 |
| Psychology 107.—Mental Tests..... | 4 |
| Biology 103.—Heredity..... | 3 |
| Construction Work | 8 |
| Observation, Teaching and Methods..... | 4 |
| (Defective Children) | |

Fourth Year.

- | 1. Professional Core: | Hours. |
|--|--------|
| See Major in Psychology. | |
| 2. Courses Required by the Department of Psychology: | |
| Psychology 106.—Clinical Psychology | 4 |
| Psychology 109.—Psycho-clinical Practice | 8 |
| Sociology 124.—Child Welfare..... | 4 |
| Observations, Teaching and Methods..... | 8 |
| (Defective Children) | |

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; (b) To discuss the causes of defects, the methods of preventing and detecting them and the procedure required for effecting their amelioration or cure.

The following topics will be treated: Sensory defects; enlarged adenoids and diseased tonsils; malnutrition; faulty postures and deformities; and hygiene of the mouth.

2. Educational Psychology—Required. Second year. Eight hours.

The purposes of this course are: (a) To familiarize the student with the capacities and native responses of the child 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 make the student acquainted with the various modes of learning and the conditions which facilitate learning. (c) To discuss those conditions of life, the schoolroom and school activities which avoid fatigue and promote work. (d) To point out the significance of individual differences for instruction and the arrangement of school work.

The following topics will be treated in two courses:

- a. The child's native equipment and mental work and fatigue.
- b. The psychology of learning and individual differences.

3. Child Development—Second year. Four hours. A prerequisite for Course 107.

The purposes of the 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 his development.

The following topics will be treated: Purposes and methods; anthropometrical measurements and growth; the development of attention and sense perception; 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—Required. Third year. Four hours.

The purposes of the 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 mastering 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 learning and teaching and the materials of the subject with individual differences and with the progress made by the child. (d) To criticize methods of instruction in the light of individual requirements, the mental processes involved in a given subject and the results of experimental studies.

The elementary school subjects are the topics treated.

105. Psychology of the High School Subjects—Required of students preparing to teach in the high school in lieu of course 104. Third year. Four hours.

The purposes of the course are: (a) The same as those enumerated in course 104. (b) To familiarize the student with the nature and the methods of applying the tests which are designed to measure the level of the child's performance in the high school subjects.

The high school subjects are the topics treated.

106. Clinical Psychology—Four hours.

The purposes of the course are: (a) To teach students how to determine the mental status of the child through first-hand observations, tests and experiments and through the collection of hereditary, developmental and environmental data. (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; mental classification of children; pathological classification of the feeble-minded; treatment of special classes of children; social, racial and educational aspects of feeble-mindedness; causes of feeble-mindedness; mental characteristics of the feeble-minded.

107. Mental Tests—Four hours.

The purposes of the course are: (a) To make the students familiar with the instruments which are employed to determine the child's general intelligence and the tests designed to measure the efficiency of the child's individual mental processes. (b) To teach the students the methods of using the tests. (c) To point out the educational and vocational significance of tests.

The following topics are treated: Graded series of tests such as the Binet-Simon, Yerkes-Bridges-Hardwick, Terman, Kuhlmann, Porteus, and Cornell; tests of perception, memory, imagination, thinking, attention, psycho-motor control and of various combinations of mental processes.

103. Educational Tests and Measurements—Required. Fourth year. Three hours.

The purposes of the course are: (a) To give the student an intimate 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. (c) To point out their educational significance.

The following topics are treated: Tests of reading, writing, spelling, arithmetic and of the other elementary school subjects.

109. Psycho-clinical Practice—Two or four hours.

The purpose of this course is to give the students practice in the examination of children. The knowledge received in courses 1, 106 and 107 is put into actual practice.

110. General Psychology—Four hours.

Purposes of the course: (a) To make the student acquainted with psychological theories and concepts. (b) To discuss the nature of mental processes and their relations to each other, the nervous system, the stimuli of the external world and certain forms of physical behavior.

Topics: Those which are listed in the text books of psychology.

111. Speech Defects—Two hours.

Purposes: (a) To make the student acquainted with the nature of such speech defects as aphasia, stuttering and lisping. (b) To show how they handicap the child in school and in life. (c) To discuss 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 the backward and feeble-minded children.

123. Psychological and Statistical Methods Applied to Education—Four hours.

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 for the treatment of educational data.

214. Conference and Laboratory Courses—Four or more hours.

Topics: Formal discipline; sex hygiene; retardation; retinal sensations; space perception; learning, etc.

State High School of Industrial Arts

JOHN R. BELL, A.M., Litt.D., *Principal.*

JEAN CROSBY, A.B., *Preceptress, History*

*RAE BLANCHARD, A.B., *English*

WILL H. DODDS, A.B., *Oral English*

ESTHER GUNNISON, A.B., *Dramatic Interpretation*

CHARLOTTE HANNO, A.B., *Modern Languages*

LUCILLE HILDEBRAND, A.B., *Mathematics*

LUCY McLANE, A.B., *English Literature*

LILA M. ROSE, Pd.M., *Music*

JENNIE TRESSEL, A.B., *Teacher Training Courses*

EDNA WELSH, Pd.M., *Typewriting, Shorthand*

The primary function of the high school department is to train that group of teachers who expect to enter the field of secondary education. Student teaching is required of all students in the Senior College, who expect to ask for recommendations as high school teachers. The College will not recommend for high school positions any student who has not had high school practice teaching. Two years of college training is a prerequisite to practice teaching in the high school.

The State High School of Industrial Arts (High School Department 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.

Untrained and unskilled teachers do not practice on the pupils. Teachers are not permitted to take charge of classes until they are both trained and skilled in the art of teaching and then always under the direction of the head of the department, who is a permanent member of the faculty and has been selected because of special fitness for the work which she is to do. It is not too much to say that some of the best high school teachers in the state are in this school.

In addition to its excellent teaching force, the school has the use of the splendid equipment of Colorado State Teachers College. The library, the museums, the collections of fine arts and the laboratories are all

*On leave of absence, 1918-1919.

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.

The school is especially suited to the needs of students who desire to become teachers. There is a teachers' training course in the high school which gives, in addition to the usual high school subjects, a thoro mastery of the common school branches, and a knowledge of how these branches should be taught. It has been shown by experience that many of the strongest graduates that have gone out from Colorado State Teachers College are persons who have taken their high school training and college training at the same institution.

103. Student-Teaching in the High School—Four hours. Every Quarter.

In this course the student-teacher is permitted to observe an expert teach the particular subject in which she desires to specialize. During this period of observation she is expected to prepare two model lesson plans each week, one of which is to be presented before the training teacher in the form of a model lesson. She is expected, also, to know thoroly each lesson that is assigned to the class by the teacher in charge and to be ready to answer questions and discuss topics at any time. The amount of student teaching is gradually increased. One or two terms of this combination of observation and teaching are

105. Principles of High School Teaching—Four hours.

This is a course in methodology as the subject relates itself to the curriculum of secondary schools. It is taught by the Principal of the High School Department but each Department Head assists in the courses and every phase of work that is being done in the high school is discussed in the light of the more recent experiments and developments in secondary education.

The course in methodology is an integral part of the plan for training high school teachers and, therefore, is required of all who expect to enter this field. Course 105 is a continuation of 103 and takes the place of a term of practice teaching.

107. Advanced Course in High School Student Teaching—Four hours.

Persons who have completed in a satisfactory manner course 103 and course 105 may be selected by the Principal of the High School and given entire charge of a class (the training teacher being present in the capacity of a critic teacher).

This course is intended for individuals who have shown exceptional talent in practice teaching and in mastering the "Principles of High School Teaching" and who want the opportunity to demonstrate their fitness for the better positions in the field of secondary education.

109. High School Supervision—Hours to be arranged.

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.

THE UNGRADED SCHOOL FOR ADULTS.

(High School Credit)

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 this school is to open the door of opportunity to just such students. The work will be evaluated according to the strength shown, and the individual will be classified, after sufficient time has elapsed, in accordance with the power demonstrated without the necessity of completing each omitted step.

The experiences of life have a very high educational value. The various types of schools of America have been slow to recognize the real significance of the fact that life is itself a school in which character can be developed and mental growth attained. By doing any kind of work,

and doing it well, the mind is made stronger and the character more dependable. The individual of twenty years or more who has taught, worked on a farm, or in a factory, during the years that other boys and girls are going to school, usually manifests, upon returning to school, far more mental power than the pupils, fourteen or fifteen years of age, with whom he has been compelled to associate in the work of the class room.

The Ungraded School for Adults provides a special school for adult 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. And, most significant of all, it substitutes the power-unit for the time-unit. No one can enter the Ungraded School for Adults who has not reached the age of twenty years.

The Training School

E. A. HOTCHKISS, A.M., <i>Director</i>
MILDRED DEERING JULIAN, A.B., <i>Kindergarten</i>
MRS. LELA AULTMAN, Pd.M., <i>First Grade</i>
MRS. BELLA B. SIBLEY, A.M., <i>Second Grade</i>
CLARA M. WHEELER, <i>Third Grade</i>
HULDA A. DILLING, B.E., <i>Fourth Grade</i>
FRIEDA B. ROHR, A.B., <i>Fifth Grade</i>
ELIZABETH HAYS KENDEL, A.B., <i>Sixth Grade</i>
_____ <i>Seventh Grade</i>
EMMA T. HEMLEPP, B.S., <i>Eighth Grade</i>
LILA MAY ROSE, Pd.M., <i>Music</i>
AGNES HOLMES, Pd.M., <i>Applied Arts</i>
ELIZABETH CLASBEY, <i>Home Economics</i>

The training school has a two-fold function: (1) to train college students in the art of teaching; (2) to maintain an ideal elementary school organization.

The training school is an Educational Laboratory where educational problems are being worked out under the direction of skilled experts. To this end the training school maintains a complete elementary public school unit from kindergarten to the eighth grade, inclusive. The sixth, seventh and eighth grades are organized on the departmental plan for the purpose of exploring earlier than usual the interests, attitudes and abilities of pupils, and at the same time provide better for individual differences of all kinds. This organization affords a splendid opportunity for studying Junior High School problems. A revised statement of the regulations, courses of study, etc., of this school unit is in process of construction.

A FOUR-YEAR CURRICULUM FOR KINDERGARTEN TEACHERS.

First Year.		Hours.
1. Professional Core:		
Biology 2.—Bionomics		4
Education 8.—Educational Values.....		4
Sociology 3.—Social Organization.....		4
2. Courses Required by Training School:		
Training School 31.—Story telling		3
Training School 32.—Construction		4
Training School 33.—Plays and Games.....		3
Psychology 1.—Child Hygiene.....		4
Art 2a.—Methods		2
Art 2b.—Applied Design		2
English 1.—Material and Method.....		3
Music 3.—Public School Music.....		2
Library Science		1

3. Suggested Electives:		
Training School 3.—Primary Methods.....	4	
Physical Education 7.—Folk Dancing.....	2	
Industrial Arts 1.—Toy Making.....	4	
Piano Lessons.....		
Second Year.		
1. Professional Core:		
Psychology 2a.—Educational Psychology	4	
Psychology 2b.—Educational Psychology	4	
Political Science 30.—Political Adjustment.....	4	
Education 10.—Elementary School Curriculum.....	4	
2. Courses Required by Training School:		
Training School 1.—Principles of Teaching.....	4	
Training School 37.—Kindergarten Curriculum	4	
Teaching.—Practice Teaching	8	
Nature Study	4	
Physical Education 6.—Singing and Rhythmic Games.....	2	
3. Suggested Electives:		
English 4 (if needed)—Functional English.....	4	
Training School 39.—Relation Kindergarten and Primary.....	3	
Physical Education 7.—Folk Dancing.....	2	
Oral English 4.—Story Telling.....	2	
Reading 9.—Teaching of Reading.....	4	
Third Year.		
1. Professional Core:		
Sociology 105.—Social Maladjustments.....	4	
Psychology 104.—Psychology of Elementary School Subjects.....	4	
2. Courses Required by Training School:		
Training School 122.—Play Life of Children.....	3	
Training School 124.—Kindergarten Conference	5	
Teaching.—Practice Teaching	4	
Physical Education 14.—First Aid.....	1	
3. Suggested Electives:		
Art 7.—Constructive Design.....	4	
Oral English 115.—The Festival.....	3	
Education 33.—History of Modern Education.....	3	
Music 1.—Sight Reading.....	4	
Fourth Year.		
1. Professional Core:		
Education 116.—The Course of Study.....	4	
Education 111.—Philosophy of Education.....	4	
Educational Psychology 108.—Educational Tests and Measure.....	3	
2. Courses Required by Training School:		
Training School 123.—Kindergarten Materials.....	5	
Oral English 3.—Appreciation of Literature.....	2	
Teaching.—Practice Teaching	4	
3. Suggested Electives:		
Industrial Arts 1.—Elementary Bookbinding.....	4	
Arts 8.—Pottery	4	
Arts 6.—Art Appreciation	1	
Agriculture 6.—School Gardening.....	4	
Biological Science 5.—Bird Study.....	4	

A FOUR-YEAR CURRICULUM FOR PRIMARY TEACHERS.

First Year.		Hours.
1. Professional Core:		
Biology 2.—Binomics.....		4
Education 8.—Educational Values.....		4
Sociology 3.—Educational Sociology.....		4
2. Courses Required by Training School:		
Training School 3 or 4.—Primary Methods and Observations.....		4
English 1.—Material and Method.....		3
Psychology 1.—Child Hygiene.....		4
Music 2.—Public School Music.....		4
Physical Education 7.—Folk Dancing.....		2
Nature Study		4
Art 2.—Applied Design.....		2
Oral English 4.—Story Telling.....		2
Penmanship if below quality 80 on Ayres Scale.....		2
Library Science 1.....		1

3. Suggested Electives:

Music 1.—Sight Reading.....	4
Physical Education 6.—Singing, rhythmic plays for children.....	2
Training School 32.—Construction.....	4

Second Year.

1. Professional Core:

Psychology 2a.—Educational Psychology, Fall.....	4
Psychology 2b.—Educational Psychology, Winter.....	4
Political Science.—Political Adjustment.....	4
Education 10.—Elementary School Curriculum.....	4

2. Courses Required by Training School:

English 4 (if needed).—Functional English.....	4
Training School 1.—Principles of Teaching.....	4
Art 13.—Blackboard Drawing.....	2
Teaching.—Practice Teaching.....	8
Reading 9.—The Teaching of Reading.....	4

3. Suggested Electives:

Training School 33.—Plays and Games.....	3
Training School 37.—Relation of Kindergarten and Primary Grades.....	4
Training School 5.—Intermediate Methods and Observations.....	4
Training School 31.—Literature and Story Telling in Kindergarten and Primary Grades.....	4
Biology 5.—Bird Study.....	4
Music 10.—Methods in Appreciation.....	2

Third Year.

1. Professional Core:

Sociology 105.—Social Maladjustments.....	4
Psychology 104.—Psychology of Elementary School Subjects.....	4

2. Courses Required by Training School:

Teaching.—Practice Teaching.....	4
Training School 32.—Construction.....	4
Physical Education 23.—Playground Supervision.....	1
Training School 37.—Kindergarten Curriculum.....	4
Oral English 106.—Reading and Dramatizing.....	4
Zoology 108.—Animal Behavior.....	2

3. Suggested Electives:

Music 6.—Chorus Singing.....	1
Art 7.—Constructive Design.....	4
Physical Education.....	4
Oral English 115.—The Festival.....	3
Sociology 1.—Anthropology.....	4
Education 33.—History of Modern Education.....	3

Fourth Year.

1. Professional Core:

Education 111.—Philosophy of Education.....	4
Education 116.—The Course of Study.....	4
Ed. Psychology 108.—Educational Tests and Measures.....	3

3. Courses Required by Training School:

Education.—Elementary Supervision.....	4
Training School 204.—Research Work in Training School.....	4
Sociology 124.—Problems and Methods of Child Welfare.....	5
Oral English 11.—Oral Composition.....	3

3. Suggested Electives:

Bacteriology 2.—Hygiene.....	3
History 27.—Contemporary History.....	4
English 31.—The Short Story.....	4
Biotics 102.—Hereditry.....	3
Psychology 3.—Child Development.....	3
Education 135.—Educational Classics.....	4

A FOUR-YEAR CURRICULUM FOR INTERMEDIATE TEACHING.

First Year.

1. Professional Core:

	Hours.
Biology 2.—Binomics.....	4
Education 8.—Educational Values.....	4
Sociology 3.—Social Organization.....	4

2. Courses Required by Training School:	
Training School 5.—Intermediate Methods and Observations.....	4
Psychology 1.—Child Hygiene.....	4
Physical Education 5.—Outdoor Games.....	1
English 2.—Material and Methods.....	3
Nature Study 1.....	4
Music 2.—Public School Music.....	4
Art 2.—Applied Design.....	2
Geography 8.—Human Geography.....	4
Penmanship if below quality 80 on Ayres' Scale.	
Library Science 1.....	1
3. Suggested Electives:	
Music 1.—Sight Reading.....	4
Physical Education 7.—Folk Dancing.....	2
Training School 3.—Primary Methods and Observations.....	4
History 13.—The Teaching of History.....	3

Second Year.

1. Professional Core:	
Psychology 2a.—Educational Psychology	4
Psychology 2b.—Educational Psychology	4
Political Science.—Political Adjustment.....	4
Education 10.—Elementary School Curriculum.....	4
2. Courses Required by Training School:	
Training School 1.—Principles of Teaching.....	4
English 4 (if needed).—Functional English.....	4
Teaching.—Practice Teaching	8
Reading 9.—The Teaching of Reading.....	4
Physical Education 23.—Playground Supervision.....	1
Art 13.—Blackboard Drawing.....	2
3. Suggested Electives:	
Physical Education 14.—First Aid.....	2
Oral English 2.—Voice Culture.....	2
Geography 3.—Climatology	4
Biology 5.—Bird Study.....	4
Music 10.—Methods in Appreciation.....	2
Art 1.—Elementary Drawing and Design.....	4

Third Year.

1. Professional Core:	
Sociology 103.—Social Maladjustments.....	4
Psychology 4.—Psychology of Elementary School Subjects.....	4
2. Courses Required by Training School:	
Teaching.—Practice Teaching	4
Art 7.—Constructive Design	4
Physical Education 3.—Elementary Light Games.....	1
Oral Reading 115.—The Festival.....	3
Zoology 108.—Animal Behavior.....	2
Mythology 110.—Greek and Roman Myths.....	4
History 105.—European History.....	4
3. Suggested Electives:	
Music 6.—Chorus Singing.....	1
English 6.—Appreciation of Literature.....	2
Geography 114.—Museum Work in Geography.....	2
Sociology 1.—Anthropology	4
English 11.—A Study of English Words.....	4
History 106.—European History.....	4
Education 33.—History of Modern Education.....	3

Fourth Year.

1. Professional Core:	
Education 116.—The Course of Study.....	4
Education 111.—Philosophy of Education.....	4
Ed. Psychology 108.—Educational Tests and Measures.....	3
2. Courses Required by Training School:	
Elementary Supervision 103.....	4
Training School 204.—Research Work.....	4
English.—Course in Literature.....	4
Political Science 12.—State and Social Government.....	4
3. Suggested Electives:	
Music 7.—History, Ancient and Medieval Music.....	2
Biotics 102.—Heredity	3
Sociology 106.—Principles of Social Progress.....	2
Political Science 123.—International Relations.....	3
Physical Education 125.—History, Development and Organization of Play and Playgrounds.....	3
Education 15.—Vocational Guidance.....	2

A FOUR-YEAR CURRICULUM FOR GRAMMAR GRADES.

First Year.

1. Professional Core:	Hours.
Biology 2.—Binomics	4
Education 8.—Educational Values.....	4
Sociology 3.—Social Organization.....	4
2. Courses Required by Training School:	
Training School 6.—Methods and Observation.....	4
Psychology 1.—Child Hygiene.....	4
Physical Education 112.—Playground Games.....	1
English 3.—Material and Methods of Junior High School.....	3
Mathematics 8.—Teaching of Arithmetic.....	4
Science.—General Science	4
Geography 8.—Human Geography.....	4
Penmanship if below quality 80 on Ayres' Scale.	
Library Science 1.....	1
3. Suggested Electives:	
Music 2.—Public School Music.....	4
Art 1.—Public School.....	2
Music 1.—Sight Reading.....	4
Oral English 11.—Oral Composition.....	3
Biology 5.—Bird Study.....	4
Typewriting	5
Phys. Education 7.—Folk Dancing.....	2
Industrial Arts 1.—Elementary Woodwork.....	4

Second Year.

1. Professional Core:	
Psychology 2a.—Educational Psychology	4
Psychology 2b.—Educational Psychology	4
Political Science.—Political Adjustments.....	4
Education 10.—Elementary School Curriculum.....	4
2. Courses Required by Training School:	
Training School 1.—Principles of Teaching.....	4
Teaching.—Practice Teaching	8
English 4 (if needed).—Functional English.....	4
English 12.—Teaching of English Grammar.....	4
Bacteriology 2.—Health Protection.....	3
History 13.—Teaching of History.....	3
Political Science 26.—Teaching of Civics.....	2
3. Suggested Electives:	
Physical Education 14.—First Aid.....	1
Music 10.—Methods in Appreciation.....	2
Mathematics 9.—Teaching of Arithmetic.....	4
Geography 3.—Climatology.....	4
Oral English 2.—Voice Culture.....	2
Industrial Arts 10.—Mechanical Drawing.....	4

Third Year.

1. Professional Core:	
Sociology 103.—Social Maladjustment.....	4
Psychology 4.—Psychology of Elementary School Subjects.....	4
2. Courses Required by Training School:	
Teaching.—Practice Teaching.....	4
Oral English 115.—The Festival.....	3
Political Science 12.—State and Social Government.....	4
Zoology 108.—Animal Behavior.....	2
Education 15.—Vocational Guidance.....	2
English 6.—Appreciation of Literature.....	2
3. Suggested Electives:	
Physical Education 7.—Folk Dancing.....	2
Physical Education 108.—Esthetic Dancing.....	2
Education 135.—Educational Classics.....	4
Music 6.—Chorus Singing.....	1
English 11.—A Study of English Words.....	2
History 10.—Social and Industrial History.....	4

Fourth Year.

1. Professional Core:	
Education 116.—The Course of Study.....	4
Education 111.—Philosophy of Education.....	4
Educational Psychology.—Educational Tests and Measures.....	3

2. Courses Required by Training School:

Research Work in Training School 204.....	4
English 31.—The Short Story.....	4
Teaching Children "How to Study".....	4
Elementary Supervision 103.....	4
Education 113.—The Junior High School.....	3

3. Suggested Electives:

Biotics 102.—Hereditv	3
Political Science 25.—Comparative Government.....	4
Physical Education 23.—Playground Supervision.....	1
Education 142.—Educational Administration and Supervision.....	3

1. Principles of Teaching—Four hours. Required in the second year of all Junior College students. Students should take this course during their first quarter of practice teaching.

This course will consist of reading, discussion, and observations of class-room work in the Training School. It will deal with such topics as class-room organization; standards for judging both the curriculum and class-room instruction; teaching children how to study; the ideas of enrichment, development and control of experiences, and the subject matter and methods appropriate to a realization of these ideas in the various grades of the elementary school from kindergarten to grammar grades.

2. Teaching in the Training School—Hours according to schedule. Required of all Junior College students.

This will include conferences, observation, and teaching on the part of college students.

3. Primary Methods—Four hours. Each Quarter.

In this course the needs of the child entering school for the first time will receive special attention. A brief comparison of courses of study in some of our larger city schools will be made. 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. Third and Fourth Grade Methods and Observation—Four hours. Each Quarter.

This course is introduced by a brief study of the instinctive responses and mental characteristics of the child between the ages of seven and ten. This forms a basis for a more detailed study of the principles of learning involved in the various school subjects such as sensorimotor learning, perceptual learning, memorizing and reasoning. Discussion of the factors which determine the selection and arrangement of subject matter. Methods of teaching. Observation of classroom work for method discussion. Study and critical discussion of the most recent literature of educational methods.

5. Fifth and Sixth Grade Methods and Observation—Four hours. Each Quarter.

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.

6. Junior High School Methods—Four hours.

This course will deal with the problems of instruction in the Junior High School. It will consist of a practical study of the methods involved in the teaching of History, Geography, English, and Arithmetic.

31. Literature and Story-Telling in the Kindergarten and Primary Grades—Three hours. Fall Quarter.

A study and classification of the different types of stories according to their fitness for various ages and purposes; a study of the educational values of stories for children and of the possibilities of creative work by children; adaptation and selection of a graded list of stories.

32. Construction in the Kindergarten and Primary Grades—Four hours. Winter Quarter.

A study of the use of materials to meet the needs of the constructive instinct as it functions in the life of the child; a comparison of the Froebelian, Montessorri, and other materials.

33. Plays and Games for Kindergarten and Primary Children—Three hours. Spring Quarter.

A study of the development of games from the spontaneous activities of children thru the rhythmic and dramatic games, into the formal games, and the dance; an application of child psychology in the selection and presentation of games for different ages.

37. The Kindergarten Program—Four hours.

A study of the organization of the Kindergarten subjects in different schools; a detailed arrangement of the Kindergarten materials in a course of study.

39. The Relation of the Kindergarten and the Primary Grades—Three hours.

A comparison of the aims, principles, methods, and materials of the Kindergarten and primary grades; a study of the adaptation of the materials and subject-matter to meet the needs of the child.

122. The Play Life of Children as a Basis for Education in the Kindergarten—Three hours.

A study of the meaning of educational play and its significance in the mental and moral development of children.

123. Kindergarten Materials—Four hours.

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.

124. Kindergarten Conference—Four hours.

A study by each student of some one subject taught in the Kindergarten.

103. Supervision of Instruction in Elementary Schools—Four hours.

This course is intended for advanced students who are preparing for elementary supervision. It will deal with such problems as (1) standards for judging both supervision and class room instruction; (2) evaluating methods of teaching and material; (3) technique of criticism on the part of supervisors or superintendents; (4) how to judge and criticize a recitation in the most helpful manner.

204. Research Work—Four hours.

This course is designed for advanced students who desire to make a more comprehensive and systematic study of school surveys or inquiries, together with a review of other investigations which have been made in the field of educational administration. Opportunity will be offered in the Training School for doing research work in various educational fields involving advanced educational thought.

County Schools

JOSEPH H. SHRIBER, A.B., *Director*

This department recognizes that the rural problem is essentially the problem of the rural school, because it is the agency of education, and a natural center for organized community service. The object of the courses offered here is to prepare county teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country. However, every effort consistent with existing conditions and lasting progress shall be made to point out the importance of reorganizing the county educational system upon a principle that shall lead to centralization. While the new conception of a new school is in process of formation, we must make the best of the present situation. Whatever may be the organization, equipment or skill in management, good teaching is the fundamental source from which the product of our schools can be judged. The rural teacher, especially, on account of limited time and a crowded curriculum should have a clear-

cut knowledge of the materials he teaches. It shall be one of the chief aims of the department to stress the importance of scholastic preparation, a professional training that relates the child closely to the teaching process, and of making the county school of the future a dynamic force in the community.

RURAL DEMONSTRATION SCHOOLS.

A FOUR-YEAR COURSE FOR COUNTY SCHOOL TEACHERS.

		First Year.	Hours.
1.	Professional Core:		
	Biology—Binomics		4
	Education 8—Educational Values.....		4
	Sociology 3—Educational Sociology.....		4
2.	Courses Required for County Schools:		
	Psychology 1—Child Hygiene.....		4
	Co. Sch. 6—County School Methods.....		4
	Co. School 26—R. Sch. Curriculum and the Community.....		3
	Math. 2—Arithmetic (Method and Content).....		4
	English 1—Material and Method.....		3
	Music 4—Rural School Music.....		3
	Nature Study		4
	Geography 2—Geography Method.....		2
	Reading 9—The Teaching of Reading.....		2
	Ag. 30—Methods of Teaching Agriculture.....		2
	Playground Games 112.....		1
	Penmanship 56—If quality below 80 on Ayres' scale, non-credit.		
3.	Suggested Electives:		
	Elements of Cookery.....		4
	Ag. 2—Plant Propagation.....		1
	Library Science 1.....		1
	Folk Dances		1
	Free Hand Drawing.....		2
		Second Year.	Hours.
1.	Professional Core:		
	Psychology 2a—Educational Psyc., Fall.....		4
	Psychology 2b—Educational Psyc., Winter.....		4
	Political Science—Political Adjustment.....		4
	Education 110—The Elementary School Curriculum.....		4
2.	Courses Required for County Schools:		
	Education 25—Ad. of Rural and Village Schools.....		3
	Sociology 6—Rural Sociology.....		3
	Demonstration School 1—Teaching and Observation.....		4
	Teaching Tr. School—Practice Teaching.....		4
	Observation 2—Observation and Method.....		1
	History 10—Industrial U. S.....		4
	English 4 (if needed)—English.....		4
	Commercial Art 58—Farm Accounting.....		3
	Elementary Woodwork 1—Fall Quarter.....		4
3.	Suggested Electives:		
	Education 130—Rural Education.....		3
	County Sch. 7—Rural School Problems.....		3
	Ag. 10—Farm Animals.....		4
	Phys. Ed. 14—First Aid.....		1
	Household Science 3—Cooking and Serving.....		4
		Third Year.	
1.	Professional Core:		
	Sociology 103—Social Maladjustments.....		4
	Educational Psyc. 108—Ed. Tests and Measurements.....		3
	Psychology 104—Psyc. of El. Sch. Sub.....		4
2.	Courses Required for County Schools:		
	Teaching—Rural Teaching and Observation.....		4
	Tr. School 32—Constructive Work.....		4
	Physical Ed. 23—Playground Supervision.....		1
	Oral English 106—Reading and Dramatization.....		4
	History 104—Western American History.....		3
	Ag. 26—Club Leadership.....		2
	Physics 15—Tr. School Physics.....		3
	Chemistry 111—Agricultural Chemistry.....		4
	Geography 122—Biogeography		4

3. Suggested Electives:

Zool. 108—Animal Behavior.....	2
Prevocational Ed. 104.....	2
Spanish or French.....	3
Public Speaking.....	2

Fourth Year.

1. Professional Core:

Education 116—The Course of Study.....	4
Education 111—Philosophy of Education.....	4
Ed. Pyc. 108—Ed. Tests and Measurements.....	4

2. Courses Required for County Schools:

General Science.....	4
Sociology 106—Principles of Social Progress.....	2
Eng. 12—The Teaching of Eng. Gram. Functionally.....	4
Ag. 20—Soils.....	4
Eng. 31—The Short Story.....	4
Music 115—School Entertainments.....	2
Rural Ed. 131—Research in Rural Education.....	3
Household Science.....	3

3. Suggested Electives:

French or Spanish.....	3
Phys. Ed.—Indoor Games.....	1
Household Science 107—Home Economics Survey.....	4
Household Art 117—Interior Decoration.....	4

26. The Rural School Curriculum and the Community—Required for County Schools. Three hours. Spring Quarter.

This course will treat of the problems of the teacher who desires to instruct country children in terms of their own environment. Methods and materials for such instruction will be outlined and discussed. Ways and means whereby stereotyped courses of study, in the various grade subjects, may be vitalized and made more significant to country children will be sought.

6. County School Methods—Required for County Schools. Four hours. Fall and Winter Quarters.

The application of methods to a rural school, the organization of material, class room management, and effective presentation will be discussed. This course will aim to discover points of difference between the graded and the ungraded school in respect to the utility of pertinent methods used in teaching the various subjects in a rural and village school.

7. Rural School Problems—Two hours. Fall and Winter Quarters.

The problem of the rural school in its relation to the teacher, the child, the school board and the community will be discussed. The daily program will be considered in its application to a school of eight grades.

1. Teaching in Rural Demonstration Schools—Four hours. Every Quarter.

Four one-room rural schools, at a convenient distance from the College, are being utilized for the special training of teachers. The Demonstration Schools are taught by successful, well trained and expert teachers of the rural type of school. Senior students who desire special preparation for country schools may teach their first term in the Training School or teach one month in the Demonstration Schools as an assistant or helper to the regular teacher and assume such regular duties of a teacher as her capabilities warrant. Board will be even less in the districts where Demonstration Schools are located than it would be at the College. All of these schools have teachers' cottages on the school grounds where the regular teacher and the student helpers live and share the work and expense of housekeeping. Two student helpers will be assigned to a school each month except for the first two weeks beginning September 3rd, 1918. Additional student teachers will follow after the school has been in session for two weeks, thus allowing a teacher to remain with, at least, two weeks' experience. The course of study being pursued at the College can be done in non-residence, during the month spent in observation and practice teaching in the Demonstration Schools. The same credit will be given this work as is given practice teaching in the Training School at the College. One month in the Demonstration Schools and one quarter in the Training School are required for students who may anticipate teaching in rural and village schools. Four hours. Every Quarter.

2. Observation in Demonstration Schools—One hour. Winter and Spring Quarters.

This is a part of the course mentioned above. One part cannot be taken without the other. Preparation for observation is based upon observations made in the Demonstration Schools, relative to correct methods used, organization, management, utility of subject matter, program, and the community in its relation to the school. Essential points of interest are to be noted by the student helper and discussed in class.

25. Administration of Rural and Village Schools—Three hours. Winter Quarter.

For full description of this course, see Department of Education.

6. Rural Sociology—Required for County Schools. Three hours. Spring Quarter.

A study of rural social conditions, a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a positive force in rural progress.

130. Rural Education—Three hours. Fall Quarter.

For full description of this course, see Education Department.

VOCATIONAL COURSES.

1. Elementary Woodwork—Required for County Schools.

For full description of this course, see Department of Practical Arts.

5. Elementary Agriculture—Required for County Schools.

For full description of this course see Department of Agriculture.

Household Science and Art—Required for County Schools.

PUBLIC SCHOOL COURSES.

2. Arithmetic—Four hours. Fall Quarter.

The principal operations and the application side of arithmetic will receive special emphasis; decimal and common fractions, measurements and the applications of percentage. Practical farm problems and their use in vitalizing the subject will be considered.

4. Functional English—Required for County Schools.

For full description of this course see the Department of Literature and English.

6. Geography—Required for County Schools.

For a full description of this course see the Department of Geology and Geography.

14. U. S. History and Civics—Required for County Schools.

For a full description of this course see Department of History and Political Science.

2. Music—For full description of this course see Department of Music.

Biological Sciences

Leverett Allen Adams, Ph.D.

John C. Johnson, A.M.

Lloyd Ackerman, A.B.

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.

The department of Biological Sciences occupies a lecture room and two laboratories on the third floor of the main building. It is equipped with microscopes, lantern slide collection, and type specimens for the work of Zoology and Botany. A museum for the use of mature work is located on the first floor of the Library Building.

A new science course, combining Zoology, Botany, Chemistry and Physics, is offered to the students as a four-year course. The combination is made to train students for the teaching of sciences in high schools, as most of the science work is or should be taught by the teachers trained in general science lines. These sciences work well together, so it is desirable for prospective teachers to train themselves in related subjects. As will be seen from the catalog, students may major in one of the four subjects with the most closely related as a minor, i. e.: Zoology—Botany, Physics—Chemistry. In any case work must be taken in the other sciences.

MAJOR IN THE BIOLOGICAL SCIENCES.

If Botany is the main interest:

		First Year.	
1.	Professional Core:		Hours.
	Biol. 2—Bionomics, Fall.....		4
	Ed. 8—Educational Values, Spring.....		4
	Soc. 3—Educational Sociology, Winter.....		4
2.	Courses Required by the Department of Botany:		
	Biology 3—Advanced Biology.....		4
	Botany 2—General Botany.....		3
	Zoology 4 or 5—Ornithology or Bird Study.....		4
		Second Year.	
1.	Professional Core:		
	Psych. 2a—Educational Psychology, Fall.....		4
	Psych. 2b—Educational Psychology, continued, Winter.....		4
	Ed. 10—El. School Curriculum, Winter.....		4
	Pol. Sc. 30—Political Adjustment, Spring.....		4
2.	Courses Required by the Department of Botany:		
	Botany 3—Systematic Botany.....		3
	Botany 4—Botany of Trees.....		2
	Bacteriology 1—Bacteria, Yeasts, and Molds.....		4
	Zoology 1—Invertebrates.....		4
		Third Year.	
1.	Professional Core:		
	Psych. 104—Psych. of El. School Subjects or		
	Psych. 105—Psych. of the High School Subjects, Fall.....		4
	Soc. 105—Social Maladjustments, Winter.....		2

2. Courses Required by the Department of Botany:	
Botany 101—Advanced Systematic Botany.....	3
Bacteriology 2—Bacteria and Public Hygiene.....	3
Zoology 2—Invertebrates.....	4
Biotics 101—History of Man.....	3
H. S. 105—Principles of Teaching.....	4
H. S. 103—Teaching.....	4

Fourth Year.

1. Professional Core:	
Ed. 116—The High School Curriculum, Fall.....	4
Ed. 111—Philosophy of Education, Spring.....	4
Ed. Psych. 108—Tests and Measurements.....	3
2. Courses Required by the Department of Botany:	
Botany 102—Botanical Technique.....	1
Botany 103—Problems in Botany.....	4
Zoology 3—Vertebrates.....	4
Biotics 102—Hereditry.....	3
H. S. 107—Teaching.....	4

The Minor is in the Physical Sciences. The following courses are required: Physics 1, 2, 3 (12 hours); Chemistry 1, 2, 3, 4, 5, 6 (12 hours).

MAJOR IN BIOLOGICAL SCIENCES.

If Zoology is the main interest:

First Year.

1. Professional Core:		Hours.
Biol. 2—Bionomics, Fall.....	4	
Ed. 8—Educational Values, Spring.....	4	
Soc. 3—Educational Sociology, Winter.....	4	
2. Courses Required by the Department of Zoology:		
Biology 3—Advanced Biology.....	4	
Zoology 4 or 5—Ornithology or Bird Study.....	4	
Botany 2—General Botany.....	3	

Second Year.

1. Professional Core:		
Psych. 2a—Educational Psychology, Fall.....	4	
Psych. 2b—Educational Psychology continued, Winter.....	4	
Ed. 10—El. School Curriculum, Winter.....	4	
Pol. Sc. 30—Political Adjustment, Spring.....	4	
2. Courses Required by the Department of Zoology:		
Zoology 1—Invertebrates.....	4	
Zoology 2—Invertebrates.....	4	
Zoology 3—Vertebrates.....	4	
Botany 3—Systematic Botany.....	3	

Third Year.

1. Professional Core:		
Psych. 104—Psych. of El. School Subjects, or		
Psych. 105—Psych. of the High School Subjects, Fall.....	4	
Soc. 105—Social Maladjustments, Winter.....	4	
2. Courses Required by the Department of Zoology:		
Biotics 101—History of Man.....	3	
Biotics 102—Hereditry.....	3	
Botany 4—Botany of Trees.....	2	
Bacteriology 2—Bacteria and Public Hygiene.....	3	
H. S. 105—Principles of Teaching.....	4	
H. S. 103—Teaching.....	4	

Fourth Year.

1. Professional Core:		
Ed. 116—The High School Curriculum, Fall.....	4	
Ed. 111—Philosophy of Education, Spring.....	4	
Ed. Psych. 108—Tests and Measurements.....	3	
2. Courses Required by the Department of Zoology:		
Zoology 101—Zoological Technique.....	1	
Zoology 110—Problems in Zoology.....	4	
Botany 101—Advanced Systematic Botany.....	3	
H. S. 107—Teaching.....	4	

The Minor is in the Physical Sciences. The following courses are required: Physics 1, 2, 3 (12 hours); Chemistry 1, 2, 3, 4, 5, 6 (12 hours).

BIOLOGY.

2. **Bionomics**—Two 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.

3. **Advanced Biology**—Four hours. Winter Quarter. A continuation of Biology 2.

4. **Biological Seminar**—One hour. Each Quarter. Required of Biology majors.

ZOOLOGY.

1. **Invertebrate Zoology**—Four hours. Two-hour periods.

Morphology and natural history of the invertebrates with particular reference to the Protozoa, Porifera, and Coelenterates.

2. **Invertebrate Zoology**—Four hours. Two-hour periods. Winter Quarter.

Continues Course 1. A study of the invertebrates from the Platyhelminthes to the Cordates. Lectures and special topics.

3. **Vertebrate Zoology**—Four hours. Two-hour periods. Spring Quarter.

Vertebrate morphology, starting with the Protocordates and including the comparative work on the higher vertebrates. Lectures and special topics.

4. **Ornithology**—Four hours. By appointment.

Critical study of birds with the use of key, etc.

5. **Bird Study**—Four hours. Spring and Summer Quarters.

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

6. **Mammals**—Three hours. By appointment.

The systematic position of the mammals, life histories, evolution, and geographical distribution.

101. **Zoological Technic**—One hour. Winter Quarter.

Work in making microscopic slides, preparation and preserving of specimens for class and museum use.

107. **Protozoology**—Three hours. Spring Quarter.

Study of Protozoans of Colorado. Laboratory course.

108. **Animal Behavior**—Two hours.

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.

109. **Parasitology**—Two hours.

A study of animal parasites. Laboratory course. Two-hour periods.

110.—**Problems in Zoology**—Four hours. By appointment.

A discussion of the present day problems in Zoology. For students majoring in the department.

210. **Comparative Vertebrate Anatomy**—Four hours.

BOTANY.

1. **Elementary Botany**—Two hours. Winter Quarter.

2. **General Botany**—Three hours. Spring Quarter.

Considers the development of the plant; life history of the plant; structures of plants in relation to their functions and environment, classification.

3. **Systematic Botany**—Three hours. Spring Quarter.

Classification of the Gymnosperms and Angiosperms of Colorado.

4. **Botany of Trees**—Two hours. Spring Quarter.

Considers the classification, morphology, growth, habits, and characteristics of the more important trees found in the West. Recognition of trees in the field emphasized.

101. **Advanced Systematic Botany**—Three hours. Given by appointment.

102. **Botanical Technic**—One hour. Winter Quarter.

A laboratory course in the preparation of botanical slides; methods of preservation, collecting, etc.

103. **Problems in Botany**—Four hours. By appointment.

A discussion of the present day problems in Botany. For students majoring in the department.

BACTERIOLOGY.

1. **Bacteria, Yeasts and Moulds**—Required of Household Science Majors. Four hours. Fall Quarter.

Lectures and laboratory work on injurious and beneficial bacteria, yeasts, and molds, likely to be found in the home or in the domestic science laboratory.

2. **Bacteria and Public Hygiene**—Three hours. Winter Quarter.

A study of Bacteria with emphasis on disease producing forms; their life history and effects on the human system; methods of prevention and control; immunity, disinfection, inspection, vaccination, hygiene of the person, home and school.

NATURE STUDY.

1. **Nature Study**—Four hours. Fall Quarter.

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.

3. **Nature Study**—Four hours. By appointment.

Special work in nature study for students who care to prepare for nature teaching.

BIOTICS.

101. **Biotics**—Three hours. Fall Quarter.

History of man and his body from the standpoint of evolution. Derivation of the skeleton, organs and different systems. Study of the remains of the prehistoric men, their form and evolutionary significance.

102. **Biotics.—Heredity**—Three hours. Winter Quarter.

This course takes up heredity and its significance. Study of the laws governing it and their importance to the future of the races. Relation of biological laws and education.

103. **Biotics. Eugenics, and Special Topics**—One hour. Spring Quarter.

The modern trend for the improvement of the race. Study of the laws of heredity and some of the legislation for the application of these laws to the races. Consideration of some of the problems.

Physics

FRANCIS LORENZO ABBOTT, B.S., A.M.

A new science course, combining Zoology, Botany, Chemistry and Physics, is offered to the students as a four-year course. The combination is made to train students for the teaching of sciences in high schools; as most of the science work is or should be taught by the teachers trained in general science lines. These sciences work well together, so it is desirable for prospective teachers to train themselves in related subjects. As will be seen from the catalog, students may major in one of the four subjects with the most closely related as a minor, i. e., Zoology—Botany, Physics—Chemistry. In any case, work must be taken in the other sciences.

MAJOR IN SCIENCES.

If Physics is the main interest:

		First Year.	Hours.
1.	Professional Core:		
	Biology 2—Bionomics.....		4
	Education 8—Educational Values.....		4
	Sociology 3—Educational Sociology.....		4
2.	Courses Required by the Department of Physics:		
	Physics 1, 2, 3—General Physics.....		12
	Chemistry 1, 2—General Chem.....		4
		Second Year.	
1.	Professional Core:		
	Psychology 2a—Educational Psychology		4
	Psychology 2b—Educational Psychology		4
	Pol. Sci. 30—Political Adjustment.....		4
	Education 10—The Elementary School Curriculum.....		4
2.	Courses Required by the Department of Physics:		
	Physics 15—Training School Physics.....		3
	Physics 110—Methods of Teaching Physics.....		2
	Chemistry 3, 4, 5, 6—General Chemistry.....		8
		Third Year.	
1.	Professional Core:		
	Sociology 105—Social Maladjustments		4
	Psy. 104 or 105—Psy. of the School Subjects.....		4
2.	Courses Required by the Department of Physics:		
	Physics 106—Historical Physics		4
	Physics 109—Alternating Currents		4
	Chemistry 7—Qualitative Analysis.....		4
		Fourth Year.	
1.	Professional Core:		
	Education 116—The High School Curricula.....		4
	Psychology 108—Educational Tests and Measurements.....		3
	Education 111—Principles of Education.....		4
2.	Courses Required by the Department of Physics:		
	Physics 104—The New Physics.....		4
	Physics 108—Radiographic Physics		4
	Chemistry 108, 112, 114 or 115.....		4

The minor is in the Biological Sciences. The following courses are required: Zoology, 1, 2 and 3; Botany, 2, 3, 4, 101 and 102. Those who major in Physics are required to take Algebra, Geometry and Trigonometry; also one course in Woodwork and one course in Mechanical Drawing.

1. General Physics—Open to Senior College. Four hours. Fall Quarter.

The work of this term covers the following subjects: Properties of matter, units of force and work, mechanics, hydrostatics, etc., and heat. Text-book: Kimball's College Physics.

2. General Physics—Open to Senior College. Four hours.

A course in sound and light. Text-book: Kimball's College Physics.

3. General Physics—Open to Senior College. Four hours. Spring Quarter.

A course in magnetism and electricity. Text-book: Kimball's College Physics.

Courses 1, 2, and 3 in Physics not only treat of the general principles of physics, but emphasize strongly the application of these principles as applied to machinery. The recitation work is fully illustrated by experiments.

4. General Science—Open to Senior College. Three hours. Every Quarter.

An elementary study planned with the view of giving, so far as is possible in such a brief course, an orderly, scientific understanding of the phenomena of everyday environment. Fully illustrated with simple experiments. By using materials at hand these experiments are so simplified that they may be used in actual school work.

5. Applied Elementary Household Physics—Two hours. Winter Quarter.

A course devoted to the study of the principles involved in home appliances, such as heating plants, refrigeration, ventilation systems, electrical apparatus, artificial illumination, conductivity of various kinds of cooking utensils, their economical use, etc. This course is planned especially for students of the Home Economics Course.

6. Applied Physics. The Automobile—Two hours. Spring Quarter. Open to Senior College students.

In this course the various types of cars, kinds of engines, springs, axles, clutches, differentials, feed systems, ignition systems, and car lubrication are discussed.

The purpose of the course is at least two-fold: (1) That persons who ride in, drive, or own a car may derive the greatest amount of satisfaction and pleasure from it by possessing an understanding of the mechanical principles underlying its operation; (2) That teachers taking the course may be well enough informed in the subject to disseminate a knowledge of the automobile physics correctly, thereby increasing scientific education.

The laboratory equipment for this course is quite complete with the various parts of the car and with an unlimited supply borrowed from the agents of various cars and garages in town.

7. Directed Play with Structural Toy Building Materials—Two hours.

The work consists of actually building any machine, or mechanical structure, with such building sets as the Mechanno, Erector or Tinker Toy, etc.

As stated in the title of the course, the building must be so directed as to call attention to the physics in the construction; yet the spontaneity of the child must not be suppressed. The course also attempts to show the historical development of the machine or structure. We are supplied with the material at present for a class of only five.

8. Physics of Sound—Two hours. Spring Quarter.

This course is meant primarily for students of music who desire a sound physical basis for their study. Such subjects as the nature and properties of sound waves, pitch, quality, resonance, interference, and scale building will be taken up and special attention paid to the physics of various musical instruments.

10. Household Physics—Open to Senior College. Three hours. Fall Quarter.

This is a first, or elementary, course in Physics planned wholly from the point of view of the practical bearings of physics. It is not restricted to the household, but fully uses the materials of the immediate surroundings of the home, school and neighborhood. It is planned to meet the needs of several

groups of people: (1) Students and teachers of Domestic Science and Household Economy; (2) Teachers in small high schools; (3) Rural school and grade teachers.

The course deals with matters so fundamental that it should be of large use to the elementary school teacher in explaining many pieces of geography, agriculture, physiology and hygiene.

The work of this quarter covers the subjects of mechanical appliances in the home, liquid gases, pumps, vacuum cleaners, etc., and heat. First ten chapters in Household Physics, Lynde.

11. Household Physics—Open to Senior College. Three hours. Winter Quarter.

For general statements, see Course 10. The subject covered in this term are: Evaporation, dew point, boiling, etc. Electricity in the home, electrical appliances, etc. Chapters XI to XX, inclusive, Lynde's Household Physics.

12. Household Physics—Open to Senior College. Three hours. Spring Quarter.

For general statement, see Course 10. The study of this quarter deals with electric machinery, sound and light. Chapters XXI to XXX, inclusive.

14. Laboratory Course in Natural Science for Grade and Rural Teachers—Two hours.

It deals with natural physical laws which will help the teacher to understand and explain many of the simple facts in nature. In this course we study the principle of the siphon, distillation of water, the thermometer, etc.

16. Training School Physics—Three hours.

This course deals with the teaching of constructive physics in the seventh and eighth grades. The most simple, fundamental, physical laws are developed along with their actual relation to daily life through the construction of various simple apparatus such as water motors and electric bells, motors, toasters, telegraph sounders and wireless apparatus.

The work is practically all construction work using the lathe, drills, files, hacksaw, soldering irons, etc.

104. The New Physics—Four hours. Fall Quarter.

This course is devoted to the study of electrons, cathode rays, X-rays, alpha rays, beta rays, gamma rays, and radium and its disintegration products. We are well equipped to illustrate this course.

106. Historical Physics—Open to Junior College. Four hours. Spring Quarter.

Probably the historical aspects of the school subjects offer the easiest insight into their relations to human life and problems. Physics, from the modern point of view and practice, is more than a set of laboratory experiences to be memorized. It is a history of men facing baffling problems and step by step finding a way to solve them. It is possible that this may be the best point of view from which to teach Physics to any group of students.

This course, however, is planned primarily for those teachers of physics who have a scholarly interest in the evolution of various aspects of their subject. Probably its chief service lies in its bringing together many classical experiments and indicating their influence on the development of physics, which is a matter of considerable difficulty, since there is no book written from this standpoint.

Beyond this, for the sake of humanizing physics, the course exhibits the circumstances and conditions under which various men first performed the classic experiments.

It is our belief that the teaching of high school physics may profit considerably from such a background study.

108. Radiographic Physics—Four hours. Winter Quarter.

This is a practical course in radio telegraphy and telephony with sufficient technical instruction to make possible the intelligent operation of a station and use of instruments connected with a wireless station. The course will be largely laboratory work and actual code work.

The department is well equipped for this course. There are several small sets and a large one as well as an automatic transmitter for code practice which will be at the disposal of the students.

109. Alternating Current Simplified—(Senior College).

Practically all of the commercial electrical current is an alternating current and our high school textbooks give practically nothing of the subject of alter-

nating currents. The aim of this course is to give a student or a teacher of physics such a clear understanding of the action of an **alternating current** as to form a safe and sure foundation for his work. The course is not a mere description of alternating machinery, but an explanation of **principles** in language so simple and clear that anyone with a very elementary knowledge of physics will have no difficulty in comprehending the course.

110. Methods in Teaching Physics—Five hours. Spring Term.

A study of the history of the teaching of physics, and a detailed course presenting a method which will make the subject of physics more interesting and of greater value to the student.

209. Theory of Relativity—Twelve hours.

This course requires a comprehensive review of the hypothesis of the ether and the structure of matter, which study shows the necessity for the Theory of Relativity.

Chemistry

CHARLES J. BLOUT, A.B., A.M.

The following courses are designed to present the general principles of Chemistry, together with a study of the elements and their most important compounds. Laboratory courses, intended to apply the laws and theories of the subject, accompany each course and are to be elected with the course which they supplement. Special phases of the subject of Chemistry, such as those offered in Courses 108, 109, 111, etc., are intended to meet the particular needs of those students requiring them, but they may be selected by any students who have completed the course in General Chemistry.

A new science course, combining Chemistry, Physics, Zoology, and Botany, is offered to the students as a four-year course. The combination is made to train students for teaching of sciences in high schools, as most of the science work is or should be taught by the teachers trained in general science lines. These sciences work well together, so it is desirable for prospective teachers to train themselves in related subjects. As will be seen from the catalog, students may major in one of the four subjects with the most closely related as a minor, i. e., Zoology—Botany, Physics—Chemistry. In any case, work must be taken in the other courses.

MAJOR IN SCIENCES.

If Chemistry is the main interest:

		First Year.	Hours.
1.	Professional Core:		
	Biology 2—Bionomics		4
	Education 3—Educational Values.....		4
	Sociology 3—Educational Sociology.....		4
2.	Courses Required by the Chemistry Department:		
	Chem. 1, 2, 3, 4, 5, 6—General Chemistry.....		12
	Phys. 1—General Physics.....		4
	English (if necessary).....		4
		Second Year.	
1.	Professional Core:		
	Psychology 2a—Educational Psychology.....		4
	Psychology 2b—Educational Psychology.....		4
	Pol. Science 30—Political Adjustment.....		4
	Education 10—The Elementary School Curriculum.....		4
2.	Courses Required by the Department of Chemistry:		
	Chem. 7—Qualitative Analysis.....		4
	Phys. 2 and 3—General Physics.....		8

Third Year.

1. **Professional Core:**
 - Sociology 105—Social Maladjustments..... 4
 - Psy. 104 or 105—Psychology of the School Subjects..... 4
2. **Courses Required by the Department of Chemistry:**
 - H. S. 105—Principles of Teaching..... 4
 - H. S. 103—Teaching 4
 - Chem. 108—Organic Chemistry 8
 - Phys. 15—Training School Physics..... 3

Fourth Year.

1. **Professional Core:**
 - Education 116—The High School Curricula..... 4
 - Psychology 108—Educational Tests and Measurements..... 3
 - Education 111—Principles of Education..... 4
2. **Courses Required by the Department of Chemistry:**
 - Chem. 112—Food Chemistry 4
 - Chem. 114—Industrial Chemistry 4
 - Chem. 115—Agr. Chemistry 4
 - Phys. 6—Applied Physics (Automobile)..... 2
 - H. S. 107—Teaching.

The minor is in the Biological Sciences.

The following courses are required: Zoology, 1, 2, 3; Botany, 2, 3, 4, 101 and 102. The student must know enough mathematics to do the work of the course.

1. General Chemistry. Non-Metals—Two hours. Fall Quarter. Required in Physical Science and Biological Science Group Courses.

A study of the foundation principles of Chemistry. Lectures, text, and reference study. Those electing Course 1 will also elect Course 2.

2. General Chemistry. Laboratory and Quiz Section—Four hours attendance, two hours credit. Fee, \$1.00.

A detailed course supplementing Course 1.

3. General Chemistry—Two hours. Winter Quarter.

Continuation of Course 1. Those electing Course 3 will elect Course 4.

4. General Chemistry, Laboratory Section—Four hours attendance, two hours credit. Fee, \$1.00.

A detailed course supplementing Course 3.

5. General Chemistry, the Chemistry of Metals—Two hours. Spring Quarter.

Continuation of Course 3. Those electing Course 5 will elect Course 6.

6. General Chemistry, Laboratory Section—Four hours attendance, two hours credit. Fee, \$1.00.

A detailed course supplementing Course 5.

7. Qualitative Chemical Analysis—Six hours attendance, four hours credit. Fee, \$1.00. Required in Physical Science Group Courses.

The grouping, separating and identification of the common elements. Prerequisites, Courses 1 to 6, inclusive.

108. Organic Chemistry—Two hours. Fall Quarter.

A study of the methods of preparation and properties of the aliphatic series. Lectures and text-book study. Prerequisites, Courses 1 to 6, inclusive.

109. Organic Chemistry, Laboratory Course Supplementing Course 103—Four hours attendance, two hours credit. Fee, \$1.00.

112. Food Chemistry—Two hours. Winter Quarter. Required in Household Art and Science Group Courses.

Lectures, text-book, and reference study on the Chemistry of air, water and food. Prerequisites, Courses 1 to 6, inclusive.

113. **Food Chemistry. Laboratory Course Supplementing Course 112**
—Four hours attendance, two hours credit. Fee, \$1.00.

114. **Applied Industrial Chemistry**—Two hours. Spring Quarter.

Prerequisites, Courses 1 to 6, inclusive. A course of lectures and text-book study on the chief Chemical Industries.

114B. **Applied Industrial Chemistry**—Four hours attendance, two hours credit. Fee, \$1.00.

Laboratory section supplementing Course 114. Chiefly qualitative and quantitative analysis.

115. **Agricultural Chemistry**—Two hours.

Prerequisites, Courses 1 to 6, inclusive. Lectures and text-book study of the Chemistry of Soils and Agricultural Products.

115B. **Agricultural Chemistry**—Four hours attendance, two hours credit. Fee, \$1.00.

Laboratory section supplementing Course 115.

Geology, Physiography and Geography

GEORGE A. BARKER, B.S., M.S.

The courses listed in this department are not review courses covering merely the material taught in the common schools. Such review courses are listed in the high school department for which no credit is given toward graduation from the college. Geography is not just a group of facts about different parts of the world. It is a definite science in which, in the underlying climatic and geologic causes the superstructure of commercial and human factors is built. It is from this point of view that the work of this department is given.

MAJOR IN GEOGRAPHY.

First Year.		Hours.
1. Professional Core:		
Biol. 2—Bionomics, Fall.....		4
Ed. 8—Educational Values, Spring.....		4
Soc. 3—Educational Sociology, Winter.....		4
2. Courses Required by the Department:		
Geog. 2—Physical Geography		4
Geog. 7—Commercial Geography		4
Geog. 12—Geography Methods		2
Physics 4—General Science.....		3
Nature Study 1—Fall Nature Study.....		4
History 27—Contemporary History		2
Astronomy 106—Descriptive Astronomy.....		5
Second Year.		
1. Professional Core:		
Psych. 2a—Educational Psychology, Fall.....		4
Psych. 2b—Ed. Psychology continued, Winter.....		4
Ed. 10—El. School Curriculum, Winter.....		4
Pol. Sc. 30—Political Adjustment, Spring.....		4
2. Courses Required by the Department:		
Geog. 4—Geography of North America.....		4
Geog. 5—Geography of Europe.....		4
Geog. 6—Geography of Asia.....		4
Geog. 8—Human Geography		4
Hist. 10—Industrial History of U. S.....		4
Soc. 1—Anthropology		4

Third Year.

1. Professional Core:

Psych. 104—Psych. of El. School Subjects or	
Psych. 105—Psych. of High School Subjects, Fall.....	4
Soc. 105—Social Maladjustments, Winter.....	4

2. Courses Required by the Department:

Geog. 100—College Geology	4
Geog. 150—Geography of Colorado.....	2
Geog. 113—Mathematical Geography	3
Geog. 103—Climatology	4
Hist. 104—Western American History.....	3
Soc. 123—Immigration and Social Problems.....	4
Biotics 101—History of Man.....	3

Fourth Year.

1. Professional Core:

Ed. 116—High School Curriculum, Fall.....	4
Ed. 111—Philosophy of Education, Spring.....	4
Ed. 103—Tests and Measurements.....	3

2. Courses Required by the Department:

Geog. 101—Mineralogy	2
Geog. 120—Geography of Polar Lands.....	2
Geog. 122—Biogeography	4
Geog. 144—Geography and Geology of Mountains.....	2
Geog. 130—The Islands of the Sea.....	2
Geog. 177—Statistical Geography	2
Hist. 25—Comparative Government	4
Biotics 103—Eugenics	1
Hist. 116—Spanish-American History.....	3
English 6—Appreciation of Literature.....	2

2. Physical Geography—Four hours. Fall Quarter.

A course designed for those who have not had physical geography in the high school. Work in the laboratory will consist of studies of type, topographic and geologic maps, as well as the observation of meteorological instruments. Field trips will be taken, and, in so far as it is possible to do so, out-of-door examples will be used to illustrate the various physiographic types. A field collection of the commoner rocks of the vicinity will be made.

4. Geography of North America—Four hours. Fall Quarter.

A lecture course with extensive library reading. The continent will be treated from the foundation of its geologic and climatic controls, and upon these will be built the economic side of the subject.

5. Geography of Europe—Four hours. Winter Quarter.

It is recommended that this course follow Course 4, as it is based upon the material presented in that course. We endeavor to understand Europe in climatic and geologic terms of our own continent.

6. Geography of Asia—Four hours. Spring Quarter.

This course finishes the year's survey of the important continents. In addition to the study of Asia, a rather rapid survey is made of the remaining continents, in order to round out the year's work.

7. Commercial Geography—Four hours. Winter Quarter.

A study of commerce, largely based on museum products, field trips and railroad and steamship maps.

8. Human Geography—Four hours. Fall Quarter.

The relation of man to his environment and the various type environmental realms, as, for instance, the desert, tropical forest, mountains, etc., will be taken up. Required in the Intermediate, Sociology and History Courses.

12. Geography Method—Two hours. Fall Quarter.

A course in which the history of geography teaching is taken up, followed by a discussion of the relative values of various methods of presentation. The materials suitable for each grade will be discussed.

100. College Geology—Four hours. Winter Quarter.

It is suggested that this course be taken only by those who have had Course 2.

101. Mineralogy—Two hours. Fall Quarter.

This course should only be taken by those students who have had Course 100 or its equivalent. A lecture and laboratory course.

103. Climatology—Four hours. Spring Quarter.

This is a thoro study of the climatological basis of the science of geography designed for those who desire to know more in detail the climatological aspect of geography. The observational side of the subject will be stressed. Advantage will be taken of our meteorological apparatus to compile weather data. The sources of meteorologic and climatic statistics will be noted in the lectures and the students will be encouraged to write themselves and build up a library of statistical material for use in their schools later.

113. Mathematical Geography—Three hours. Winter Quarter.

A recitation course designed to cover such problems as proofs of earth's rotation and revolution, the tides, international date line, time belts, calendars, solar and sidereal time, etc. Required of students in the Mathematics Course.

120. Geography of Polar Lands—Two hours. Spring Quarter.

This course refers to a part of the earth usually neglected in the study of the continents. A discussion of climatic factors in the Arctic and Antarctic regions will be taken up. The influence of these factors on life on land and sea will be considered. The great resources of sea food yet untouched in the Polar seas and the possible mineral resources upon the land will be discussed.

122. Biogeography—Four hours. Spring Quarter.

The distribution of plants and animals emphasizing the main climatic and geologic controls in such distribution. It is recommended that the student should have already taken Botany and Zoology before entering this course.

130. The Islands of the Sea—Two hours. Winter Quarter.

A study of the various ways islands are formed as well as their relation to the continents in a geologic, biologic and social sense. The average geography course does not study the outlying islands because it is too busy with the continents. This course is designed to fill this gap in the pupil's geographic knowledge—a gap that needs to be filled because of the strategic and historic importance of many island groups.

144. Geography and Geology of Mountains—Two hours. Spring Quarter.

A course which is planned especially with reference to the mountains of Colorado. Geologic folios and climatic and botanical data will be considered and the student will be referred to this material in the library. It is suggested that the student have Courses 100, 103 and 122 before taking this course.

150. Geography of Colorado—Two hours. Fall Quarter.

A lecture course on Colorado geography touching the physiographic features of the state, the influence of the geologic past upon these features, weather phases and climate of Colorado, the main geographic controls in animals and plant distribution, man past and present, and his distribution, the industries of the state and the geographic controls of industry.

177. Statistical Geography—Two hours. Spring Quarter.

The types of statistical data that can be used in geography to advantage—when and how to employ this material. The type of material employed embraces meteorologic data, data on areas of various countries and states, data on products, etc. The comparative method in teaching geography is emphasized here and methods of making material graphic are shown.

201. Regional Geography—Four hours. Any Quarter.

An individual course in which the student makes a thoro study of the Greeley Region, beginning with the climate, physiography and geology, and articulating the industries of the region with these casual factors. A thesis upon the Greeley District is submitted at the end of this course.

Mathematics

G. W. FINLEY, B.S.

FRANK W. SHULTIS, A.B., A.M.

LUCILLE HILDEBRAND, A.B., B.E.

All courses in this department are given with a keen realization of the modern demand for vitalization of school work. The instructors and students alike are constantly on the alert for points of contact between their courses and real life. This is especially true of those branches which the student is preparing to teach after graduation.

Four Year Course for Teachers of Mathematics.—(Each student must select a minor, preferably Physics, Industrial Arts, or Chemistry, in which 24 hours of work must be done.)

First Year.

	Hours.
1. Professional Core:	
Biology 2.—Bionomics.....	4
Ed. 8.—Ed. Values.....	4
Sociol. 3.—Educational Sociology	4
2. Courses Required in Mathematics:	
Math. 2.—Solid Geometry.....	4
Math. 2.—Plane Trigonometry.....	4
Math. 3.—Plane Trigonometry.....	2
Math. 4.—Surveying	4
3. Electives	18

Second Year.

1. Professional Core:	
Psych. 2a.—Educational Psych.	4
Psych. 2b.—Educational Psych.	4
Pol. Sci.—Political Adjustment.....	4
Ed. 10.—El. School Curriculum.....	4
2. Courses Required in Mathematics:	
Math. 7.—Analytic Geometry.....	5
Math. 5.—College Algebra.....	2
Math. 6.—College Algebra.....	4
Math. 8.—Teaching of Arithmetic.....	2
3. Other Required Courses:	
Tr. Sch. 1.—Methods and Observation.....	4
Teaching	8
(Notice: If student does not desire the diploma at the end of the two years these 12 hours need not be taken.)	
4. Elective	7

Third Year.

1. Professional Core:	
Psych. 105.—Psych. of H. S. Subjects.....	4
Soc. 103.—Social Maladjustment.....	4
2. Courses Required in Mathematics and Related Subjects:	
Math. 101.—Differential Calculus.....	5
Math. 102.—Integral Calculus.....	5
Geog. 113.—Mathematical Geography.....	3
3. Electives	27

Fourth Year.

1. Professional Core:	
Psych. 108.—Ed. Tests and Measurements.....	3
Ed. 116.—The High School Curriculum.....	4
Ed. 111.—Principles of Education.....	4

2. Required Courses in Mathematics:

Math. 100.—Teaching of Sec. Math.	2
Math. 106.—Descriptive Astronomy.....	5

3. Other Required Courses:

H. S. 105.—Principles of H. S. Teaching.....	4
H. S. 107.—High School Teaching.....	8

4. Electives 10**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 Quarter.

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.

3. Trigonometry—Two hours. Winter Quarter.

A continuation of Course 2. The solution of the oblique triangle with numerous applications of both the oblique and the right triangle.

4. Surveying—Four hours. Summer 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—Two 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 logarithms, the progressions, and the function and its graph.

6. College Algebra—Four hours. Spring Quarter.

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

7. Analytic Geometry—Five hours. Fall Quarter.

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. Every Quarter.

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 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 Teaching of Arithmetic—Four hours.

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.

10. Country School Arithmetic—Four hours.

In this course the subject of Arithmetic will be treated in such a way as to show how it can be made a vital thing in the lives of the children in our country schools. The problems to be met by the rural school teacher will be taken up and discussed at length.

100. The Teaching of Secondary Mathematics—Two hours.

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—Five 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—Five hours. Spring Quarter.

A continuation of Course 101.

103. Differential and Integral Calculus—Five hours.

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

104. Descriptive Geometry—Two hours.

This course is designed especially for those interested in mechanical and architectural work. It takes up the problems arising from the study of the projection of points, lines, planes and solids.

105. Spherical Trigonometry—Four hours.

Formulas relating to the right triangle. Napier's rules, solution of right triangles; spherical triangles in general; solution of examples, with applications to the celestial spheres.

106. Descriptive Astronomy—Five hours.

This course gives an introduction to the fascinating study of Astronomy. It gives an 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 Calculus—Five hours.

In this course the work of the preceding courses in this subject is rounded out and extended into new fields.

201. Differential Equations—Five hours.

Discussion of problems which lead to differential equations and of the standard methods for their solution.

Social Science

GURDON RANSOM MILLER, Ph.D.

EDGAR DUNNINGTON RANDOLPH, A.M.

This department offers a series of courses which it desires shall appeal to both 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.

Social Science deals with the knowledge on which true theory in Education must be based. It is equally essential in the training of high school and elementary teachers.

The major four-year course offered by this department is a superior opportunity for high school teachers, superintendents, principals, supervisors, and all students desiring liberal training in Modern Social thought and its inevitable effects on Education and human progress.

A four-year curriculum for Teachers of Sociology, History, and Economics, Supervisors, Principals, and Superintendents of Schools.

First Year.

1. Professional Core:	Hours.
Sociology 3.—Educational Sociology.....	4
Biology 2.—Bionomics.....	4
Education 8.—Educational Values.....	4

2. Courses Required by the Department of Sociology and Economics:

Sociology 1.—Anthropology.....	Fall	4
History 10.—Industrial History.....	Fall	4
Sociology 23.—Immigration.....	Winter	4
History 11.—Commercial History.....	Winter	4
Geography 8.—Human Geography.....	Spring	4
Sociology 12.—Social Adjustment.....	Spring	4

3. Elective Courses Supplementing Required Courses:

Choose 8 hours from any department of College. The following are suggested:

Sociology 37.—Labor and Society.....	4
Sociology 32.—The Family.....	4
History 13.—The Teaching of History.....	2
History 26.—The Teaching of Civics.....	2
Bacteriology 2.—Bacteria, Hygiene, Prophylaxis.....	3
History 27.—Contemporary History.....	2
Library 1.—Use of the Library..... (Fall only)	1
Biotics 102.—Heredity.....	3

Second Year.

1. Professional Core:

Psychology 2a.—Educational Psychology.....	4
Psychology 2b.—Educational Psychology.....	4
Education 10.—The Elementary Curriculum.....	4
Political Science.—Political Adjustment.....	4

2. Courses Required by the Department of Sociology and Economics:

Training School 1.—Methods and Observation.....	Fall	4
Teaching 1.—Practice Teaching.....	Fall	4
Teaching 2.—Practice Teaching.....	Winter	4

Note: The three courses named above may be omitted by students who are not asking to be graduated at the end of a two year curriculum. Electives may be substituted in their stead.

Sociology 18.—Rural Sociology.....	Fall	4
Sociology 19.—Urban Sociology.....	Winter	4
Sociology 24.—Child Welfare.....	Winter	4
Sociology 16.—Society and the Church.....	4	
Sociology 20.—Distribution of Wealth.....	4	
Polit. Sc. 12.—State and Local Government.....	4	

3. Elective Supplements of Required Courses:

Sociology 107.—Privilege and Society.....	4
Psychology 3.—Child Development.....	4
History 25.—Comparative Government.....	4
History 9.—National Government.....	4
Sociology 132.—Social Revolutions.....	3

Third Year.

1. Professional Core:

Psychology 104 or 105.—Psychology of School Subjects.....	4
Sociology 105.—Psychic Factors in Sociology.....	4

2. Courses Required by the Department of Sociology and Economics:

High School 103.—Practice Teaching.....	4	
High School 105.—Principles of High School Teaching.....	4	
Sociology 104.—Principles of Sociology.....	Fall	2
Sociology 106.—Social Progress.....	Spring	2
Economics 110.—Economics.....	Fall	3
Economics 111.—Advanced Economics.....	Spring	3

3. Elective Courses Supplementing Required Courses:

Biotics 101.—History of Man.....	Fall	3
Education 135.—Educational Classics.....	Spring	4
Sociology 127.—Social Legislation.....	4	
Sociology 117.—Women and Social Evolution.....	4	
Sociology 131.—Tendencies of Civilization.....	3	
Sociology 220.—Consumption of Wealth.....	4	
Industrial Arts 104.—Prevocational Education.....	2	
Education 15.—Vocational Guidance.....	2	
English 133.—The Modern Novel.....	4	

Fourth Year.

1. Professional Core:

Education 111.—Philosophy of Education.....	4
Education 116.—The Course of Study.....	4
Psychology 108.—Tests and Measurements.....	3

2. Courses Required by the Department of Sociology and Economics:

High School 107.—Practice Teaching.....	4
Sociology 108.—Social Insurance.....	4
Sociology 210.—Methods of Social Research.....	4
Sociology 200.—Psychological Sociology.....	4
Sociology 221.—Social Economy.....	4
Sociology 230.—The High School Course in Sociology and Economics.....	4

3. Elective Courses Supplementing Required Courses:

Sociology 106.—Principles of Social Progress.....	2
Sociology 107.—Privilege and Democracy.....	2
History 123.—International Relations.....	3
History 27.—Contemporary History.....	1
Sociology 229.—Criminology and Development.....	4
Sociology 220.—Consumption of Wealth.....	4
Sociology 211.—Evolution of Morals.....	4
Education 245.—Measurement of Results in Education.....	4
Education 147.—Educational Surveys.....	3

1. Anthropology—Four hours. Fall Quarter.

The evolution of social ideas and institutions, the family, religion, government, law, art, and industry.

3. Educational Sociology—Four hours. Every Quarter. Required in first year.

A course giving (1) a background of information concerning origins and interrelations of present social problems; (2) a brief formulation of the methods of social progress; and making (3) a definite attempt to show the relation of education to the problems of control and progress.

12. Social Readjustment—Four hours. Spring Quarter.

This course offers an elementary study of how the processes of reconstruction may be applied to a considerable number of practical social problems. 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. This course should be useful to the elementary school teacher of history and civics.

16. Society and the Church—Four hours.

The social evolution of the church, and its changing relation to Society; new concepts in religious education.

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.

19. Urban Sociology—Four hours. Winter Quarter.

The modern city and its social problems.

20. The Distribution of Wealth—Four hours.

Changing modes of distribution, the varying proportion, tendencies in legislation, changing modes of taxation, effect of Social insurance.

23. Immigration and American Problems—Four hours. Winter Quarter.

A study of the changes in the population of the United States during the 19th century, and our resultant alien problems.

24. Child Welfare—Four hours. Winter Quarter.

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.

32. The Family—Four hours.

A very profitable study of the family from the standpoint of education, industry, ethics, and as a social unit. Desirable for teachers, but of great value to all students of either theoretical or practical Sociology. Closely related to courses 22 and 24.

37. Labor and Society—Four hours.

A study of the laboring classes, development, place, privileges, and rights in society; and relation of workers to systems of industrial administration. Specially commended to teachers of industrial education, and students of economics. It correlates well with courses 12, 107, 108, 19, and 27.

104. Social Theory—Two hours. Fall Quarter.

A brief history of Sociologic theory; a comparative study of modern social theory, and its relation to modern biologic science.

105. The Psychic Factors in Sociology—Four hours. Winter Quarter. Required in third year.

The relation of Sociology to Psychology; the evolution of mind as a Social progress, the Social emotional basis of mind and its development as a directive agent.

106. Principles of Social Progress—Two hours. Spring Quarter.

A study of the basic principles of social evolution and social progress; consideration of present social tendencies; and speculation as to future social control.

107. Privilege and Democracy—Four hours. Fall Quarter.

A study of special privilege in America in its relation to land and natural resources; monopolies in their relation to land holding; and a discussion of the single tax in comparison with other methods of control.

108. Social Insurance—Four hours. Winter Quarter.

Studies in the operation of social insurance in European countries, Australia, New Zealand, and the growth of the idea in America since 1912. It comprises social compensation for accidents, sickness, invalidity, unemployment, and old age.

110. Economics—Three hours. Fall Quarter.

A general course, touching all common phases of the Science of Economics.

111. Advanced Economics—Three hours. Spring Quarter.

An intensive study of labor problems and economic organization; labor unions and legislation; corporation and public ownership; socialism; and modern changes in taxation.

117. Women and Social Evolution—Four hours.

A study of the woman movement; its history; its economic and psychologic significance; its possible effects on social progress; its relation to education, and its specific relation to the education of women.

127. Social Legislation—Four hours.

The term social legislation is intended to suggest a very recent development of purpose in legislative remedies. If it be true that in the past legislation has not only not anticipated bad conditions but has, rather, characteristically waited until evils reached dramatic proportions before being applied, the meaning of the course title will be perfectly clear. The course is to deal with the more purposive application of legislative remedies to existing social maladjustments—such as, for example, labor difficulties, housing and health problems, the liquor traffic, prostitution, city planning, and the like.

131. Modern Civilization and Its Social Tendencies—Three hours. Fall Quarter, alternate.

Hypernationalism; Social negatives; the survival of pagan ideals; the need of economic, spiritual, ethical and religious revolutions.

132. Social Revolutions—Three hours. Spring Quarter, alternate.

A program of possible reconstruction of social values, and the development of social leadership thru some change of emphasis in Education.

200. Psychological Sociology—Four hours.

A study of the psychology of social relations, social organization, social changes, and impediments to social progress.

210. Methods of Social Research—Four hours.

A seminar for research study, including intensive work in social surveys.

211. Morals and Culture—Four hours.

A study of the evolution of morals, the development of ideas of culture, and the relation of these to modern theories of Education.

220. The Consumption of Wealth—Four hours.

An advanced course in Social Economics, a constructive analysis of the modern tendency to subject the consumption of wealth to scientific treatment, emphasizing the human costs of production versus the human utility of scientific consumption; a human valuation.

221. Social Economy—Four hours.

A course which shows the nature and extent of past social failures and the slow evolution from blind reaction to distress to more or less rational methods of control; and deals with the extensions of social concern to the fields of need felt most keenly.

229. Criminology—Four hours.

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 intends to present the best modern thought in the various aspects of this field.

230. High School Course in Sociology and Economics—Four hours.

A course in materials and methods in elementary Sociology and Economics for high school teachers.

History and Political Science

EDWIN B. SMITH, B.S., A.M.

JEAN M. CROSBY, A.B.

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 problems of government and citizenship are occupying an increasingly important place in our living experiences. There is particular need for the adoption of modern attitudes in the teaching of history and of civics. Courses based on the subject-matter and on the teaching of the subjects are offered in the department.

The outline of a four-year course for students specializing in history and political science:

	First Year.	Hours.
1. Professional Core:		
Biology 2.—Bionomics.....		4
Education 8.—Educational Values.....		4
Sociology 3.—Educational Sociology.....		4

2. Subjects Required by the Department:

History 10.—Industrial and Social History of the United States.....	4
Political Science 25.—Comparative Government.....	4
Sociology 1.—Anthropology.....	4
History 27.—Contemporary History.....	2
Geography 8.—Human Geography.....	4

3. Electives*

Second Year.

1. Professional Core:

Psychology 2a.—Educational Psychology.....	4
Psychology 2b.—Educational Psychology.....	4
Political Science 30.—Political Adjustment.....	4
Education 10.—Elementary School Curriculum.....	4

2. Subjects Required by the Department:

History 105.—Early Modern Europe.....	4
History 106.—Recent European History.....	4
History 13.—The Teaching of History in the Elementary School....	3
Pol. Sc. 26.—The Teaching of Civics in the Elementary School.....	2
Pol. Sc. 12.—State and Local Government.....	4

3. Electives:

Students desiring diploma at the end of the two years are required to take:

Training School 1.—Methods and Observations.....	4
Teaching	8

Third Year.

1. Professional Core:

Psychology 105.—Psychology of School Subjects.....	4
Sociology 103.—Maladjustment	4

2. Subjects Required by the Department:

History 117.—The Teaching of History and Civics in the High School	3
History 104.—Western American History.....	3
History 116.—Spanish American History.....	2
Economics 110	4
History 125.—Ancient Social History.....	4
History 107.—Modern England and the British Empire.....	4
Education 103.—High School Practice Teaching.....	4
Education 105.—Principles of High School Teaching.....	4

3. Electives*

Fourth Year.

1. Professional Core:

Education 111.—Philosophy of Education.....	5
Psych. 108.—Educational Tests.....	3
Education 116.—The High School Curriculum.....	4

2. Subjects Required by the Department:

Education 107.—High School Practice Teaching.....	4
Pol. Sc. 123.—International Relations.....	3
History 124.—History of the Far East.....	4
Economics 111.....	4
Pol. Sc. 118.—American Constitutional Development.....	4

3. Electives*

*In choosing the elective courses it is suggested that the selection be made from the departments of History and Political Science, English, Sociology and Economics, or Geography. The election, however, may be made as the student desires.

5. Early Modern Europe—Four hours.

The earlier development of the medieval period particularly affecting the people of Modern Europe will be considered. The course will conclude with the French Revolution and Napoleon. Interest will center upon the social and industrial phases of the people's experience.

6. Recent European History—Four hours.

This is a continuation of Course 5. The period since Napoleon will be traced through the political, social, and industrial developments. The experience of the people of Europe since 1870 will furnish the basis for understanding the

events of the years of the war. The relations of the people of the United States to European conditions will receive attention.

10. Social and Industrial History of the United States—Four hours.

The current social and industrial conditions within the United States will be traced from their beginnings; the European conditions which furnished traceable influences will be considered. Some other topics are suggested as follows: the natural resources; the influence of cheap land; the effect of invention, machinery, and science; the development of agriculture and manufacture; the rise of great industries, capitalism, business combination, and labor organization.

11. Commercial History of the United States—Four hours.

A survey of commerce in early times will be followed by the colonial commerce and its consequences. The several periods of American commerce, domestic and foreign, will give opportunity for considering the coast trade, government aid, the consular service, the relation of the general commerce to the business development of the country, the changes of the twentieth century, the growth of modern business, and government supervision.

12. State and Local Government—Four hours.

The relationship between the individual and the community will be emphasized. The organization and administration of the government of the city, the county, and the state will furnish the basis of the course. The government of these several communities in Colorado will be considered as types.

13. The Teaching of History in the Elementary School—Three hours.

The history of history instruction in elementary schools; the aims and values of instruction; methods and materials for the elementary and grammar grades.

25. Comparative Government—Four hours.

The government in other countries compared with that in our own; England the cabinet type, France the constitutional cabinet type, Germany the cabinet type in transition, and Switzerland the most perfect type of democracy; the smaller European states and the South American republics; the growth of internationalism and democracy.

26. The Teaching of Civics in the Elementary School—Two 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.

27. Contemporary History—Two hours.

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

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.

30. Political Adjustment—Four 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 that public opinion holds in a republican government, and to the creating of American spirit. A definite effort is made to show the relations between the individual, education, and the forms and processes of government.

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.

117. The Teaching of History and Civics in the High School—Three hours.

The development of instruction in these subjects in the high school; their place in the high school program; aims and values; problems connected with the teaching of the subjects; the relation between history and civics teaching.

104. Western American History—Three 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 dependencies.

116. Spanish American History—Two hours.

A course designed to furnish a background for the growing relations between the United States and the republics to the south. In tracing the experience 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.

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 upon the tariff policy and the currency system; the recent achievements in the financial system as expressed in the federal reserve banking system and the financing of the war.

119. Constitutional History of the United States—Three hours.

Origin of the constitution; relation to the state constitutions; the Articles of Confederation as a precedent; the constitution in the process of making; the interpretation by the makers; the period of misunderstanding; the new interpretation of the principles of government; the service of the law courts; and the great cases that have grown out of the interpretation of the document.

123. International Relations—Three 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 alien enemies, the rights of nations with respect to war, neutrality, and intervention, and the regard for treaties. American ideals, the Monroe Doctrine, and Pan-Americanism are subjects considered in connection with the European War.

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 with Europe and the United States.

214. Methods in Historical Research—Two hours.

This course is a study of the methods of historical investigation, the historical document, its nature and use, and historical writing.

215. Research in History.

Students doing graduate work in history and political science may register in this course. By conference desired work will be arranged.

Latin and Mythology

JAMES HARVEY HAYS, A.B., A.M.

The courses in this department for the most part may be taken by those students who have completed from two to four years of Latin in the high school. These courses have been prepared from the viewpoint of the teacher of Latin, and aim to do these things: (1) To correct careless and faulty pronunciation; (2) To review in a critical manner the grammar of the language; (3) To present the best methods of teaching the subject; (4) To afford the students an opportunity to extend their acquaintance with authors beyond those found in the high school course.

The outline of a four-year course for students specializing in Latin and Mythology:

	First Year.	Hours.
1. Professional Core:		
Biology 2.—Bionomics.....		4
Sociology 3.—Educational Sociology.....		4
Education 8.—Educational Values.....		4

2. Departmental Requirement:

Latin 1.—Grammar Review	4
Latin 2.—Cicero	4
Latin 3.—Prose Composition.....	4

Second Year.

1. Professional Core:

Psychology 2a.—Educational Psychology.....	4
Psychology 2b.—Educational Psychology.....	4
Education 10.—Elementary School Curriculum.....	4
Political Science 30.—Political Adjustment.....	4

2. Departmental Requirement:

Latin 30.—Horace	8
Latin 10.—The Teaching of Latin.....	4
Training School 1.—Observation and Methods.....	4
Training School 2.—Teaching	8

(These Training School subjects may be omitted if the student is continuing the course for four years.)

Third Year.

1. Professional Core:

Psychology 104.—Psychology of School Subjects.....	4
Sociology 105.—Social Maladjustment.....	4

2. Departmental Requirement:

Latin 110.—Livy	4
Latin 120.—Tacitus	8
Education 103.—Principles of High School Teaching.....	4
Education 105.—Practice of High School Teaching.....	4

Fourth Year.

1. Professional Core:

Education 111.—Philosophy of Education.....	4
Education 116.—High School Curriculum.....	4
Psychology 108.—Educational Tests.....	4

2. Departmental Requirement:

Latin 140.—Catullus	4
Latin 160.—Latin Comedy.....	4
Education 107.—High School Teaching.....	4

In choosing electives it is suggested that the election be made from the departments of Latin and Mythology, Romance Languages, English, and History. The election, however, may be made as the student desires.

1. Grammar Review—Four hours.

An intensive study of the grammar with usages found in Latin texts.

2. Cicero—Four hours.

A study of the letters and essays of Cicero.

3. Prose Composition—Four hours.

The leading principles; practice in forms of expression.

30. Horace—Eight hours.

Odes and Epodes. A study of lyric poetry and Latin verse.

10. The Teaching of Latin—Four hours.

The purpose and methods of Latin instruction; reviews and translations.

110. Livy—Four hours.

Selections from Livy; a study of early Roman life.

120. Tacitus—Eight hours.

Agricola and Germania form the basis of this work.

140. Catullus—Four hours.

Selections from this work.

150. Plautus and Terence—Four hours.

Latin comedy.

112. Greek and Roman Myths—Four hours.

A study of classical myths of Greece and Rome with comparisons with the myths of other peoples. Also the influence of myths upon modern life, literature, and art.

122. Norse Mythology—Four hours.

A study of the religion of our pagan ancestors and the myths which have influenced our beliefs, customs, and literature.

Literature and English

ALLEN CROSS, A.M.

ADDISON LEROY PHILLIPS, A.M.

A teachers' college is a vocational school devoted to the task of preparing teachers. The English courses in such a 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 Teachers College all the courses they need in the field of English. 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 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.

The Required English Course.—The College wishes to assure itself that all students who go out as graduates to teach children and all who teach in its training school will not misuse the English language in the presence of school children. It realizes that students, who have all their lives spoken incorrect English, cannot altogether change their habits in three or six months. The best thing it can do, then, seems to be to require all students to take a course in grammar and oral and written composition. The head of the English department may excuse from taking this course any student who speaks and writes English exceptionally well. A student who does not succeed in a single quarter in overcoming bad habits in speech and writing will be required to continue the course until the English department is satisfied. In unusual cases this may mean two, three, or more quarters. Only four hours' credit will be given, however, for this practice in correct speech and writing. The College will positively refuse to graduate a student who cannot write and speak the English language with a fair degree of accuracy and ease. It will also qualify its recommendation of a student to a superintendent or school board if the student's English is only passable.

Co-operation of Other Departments with the English Department—

All the departments in the College are invited to co-operate with the English department to secure a reasonable degree of correctness in spoken and written English. Teachers are invited to call the attention of the English department to any student whose English is poor.

Any instructor may require any student in his department who shows a deficiency in oral or written English to report to the English department for further instruction, even tho the student has already met the catalog requirement in English.

A Four-Year Group Course for High School English Teachers and Supervisors of English in Normal Schools, Junior High Schools, and Elementary Schools.

First Year.

1. Professional Core:	Hours.
Biol. 2—Bionomics, Fall.....	4
Ed. 8—Educational Values, Spring.....	4
Soc. 3—Educational Sociology, Winter.....	4
2. Courses Required by the Department:	
Lib. Sc. 1—The use of the Library, Fall.....	1
Eng. 8—English Literature, 670-1660, Fall.....	4
Eng. 6—Appreciation of Lit., Fall.....	2
Eng. 4—Speaking and Writing, Winter or Spring.....	4
Eng. 9—Eng. Lit., 1660-1900, Winter.....	4
Eng. 31—The Short Story, Winter or Spring.....	4
Eng. 10—American Literature, Spring.....	4

3. Elective Courses:

Select twelve additional hours from the English Department if you do not wish to select some other subject as a minor; or from the Department of Oral English, History, Mythology, Modern Languages, or any other you may choose as a minor.

NOTE: If you wish to combine English as a major with some other subject as a minor, you will be required to elect at least twenty-four hours in the minor subject within the four years of your course.

Second Year.

1. Professional Core:	Hours.
Psych. 2a—Educational Psychology, Fall.....	4
Psych. 2b—Ed. Psychology continued, Winter.....	4
Ed. 10—The Elementary School Curriculum, Winter.....	4
Pol. Sc. 30—Political Adjustment, Spring.....	4
2. Courses Required by the Department:	
Tr. Sch. 1—Methods and Observation, Fall.....	4
Teach. 1—Practice Teaching, Winter.....	4
Teach. 2—Practice Teaching, Spring.....	4

NOTE: The three courses named above may be omitted by students who are preparing to become high school teachers and are not asking to be graduated at the end of a two-year course. Electives may be substituted in their places.

Eng. 7—The Epic, Fall.....	4
Eng. 11—A Study of English Words, Winter.....	4
Eng. 12—Functional Grammar Teaching, Spring.....	2

3. Elective Courses:

Select ten additional hours from the English Department if you so desire, or from the departments of Oral English, History, Mythology, Modern Languages, or any other you may choose. Students graduating from the two-year course should elect one or two of the following: **English 1, English 2, or English 3.**

Third Year.

1. Professional Core:	Hours.
Psych. 104—Psych. of Elementary School Subjects, or	
Psych. 105—Psychology of the High School Subjects, Fall.....	4
Soc. 105—Social Maladjustments, Winter.....	4
2. Courses Required by the Department:	
Eng. 3—Junior H. S. Materials and Methods, Fall.....	3
Eng. 106—H. S. Materials and Methods, Winter.....	3
H. S. 105—Principles of H. S. Teaching, Fall or Winter.....	4
H. S. 103—High School Teaching, Winter or Spring.....	4

3. Elective Courses:

Additional English courses, not less than.....	12
English, Oral English, History, Mythology, Modern Languages, or other free electives.....	16

Fourth Year.

1. Professional Core:	Hours.
Ed. 116—The High School Curriculum, Fall.....	4
Ed. 111—Philosophy of Education, Spring.....	4
Ed. Psych. 108—Tests and Measurements.....	3

2. Courses Required by the Department:

H. S. 107—High School Teaching.....	4
English Courses not less than.....	12
English, Oral English, History, Mythology, Modern Lan- guages, or other free electives.....	14
	48

NOTE: Courses Eng. 106, Psych. 105, H. S. 105, H. S. 103, H. S. 107, and Ed. 116 are required only of those who expect to become high school or Junior high school teachers.

Summary.

	Hours.
Professional Core.....	51
English	60
Additional English, or a minor subject.....	24
Observation, Teaching and Lib. Sc.....	25 or 13
Free Electives	26 or 38
	192

COURSES IN LITERATURE AND ENGLISH FOR THE DEGREE OF
MASTER OF ARTS.

Any of the courses numbered from 106 upward which have not already been taken as a part of the course leading to the degree of **Bachelor of Arts** may be elected to apply upon the degree of **Master of Arts**.

1. Materials and Methods in Literature and English for Grades One, Two and Three—Three hours. Fall Quarter.

The materials used in literature in the lower grades and how to use them; oral literature and composition; the principles of story-structure; and the treatment of myths and the folk-epoch for children.

2. Materials and Methods in Literature and English for Grades Four, Five and Six—Three hours. Winter Quarter.

As the title indicates, this course deals with the materials appropriate for the intermediate grades in literature and oral composition.

3. Materials and Methods in Literature and English for the Junior High School—Grades Seven, Eight and Nine—Three hours. Spring Quarter.

Similar to Course 2, but dealing with the literature, and oral and written composition suited to the Junior high school. The teaching of grammar is only touched upon in this course. Course 12 covers the subject of teaching grammar in detail.

NOTE: Students majoring in English are not required to take any of these method courses if they take the A. B. degree without asking for the two-year diploma; but English students taking the two-year diploma must take at least one of these three. Those expecting to become supervisors of English teaching should take all three.

4. Speaking and Writing English. Required of all students unless excused by the head of the English department. Four 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—Every Quarter. No credit.

Oral and written composition. A course planned 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. Appreciation of Literature—A general literary course. Recommended to all students. Two hours. Every Quarter.

An elective cultural course intended to "expose" students to the influence of some of the best literature of the world in the form of story, novel, essay, drama, and lyric and narrative poetry. The hope of the instructors is that students so exposed may find great literature mildly "taking." The course is

mainly the hearing of good literature read effectively and with appreciation of its value in the class. Enough work is assigned for outside reading to give the student an active participation in the course and to make the study worthy of the two hours' credit assigned to it.

7. The Epic—Four hours. Fall Quarter.

This course consists of a study of the two great Greek epics, The Iliad and 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.

Junior College or Senior College. A reading course following the chronological development of our literature from 670 to 1660.

9. The History of English Literature—Four hours. Winter Quarter.

Junior College or Senior College. A reading course following the chronological development of our literature from 1660 to 1900.

10. American Literature—Four hours. Spring Quarter.

Junior College or Senior College. A course in American literature following the plan of Courses 8 and 9 in English literature.

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. The Functional Teaching of English Grammar—Two hours.

A course in the teaching of grammar, including such topics as: What grammar facts really guide people in speaking and writing; how shall these be taught; how may pupils' errors be detected and tabulated; what are the typical errors; what can be done to eradicate them, etc. The course also gives a brief history of the teaching of grammar, to show by what route we have come to our present conclusions, and to prevent each teacher from making the mistakes of the past by adopting the "cut and try" method of securing certain results after the failure of others using the same devices.

31. The Short Story—Four hours. Fall Quarter.

A study of fifty typical modern short stories to observe the technical methods of modern 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 later for professional magazines, should take 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.

104. Advanced English Grammar—Five hours.

Many students, especially those who expect to become high school teachers of English, want an extensive course in advanced English grammar. This course is planned to meet their needs. Besides including a careful and detailed study of modern practice in the use of the language, it gives considerable attention to the evolution of modern usage thru historical grammar.

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 types of composition work for high schools, with illustrative practice in writing.

NOTE: Courses 107, 108, and 109 are given in collaboration with the departments of Oral English, Latin, and Modern Foreign Languages. The three courses include a series of readings in English translation of the great pieces of the literature of the world.

107. General Literature—Oriental, Greek, and Latin—Five hours.
Fall Quarter.

Readings in English translation of a few of the great pieces of classic literature—Hebrew, Greek and Latin.

108. General Literature—Italian, Spanish and French—Five hours.
Winter Quarter.

Readings in English translations of the classic pieces—Italian, Spanish and French literature.

109. General Literature—German, Scandinavian and Russian—Five hours.
Spring Quarter.

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

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, Shelley, 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.

125. Nineteenth Century Prose—Four hours. Fall Quarter.

The work of the chief prose writers of the century, with emphasis on those of the Victorian Age. The course does not include the fiction of the period.

126. The Familiar 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 course; 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. Autumn 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. The plays will be Julius Caesar, Macbeth, Hamlet, As You Like It, Twelfth Night, Henry IV, and six others. Some account of the theatre in Shakespeare's time.

128. Shakespeare's Plays—Four hours. Winter Quarter.

Thirteen 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 the 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 and 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.

135. Current Literature—Four hours.

Readings from the best of current literature in books and magazines, including narratives, essays, articles, lyric poetry, drama, stories, novels, etc.

Oral English

FRANCES TOBEY, B.S., A.B.

MARGARET JOY KEYES, A.B.

Four types of work are represented in the courses of the department: (1) Courses involving oral composition, aiming to establish the pupil in facile, accurate, logical and vigorous expression of his own thought; (2) Courses in literary and dramatic interpretation, to the ends of appreciation, personal freedom and responsiveness; (3) Method courses, emphasizing primarily the pedagogical aspects of the field; and (4) Courses demanding original and research activity in the development of festivals, masques, pageants, story-sequences.

Altho the courses outlined are grouped in the several colleges, flexibility prevails in the election of courses in accordance with the preparation or the need of the individual student.

A four-year group course for Teachers of Oral English in High School and Supervisors of Oral English in Normal Schools, Junior High Schools and Elementary Schools.

First Year.

1. Professional Core:	Hours.
Biology 2—Bionomics, Fall.....	4
Ed. 8—Educational Values, Spring.....	4
Soc. 3—Educational Sociology, Winter.....	4
2. Courses Required by the Department:	
Lib. Sc. 1—The Use of the Library, Fall.....	1
Eng. 4—Speaking and Writing, Fall.....	4
Oral Eng. 1a—The Evolution of Expression, Fall.....	4
Oral Eng. 112—Esthetic Dancing, Fall.....	2
Oral Eng. 1b—The Evolution of Expression, Winter.....	4
Oral Eng. 3—Appreciation of Literature, Winter.....	2
Oral Eng. 113—Classical Dancing, Winter.....	2
Oral Eng. 2—Voice Culture, Spring.....	4
Phys. Ed. 27—Hygiene, Spring.....	1
Oral Eng. 114—Interpretive Dancing, Spring.....	2

The above department requirements include the Junior College requirements in the department of physical education. Additional hours may be selected from other departments not to exceed 48 hours in all.

Second Year.

1. Professional Core:	Hours.
Psych. 2a—Educational Psychology, Fall.....	4
Psych. 2b—Educational Psychology continued, Winter.....	4
Pol. Sci. 30—Political Adjustment, Spring.....	4
Ed. 10—Elementary School Curriculum, Winter.....	4

2. Courses Required by the Department:

Tr. Sch. 1—Methods and Observation, Fall.....	4
Teach. 1—Practice Teaching, Winter.....	4
Teach. 2—Practice Teaching, Spring.....	4

NOTE: The three courses named above may be omitted by students who are preparing to become high school teachers and are not asking to be graduated at the end of a two-year course. Electives may be substituted in their places.

Oral Eng. 5—Dramatic Interpretation, Fall.....	4
Oral Eng. 9—The Teaching of Reading, Fall.....	4
Oral Eng. 6—Dramatic Art, Winter.....	4
Oral Eng. 4—The Art of Story Telling, Spring.....	2
Oral Eng. 11—Oral Composition, Spring.....	3

Additional hours to complete forty-eight may be selected from another department.

Third Year.

1. Professional Core:	Hours.
Psych. 104—Psychology of the Elementary School Subjects or	
Psych. 105—Psychology of the High School Subjects, Fall.....	4
Soc. 105—Social Maladjustments, Winter.....	4

2. Courses Required by the Department:

Oral Eng. 106—The Perfective Laws of Art, Fall.....	4
Oral Eng. 109—Argumentation, Fall	2
Oral Eng. 101—The Reading of Lyric Verse, Winter.....	3
Oral Eng. 107—Oral English in the High School, Winter.....	2
Oral Eng. 115—The Festival, Spring.....	3
Home Econ. 110—Festival Costuming, Spring.....	2

Additional courses to the extent of 24 hours may be selected, on conference with the head of the department, from the departments of English, Mythology, History, Modern Languages, or other departments.

Fourth Year.**1. Professional Core:**

Psych. 108—Educational Tests and Measures, Fall.....	3
Ed. 116—The High School Curriculum, Winter.....	4
Ed. 111—The Philosophy of Education.....	4

2. Courses Required by the Department:

H. S. 107—High School Teaching.....	4
Oral English courses, not less than.....	12
English, Oral English, History, Mythology, Modern Languages, Fine and Applied Arts, or other free electives.....	25

NOTE: Courses Psych. 105, H. S. 105, H. S. 103, H. S. 107, and Ed. 116 are required only of those who expect to become high school or Junior high school teachers.

Summary.

Professional Core	51
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Observation, Teaching, and required courses in other departments..	26
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COURSES IN ORAL ENGLISH FOR THE DEGREE OF MASTER OF ARTS.

Any of the courses numbered from 100 upward which have not already been taken as a part of the course leading to the degree of Bachelor of Arts may be elected to apply upon the degree of Master of Arts.

1. The Evolution of Expression—Four hours. Fall Quarter.

A systematic, directed endeavor to reflect, for the inspiration of the social group, the spirit and dominant truth of varied literary units. The ultimate end of this endeavor, besides literary analysis and appreciation, is growth in personal power, manifested through presence and address, in spontaneity, life, vigor, purpose, directness, poise.

1b. The Evolution of Expression—Four hours. Winter Quarter.

A continuation of Oral English I.

2. Voice Culture—Four hours. Spring Quarter.

Technical drill for freedom, flexibility and expression 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.

3. The Appreciation of Literature—Two hours. Winter Quarter.

The object of the course is to subject students to the contagion of beauty and power in literature thru the luminous oral reading of various type models. Definite reactions are invited from the class.

4. The Art of Story Telling—Two hours. Spring Quarter.

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

5. Dramatic Interpretation—Four hours. Fall Quarter.

A study of the dramatic monolog as found in the Victorian poets, etc. Open only to students who have taken Courses 1 and 2 or 4.

6. 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 5.

7. Dramatic Art—Three hours. Spring Quarter.

Intensive study and group presentation of the Annual Senior Class Play, supplemented by individual studies of related topics.

Open only to the students who are chosen, upon competitive basis, to interpret roles in the Class Play, the most ambitious and carefully elaborated dramatic exercise of the college year.

8. Dramatic Art—Five hours. Summer Quarter.

The consideration of comedy as a type of drama, with the 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.

9. The Teaching of Reading—Four hours. Every Quarter.

The selection, organization and adaptation of reading material in the grades. Method of teaching, based upon defined principles. An estimate of the relative values of oral and silent reading. A study of motivation in reading.

11. Oral Composition—Three hours.

The endeavor of this course is to establish the student in accurate speech habits, and to encourage fluency, vigor and logical marshalling of his thought in discourse of varied types. Since the work is largely done in class, the group meets four times a week for three hours' credit.

101. The Reading of Lyric Verse—Three hours. Winter Quarter.

Based upon the content of "The Golden Treasury" and selected current poetry.

102. The Reading of Shakespeare—Three hours.

Emphasis not only upon dramatic interpretation, but also upon verse melody and other sources of poetic effect.

103. Shakespearean Types of Character—Three hours.

A wide range of character study and impersonation.

104. Interpretations from Browning—Three hours.

Selected Dramatic Lyrics and Monologues. "In a Balcony," "Luria," "Pippa Passes," "The Ring and the Book" ("Pompilia," "Caponasacchi," etc.)

A study of the sources of tragic effect. The intensive and comparative study and dramatic representation of a standard tragedy.

106. The Perfective Laws of Art—Four hours. Fall Quarter.

The study and exemplification of established criteria of art in oral expression. This course involves some consideration of comparative esthetics as a background for the teaching of reading, oratory or dramatization.

107. 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.

108. Public Speaking—Two hours.

Study of models and history of oratory. Practice in oratorical discourse.

109. Argumentation—Two hours. Fall and Winter Quarters.

The preparation of briefs and practice in the conduct of debate.

110. Dramatization—Two hours.

The arrangement of material in dramatic form. Dramatization for children: values, types, methods.

111. Pantomime—Two hours.

Story-telling without words. Exercises for bodily freedom and responsiveness. Monologs or plays which demand very marked and definite action.

112. Esthetic Dancing—Two hours. Fall Quarter.

See Department of Physical Education.

113. Classical Dancing—Two hours. Winter Quarter.

See Department of Physical Education.

114. Interpretive Dancing—Two hours. Fall Quarter.

See Department of Physical Education.

116. The Festival—Three hours. Spring Quarter.

A study of the 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.

201. The Greek Drama (in English)—Four hours.

Literary and dramatic standards applied to Greek drama. The classical drama and world view (philosophic, social, religious, ethical attitudes). Comparison with drama of other great periods of dramatic production.

202. Conference Course—

Individual courses, involving research and original work suited to the needs of the individual student. This course includes the direction of thesis writing in cases in which the study of the graduate student centers in the department of Oral English.

Modern Foreign Languages

EDWIN STANTON DUPONCET, Ph.D.

Instruction will be offered during the year 1918-19 in the following languages: French, Spanish, Italian, Portuguese.

A major in the Romance languages consists of four years in one language and three years in the second language. The student will be required to speak the major language with fluency.

A master's degree will demand an additional year's work in the major language, and also one year's study of either Old French or Old Spanish.

A certain amount of successful teaching may be required, usually one term in the Training School and two terms in the High School.

The French club will meet weekly during the Fall and Winter quarters, and the Spanish club will hold regular meetings twice monthly.

No credit will be given for less than three terms' work in any language. This applies to the work of the first year only.

ROMANCE LANGUAGES.

First Year.

	Hours.
1. Professional Core:	
Biology 2—Bionomics	4
Education 8—Educational Values.....	4
Sociology 3—Educational Sociology.....	4
2. Departmental Requirement:	
French 1, 2, 3, or 4, 5, 6.....	12
Spanish 1, 2, 3, or 4, 5, 6.....	12
3. Electives: Choose from the Departments of	
Latin.	
English.	
History.	

Second Year.

1. Professional Core:	
Psychology 2a—Educational Psychology	4
Psychology 2b—Educational Psychology	4
Ed. 10—Elementary School Curriculum.....	4
Political Science 30—Political Adjustment.....	4
2. Departmental Requirement:	
French 4, 5, 6, or 7, 8, 9.....	12
Spanish 4, 5, 6, or 7, 8, 9.....	12
3. Electives: Choose from the Departments of	
Latin.	
English.	
History.	

Third Year.

1. Professional Core:	
Psychology 104—Psychology of School Subjects.....	4
Sociology 105—Social Maladjustment.....	4
2. Departmental Requirement:	
French 15, 16, 17.....	12
Spanish 15, 16 17.....	12
High Sch. 103—Practice Teaching	4
High Sch. 105—Principles of Teaching.....	4
3. Electives: Choose from the Departments of	
History.	
English.	

Fourth Year.

1. Professional Core:	
Education 111—Philosophy of Education.....	4
Education 108—Educational Tests.....	3
2. Departmental Requirement:	
French 210, 211.....	8
Spanish 210, 211.....	8
High School Teaching.....	4
3. Electives: Choose from the following:	
Italian.	
Portuguese.	
Old French.	
Old Spanish.	

FRENCH.

1. **First Year French—Four hours. Fall Quarter.**

Thieme and Effinger's French Grammar and easy texts, with special attention to phonetics.

2. **First Year French—Four hours. Winter Quarter.**

A continuation of the Grammar, and the reading of Malot's Sans Famille. Daily work in prose composition and drill in conversation and dictation.

3. **First Year French—Four hours. Spring Quarter.**

Completion of the Grammar and reading of Verne's *Le Tour du Monde en 80 Jours*, and *Le Voyage de M. Perrichon*.

4. **Intermediate French—Four hours. Fall Quarter.**

For those who have had one year of French and less than two years. Rapid review of grammar and of all irregular verbs. Reading of two hundred pages of modern French of average difficulty. Texts: Duma's *La Tuplie Noire* and *About's Le Roi des Montagnes*.

5. Intermediate French—Four hours. Winter Quarter.

Devoted to George Sand. Works to be read will include *La Mare Au Diable*, *La Petite Fadette*, *Francois le Champi*, and *Indiana*.

6. Intermediate French—Four hours. Spring Quarter.

This course will be conducted in French. Devoted to Balzac. The following will be read: *Le Colonel Chabert*, *Les Chouans*, *Une Tenebreuse Affaire* and *La Vendetta* and Paul Grasson. This course is continued in catalog number 210. Conducted in either French or English.

107a. Advanced French—Four hours. Fall Quarter.

Devoted to the origin and development of French fiction. The reading of Hugo's *Bug Jargal*, *Notre Dame de Paris* and *Les Miserables*. Original themes in French.

107b. Advanced French.

A course in easy French fiction conducted in Spanish. All translation work will be done into Spanish. For students who have had two years of both languages. Can be taken any term. A five-hours' course, allowing students three hours in each language.

108. Advanced French—Four hours. Winter Quarter.

A study of the most popular shorter French romances: Biart's *Monsieur Pinson*, Daudet's *Lettres de Mon Moulin*, De Bernard's *L'Anneau d'Argent*, De la Brete's *Mon Oncle et Mon Cure* and Lamy's *Le Voyage du Novice Jean-Paul*.

109. Advanced French—Four hours. Spring Quarter.

A continuation of Course 108. Texts: Daudet's *Tartarin de Tarascon*, *Tartarin Sur Les Alpes*, Montesquieu's *Lettres Persanes*, and Sandeau's *Sacs et Parchemins*.

NOTE: In the above courses listed as "Advanced French" some outside reading can be taken for which one hour's credit will be granted on the completion of 600 pages of selected texts. A written and oral examination will be required.

210. Graduate French—Four hours. Fall Quarter.

A critical study of Balzac's life and works, methods and achievements as the leading French novelist. Devoted principally to "*Les Cinq Scenes de la Comedie Humaine*."

211. Graduate French—Four hours. Winter Quarter.

Devoted to the life and works of Prosper Merimee. *Colomba*, *Mateo Falcone*, and *Le Coup de Pistolet*.

212. Graduate French—Four hours. Spring Quarter.

The life and works of Alfred de Musset. Conducted in French.

213. Graduate French—Four hours. Fall Quarter.

This course alternates with Graduate French 210. Moliere: A critical study of the greatest writer of comedies in France. The reading of seven selected plays.

214. Old French—Four hours. Winter Quarter.

A reading course in Old French prose: *Aucassin et Nicolette*.

216. Teachers' Course—Five hours. Any Quarter.

The principles of French teaching requirements in high schools.

SPANISH.**1. First Year Spanish—Four hours. Fall Quarter.**

Espinosa and Allen's Grammar, and the reading of easy texts.

2. First Year Spanish—Four hours. Winter Quarter.

Grammar continued. Graded texts.

3. First Year Spanish—Four hours. Spring Quarter.

Grammar completed. Henry's *Easy Spanish Plays*, Valera's *Pajaro Verde*, Fuentes and Francois' *A Trip Through Latin America*, and Escrich's *Amparo*.

4. Intermediate Spanish—Four hours. Fall Quarter.

Alarcon's Short Stories, Albes' Viajando por Sud America, Ballard and Stewart's Oral Spanish.

5. Intermediate Spanish—Four hours. Winter Quarter.

Baridan's Leyendas Mejicanas, Isaac's Maria and Sanz's Don Francisco de Quevedo.

6. Intermediate Spanish—Four hours. Spring Term.

The life and works of Pedro de Alarcon: El Sombrero de Tres Picos, El Final de Norma and El Nino de la Bola.

105. Advanced Spanish—Four hours. Fall Quarter.

The life and works of Galdos: Dona Perfecta, Electra and Marianela.

106. Advanced Spanish—Four hours. Winter Quarter.

Devoted to the drama of Jose Echegaray, the greatest Spanish dramatist of the 19th century: La Muerte en Los Labios, O Locura O Santidad and El Gran Galeoto.

107. Advanced Spanish—Four hours. Spring Quarter.

Modern Spanish Dramatists: Tamayo y Baus, de Los Herreros, Martinez Sierra, and Jacinto Benavente.

210. Graduate Spanish—Four hours. Fall Quarter.

Cervantes' Novelas Ejemplares. Five selected novels will be used as a preparation for the Don Quixote.

211. Graduate Spanish—Four hours. Winter Quarter.

Cervantes' Don Quixote, with special lectures on the satire of Cervantes.

212. Graduate Spanish—Four hours. Spring Quarter.

The Golden Age of Spanish Literature. The leading dramas of Lopa de Vega and Calderon.

213. Graduate Spanish—Four hours. Fall Quarter, or any quarter.

The One-Act Play in Spain. The Quinteros, Sierra, Echegaray, Benavente, and Rusinol. One play of each will be read. This course conducted in French. For students who have had at least two years in each language.

214. Old Spanish—Four hours. Winter Quarter.

Old Spanish Grammar and Readings.

216. The Teaching of Spanish—Four hours. Any Quarter.

Conducted in Spanish. An outline of the work as best presented in the first two years in high school Spanish.

PORTUGUESE.**1, 2, 3. Beginning Portuguese—Four hours. Fall, Winter and Spring Quarters.**

Branner's Grammar and easy texts. Elective for those majoring in Spanish.

ITALIAN.**1, 2, 3. Beginning Italian—Four hours. Fall, Winter and Spring Quarters.**

Recommended for those students whose major is French. Prerequisite: four years of Latin, two of French and Spanish.

Courses in Commercial French and Spanish will be provided on request of five or more students.

Hygiene and Ethics

HELEN GILPIN-BROWN, A.B., *Dean of Women*

In the courses given below, it is hoped that two great essentials in the training of a teacher—health and personality—may be fostered and improved. The young woman who starts out upon her teaching career with a good physical foundation, and the advantage of a character developed through right ideas of conduct, has two assets which are invaluable.

Hygiene 1—Two periods. One hour credit. Every Quarter.

This course has been organized to answer a need in college for instruction along the line of everyday healthful living. It is deemed advisable that the Dean of Women in her work should gain a personal knowledge of the living conditions of as many students as possible. The course will cover the fundamental facts relating to personal health and efficiency. Foods and feeding habits, clothing, housing and ventilation, baths and bathing, muscular activity, work, rest and recreation, avoidance of communicable diseases as a health problem, etc., will form the subject-matter of the course. Lectures, discussions, reference assignments.

Ethical Culture 2—Two hours. Every Quarter.

A course designed for instruction in the etiquette of everyday life, and a general appreciation of culture, and its necessity in the training of a teacher. The Dean of Women hopes to get in touch with the personal side of each student. Questions will be requested from the members of the class, and there will be a friendly exchange of ideas with reference to conduct. Lectures, book, and magazine reviews and reports.

The Library

ALBERT F. CARTER, A.B., M.S., *Librarian*
 GRACE CUSHMAN, Pd. B.
 MARY F. COCHRAN, A.B.
 WILLIAM B. PAGE

The main library of the College contains about forty-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 "Silva of North America"; Gould's "Humming Birds"; the works of Buffon, Nuttall and Michaux, Linnaeus, 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 two thousand well selected books for the use of the Training School pupils.

1. **Library Science**—One hour. Fall, Winter and Spring Quarters.

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 catalog and various indexes; also the various standard books of reference, dictionaries, encyclopedias, etc., the purpose being to acquaint the student with the most ready means of using the library and of making it of the most value in the college course.

Music

JOHN CLARK KENDEL, A.B., *Director*
 M. EVA. WRIGHT, *Piano, Pipe Organ*
 JOSEPHINE KNOWLES KENDEL, *Voice*
 LILA MAY ROSE, Pd.M., *Public School Methods*
 NELLIE B. LAYTON, A.B., *Piano*
 LUCY B. DELBRIDGE, Pd.M., *Violin*
 H. W. BURNARD, *Flute, Oboe*
 RAYMOND H. HUNT, *Clarinet*

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, literary, and esthetic side of music, or for those who wish to become supervisors or professional teachers of vocal and instrumental music.

Courses for grade teacher and general student: Music 1, 2, 3, and 4.

Courses for supervisors and professional teachers of music: Music 2, 5, 7, 8, 9, 10, 12, 13, 14, 17, 100, 101, 102, 105, 106, 119, 120, and 121.

Courses which are cultural in their nature and meant for the general or special student: Music 7, 10, 12, 13, 14, 17, 119, and 120.

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, composed 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 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, their closing program being the Oratorio given during the Spring Music Festival. All pupils registered in the Conservatory of Music

classes are required to join the Choral Union upon invitation of the director if they are taking the work for College credit.

Cost of Instruction in the School of Music.

The fixed policy of the Conservatory is to provide individual instruction of the highest possible artistic type at a considerably lower cost than is usually charged for the same grade of instruction. This is made possible because the state assumes all actual expense of salaries of teachers, and other overhead expenses, as it does in all other College subjects.

The courses offered are of such a nature that some courses designated as Senior College may be elected by advanced students in the Junior College. Some courses ostensibly Junior College may be elected by Senior College students whose preparation has not been sufficient to enable them to elect Senior College classes.

Preparation of Supervisors of Public School Music.

One of the most interesting and profitable fields of professional musical careers is that of the Supervisor of Public School Music. Time was when the matter of who should be the supervisor of music was of no particular importance. She was often chosen because of ability as a piano teacher or a band leader, or she had a similar accomplishment. That day is now past. To be chosen as supervisor now one must have studied that branch of musical specialization as carefully as any other of its numerous special fields.

Colorado Teachers College offers a three and four-year course in Supervision of School Music. The four-year course leads to the degree of Bachelor of Music.

Courses in Public School Music.

In the courses in Supervision of Public School Music the plan is always towards making the work of the most practical nature, not theoretical only, but so practical that our graduates can step into positions with all the assurance necessary to insure success.

No student will be graduated from the supervisors course until he has demonstrated to the entire satisfaction of the director of the department that he is thoroly qualified to hold down a supervisorship successfully.

The director is an experienced and practical supervisor of public school music and is capable of judging from all angles the qualifications demanded. This will be a guarantee both to the prospective supervisor and the employer of the success of the candidate for the position.

Courses covering four years' work, with a major in Music, and leading to the degree of Bachelor of Music, are offered by the College Conservatory of Music. All students in the Conservatory are required to take two years of voice and piano unless they have previously had the equivalent of the work offered.

The courses offered by the department are noted below:

The four-year course with a major in Music offers a very superior opportunity for students wishing to prepare in the most thoro way to become supervisors of music in larger cities. This course will provide ample practice teaching, directing of chorus, glee club, and orchestra to insure the success of the student in a large way.

A Four-Year Curriculum for Teachers of Public School Music, Supervisors of Music in Public Schools, and Directors of Music in Normal Schools and Colleges.

	First Year.	Hours.
1. Professional Core:		
Biology 2—Bionomics		4
Sociology 3—Ed. Sociology.....		4
Education 8—Ed. Values.....		4

2. Courses Required by the Department of Music:

*Music 1—Sight Reading.....	4
Music 2—Methods for the Grades.....	4
Music 8a—Harmony, Fall	3
Music 8b—Harmony, Winter	3
Music 8c—Harmony, Spring	3
Music 7—History, Fall	2
Music 10—Appreciation, Winter	2
Music 17—Modern Music, Spring.....	2
Music 12 and 13—Voice and Piano (unless excused by the Director) with or without credit.	

3. Elective:

Students may elect the remaining 9 hours or 13 (if excused from Music (1) from any department of the College. The following departments are suggested:

- Fine Arts.
- Languages.
- Conservatory of Music.
- Use of the Library (Fall only).

Second Year.

Psychology 2a—Ed. Psychology	4
Psychology 2b—Ed. Psychology	4
Education 10—The Elementary Curriculum.....	4
Political Science—Political Adjustment.....	4

2. Courses Required by the Department of Music:

Training School 1—Methods and Observation, Fall.....	4
Teaching 1—Practice Teaching, Fall.....	4
Teaching 2—Practice Teaching, Winter.....	4
Teaching 3—Practice Teaching, Spring.....	4
Music 9a—Advanced Harmony, Fall.....	3
Music 9b—Advanced Harmony, Winter.....	3
Music 5—Supervisors' Course, Spring.....	3
Music 12 and 13—(Unless excused by the Director) with or without credit.	

3. Elective:

Students may elect the remaining 11 hours from any department of the College. The following departments are suggested:

- Conservatory of Music.
- Fine Arts.
- Languages.

Third Year.

1. Professional Core:

Psychology 104 or 105—Psychology of School Subjects.....	4
Sociology 105—Social Maladjustments.....	4

2. Courses Required by the Department of Music:

Music 100—Counterpoint, Fall	3
Music 101—Composition and Analysis, Winter.....	3
Music 102—Orchestration, Spring	3
Music 119—Standard Operas, Fall.....	2
Music 120—Standard Oratorios and Symphonies.....	2
Teaching in High School, Fall.....	4
Teaching in High School, Winter.....	4
Practice Supervising in Elementary School.....	4

3. Electives:

Students may elect the remaining 15 hours from any department in the College. The following departments are suggested:

- Conservatory of Music.
- Fine Arts.
- Languages.
- Physics of Sound.

Fourth Year.

1. Professional Core:

Education 111—Philosophy of Education.....	4
Education 116—The Course of Study.....	4
Psychology 108—Tests and Measurements.....	3

2. Courses Required by the Department of Music:

Music 106—Choral and Orchestral Conducting, Fall.....	4
Music 121—Research, Winter	4
Music 105—Supervisors' Course, Spring.....	4
Teaching and Conducting, Fall.....	4
Supervising in Elementary School, Winter.....	4

*Students may be excused from this course upon passing a satisfactory examination.

3. Electives:

Students may elect the remaining 17 hours from any department of the College. The following departments are suggested:

Conservatory of Music.
Fine Arts.
Languages.
Reading.
Interpretive Dancing.
English.

1. Sight Reading—Required of Majors in Music. Open to Senior College students. Four hours.

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

2. Methods for the First Eight Grades—Required of Majors in Music. Open to Senior College. Five hours.

A very practical course for teachers, in which the material used in the public schools is studied and sung, with suggestions as to the best ways to present all phases of the work. Prerequisite for this class, Music 1 or its equivalent.

3. Kindergarten and Primary Music—Open to Senior College. Two hours.

Designed especially for kindergarten and primary teachers. Songs and music adapted to children of these departments will be studied and sung. The care and development of the child voice; the teacher's voice; methods of instruction; practice singing and rhythm exercises will be presented.

4. Rural School Music—Three hours.

This course consists of methods and material adapted to the conditions of the rural school building, where a number of children from all grades are assembled together.

5. Methods for Special Students—Three hours.

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 Supervisors' Course.

6. Chorus Singing—Open to Senior College. One hour.

Worth-while music and standard choruses are studied and prepared to present in concert.

7. History of Ancient and Medieval Music—Required of Majors in Music. Open to Senior College. Two hours.

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—Required of Majors in Music. Open to Senior College. Three hours.

Beginning harmony. The work consists of written exercises on basses (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. Required of Majors in Music. Open to Senior College. Six hours.

Harmonization of all discords. The circle of chords completed, modulation, etc. The harmony courses continue throught the year, and the work is planned to meet the individual needs of the class.

9. Advanced Harmony—Open to Senior College. Three hours.

A continuation of Courses 8a, 8b, and 8c.

10. Methods in Appreciation—Required of Majors in Music. Open to Senior College. Two hours.

This course is planned to prepare teachers to present more intelligently the work in Appreciation of Music, for which there is such 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—Required of Majors in Music. Open to Senior College.

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—Required of Majors in Music. Open to Senior College.

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—Open to Senior College.

The work will be outlined according to the ability of the student. To arrange work, consult the director.

17. Modern Composers—Required of Majors in Music. Open to Senior College. Two hours.

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.

A continuation of Course 9.

101. Composition and Analysis—Three hours.

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.

The instruments of the orchestra. Practical arranging for various combinations and full orchestra.

103. Advanced Orchestration—Four hours.

A continuation of Course 102.

105. Supervisors' Course—Four hours.

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 standard 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.

112. Advanced Vocal Individual Instruction—

The individual work in voice may be carried thru the entire four-year course for those wishing to prepare as specialists in that field.

113. Advanced Piano Individual Instruction—

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—Open to Junior College. Four hours.

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. Interpretation and Study of Standard Operas—Two hours.

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. Interpretation and Study of Standard Oratorios and Symphonies—Two hours.

The standard oratorios are studied. The best known solos and choruses are presented by members of the class or talking machine. 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.

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 teachers' colleges of the various states.

VOCAL COURSES.

Elementary Course.

In the Vocal Department the aim is to give the student correct vocal habits from the beginning of the course. Proper conception of good tone, the blending of the speaking and singing voice, firm breath support and resonance. No set group of studies is used, but exercises to fit the needs of each individual student are assigned. Songs suitable to the requirements and musicianship of the student are studied with the emphasis laid upon correct phrasing, refined diction, and intelligent singing.

Intermediate Course.

The Intermediate Course grows logically out of the elementary. As the student grows in power and musicianship, exercises and studies to fit the needs are assigned. Songs of a more advanced type are studied, always with the clear object of producing intelligent singers. Students are expected to appear upon recital programs.

Advanced Course.

The emphasis is laid upon repertoire. Songs of Schumann, Schubert, Brahms, Mendelssohn, and other standard classical composers are studied. Operatic and Oratorio Arias, Folk songs, and a full concert repertoire are acquired. Each student to complete this part of the course is required to present a full recital program assisted by some member of the instrumental department.

PIANO COURSES.

Elementary and Primary Foundation Studies.

Special care given to hand culture, finger exercises, scales, playing movements, mental control, notation and sight-reading.

Sonatinas and pieces: Kuhlau, Kullak, Clementi, Bach, Twelve Little Preludes, and pieces suited to the individual student.

Intermediate Course.

All forms of technical exercises, trills, chords, arpeggios, double thirds, octaves. Care being given to tone production, phrasing, rudiments of harmony, use of pedal, sight-playing, studies by Czerny, Clementi and others suitable to special purposes.

Advanced Course.

Technical work continued with increased velocity, Accent and Accent Scales, Double Thirds and Sixths. Attention is given to good muscular and nerve control when playing with the weight of the arm. History of Music, Harmony, Studies by Clementi, Chopin, and Liszt. Pieces by Bach, Chopin, Schumann, Schubert, Greig, MacDowell, Debussy, etc., including Concertos by Mozart, Hummel, Mendelssohn, Saint-Saens and Tchaikowsky.

Sight-Playing, Ensemble Class, Accompanying.

VIOLIN COURSES.

Elementary Course.

Part One.

Wichtl.
 Wohlfahrt Op. 45
 Wohlfahrt Op. 54
 Wohlfahrt Op. 74
 Kayser Bk. I
 Fifth Easy Pieces—Kelly
 Zephyrs from Melodyland—Krogram
 Twenty-five Pieces in First Position—Lehman
 Harvest of Flowers—Weiss
 Pleyel Duets

Part Two.

Wohlfahrt Op. 45 Bk. II
 Wohlfahrt Op. 74 Bk. II
 Sevcik Op. 1—Part One
 Kayser Bk. II
 Dancla—School of Mechanism
 Schradieck—Technical Violin School
 Casorti
 Easy Solos in the Third Position

Intermediate Course.

Kayser Bk. III
 Mazas Bks. I and II
 Schradieck—Chord Studies
 Sevcik Op. I Part II
 Don't Studies
 Sevcik Op. 8—Shifting Positions
 Wilhelmj—Studies in Thirds
 Mozart Sonatas
 De Beriot Airs
 Mazas Duets
 Selected Solos

Advanced Course.

Kreutzer
 Dancla Op. 73
 Mazas Bk. III
 Sevcik Bk. 4—Op. I
 Rode
 Gavines
 Campagnoli
 Bach Sonatas
 Beethoven Sonatas
 Grieg Sonatas
 Mozart Concertos
 De Beriot Concertos
 Concertos of Mendelssohn and Bruch
 Selected Solos and Sonatas

ORGAN COURSES.

It is necessary in taking up the subject of the organ to have some knowledge of the piano, sight-reading, rhythm, scales, arpeggios, etc. It is also advisable to have had some instruction in harmony. Attention is called to registration, facility in the use of the pedals and in handling two or more manuals. So without some preparatory work in piano the difficulty is obvious.

Preparatory Course.

The student is required to become accustomed to the use of manuals and pedals, beginning pedal technic, scales, arpeggios and organ touch. Stainers' Beginning Book.

Bach Smaller Preludes and Fugues.

Intermediate Course.

Pedal technic continued, registration, Clemens' Organ Studies, More difficult Preludes and Fugues of Bach. Pieces of modern composers—French, English, Russian and American schools.

Advanced Course.

Bach Fantasie and Fugue G. Min., Toccata and Fugue (Dorian Mode).

The well known St. Ann's Fugue, Mendelssohn, Widor, Guilmont and Rheinberger Sonatas, Handel Concertos. Pieces by French, English, Russian and American composers. Great choral works of Bach and Handel.

Physical Education

RALPH GLAZE

MARGARET JOY KEYES, A.B.

Aims of the Department.

The department aims (1) to help the student form regular habits of exercise, and develop organic power; (2) to give such instruction that the teacher may be able to supervise the play activities of her own school successfully; and (3) to offer the training to students who desire to become teachers of physical education in schools, playground directors, or play leaders.

Equipment.

The physical examination room contains the usual anthropometric instruments; the gymnasium has apparatus for indoor exercises, and the outdoor gymnasium is supplied with modern playground apparatus; the athletic field has an excellent quarter with cinder track, grandstand, football and baseball fields, tennis courts and basketball courts.

Required Work.

Two-thirds of the time in residence is required of all students for graduation from the Junior College. In cases where physical disability does not permit a student to participate in the regular activities, special work is prescribed or an equivalent of work in Hygiene is given.

Students who desire to do special work in this department may elect the course outlined under the special Physical Education Course.

Gymnasium Dress.

All students are required to wear during exercises an approved gymnasium uniform. This uniform for women consists of bloomers, middle blouse, and tennis or ballet shoes. The uniform for men consists of a track suit and tennis shoes. These suits may be purchased in Greeley or they may be secured before entering the college.

Physical Examinations.

Students upon registering are required to fill out health history blanks, and are required to take a physical examination. Students who are below average, or who have physical defects likely to interfere with their taking moderate exercise, will have special work prescribed for them.

Physical Education and Playground Teachers.

To meet the increasing demand for teachers who can supervise physical education in schools and direct playground work, a major has been outlined. In general these courses include Psychology, Physiology, Biology, Education, Hygiene, Anatomy, History of Physical Education and Play, Kindergarten, Story Telling, and practical courses in gymnastics, playground games, and athletics necessary to equip them to direct such work.

MAJOR IN PHYSICAL EDUCATION.

A Four-Year Group Course for Supervisors of Playground and High School Teachers of Physical Education.

		First Year.		Hours.
1.	Professional Core:			
	Biol. 2.—Bionomics	Fall	4	
	Ed. 8.—Educational Values	Spring	4	
	Soc. 3.—Educational Sociology.....	Winter	4	
2.	Courses Required by the Department:			
	Library Science 1.—The Use of the Library.....	Fall	1	
	English 4.—Speaking and Writing.....		4	
	Phy. Ed. 3.—Light Gymnastics.....		2	
	Phy. Ed. 6.—Singing Games		2	
	Phy. Ed. 7.—Folk Dancing		2	
	Phy. Ed. 21.—Playground Games		2	
Second Year.				
1.	Professional Core:			
	Psych. 2a.—Educational Psychology.....	Fall	4	
	Psych. 2b.—Ed. Psychology, Continued.....	Winter	4	
	Ed. 10.—Elementary School Curriculum.....	Winter	4	
	Pol. Sc. 30.—Political Adjustment.....	Spring	4	
2.	Courses Required by the Department:			
	Phy. Ed. 14.—First Aid.....	Winter	1	
	Phy. Ed. 108.—Esthetic Dancing	Three periods	2	
	Phy. Ed. 109.—Classical Dancing	Three periods	2	
	Phy. Ed. 110.—Interpretive Dancing	Three periods	2	
	Phy. Ed. 112.—Supervision of Playground.....		3	
	Phy. Ed. 4.—Advanced Light Gymnastics.....		2	
	Phy. Ed. 9.—Athletics for Women.....		2	
	Phy. Ed. 113.—Indoor Games		2	
Third Year.				
1.	Professional Core:			
	Psych. 104.—Psych. of Elementary School Subjects or			
	Psych. 105.—Psych. of High School Subjects.....	Fall	4	
	Soc. 105.—Social Maladjustments.....	Winter	4	
2.	Courses Required by the Department:			
	Phy. Ed. 1.—Physiology		5	
	Phy. Ed. 3.—Anatomy		5	
	Phy. Ed. 17.—History of Phy. Educ.		2	
	Phy. Ed. 5.—Outdoor Games		2	
	Training School 33.—Plays and Games for Kindergarten.....		3	
	31.—Story Telling		3	
	Student may elect any courses not yet taken from previous schedule.			
Fourth Year.				
1.	Professional Core:			
	Ed. 116.—The High School Curriculum.....	Fall	4	
	Ed. 111.—Philosophy of Education.....	Spring	4	
	Ed. 108.—Tests and Measurements.....		3	
2.	Courses Required by the Department:			
	Phy. Ed. 224.—Research in Phy. Educ., Thesis, Training School, Methods and Observation.....		4	
	122.—The Play Life of Children.....		3	
	115.—The Festival		3	
	111.—Pantomime		2	

MAJOR IN PHYSICAL EDUCATION.

Coaching Course for Men.

First Year.

1. Professional Core:		Hours.
Biol. 2—Bionomics.....	Fall	4
Ed. 8—Educational Values.....	Spring	4
Soc. 5—Educational Soc.....	Winter	4
2. Courses Required by the Department:		
Phy. Ed. 23—Athletic Coaching Course.....	Each quarter	6
Phy. Ed. 18—Light Gymnastics		2
Phy. Ed. 19—Elementary Heavy Gymnastics.....		2

Second Year.

1. Professional Core:		
Psych. 2a.—Educational Psychology.....	Fall	4
Psych. 2b.—Ed. Psychology, Continued.....	Winter	4
Ed. 10.—Elementary School Curriculum.....	Winter	4
Pol. Sc. 30.—Political Adjustment.....	Spring	4
2. Courses Required by the Department:		
Phy. Ed. 23.—Athletic Coaching Course.....	Each Quarter	6
Phy. Ed. 14.—First Aid.....		1
Phy. Ed. 21.—Playground Games.....		2

Third Year.

1. Professional Core:		
Psych. 104.—Psych. of Elementary School Subjects, or		
Psych. 105.—Psych. of High School Subjects.....	Fall	4
Soc. 105.—Social Maladjustments.....	Winter	4
2. Courses Required by the Department:		
Phy. Ed. 23.—Athletic Coaching Course.....	Each Quarter	6
Phy. Ed. 1.—Anatomy		5
Phy. Ed. 2.—Physiology		5
Phy. Ed. 17.—History of Phy. Education.....		2
Phy. Ed. 19.—Advanced Heavy Gymnastics.....		2

Fourth Year.

1. Professional Core:		
Ed. 116.—The High School Curriculum.....	Fall	4
Ed. 111.—Philosophy of Education.....	Spring	4
Ed. 108.—Tests and Measurements.....		3
2. Courses Required by the Department:		
Phy. Ed. 23.—Athletic Coaching Course.....	Each Quarter	6
Phy. Ed. 112.—Playground Supervision.....		3
Phy. Ed. 224.—Physical Educational Research.....		

1. Anatomy—Five periods, five hours. Fall Term.

2. Physiology and Hygiene of Exercise—Men and women. Five periods.

3. Elementary Light Gymnastics—Two periods, one hour. Winter and Spring Terms.

Class organization and conduct; fundamental positions and movements; free army dumb-bell, wand and Indian club drills; practice in organization and leading of drills.

4. Advanced Light Gymnastics and Swedish Gymnastics—Prerequisite Course 3. Two periods, one hour. Spring Term.

5. Outdoor Plays and Games—Two periods, one hour credit.

Plays and games progressively arranged from simple circle to highly organized group and team games. The course aims to meet the needs of school and playground for the lower age periods.

6. Singing and Rhythmic Plays for Children—Three periods, two hours credit. Winter Term.

A course for those desiring play material for the elementary grades.

7. Folk Dances—Three periods, two hours credit. Each term.

Selected folk dances of various nations arranged to meet the needs of school and playground.

9. Outdoor Athletics for Women.

A recreational course of advanced team-play games. Hockey, indoor ball, volley ball, basketball, track, etc.

14. First Aid—One period, one hour credit. Winter Term.

Lectures, demonstrations and recitations. The Red Cross handbook used as text with reference to other books on the subject. Men and women.

17. History of Physical Education—Two periods, two hours credit. Fall Term.

The place given to physical education in the life of various nations in ancient, medieval and modern times. The beginning of modern physical education.

18. Light Gymnastics—Two periods, one hour credit.

Free arm drills, wands, dumb-bells, Indian clubs.

19. Elementary Heavy Gymnastics—Two periods, one hour credit.

Horse, horizontal bar, rings.

20. Advanced Heavy Gymnastics—Two periods, one hour credit.

Continuation of Course 19.

21. Playground and Group Games—Two periods, one hour credit.

A selected list of group and team games.

23. Athletic Coaching Course—Men. Five hours.

To supply the demand for teacher coaches. Lectures, field practice and competition, managing teams, training men, discipline. Football, baseball, basketball, track, and gymnasium in season. Sports taken up in their season.

108. Esthetic Dancing—Three periods, two hours credit. Each Quarter.

110. Interpretive Dancing—Three periods, two hours credit. Winter and Spring Quarters.

Technic of the dance. Plastic exercises for the development of bodily coordination and rhythmical responsiveness. Practice and reports.

109. Classical Dancing—Three periods, two hours credit. Winter and Spring Quarter.

Continuation of Course 108. Advanced technic. Classical dances.

Interpretation of words in music thru rhythmical movements. Analysis and composition of original dances.

112. History, Development, Organization of Play and Playgrounds—Three periods, three hours credit. Theory and practice in all phases of Playground work.

113. Indoor Games—Two periods, one hour.

Selected group and team games.

224. Research in Physical Education—Required of Majors in Physical Education.

Qualified Senior College and graduate students may elect a subject for research in physical education. The following subjects are suggested, but others, depending upon the students' interest and available materials, may be chosen:

1. The status of Physical Education in the schools of Colorado, with proposed plans for improvement.
2. The playground and recreation movement; its rise, growth and present status.
3. A recreational survey of a selected community, with a suggested plan for improvement.
4. Educational Athletics. Plan for a county or city system.

Practical Art

SAMUEL MILO HADDEN, A.M., *Dean*

The Practical Arts Division occupies the entire Guggenheim Hall of Industrial 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 Guggenheim Hall of Industrial Arts is a beautiful white brick building, built especially to house practical arts work. The equipment is modern; and the museum, housed in the building and covering the various phases of practical arts education, is the most complete in the Middle West.

Industrial Arts

RALPH T. BISHOP

CHARDES M. FOULK, Pd.B.

OTTO W. SCHAEFER

Woodworking and Drafting.

The Woodworking and Drafting Departments of the State Teachers College are the most modern departments to be found in the Middle West. The departments occupy almost all of the first and half of the second floor of the Guggenheim Hall of Industrial Arts. The rooms are large, well ventilated and well lighted. The student 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 first class working condition. It is the aim of the departments to employ methods in woodworking and drafting as thoro and practical as are to be found in the regular commercial shops. All classes in shop work are double period, giving the student plenty of time to work out problems well worth while. Students are not compelled to work from models, but are given plenty of opportunity to make use of their own ideas with proper help and guidance.

A Four-Year Group Course for High School Industrial Arts, Teachers and Supervisors of Industrial Arts in Normal Schools, Junior High Schools, and Elementary Schools. This course is arranged as a two, three or four year course.

First Year.

1. Professional Core:	Hours.
Biol. 2.—Bionomics	4
Ed. 8.—Educational Values.....	4
Soc. 3.—Educational Sociology.....	4
2. Courses Required by the Department:	
Ind. Arts 8.—Elementary Art Metal.....	4
Ind. Arts 3.—Woodworking for Elementary School.....	4
Ind. Arts 10.—Elementary Mechanical Drawing, or	
Ind. Arts 12.—El. Architectural Drawing.....	4
Ind. Arts 1.—El. Woodworking.....	4
Ind. Arts 2.—Int. Woodworking.....	4

Second Year.

1. Professional Core:

Psych. 2a.—Educational Psychology	4
Psych. 2b.—Educational Psychology, Continued.....	4
Pol. Sc. 30.—Political Adjustment.....	4
Ed. 10.—The El. School Curriculum.....	4
2. Courses Required by the Department:

Ind. Arts 5.—Methods in Practical Arts.....	4
Ind. Arts 14.—Care and Management.....	4
Ind. Arts 11.—Int. Mechanical Drawing, or	
Ind. Arts 13.—Adv. Architectural Drawing.....	4
Ind. Arts 19.—Wood Turning	4
3. Elective Courses:

Suggested fields for election for the students that expect to finish their school work at the end of the second year are in following departments: Printing, Bookbinding, Art, Commercial, Mathematics, Science, or Physical Education.

Third Year.

1. Professional Core:

Psych. 104.—Psych. of El. Sch. Sub., or	
Psych. 105.—Psych. of High School Sub.....	4
Soc. 105.—Social Maladjustments.....	4
2. Courses Required by the Department:

Ind. Arts 106.—Repair and Equipment.....	4
Ind. Arts 121.—Adv. Cabinet Making	4
Art 1.—El. Drawing and Design, or	
Art 2.—Applied Design.....	2
Art 11.—Hist. of Architecture.....	1
Bkdbg. 1.—Elementary Bookbinding.....	4
Print. 1.—Elementary Printing.....	4

Fourth Year.

1. Professional Core:

Ed. 111.—Philosophy of Education.....	4
Ed. 116.—High School Curriculum.....	4
Ed. 108.—Tests and Measurements.....	4
2. Courses Required by the Department:

Ind. Arts 115.—Filing and Grinding.....	4
Ind. Arts 104.—Pre-Vocational Ed.....	3
Print. 2.—Int. Printing, or	
Bkdbg. 2.—Int. Bookbinding.....	4
Art.—Design Course, to be selected.....	4
3. Elective Courses:

Fields for election for students that expect to finish at the end of the third or fourth year of the course should be selected after consultation with the head of the department.

COURSES IN INDUSTRIAL ARTS FOR THE DEGREE OF
MASTER OF ARTS.

Any of the courses numbered from 100 upwards which have not already been taken as a part of the course leading to the degree of Bachelor of Arts may be elected to apply upon the degree of Master of Arts.

5. **Methods in Practical Arts**—Required of all Majors in Industrial Arts, Commercial Arts and Applied Arts. Four hours. Fall, Spring and Summer Quarters.

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

1. **Elementary Woodwork**—Required of Industrial Arts Majors. Four hours. Fee, \$1.00. Every Quarter.

This course is arranged for those who have had no experience in wood-working 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—Required of Industrial Arts Majors. Four hours. Fee, \$1.00. 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 wood-working.

3. Woodworking for Elementary Schools—Required of all Industrial Arts Majors. 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.

19. Wood Turning—Required of all Industrial Arts Majors. Four hours. Fee, \$1.00. 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.

14. Care and Management—Required of Industrial Arts Majors. Three hours.

This course is designed to train students to care for, repair and adjust hand and power tools of the woodworking department.

8. Elementary Art Medal—Required of Industrial Arts Majors. Four hours. Fee, 50 cents. Every Quarter.

(a) This course has in mind the designing and creation of simple, artistic forms in copper, brass and German silver.

(b) Also simple, artistic jewelry, including monograms and the setting of semi-precious stones.

10. Elementary Mechanical Drawing—Required of Industrial Arts Majors. Four hours. Fall Quarter.

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.

6. Repair and Equipment Construction—Required of Industrial Arts Majors. Four hours.

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

12. Elementary Architectural Drawing—Required of all Industrial Arts Majors. Four hours.

This course includes the making of complete designs of simple one-story cottages, together with details and specifications of same.

11. Advanced Mechanical Drawing—Four hours.

This course includes intersections, cycloid, hypercycloid and involute curves; their application to spur and bevelled gear drawing; developments, advanced projection, lettering and line shading.

13. Advanced Architectural Drawing—Four hours.

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.

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.

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 letter-heads, tickets, programs, etc. Color study in selection of papers and inks.

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, advertisements, etc. Imposition 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.

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

BOOKBINDING.

1. Elementary Bookbinding—Four hours. Every Quarter.

This course includes the following: Tools, machines, materials and their uses, collating and preparing the sheets for sewing, sewing on tape and cord, preparing of end sheets, trimming, glueing, rounding, backing, headbanding and lining of backs. Cover materials, planning and making of covers, finishing and lettering of titles, and labeling; all the steps necessary for the binding of full cloth-bound books.

2. Intermediate Bookbinding—Four hours. Every Quarter.

This course includes the binding of books in half morocco and full leather, including such processes as tooling in gold and blank, edge gilding and marbling, and the making and finishing of cardboard boxes and leather cases.

120. Pattern Making—Five hours.

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.

122. Building Construction—Four hours.

The purpose of this course is to give the student a knowledge of the different parts of a building and the best method of framing and assembling. The work in this course will be executed on a reduced scale, but in a manner that will convey the full purpose. The use of the steel square and compass will be fully demonstrated.

109. Advanced Art Metal—Four hours. Winter, Spring and Summer Quarters.

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.

117. Elementary Machine Design—Four hours.

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.

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.

104. Pre-vocational Education—Two hours.

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.

116. Historic Furniture—One hour. Fall Quarter.

Lectures illustrated by lantern slides and pictures, showing the development of and characteristics fundamental in the Netherlands, English and American periods.

121. Advanced Cabinet Making—Four hours.

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.

115. Filing and Grinding—Four hours.

This course takes up such technical work of the woodworking department as saw filing, machine knife developing and grinding and the construction of hand devices for woodworking machinery.

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.

FINE AND APPLIED ARTS.

WALTER F. ISAACS, B.S.

AGNES HOLMES, Pd.M.

SAMUEL M. HADDEN, A.M.

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 thru 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 large museum of ceramics, original paintings, reproductions, and copies of masterpieces, bronzes, marbles, 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.

1. Grammar Grade Methods—Four hours. Required of Majors in Fine and Applied Arts. Each Quarter.

(a) T. Th.—Problems in public school art; discussion of grade methods, with special reference to the upper grades.

(b) M. W.—Elementary design principles; exercises involving line, space and color; freehand drawing.

A Four-Year Group Course for Supervisors of Art and Teachers in High School and Departmental Schools. Arranged as a two, three or four year course.

First Year.

1. Professional Core:	Hours.
Biol. 2.—Binomics	4
Ed. 8.—Ed. Values.....	4
Soc. 3.—Ed. Soc.....	4
2. Courses Required by Department:	
Art. 1.—Grammar Grade Methods.....	4
Art. 2.—Primary Grade Methods.....	4
Art. 3.—Free hand Drawing.....	4
Ind. Arts 10.—Mech. Drawing.....	2
Art. 4.—Applied Design.....	4

Second Year.

1. Professional Core:	
Psych. 2a.—Ed. Psych.....	4
Psych. 2b.—Ed. Psych.....	4
Pol. Sc. 30.—Political Adj.....	4
Ed. 10.—El. School Curriculum.....	4

2. Courses Required by the Department:

Art. 9.—Hist. of Painting.....	3
Art. 10.—Hist. of Sculpture.....	2
Art 11.—Hist. of Architecture.....	1
Ind. Arts 5.—Methods in Prac. Arts.....	4
Art 6.—Art Appreciation.....	2
Art 5.—Water Color.....	3
Art 13.—Blackboard Drawing.....	8
Teaching	8

Third Year.

1. Professional Core:

Psych. 104.—Psych. of Elementary Subjects, or	
Psych. 105.—Psych. of High School Subjects.....	4
Soc. 5.—Social Maladjustment.....	4

2. Courses Required by the Department:

Art 100.—Methods in Supervision.....	3
Art 101.—Drawing from Life.....	4
Art 102.—Com. Design.....	4
Art 8.—Painting	4
Teaching	4

Fourth Year.

1. Professional Core:

Ed. 111.—Phil. of Ed.....	4
Ed. 116.—High School Curriculum.....	4
Ed. 108.—Tests and Measurements.....	4

2. Courses Required by the Department:

Art 200.—Oil Painting.....	4
Art 103.—Antique	4
Art 104.—Poster Designing.....	4
Teaching	4

9. History of Painting—Two hours. Winter Quarter.

The evolution of painting from the beginning of history; the growth of the great schools and their influences; the study of the important masters, their personalities as related to their painting, and their work as an index to the time in which they lived; illustrated by a large collection of photographs and lantern slides. Lectures with related reading.

10. History of Sculpture—One hour. Winter Quarter.

The works of the great masters of ancient and modern schools, illustrated by pictures and lantern slides. Lectures with related readings.

11. History of Architecture—One hour. Spring Quarter.

Illustrated lectures on the development of architecture; interpretations of famous buildings.

12. Household Art Design—Four hours. Winter and Spring Quarters.

The execution of designs for interior decoration and costumes.

13. Blackboard and Laboratory Drawing—Two hours. Each Quarter.

General blackboard drawing; practice in drawing plants and animals; exercises in laboratory drawing.

14. Modeling—Two hours. Fee, 50 cents. Winter Quarter.

Modeling in the round and relief; practice in casting.

100. Methods in Art Supervision—Three hours. Spring Quarter.

The supervision of art education in city systems; the planning of a course of study; methods of teaching.

101. Drawing from Life—Four hours. Winter Quarter.

Study from the costumed model. The student is allowed to choose the medium to be used.

102. Commercial Design—Four hours. Winter Quarter.

Design considered in its relation to advertising art. Posters, cover designs and various advertising problems are executed.

103. Antique—Four hours. Winter Quarter.

Charcoal drawing from antique casts in outline and in light and shade. An intensive course requiring accurate drawing and close study of values.

104. Design and Composition—Four hours. Prerequisite, Art 4. Fall Quarter.

The theory of space filling and color harmony; conventionalized plant motifs; poster designing.

200. Oil Painting—Four hours. Each Quarter.

This work may be done outside of regular classes, to suit the convenience of the student. Regular criticisms will be given by the instructor in charge. The student must submit satisfactory evidence of having had sufficient preparation for this course.

201. Color Composition—Two hours. Each Quarter.

An advanced study of color composition in oil or water color. Arrangements of form and color for decorative effect. The student will be assigned subjects and will meet with the instructor for criticism at appointed time.

202. Advanced Poster Designing—Four hours. Each Quarter.**2. Primary Grade Methods—Four hours. Required of Majors in Fine and Applied Arts. Each Quarter.**

- (a) T. Th.—Lower grade methods.
- (b) M. W. Design in its relation to useful objects.

3. Freehand Drawing—Four hours. Required of Majors in Fine and Applied Art. Fall Quarter.

Drawing in charcoal, pencil, pen and ink, and colored chalk from still life and casts; outdoor sketching; principles of perspective.

4. Applied Design—Three hours. Required of Majors in Fine and Applied Arts. Fall and Spring Quarters.

Relation and application of design to various articles. Blocking printing on pillow covers, table runners or curtains.

5. Water Color Painting—Three hours. Required of Majors in Fine and Applied Arts. Fall and Spring Quarters.

Studies are made from still life, flowers and landscape. The student is allowed freedom of technic.

6. Art Appreciation—One hour. Required of Majors in Fine and Applied Arts. Winter Quarter. Mr. Isaacs.

The main principles of esthetics underlying the fine arts are taken up in illustrated lectures. The course is planned with a view to increasing the student's power to select and enjoy good examples of fine art. Examples of the world's best art are studied.

7. Constructive Design—Four hours. Winter Quarter.

Design as a factor in construction; reed and raffia work; construction of mats, bags, purses, book covers, etc., in leather, with embossed or colored designs.

8. Pottery—Four hours. Fee, 50 cents. Fall and Spring Quarters.

Vases, bowls, decorative tiles, etc., are made. The department is equipped with a modern kiln, and the work of students is fired and glazed. A variety of glazes with the different colors is used. Embossed, incised and inlaid decorations.

15. Pottery—Two hours. Fee, 50 cents. Winter Quarter.

A course which stresses the decoration and glazing of pottery.

COMMERCIAL ARTS.

AMBROSE OWEN COLVIN, B.C.S.

The courses in Commercial Education are designed to meet the growing demand for professionally as well as technically trained Commercial Teachers. In these courses we have in mind the vocational school, the high schools, and normal schools or colleges.

Students who have done commercial work elsewhere, for which they have received entrance or advanced credit at this institution, will be given advanced work and will be allowed to select work from both branches of the department.

A Four-Year Group Course for Those who are Preparing to Teach Commercial Courses in Public Schools. This course is arranged so it may be completed as a desirable unit in two, three, or four years.

First Year.

1. Professional Core:	Hours.
Biol. 2.—Binomics	4
Ed. 8.—Educational Values	4
Soc. 3.—Educational Soc.	4
2. Courses Required in Department:	
Com. Arts 6.—Theory of Accounts	4
Com. Arts 53.—Commercial Arith., or	4
Com. Arts 11.—Elementary Typewriting	4
Com. Arts 51.—Int. Accounting	4
Com. Arts 1.—Prin. of Shorthand	4
Com. Arts 2.—Prin. of Shorthand	4
Com. Arts 6.—Methods in Commercial Education	4
Psych. 2b.—Educational Pysch.	4

Second Year.

1. Professional Core:	
Psych. 2a.—Educational Psych.	4
Com. Arts 14.—Business Forms	4
Pol. Sc.—Political Adjustment	4
Ed. 10.—El. School Curriculum	4
2. Courses Required by Department:	
Ind. Arts 6.—Methods in Practical Arts	4
Com. Arts 52.—Advanced Accounting	4
Com. Arts 13	4
Com. Arts 40.—Business English	4
Teaching	8

Third Year.

1. Professional Core:	
Psych. 104.—Psych. of El. Sch. Sub., or	4
Psych. 105.—Psych. of High School Sub.	4
Soc. 5.—Social Maladjustment	4
2. Courses Required by the Department:	
Com. Arts 150.—Bank Account	4
Com. Arts 151.—Cost Account	4
Com. Arts 54.—Com. Law	4
Com. Arts 41.—Business Correspondence	4
Teaching	4

Fourth Year.

1. Professional Core:	
Ed. 111.—Phil. of Ed.	4
Ed. 116.—High School Curr.	4
Ed. 108.—Tests and Measurements	4

2. Courses Required by the Department:

Com. Arts 58.—Systems of Accts.....	4
Com. Arts 59.—Auditing	4
Com. Arts 152.—Accounting Problems	4
Com. Arts 156.—Corporation Finance.....	4
Teaching	4

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 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—Four hours. Spring 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.

5. Office Practice and Methods—Four hours. Every Quarter.

Office work in the various departments of the school. The latest devices in office equipment will be studied; modern methods of filing and handling incoming and outgoing mails, etc.

6. Methods in Commercial Education—Required of Majors in Commercial Arts. Four hours. Fall 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.

7. Corporation Finance—Four hours.

This course covers the organization and operation of a corporation. A study of stocks and bonds, the corporation charter, corporation laws of various states, and is intended to make the theory of corporation accounts clearer for the student.

11. Elementary Typewriting—Required of Majors in Commercial Arts. Four hours. Every 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. Typewriting. Business Letter Writing—Required of Majors in Commercial Arts. Four hours. Every Quarter.

Study of approved forms and circular letters, addressing envelopes, manifolded and tabulating.

13. Advanced Typewriting—Required of Majors in Commercial Arts. Four hours. Every Quarter.

A study of the preparation of all kinds of legal documents, speed practice, direct dictation to the machine, and arranging and copying rough drafts, specifications, etc.

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.

41. Business Correspondence—Required of Majors in the Commercial Arts. Four hours. Winter Quarter.

Business letter writing in all of its phases will be studied in this course. The latest and most improved methods in advertising, selling and collecting by mail.

50. Elementary Accounting—Required of Commercial Majors. Four hours. Fall Quarter.

The principles of double entry bookkeeping. The journal, cash book, purchase book, sales book, and ledger are explained and illustrated. A retail grocery set will be written.

51. Intermediate Accounting—Required of Commercial Majors. Four hours. Winter Quarter.

The use of the special column cash book will be introduced. The bill book, invoice book and special ledger will be illustrated. A wholesale set will be written.

53. Commercial Arithmetic—Required of Commercial Majors. Four hours. Fall Quarter.

A thoro treatment of arithmetic from the modern commercial point of view.

54. Commercial Law—Required of Commercial Majors. Four hours. Winter 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.

55. Theory of Accounts—Required of Commercial Majors. One hour. Every Quarter.

A study of the basic principles of accounting with problems illustrating them.

14. Business Forms—Four hours.

Practice in writing various forms of commercial paper. A study of endorsements on negotiable paper and a review of good business methods and practice.

58. Systems of Accounts—Four hours.

A study of the various systems of accounts used in department stores, factories, insurance and brokerage companies, banks, etc.

56. Penmanship—Four hours. Fall Quarter.

Drill in rapid, arm-movement, business writing.

57. Penmanship—Four hours. Winter Quarter.

59. Auditing—Four hours.

The outline of an ordinary business audit, the duties and liability of the auditor, and a study and analysis of various statements and accounts.

114. Business Office Methods—Routine—Four hours. Every Quarter.

The use of the mimeograph and other duplicating devices will be taught. The sorting, routing, and proper handling of first or second class matter will be presented from a practical point of view.

142. Business English—Advertising—Four hours.

Advertisement writing of various kinds, display work for newspapers or magazines. A comprehensive study of the writing of business themes having advertising value.

150. Bank Accounting—Four hours. Spring 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.

151. Cost Accounting—Four hours. Spring 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—Four hours. Spring Quarter.

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.

152. Accounting Problems—Four hours.

Practice problems in accounting to be solved by the students. Many of these problems will be taken from state examinations for Certified Public Accountants.

156. Corporation Finance—Four hours.

A study of the organization and promotion of corporations. This course gives the student a clear idea of the methods used in the organization and operation of some of our largest companies.

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.

Home Economics

HELEN PAYNE, B.S., *Director*

GLADYS SCHARFENSTEIN, Ph.B.

ELIZABETH CLASBEY

MARGARET RODGERS, B.S.

WILKE WRIGHT LIGGETT, B.S.

The course in Home Economics is planned for teachers or supervisors of Home Economics in grades, high schools or normal schools.

The group courses give a maximum of either Household Science or Household Art at the end of two years, according to the group selected, while a four-year course gives practically the same amount of each regardless of the group selected.

Note.—All students are required to wear white waists and skirts in the Household Science laboratory and to provide themselves with apron, towel and holder.

A Four-Year Course for Teachers in Normal Schools, High Schools and Elementary Schools.

HOUSEHOLD SCIENCE.

First Year.

	Hours.
1. Professional Core:	
Biol. 2.—Bionomics.....	Fall 4
Soc. 3.—Educational Sociology.....	Winter 4
Ed. 8.—Educational Values.....	Spring 4
2. Courses Required by the Department:	
H. S. 1.—Elements of Cookery.....	Fall 4
Chem. 1.—General Chemistry.....	Fall 2
Chem. 2.—General Chemistry Lab.....	Fall 2
H. S. 2.—Elements of Cookery.....	Winter 4
Chem. 108.—Organic Chemistry.....	Winter 2
Chem. 109.—Food Chemistry.....	Winter 2
H. S. 3.—Cooking and Serving.....	Spring 4
H. S. 7.—Housewifery and Sanitation.....	Spring 4
Phys. Ed.	Every Term 1
Eng. 4.—Functional English.....	Fall 4

3. Suggested Electives:

Library 1.—Library Science.....	Fall	1
H. S. 7.—Dressmaking Practice.....	Spring	4

Second Year.

1. Professional Core:

Psych. 2a.—Educational Psychology.....	Fall	4
Psych. 2b.—Educational Psychology, Continued.....	Winter	4
Pol. Sc. 30.—Political Adjustment.....	Spring	4
Ed. 10.—El. School Curriculum.....		4

2. Courses Required by the Department:

H. S. 6.—Catering	Every Term	4
H. S. 9.—H. H. Management.....	Every Term	4
Teaching	Every Term	4
H. A. 1.—Household Art Crafts.....	Fall	4
Bact. 1.—Bact. Yeasts Moulds.....	Fall	4
H. A. 2.—Machine Construction.....	Winter	4
H. A. 4.—Advanced Dressmaking.....	Spring	4
H. S. 8.—Food Production.....	Spring	4
Phys. Ed.....	Every Term	1

Third Year.

1. Professional Core:

Psych. 105.—Psych. of High School Subjects.....	Fall	4
Soc. 105.—Social Maladjustment.....	Winter	4

2. Courses Required by the Department:

H. S. 4.—Food Preservation.....	Fall	2
H. S. 102.—Bread and Bread Making.....	Fall	2
H. A. 6.—Textiles	Fall	4
H. S. 113.—Dietetics	Winter	4
H. A. 9.—House Decoration.....	Winter	4
H. S. 105.—Therapeutics	Spring	4
H. A. 5.—Millinery	Spring	4

3. Suggested Elective Courses:

Hist. 1.—American History.....	Fall	4
Hist. 2.—American History	Winter	4
Nature Study 2.—Nature Study of Spring and Summer.....	Spring	4
Fine Arts 8.—Pottery.....	Spring	4
Phys. Ed.....	Every Term	1

Fourth Year.

1. Professional Core:

Ed. 116.—The High School Curricula.....	Winter	4
Ed. 111.—Philosophy of Ed.....	Spring	4
Ed. Psych. 108.—Tests and Measurements.....		3

2. Courses Required by the Department:

H. S. 107.—Home Ec. Survey.....	Fall	4
H. A. 115.—Modeling and Pattern Making.....	Fall	4
Bact. 2.—Bact. Hygiene Prophylaxis.....	Winter	4
Fine Arts 12.—Household Art Design.....	Winter	4
Agr. 6.—School Gardening.....	Spring	4
H. G. 4.—Dressmaking	Spring	4
Teaching	Every Term	4

3. Suggestive Elective Courses:

H. A. 103.—Advanced Arts Crafts.....	Spring	4
Eng. 133.—The Recent Novel.....	Spring	4
Phys. Ed.....	Every Term	1

HOUSEHOLD ART.

First Year.

1. Professional Core:

Biol. 2.—Bionomics.....	Fall	4
Soc. 3.—Ed. Sociology.....	Winter	4
Ed. 8.—Educational Values.....	Spring	4

2. Courses Required by the Department:

H. A. 1.—Household Art Crafts.....	Fall	4
Fine Arts 1.—Elementary Drawing and Design.....	Fall	4
H. A. 2.—Machine Construction.....	Winter	4
Fine Arts 7.—Constructive Design.....	Winter	4
H. A. 7.—Dressmaking Practice.....	Spring	4
Fine Arts 12.—Household Art Design.....	Spring	4
Phys. Ed.....	Every Term	1
Eng. 4.—Functional English.....	Fall	4

3. Suggested Electives:

Library Sc. 1.—Library Science.....	Fall	1
H. S. 7.—Housewifery and Sewing.....	Spring	4

Second Year.**1. Professional Core:**

Psych. 2a.—Educational Psychology.....	Fall	4
Psych. 2b.—Ed. Psych., Continued.....	Winter	4
Pol. Sc. 30.—Political Adjustment.....	Spring	4
Ed. 10.—El. School Curriculum.....		4

2. Courses Required by the Department:

H. A. 6.—Textiles	Fall	4
H. A. 9.—House Decoration.....	Fall	4
Teaching	Every Term	4
H. S. 1.—Elements of Cookery.....	Fall	4
H. A. 5.—Millinery	Winter	4
H. S. 2.—Elements of Cookery.....	Winter	4
H. A. 12.—Costume Design	Spring	4
H. A. 4.—Dressmaking	Spring	4
H. S. 3.—Cooking and Sewing.....	Spring	4
Phys. Ed.....	Every Term	1

Note.—Majors in this course will choose two of the three Household Science subjects offered this year.

Third Year.**1. Professional Core:**

Psych. 105.—Psych. of High School Subjects.....	Fall	4
Soc. 103.—Social Maladjustments.....	Winter	4

2. Courses Required by the Department:

H. A. 115.—Modelling and Pattern Making.....	Fall	4
Fine Arts 2.—Applied Design.....	Fall	4
H. A. 111.—Advanced Textiles.....	Winter	4
Fine Arts 4.—Design and Composition.....	Winter	4
H. A. 116.—Remodelling.....	Spring	4
Fine Arts 8.—Pottery.....	Spring	4

3. Suggested Elective Courses:

H. S. 6.—Catering	Every Term	4
H. S. 9.—H. H. Management.....	Every Term	4
Chem. 1.—General Chem.....	Fall	2
Chem. 2.—General Chem. Lab.....	Fall	2
Chem. 108.—Organic Chem.....	Winter	2
Chem. 109.—Food Chem.....	Winter	2
Phys. Ed.....	Every Term	1

Fourth Year.**1. Professional Core:**

Ed. 116.—The High School Curricula.....	Winter	4
Ed. 111.—Philosophy of Ed.....	Spring	4
Ed. Psych. 108.—Tests and Measurements.....		3

2. Courses Required by the Department:

H. A. 117.—Interior Decoration	Fall	4
H. S. 4.—Food Preservation	Fall	2
H. S. 102.—Bread and Breadmaking.....	Fall	2
H. A. 114.—Dress Design	Winter	4
H. S. 103.—Dietetics	Winter	4
H. A. 103.—Adv. Household Art Crafts.....	Spring	4
H. S. 105.—Therapeutics	Spring	4
Teaching	Every term	4

3. Suggested Elective Courses:

Hist. 1.—American Hist.	Fall	4
Hist. 2.—American Hist., continued.....	Winter	4
Nature Study 2.—Nature Study of Spring and Summer.....	Spring	4
Phys. Ed.....	Every term	1

Note.—Majors in this course will drop either H. S. 4 and H. S. 102 or H. S. 105 for teaching.

HOUSEHOLD SCIENCE.

1. Foods and Cooking—Four hours. Fall Quarter. Fee, \$2.00.

A general survey of food principles and cookery of foods.

2. Foods and Cookery—Four hours. Winter Quarter. Fee, \$2.00.

Continuation of Course 1.

3. Cookery and Table Service—Four hours. Spring Quarter. Fee, \$2.00.

Planning, preparation and serving of meals. Special attention is given to care of dining room and table service.

6. Catering—Four hours. Every Quarter.

Planning, cooking and serving in quantities. Menus are planned and served for private or college functions.

7. Housewifery and Sanitation—Four hours. Spring Quarter.

Study of household appliances, household care and cleaning and sanitation.

8. Food Production—Four hours. Fall Quarter.

A study of food production, transportation, storage and cost of food, the use of food in the diet and current food problems.

9. Household Management—Four hours. Every Quarter.

Care and management of practice cottage for one month.

102. Bread and Bread Making—Two hours. Fall Quarter. Fee, \$2.00.

Study of flours, leavening agents and making breads. Practice in composing and preparing original recipes.

103. Dietetics—Four hours. Winter Quarter. Fee, \$2.00.

Study of food values, costs and adaptation of food to children and adults in kind and amounts.

105. Therapeutics—Four hours. Spring Quarter. Fee, \$2.00.

Study of deficiency diseases and their dietetic treatment. Preparation of invalid diets.

107. Home Economics Survey—Four hours. Winter Quarter.

Study of development of Home Economics, its place in the school and application in different schools.

112. Institutional Cookery—Four hours. Every Quarter. Fee, \$2.00.

Study of institutional management and laboratory work in connection with the cafeteria.

HOUSEHOLD ART.

1. Household Art Crafts—Four hours. Fall and Spring Quarters.

A study of the construction and decoration of articles for the home and for personal use, stressing accuracy of construction and application of good design.

2. Machine Construction—Four hours. Winter and Spring Quarters.

Fundamental principles of garment construction. Four problems based on drafted patterns.

4. Dressmaking—Four hours. Spring Quarter.

Development of methods of procedure, accuracy, speed and manipulation in handling dressmaking problems.

5. Millinery—Four hours. Winter Quarter.

A study of basic design principles applied to the hat and silhouette. Practical shop methods of construction with new materials, remodeling and copying designs in fabric.

6. Textiles—Four hours. Fall Quarter.

Identification of textile fabrics thru work with structure, color, width and price.

7. Dressmaking Practice—Four hours. Spring Quarter.

Practice in correct method of work and technic in construction of cotton or linen tailor fabrics.

9. Home Decoration—Four hours. Fall Quarter.

Appreciation course in the decorative elements of the house, exterior, interior and surroundings.

12. Costume Design—Four hours. Fall Quarter.

Study of the lay figure in the construction of designs for costumes and modeling of original designs for type figures.

103. Household Art Crafts—Four hours. Winter Quarter.

Application of color and form to articles for the home; emphasis on design, also on comparative costs of fabrics used in construction work of course.

110. Festival Costuming—Two hours. Spring Quarter.

Costuming for pageants and festivals based on an historical and interpretive study of costume design. Simple method in modeling original designs in paper or crinoline.

111. Advanced Textiles—Four hours. Winter Quarter.

Examination of fabrics for adulteration, laundering and dyeing qualities by qualitative and quantitative analysis. Study of market conditions.

114. Dress Design—Four hours. Winter Quarter.

Pattern modeling and construction of original designs on afternoon and evening gown fabrics.

115. Modeling and Pattern Making—Four hours. Fall Quarter.

A comparative study of drafting systems used in schools. Principles of modeling and extensive practice in copying magazine designs.

116. Remodeling—Four hours. Spring Quarter.

Practice in remodeling garments.

117. Interior Decoration—Four hours. Winter Quarter.

Application of principles of design to specific problems of the individual rooms of a house. Demonstrations in practice cottage.

Agriculture

J. HORACE CRAFT, *B.S. in Ag.*

The work in Agriculture treats of the underlying principles of plant and animal culture and their improvement. It is designed to interest students in and put them in touch with the things of rural life. Practical work in gardening, visits to adjoining ranch and dairy, and laboratory work in soil examination and seed testing, help the student to a practical understanding of the subject.

	First Year.	Hours.
1. Professional Core:		
Biology 2—Bionomics		4
Education 8—Ed. Values		4
Soc. 3—Ed. Soc.		4
2. Courses Required by the Department:		
History 10—Com. History		4
Agri. 2—Greenhouse Methods		4
Agri. 4—Food Production		4
Agri. 6—Methods in Sch. Gard.		4
Libr. Sci. 1—Library Methods		1
English 4—Functional Eng. (or its equivalent)		4

Second Year.

1. Professional Core:

Psych. 2a—Ed. Psych.	4
Psych. 2b—Ed. Psych.	4
Pol. Sci. 30—Political Adj.	4
Ed. 10.—El. School Curriculum.	4

2. Courses Required by the Department:

Chem. 1—Gen. Chem. (or its equivalent).....	4
Agri. 8—Poultry Production	4
Agri. 10—Meat Production	4
Agri. 12—Milk Production	4
Teaching	8

Students enrolling in the two-year Agriculture course will have their elective approved by the head of the department.

1a. General Agriculture. Farm Crops—Four hours. Fall Quarter.
Fee, 50 cents.

This course will include the study of corn, wheat, oats, rye, barley, potatoes, sugar beets, and the pasture and forage crops.

1b. General Agriculture. Farm Animals—Four hours. Winter Quarter.
Fee, 50 cents.

Horses, beef cattle, dairy cattle, swine, sheep and poultry will be studied. Practice in judging of all the different animals, also testing of milk for butter fat and the study of cream separators. By taking courses 1a and 1b the student can cover the field of elementary agriculture.

2. Greenhouse Methods—Four hours. Fall Quarter. Fee, 50 cents.

A study of the natural and cultural methods of propagating plants. The handling and treatment of seeds. The making of cuttings. Study of graftage and layerage.

3. Agricultural Nature Study—Four hours. Fall and Spring Quarters.

This is a brief course for those who are interested in primary and grade work. It deals with the agricultural side of nature study. Farm crops, domestic animals, and soils are considered briefly. Some attention is given to school gardens. This is a nature study course and no credit is given in agriculture in this course.

4. Food Production—Four hours. Fee, 50 cents.

The production, cultural methods and varieties of wheat, oats, rye, barley, spelts, emmer, potatoes and root crops are studied. Scoring and judging of the grains in the laboratory from the standpoint of seed selection.

6. Methods in School Gardening and Truck Crops—Four hours. Fee, 50 cents.

A discussion of the general principles of gardening. The adaptability of the different garden crops for home use and commercial production. Garden club work. Practice in garden making.

8. Poultry Production—Four hours. Fall Quarter. Fee, 50 cents.

The economic importance of poultry, egg production, grading and marketing of poultry products, feeding and housing of poultry. Types and breeds. Scoring.

10. Meat Production—Four hours. Winter Quarter. Fee, 60 cents.

A study of the market types of horses, beef cattle, hogs and sheep. Scoring and judging of animals. Inspection trips are made as time permits. Meat production on both ranch and range is considered.

12. Dairy Breeds and Milk Production—Four hours. Spring Quarter.
Fee, 50 cents.

The types and breeds of dairy cattle. The dairy industry. Production of market milk, silos and silage. Testing milk for butter fat. The building up and improvement of the herd. The making of butter and ice cream.

114. Forage Crops—Four hours. Fall Quarter. Fee, 50 cents.

A study of the forage crops, their cultural requirements, adaptability to different regions, feeding value and uses, soiling and silage crops, exercises in identification of plants and seeds.

116. Feeds and Feeding—Four hours. Winter Quarter.

This course includes a study of the most successful and economical methods of feeding horses, cattle, sheep and swine. Growth and development of the young animal is emphasized. The results obtained at the various experiment stations are compared.

118. Fruit Production—Four hours. Spring Quarter. Fee, 50 cents.

Cultural requirements, insect enemies, and diseases of large and small fruits. Orchard practice as adapted to Western conditions. Practice in pruning in the College orchard. Harvesting and marketing of the orchard products.

120. Soils—Four hours. Fall Quarter. Fee, 50 cents.

A study of the origin, classification, structure and texture of soils. Conservation of the fertility, crop requirements, stable and green manures. The general management of soils under irrigated and dry land farming. Field and laboratory practice.

121. Rural Economics and History of Agriculture in the United States—Four hours.

The history of Agriculture in the United States is traced, and the principles of rural economy are outlined.

160. Rural Sanitation and Hygiene—Four hours.

A discussion of the rural water supply, taking care of sewage, cleanliness in handling the milk supply, care of the individual, prevention of disease and the need of sanitation and cleanliness in the schools.

122. Farm Management—Four hours. Winter Quarter.

A course in selecting the farm, planning the rotation, locating the fields, lots, buildings, and keeping the farm accounts. This course takes up farming as a big business and shows the need of a thoughtful plan in making it a success.

126. Club Leadership—Two hours.

A course in the problems and plans of organization and management of boys' and girls' clubs. The clubs in the Elementary, High School, and Rural Demonstration Schools will be used for practice.

130. Methods of Teaching Agriculture—Two hours.

In this course a selection and adaptation of materials will be made for the work in rural, grade and high school work. Courses of study in Agriculture will be formulated, compared and discussed. Attention is also given to the home project.

140. Principles of Breeding—Four hours. May be offered any Quarter.

A study of the laws governing crop and live stock improvement. The methods employed by the live stock men in improving their herds. The methods used by the experiment station in developing new crops.

CATALOG OF STUDENTS TEACHERS' COLLEGE

Summer School

1917

Acker, Katherine.....	Prowers (Wiley), Colo.
Ackerman, Lloyd.....	Greeley, Colo.
Adams, Doris.....	East Lake, Colo.
Adams, Elizabeth.....	Ouray, Colo.
Ahberg, Ingrid.....	Mosca, Colo.
Aitchison, Annie T.....	St. Joseph, Mo.
Allen, Myrtle Camp.....	Gypsum, Colo.
Allen, Flove.....	New Raymer, Colo.
Allen, Harland H.....	Greeley, Colo.
Allen, Louisa T.....	Denver, Colo.
Allen, Mary E., Mrs.....	Greeley, Colo.
Aller, Blanche.....	Hastings, Neb.
Alles, Adam.....	Greeley, Colo.
Allman, Clifford.....	Pueblo, Colo.
Allsworth, Brainard H.....	Cokedale, Colo.
Ames, Anna.....	Warrensburg, Mo.
Anderson, Addie A.....	Montrose, Colo.
Anderson, Ida M.....	Denver, Colo.
Anderson, Lillie.....	Weldona, Colo.
Anderson, Pearl.....	Grand Junction, Colo.
Andrew, Margaret.....	Henderson, Colo.
Andrews, Daisy.....	Loveland, Colo.
Andrews, Lucile.....	Morrill, Neb.
Annett, Olive.....	Greeley, Colo.
Axtens, Arthur S.....	Fort Collins, Colo.
Aultman, Lela.....	Greeley, Colo.
Baab, Bertha M.....	Greeley, Colo.
Baker, Beulah.....	Hotchkiss, Colo.
Baker, Winifred.....	Lawton, Okla.
Baldwin, Margaret.....	Durango, Colo.
Ballard, Edith.....	Paonia, Colo.
Ballard, Tressa.....	Paonia, Colo.
Baker, Florence Lillian.....	Meeker, Colo.
Bardwell, Anna B.....	Greeley, Colo.
Bardwell, Mrs. Belle.....	Long Beach, Calif.
Bardwell, Esther.....	Greeley, Colo.
Barker, Miriam E.....	Denver, Colo.
Barnett, Myrtle.....	Council Bluffs, Iowa
Barry, Ruth.....	Evans, Colo.
Bartels, Gertrude.....	Denver, Colo.
Barton, Minnie A.....	Fort Collins, Colo.
Bastin, Marguerite.....	Colorado Springs, Colo.
Beardsley, E. D.....	Greeley, Colo.
Becher, Bertha E.....	Apache, Colo.
Beck, Elin M.....	Denver, Colo.
Beckwith, Adella.....	Longmont, Colo.
Bell, Mary.....	Penrose, Colo.
Berliner, Belle.....	Pueblo, Colo.
Bench, Ruth.....	Pueblo, Colo.
Benge, Marie F.....	Walter, Okla.
Bottolfson, Cornelia.....	Minturn, Colo.
Bean, Estella.....	East St. Louis, Ill.
Bothwell, Julia S.....	Cincinnati, Ohio
Briggs, James A.....	Greeley, Colo.
Bushey, Mrs. Clifford A.....	Lamar, Colo.
Bennett, Merle.....	Fort Collins, Colo.
Benson, Mirlam, Mrs.....	Cañon City, Colo.
Butler, Bernice B.....	St. Joseph, Mo.
Bettex, Betty.....	Idalia, Colo.
Blagg, Blanche.....	Neosho Falls, Kan.
Blain, Maud.....	Arlington, Colo.

Blake, Alta.....	Greeley, Colo.
Blair, Martha.....	Rock Springs, Wyo.
Blair, Mary Camilla.....	Greeley, Colo.
Bluebaugh, Janet.....	Fort Morgan, Colo.
Bob, Hazel.....	Florence, Colo.
Bohn, Nellie A.....	Denver, Colo.
Bourg, Mamie.....	Watson, Colo.
Bovard, Ruby B.....	Greeley, Colo.
Boyd, Bertha.....	Farr, Colo.
Boyer, Monta J.....	Denver, Colo.
Boyd, Florence A.....	Cripple Creek, Colo.
Brackett, Mary.....	Jewell, Kan.
Bradley, Ruby.....	Pueblo, Colo.
Bragg, Lottie.....	Fort Collins, Colo.
Bramkamp, Ethel M.....	Denver, Colo.
Bramkamp, Minnie L.....	Denver, Colo.
Brandhorst, Lillie Elizabeth.....	Boulder, Colo.
Brennan, Margaret.....	Grand Valley, Colo.
Brooks, Mabelle.....	Memphis, Tenn.
Briggs, Nellie.....	Pueblo, Colo.
Broman, Anna Rae.....	Greeley, Colo.
Brown, Clara M.....	Swallow, Colo.
Brown, Grace.....	Greeley, Colo.
Brown, Sadie Margaret.....	Denver, Colo.
Brubaker, Irma.....	Rocky Ford, Colo.
Bruce, Helen.....	Paonia, Colo.
Bruce, Maude.....	Denver, Colo.
Brumelle, Nellie.....	Denver, Colo.
Brunton, Jessie.....	Fort Collins, Colo.
Brush, F. Thelma.....	Salida, Colo.
Brush, Marguerite.....	Denver, Colo.
Buchanan, Sue Whittleage.....	Fort Worth, Texas
Buck, Vera H.....	Greeley, Colo.
Budin, Christena.....	Sterling, Colo.
Bryacich, Minnie.....	Agullar, Colo.
Bull, R. Lucile.....	Delta, Colo.
Bullington, Tirzah.....	Wichita Falls, Texas
Bunker, Ada.....	Greeley, Colo.
Burke, Alice.....	Rocky Ford, Colo.
Burke, Ellen J.....	Ogden, Utah
Burks, Arthur L.....	Shawnee, Okla.
Burnett, Adda M.....	Denver, Colo.
Burson, Viola.....	Fruita, Colo.
Burtis, Louise.....	Montrose, Colo.
Burtis, Mable.....	Montrose, Colo.
Burtle, Georgia.....	Longmont, Colo.
Bushey, A. H.....	Manzanola, Colo.
Busey, Callie.....	Montrose, Colo.
Burton, Edith.....	Cañon City, Colo.
Butler, Marian.....	Denver, Colo.
Brosnan, Margaret Overton.....	Denver, Colo.
Carr, Anna M.....	McAlester, Okla.
Clerici, Antoinette.....	Trinidad, Colo.
Cage, Mary L.....	Hillrose, Colo.
Camden, Cynthia.....	Platteville, Colo.
Cameron, Dora Lessley, Mrs.....	Denver, Colo.
Campbell, Della.....	Greeley, Colo.
Campbell, F. H.....	Picton, Colo.
Campbell, Helen Mar.....	Pueblo, Colo.
Campbell, Ruby G.....	Trinidad, Colo.
Campbell, Sadie.....	Greeley, Colo.
Candlin, P. R.....	Greeley, Colo.
Canning, A. B.....	Aspen, Colo.
Carey, Elma A.....	Kansas City, Mo.
Carlson, Annie.....	Independence, Colo.
Carlson, Anna.....	Eaton, Colo.
Carney, Elizabeth.....	Greeley, Colo.
Carpenter, Ethel.....	Steamboat Springs, Colo.
Carrroll, Katherine, Mrs.....	Salida, Colo.
Carruth, Dorothy.....	Fort Morgan, Colo.
Carson, Louise.....	Council Bluffs, Iowa
Carson, Henrietta.....	Cañon City, Colo.
Carter, Arthur B.....	Greeley, Colo.
Carter, Paul.....	Greeley, Colo.
Cash, Mildred.....	Pinon, Colo.
Cavenah, Anna.....	Agullar, Colo.
Center, G. H.....	Pomona, Calif.
Center, Verdi M.....	Pomona, Calif.
Chandler, Hulda, Mrs.....	Trinidad, Colo.
Chandler, Winifred.....	Trinidad, Colo.
Chapin, Olive.....	Meeker, Colo.
Chapman, Klyda.....	Dresden, Kan.
Charles, C. W.....	Denver, Colo.
Charlesworth, H. W.....	Erie, Colo.

Choisser, D. P.	Milliken, Colo.
Choury, Armande	San Luis, Colo.
Christeson, Lulu	Alta, Iowa
Churchill, Lillian	Denver, Colo.
Claassen, Mayme	Haswell, Colo.
Clarke, Isabella J.	Kansas City, Mo.
Clerici, Irma	Trinidad, Colo.
Cline, Frances	Lebanon, Kan.
Cline, Twilight	Fort Morgan, Colo.
Cline, Margaret	Elizabeth, Colo.
Close, Vera	Greeley, Colo.
Cobb, Jessie	Fowler, Colo.
Cobb, Madge	Wellington, Kan.
Cochran, Charlie	Fort Morgan, Colo.
Cochran, Ethel	Greeley, Colo.
Codding, Beth	Rye, Colo.
Coin, Lorena	Denver, Colo.
Collins, F. W.	Boyer, Colo.
Collins, Mrs. F. W.	Boyer, Colo.
Collins, Ruth	Holyoke, Colo.
Calloway, Esther A.	Denver, Colo.
Colvin, Isabel	Pueblo, Colo.
Comin, Mary	Greeley, Colo.
Coney, Edna	Trinidad, Colo.
Confar, Mary	De Beque, Colo.
Conner, Maude E.	Greeley, Colo.
Clark, Laura D.	Longmont, Colo.
Conway, Agnes	Wichita, Kan.
Cook, Saida	Lamar, Colo.
Cook, Winnie	Hannibal, Mo.
Coolley, Ruth	Trinidad, Colo.
Coolidge, Elizabeth	Chattanooga, Tenn.
Coons, Erma L.	Brandon, Colo.
Cornell, Eva	Alamosa, Colo.
Cornett, Esther	Webb City, Kan.
Cosgrove, Ana J.	Meriden, Iowa
Couch, Ethel	Merino, Colo.
Coursey, Nell	Denver, Colo.
Cox, Marion A.	Cedar Falls, Iowa
Cranford, Myrtle	Otis, Colo.
Creel, Myrtle	Fort Morgan, Colo.
Cribbis, Marie	Idaho Springs, Colo.
Cribbis, Stella	Idaho Springs, Colo.
Crie, Robert R.	Windsor, Colo.
Critzer, Ruby	Pueblo, Colo.
Cronin, Jessie	Hannibal, Mo.
Crosby, Grace D.	Denver, Colo.
Culp, Ruby L.	Muskogee, Okla.
Curtis, Bessie	Pueblo, Colo.
Curtis, H. W.	Wray, Colo.
Curtin, Ida B.	Monte Vista, Colo.
Cutler, Edwynne	Fort Morgan, Colo.
Cattell, Nancy	Denver, Colo.
Center, Verdi M.	Pomona, Calif.
Cochran, Mabel	Greeley, Colo.
Dalbey, Cora	Sterling, Colo.
Dalton, Agnes L.	Pueblo, Colo.
Damon, J. G.	Pierce, Colo.
Dardis, Kathleen Francine	Grover, Colo.
Dauth, Louise	Greeley, Colo.
Davis, Ida	Rifle, Colo.
Davis, Ruth	Fort Morgan, Colo.
Dawson, Alma	Chivington, Colo.
Dedman, Ella	Tahlequah, Okla.
Della, Josephine	Avon, Colo.
Demmel, Margaret	Fort Collins, Colo.
DeSelle, Margaret	Denver, Colo.
DeWeese, Blanche	Canon City, Colo.
Dewey, Cora P.	Goldfield, Colo.
Diggs, Charles A.	Greeley, Colo.
Dilts, Delpha	Fort Collins, Colo.
Dineley, C. L.	Trinidad, Colo.
Dotson, Jessie	Sharon Springs, Kan.
Dodds, Torrence	Greeley, Colo.
Dodge, Elizabeth	Denver, Colo.
Donley, H. H.	Cortez, Colo.
Donnelly, Irene	Pueblo, Colo.
Dotson, Edna	Greeley, Colo.
Dotson, Ruth	Greeley, Colo.
Doudna, Laura	Boulder, Colo.
Downes, Irma	Golden, Colo.
Duling, Julia	Trinidad, Colo.
Dungan, Edith L.	Denver, Colo.
Durkee, Clara	Manitou, Colo.

Durning, Bertha.....	Greeley, Colo.
Dyer, Josephine Seeby.....	Boulder, Colo.
Eagle, C. E.....	Eads, Colo.
Eagleton, W. H.....	Denver, Colo.
Edwards, Cordelia.....	Brighton, Colo.
Eddwards, Grace E.....	Greenwood, Colo.
Eldridyo, Jessie.....	Florence, Colo.
Elias, Minnie.....	Rock Springs, Wyo.
Elliott, Elsie Alberta.....	Cameron, Mo.
Ely, Clara.....	Wagner, S. Dakota
Emerson, Audrey.....	Portland, Colo.
Emerson, Inez.....	Greeley, Colo.
Engels, Bernice.....	Rocky Ford, Colo.
Ericeson, Anna.....	Denver, Colo.
Erickson, Anna.....	Aspen, Colo.
Eriksen, Julia.....	Aspen, Colo.
Erskine, Cora.....	Rouse, Colo.
Erwin, Eva M.....	Greeley, Colo.
Evans, Hattie.....	Colorado Springs, Colo.
Evans, Eliza.....	Colorado Springs, Colo.
Evans, Julia.....	Denver, Colo.
Everett, Geary E.....	Greeley, Colo.
Eversman, Alice.....	Julesburg, Colo.
Eversman, Olga.....	Julesburg, Colo.
Ewens, Nelle.....	Nunn, Colo.
Eyler, Shirley, Mrs.....	Denver, Colo.
Fahlsing, Bertha.....	Kansas City, Mo.
Farmer, G. E.....	Greeley, Colo.
Farr, Jennie.....	Fort Morgan, Colo.
Ferguson, Lillian H., Mrs.....	Greeley, Colo.
Ferris, Hortense E.....	Pueblo, Colo.
Fleckenstein, Felicia.....	Denver, Colo.
Floyd, Catherine A.....	Denver, Colo.
Fluharty, Ada D.....	Mancos, Colo.
Filbin, Addie Mae.....	Greeley, Colo.
Finch, Carolina A.....	Colorado Springs, Colo.
Finn, Nora C.....	Denver, Colo.
Fish, Florence.....	Greeley, Colo.
Fisher, Annie C.....	Denver, Colo.
Fisher, Otto, Mrs.....	Greeley, Colo.
Fitzmorris, Ray S.....	Greeley, Colo.
Foster, Arthur J.....	Delta, Colo.
Foulk, C. M.....	Greeley, Colo.
Foulk, Lola.....	Greeley, Colo.
Frakes, O. E.....	Greeley, Colo.
Franklin, Mary J.....	Fort Morgan, Colo.
Frasier, Alice M.....	Montrose, Colo.
Freedle, Mary Alma.....	Alamosa, Colo.
Freeland, G. E., Mrs.....	Greeley, Colo.
Fuller, Lillian.....	Colorado Springs, Colo.
Fuller, Violet M.....	Colorado Springs, Colo.
Gage, Ethel M.....	Leadville, Colo.
Gale, Mae.....	Cañon City, Colo.
Galt, Ruth A.....	Hale Center, Texas
Gammill, F. I.....	Mead, Colo.
Gammill, F. I., Mrs.....	Mead, Colo.
Gearhart, Orpha.....	Greeley, Colo.
Geer, Bernice.....	Longmont, Colo.
George, Margaret.....	Rifle, Colo.
Gibbeon, Lota.....	Greeley, Colo.
Gibbs, Edith A.....	Tarkio, Mo.
Gigax, Agnes.....	Grand Junction, Colo.
Gigax, Minnie.....	Grand Junction, Colo.
Gilbert, Arthur.....	Telluride, Colo.
Gilchrist, Evelyn L.....	Kansas City, Mo.
Gillett, Vera.....	Sligo, Colo.
Gilliam, Ellen.....	Chandler, Okla.
Gilmore, Faith W.....	Denver, Colo.
Gilmore, Mary E.....	Berthoud, Colo.
Gilpin-Brown, Helen.....	Greeley, Colo.
Glazier, Winifred.....	Greeley, Colo.
Gleasman, Lillian.....	Greeley, Colo.
Glover, Nancy.....	Goodrich, Colo.
Godwin, Virgie.....	Montrose, Colo.
Goff, Frances.....	Colorado Springs, Colo.
Golladay, Grace.....	Lamar, Colo.
Gooch, Sarah.....	La Junta, Colo.
Goodin, Ella.....	Windsor, Mo.
Gookins, Clara, Mrs.....	Loveland, Colo.
Gould, Willie Ann.....	Crawford, Miss.
Graham, Mary E.....	Fort Morgan, Colo.
Grant, Xina M.....	Rocky Ford, Colo.

Graves, Ruth	.....	New Raymer,	Colo.
Gray, Elizabeth	.....	Wellington,	Colo.
Gray, Lulu	.....	Wellington,	Colo.
Gray, Mamie S.	.....	Colorado Springs,	Colo.
Gray, Sarepta	.....	Wellington,	Colo.
Greenamyre, Katherine	.....	Fort Collins,	Colo.
Greene, Anna Scheffer	.....	Denver,	Colo.
Green, Prudence	.....	Wellington,	Kan.
Greene, Clara	.....	Grand Valley,	Colo.
Grever, Mina	.....	Ordway,	Colo.
Grisier, Orville J.	.....	Wiggins,	Colo.
Groat, Valentine	.....	Monte Vista,	Colo.
Gross, Eda	.....	Greeley,	Colo.
Gross, Emma	.....	Denver,	Colo.
Gross, Rylla	.....	La Veta,	Colo.
Grout, Stella S.	.....	Pueblo,	Colo.
Grutzmacher, Frances Lois	.....	Blackhawk,	Colo.
Guanella, Clementine M.	.....	Council Bluffs,	Iowa
Guillet, Kathleen	.....	Mancos,	Colo.
Guirand, Fred	.....	Greeley,	Colo.
Guirand, Emma	.....	Greeley,	Colo.
Gunnison, Esther	.....	Aurora,	Nebr.
Gurpin, Irene	.....	Longmont,	Colo.
Guanella, Frances M.	.....	Council Bluffs,	Iowa
Greenlee, Ethel	.....	Goodrich,	Colo.
Gwynn, Irene	.....	Longmont,	Colo.
Haggerty, Avis	.....	New Castle,	Colo.
Hanies, Mary E.	.....	Greeley,	Colo.
Hall, Grace E.	.....	Greeley,	Colo.
Hall, Jessie M.	.....	Greeley,	Colo.
Hale, Agnes D.	.....	Grand Junction,	Colo.
Hale, Laffea Dolly, Mrs.	.....	Platteville,	Colo.
Hamilton, Catherine	.....	Denver,	Colo.
Hamilton, Elsie B.	.....	Milliken,	Colo.
Hamilton, Vera	.....	Greeley,	Colo.
Hampton, Alice	.....	Durango,	Colo.
Hansen, Bertha	.....	Denver,	Colo.
Hansen, Kathrine	.....	Denver,	Colo.
Hansen, Marie	.....	Denver,	Colo.
Hanson, Viola	.....	Arvada,	Colo.
Hardenburgh, Hilda	.....	Greeley,	Colo.
Hardwick, Nellie M.	.....	Greeley,	Colo.
Harmon, Mary O.	.....	Greasy Ridge,	Ohio
Harrington, Alice M.	.....	Denver,	Colo.
Harris, Catherine	.....	Cañon City,	Colo.
Harris, Ruu	.....	Akron,	Colo.
Harrison, Coy	.....	Goldfield,	Colo.
Harrison, Shirley V.	.....	Goldfield,	Colo.
Hart, Dorothea	.....	Aspen,	Colo.
Haruff, Reba	.....	Greeley,	Colo.
Harvat, Helen	.....	Denver,	Colo.
Harvey, Sarah	.....	Rock Springs,	Wyo.
Hatfield, Winifred	.....	La Jara,	Colo.
Hathaway, Margaret	.....	Hugo,	Colo.
Hathaway, Maria Elizabeth	.....	Denver,	Colo.
Haun, Olive	.....	Pinon,	Colo.
Hawes, Josephine	.....	Manitou,	Colo.
Hawley, S. Frances	.....	Trinidad,	Colo.
Haworth, Nelle	.....	Colorado Springs,	Colo.
Haynes, Alice K.	.....	Salida,	Colo.
Hays, Mary	.....	Sterling,	Colo.
Hayton, Kate W.	.....	Greeley,	Colo.
Hazelbaker, Gladys	.....	Pleasanton,	Kan.
Hazlett, Elizabeth	.....	Pueblo,	Colo.
Hazlett, Grace	.....	Paonia,	Colo.
Hazlett, Irene	.....	Paonia,	Colo.
Heath, Orrie M.	.....	Denver,	Colo.
Hemphill, F. C.	.....	Pine Bluffs,	Wyo.
Henderson, Glenn	.....	Tingley,	Iowa
Henley, Bessie	.....	Central City,	Colo.
Henley, Pearl	.....	Colorado Springs,	Colo.
Henry, Elizabeth C.	.....	Denver,	Colo.
Henry, Martha	.....	Greeley,	Colo.
Herrick, Flora	.....	Arena,	Colo.
Hersh, Lillian, Mrs.	.....	Brush,	Colo.
Hersh, Dola	.....	Greeley,	Colo.
Hewitt, Mildred	.....	Cascade,	Colo.
Hiatt, Irene	.....	Cañon City,	Colo.
Hiatt, Lina	.....	Cañon City,	Colo.
Hickman, Lois	.....	Greeley,	Colo.
Hicks, Marie	.....	Ordway,	Colo.
Hedges, Cecilia M.	.....	Denver,	Colo.
Higbee, Eliza C.	.....	Holdenville,	Okla.
Higgins, Ada	.....	Pueblo,	Colo.

Hill, Azelia.....	Greeley, Colo.
Hile, Belle D.....	Denver, Colo.
Hill, Cora.....	Holly, Colo.
Hill, Mary A.....	Tate, Ga.
Hinds, Archie.....	Sedgwick, Colo.
Hix, Beulah.....	Estes Park, Colo.
Hocker, Opal.....	Monte Vista, Colo.
Hodgin, Lena.....	Cañon City, Colo.
Hogan, Irene G.....	Denver, Colo.
Hogan, May C.....	Denver, Colo.
Holahan, Josephine.....	Colorado Springs, Colo.
Hollarin, Susan Dotson.....	Ludlow, Colo.
Hollister, Evaline.....	Leadville, Colo.
Holmes, Anne H.....	Denver, Colo.
Holmes, Mossie.....	Muskogee, Okla.
Hoffman, Myrtle.....	Rocky Ford, Colo.
Hornberger, E. H.....	Delta, Colo.
Houghton, Louise P.....	Greeley, Colo.
Hooker, Burton L.....	Weitzer, Colo.
Hoon, Helen.....	Colorado Springs, Colo.
Hopkins, Mabel.....	Greeley, Colo.
Horn, Cora.....	Akron, Colo.
Horn, Mary.....	Las Animas, Colo.
Howard, Lavinia.....	Denver, Colo.
Hawke, Edna.....	Pueblo, Colo.
Hudson, N. T.....	Wiley, Colo.
Humphreys, Marie.....	Atwood, Colo.
Hunt, Neva M.....	Denver, Colo.
Hunt, Ruth.....	Denver, Colo.
Hunter, Annie.....	Muskogee, Okla.
Hunter, Emily.....	Muskogee, Okla.
Hurley, Ethel.....	Blanca, Colo.
Huston, Mabel B., Mrs.....	Boulder, Colo.
Hutchison, Alodia.....	Daytona, Florida
Ivey, Mattie M.....	Denver, Colo.
Isbell, Cecile E.....	Greeley, Colo.
Jackson, Bess.....	Tarkio, Mo.
Jackson, Rae L.....	Denver, Colo.
James, Mary.....	Alamosa, Colo.
Jamison, Vesta May.....	Colorado Springs, Colo.
Jansson, Esther.....	Greeley, Colo.
Jay, Nelle.....	La Salle, Colo.
Jeffers, Harriet.....	Kansas City, Mo.
Job, Henry J.....	Rockvale, Colo.
Johnson, Bevie.....	Greeley, Colo.
Johnson, Georgie.....	Blanca, Colo.
Johnson, Hannah.....	Denver, Colo.
Johnson, Irene.....	Loveland, Colo.
Johnson, J. Helen.....	Evans, Colo.
Johnson, Marie E.....	Kiowa, Colo.
Jones, Carl.....	Greeley, Colo.
Jones, Estelle.....	Lawton, Okla.
Jones, Gwladys.....	Denver, Colo.
Jones, Lena J.....	Denver, Colo.
Jones, Ruth M.....	McAlester, Okla.
Jones, W. R.....	Frederick, Colo.
Jordan, Beulah.....	Jewell City, Kan.
Joseph, Beatrice.....	Denver, Colo.
Joy, Pearl.....	Greeley, Colo.
Joyce, Mary Elizabeth.....	Fort Collins, Colo.
Judson, Lohr A.....	Cripple Creek, Colo.
Justice, Hazel I.....	Fowler, Colo.
Karlson, Lottie.....	Gothenburg, Nebr.
Keena, Bertha.....	Haswell, Colo.
Keller, Elizabeth M.....	Denver, Colo.
Kelley, Esther.....	Ordway, Colo.
Kellogg, Jeniveve.....	Sterling, Colo.
Kelly, Chalice M.....	Greeley, Colo.
Kelly, H. B.....	Greeley, Colo.
Kendrick, Edith.....	Victor, Colo.
Kennedy, Anna.....	Greeley, Colo.
Kennedy, Eunice.....	Colorado Springs, Colo.
Kenney, Maurice.....	Wheatland, Wyo.
Kessler, F. C.....	Knob Lick, Mo.
Kessler, Kate E., Mrs.....	Denver, Colo.
Keys, Margaret.....	Greeley, Colo.
Kidder, Ethel M.....	Denver, Colo.
Kindal, Mabel.....	Pueblo, Colo.
Kendel, A. I.....	Greeley, Colo.
Kibby, Ira W.....	Pomona, Calif.

Kindred, Roy	Greeley, Colo.
King, Ellen, Mrs.	Pueblo, Colo.
King, Florence	Otis, Colo.
King, Frances	Otis, Colo.
Kinsey, Helen I.	Denver, Colo.
Kirke, Irene	Carthage, Mo.
Kirkland, Annie	Ordway, Colo.
Kirkland, Claribel	Ordway, Colo.
Kirkpatrick, Bula	Rafe, Iowa
Kissack, Ethel	Julesburg, Colo.
Klein, Carrie A.	Denver, Colo.
Kline, Anna E.	Montrose, Colo.
Klippel, Amilla	Kansas City, Mo.
Knight, Florence	Hobart, Okla.
Knight, Ida	Cortez, Colo.
Kohen, Nora I.	Greeley, Colo.
Kouns, Zella	Fowler, Colo.
Kreider, Jacob	Montrose, Colo.
Kriner, Mabel A.	Greeley, Colo.
Krone, Marie	Fort Smith, Ark.
Kronen, Margaret	Fort Collins, Colo.
Kussart, Jeannette	Greeley, Colo.
Kyler, Lela	Greeley, Colo.
Laing, Margaret	Colorado Springs, Colo.
Lake, Vera	Oberlin, Kan.
Lamb, Helen	Brighton, Colo.
Landers, Hazel	Eaton, Colo.
Landstrom, Elvira	Council Bluffs, Iowa
Lanning, E. A.	Windsor, Colo.
Lanning, E. A., Mrs.	Windsor, Colo.
Lanning, C. W.	Julesburg, Colo.
Larsen, Ruth	Trinidad, Colo.
Larson, Ruth	Grand Junction, Colo.
LaShier, Virginia	Rocky Ford, Colo.
Latronico, Maime	Louisville, Colo.
Latta, Kathryn	Washington, Iowa
Lawlor, Mary C.	Broomfield, Colo.
Laybourn, Myrna Blanche	Windsor, Colo.
Layton, Ruth H.	Alliance, Nebr.
Leasure, Mary	Solomon, Kan.
Leasure, Zillah	Solomon, Kan.
Lenan, Bertha	Hobart, Okla.
Linhart, Marie	Berthoud, Colo.
Lewis, Anna N.	Denver, Colo.
Lewis, Cora A.	La Junta, Colo.
Lewis, Elizabeth	Denver, Colo.
Lewis, Ivy V., Mrs.	Greeley, Colo.
Libby, Jennette M.	Fort Morgan, Colo.
Light, Edith H.	Leaf River, Ill.
Lilley, Vina	Redlands, Calif.
Lindsay, Jeannie	Leadville, Colo.
Linn, Irene E.	Denver, Colo.
Little, Rosamond	Limon, Colo.
Lloyd, Jane	Rockvale, Colo.
Lloyd, Martha	Rockvale, Colo.
Lockhart, Bruce M.	Greeley, Colo.
Lockhart, J. I.	Houston, Texas
Logan, Ivy	Tarkio, Mo.
Lois, Irvine	Little Rock, Ark.
Longenbaugh, Bertha	Cortez, Colo.
Longheed, Lila	La Veta, Colo.
Loughery, Catherine	Trinidad, Colo.
Longshore, Mary L.	Kansas City, Mo.
Looney, Ethel	Vinita, Okla.
Lowe, Guidotta M., Mrs.	Akron, Colo.
Lowe, Lillian	Glenwood Springs, Colo.
Love, R. H., Mrs.	Mead, Colo.
Loveland, Ethel	Loveland, Colo.
Lowe, Katharyne	Nevada, Mo.
Loy, Anna B., Mrs.	Tarkio, Mo.
Lum, Bessie E.	Fountain, Colo.
Lucas, Beatrice	Wheatland, Wyo.
Lunden, Martha	Greeley, Colo.
Luttrell, Mary	Galeton, Colo.
Lyon, Eleanor	Hutchinson, Kan.
Lyons, Anna B.	Denver, Colo.
MacLeod, Berenice	Greeley, Colo.
MacLiver, Mary	Trinidad, Colo.
MacNee, Harriet J.	Greeley, Colo.
Madarasz, Irma	Denver, Colo.
Madison, Harriet	Greeley, Colo.
Maes, Alice	Trinidad, Colo.
Mahon, Maude, Mrs.	Ravenwood, Colo.
Maize, Nellie	Akron, Colo.

Mallot, Elizabeth	Greeley	Colo.
Mallot, Ellen	Greeley	Colo.
Mallot, Pauline	Rugby	Colo.
Manlove, Esther	Manitou	Colo.
Manlove, Marae	Manitou	Colo.
Mars, Elsie	Trinidad	Colo.
Martze, A. J.	Byers	Colo.
Marshall, Helen G.	Denver	Colo.
Mason, Alice D.	Greeley	Colo.
Mason, Blanche	Greeley	Colo.
Mason, Lela	Greeley	Colo.
Massey, Joyce	Trinidad	Colo.
Massey, Margaret	Trinidad	Colo.
Masterson, W. G.	McAlester	Okla.
Matley, Marie A.	Durango	Colo.
Matson, Helen	Denver	Colo.
Matson, Irene A.	Greeley	Colo.
Maxey, Effie	Granite City, Ill.	
Maxwell, Elizabeth	St. Joseph, Mo.	
Mayer, George	Longmont	Colo.
McAleer, Elena	Victor	Colo.
McAndrew, Ellen	Denver	Colo.
McBreen, Katherine	Minturn	Colo.
McBride, Gertrude	Denver	Colo.
McBride, Grace	Akron	Colo.
McCarthy, Abigail	Segundo	Colo.
McCarthy, Evelyn	Cañon City	Colo.
McChesney, Bessie	Allison	Colo.
McClintock, Alva	Denver	Colo.
McClure, Ruby	Loveland	Colo.
McClurg, Alice	Greeley	Colo.
McConnell, Elizabeth	Florence	Colo.
McCray, Blanche	Paonia	Colo.
McClung, Margaret	Longmont	Colo.
McCready, B. V.	Mansfield	Ohio
McCrary, Grace Elizabeth	Greeley	Colo.
McCullough, A. M.	Chase	Kan.
McCune, Sue	Lawson	Mo.
McElfresh, Jessie	Lincoln	Kan.
McGirr, Lucy	Pagosa Springs	Colo.
McGovern, Alice	Denver	Colo.
McGearty, Margaret	Denver	Colo.
McHenry, Della O.	Las Animas	Colo.
McIntyre, Mary L.	Pueblo	Colo.
McKelvey, Eva M.	Denver	Colo.
McKennie, Alice	Hannibal	Mo.
McLean, Beryl	Lamar	Colo.
McMahan, Ina	Basalt	Colo.
McNamara, Margaret	Denver	Colo.
McNutt, Katie	Hobart	Okla.
McNutt, Sarah A.	Greeley	Colo.
McRae, Frank W., Mrs.	Fort Lupton	Colo.
McFadden, Cherrie	Tahlequah	Okla.
Meller, Mary	Durango	Colo.
Meller, Ruth	Durango	Colo.
Meyers, Fawny E.	Ignacio	Colo.
Meyers, Josephine N.	Greeley	Colo.
Michaels, Hollis	DeBeque	Colo.
Miller, Katharine A.	La Junta	Colo.
Miller, Lucy	Cripple Creek	Colo.
Miller, Maggie	Denver	Colo.
Miller, M. Elizabeth	Greeley	Colo.
Miller, Susan	Tarkio	Mo.
Minton, Violet	Neosho Falls	Kan.
Missimore, Alma	Comanche	Okla.
Mitchell, F. A.	Windsor	Colo.
Mitchell, Syvilla	Idaho Springs	Colo.
Moderwell, Jessie	Cañon City	Colo.
Monahan, Aileen	Greeley	Colo.
Montgomery, L. P., Mrs.	Greeley	Colo.
Montgomery, Emma E.	Florence	Colo.
Moore, E. B.	Colorado Springs	Colo.
Moore, Mary	Trinidad	Colo.
Mootz, Gussie	Dodge City	Kan.
Morgan, Alice	Denver	Colo.
Morrison, B. H.	Ault	Colo.
Morrow, Alice M.	Rock Springs	Wyo.
Morrow, Florence Marie	Colorado Springs	Colo.
Morrow, Margaret	Colorado Springs	Colo.
Moss, Mary Louise	Denver	Colo.
Mott, Irene	Greeley	Colo.
Mowery, Gertrude	Brush	Colo.
Muir, D. A.	Greeley	Colo.
Munroe, Mina B.	Cañon City	Colo.
Musgrove, Rachel	South Hauen	Kan.
Myers, Blanche	Denver	Colo.

Myers, Gladys E.	Alamosa,	Colo.
Moreland, Genevieve.	Denver,	Colo.
Morgan, J. R.	Trinidad,	Colo.
Nash, Margaret	Cripple Creek,	Colo.
Nauman, Blanche, Mrs.	Mound City,	Mo.
Neat, Elizabeth	Brandon,	Colo.
Nelson, H. G.	Brush,	Colo.
Nelson, Esther	Denver,	Colo.
Nelson, Maybelle	Brush,	Colo.
Nielsen, Edna M.	Denver,	Colo.
Nichols, Keene	Boulder,	Colo.
Nichols, Mary J., Mrs.	Denver,	Colo.
Nichols, Maud E.	Bristol,	Colo.
Nicholson, Paul H.	Frederick,	Colo.
Nix, Lily L., Mrs.	Brush,	Colo.
Nordstrom, Olga	Grand Valley,	Colo.
Nowlin, E. W.	Hannibal,	Mo.
O'Conner, Florence	Greeley,	Colo.
Odd, Gertrude M.	Sugar City,	Colo.
O'Dea, Irene	Leadville,	Colo.
O'Donnell, Ellen	Trinidad,	Colo.
O'Grady, Elizabeth	Greeley,	Colo.
Ohlson, Clara	Kiowa,	Colo.
Oldfather, Carrie, Mrs.	Loveland,	Colo.
Olson, Nettie	Red Oak,	Iowa
Onstine, Geraldine	Greeley,	Colo.
O'Toole, Mary Ann	Denver,	Colo.
Oviatt, Inez	Longmont,	Colo.
Owen, Ethel	Topeka,	Kan.
Owen, Maud E.	Longmont,	Colo.
Owen, Olive	Topeka,	Kan.
Page, Alida	Greeley,	Colo.
Page, Edith M.	Fruita,	Colo.
Page, Mildred A.	Greeley,	Colo.
Pakiser, Florence	Denver,	Colo.
Palm, Frances	Larkspur,	Colo.
Palm, Helen E.	Larkspur,	Colo.
Palmer, Myrtle	Trinidad,	Colo.
Parsons, Alice	Denver,	Colo.
Pate, Ethel	Hobart,	Okla.
Paterson, Anna	Independence,	Kan.
Patterson, Cora	Fort Worth,	Texas
Patterson, Marguerite	Whiting,	Kan.
Patton, Sara	Hiawatha,	Kan.
Park, Grace	Concordia,	Kan.
Payne, Sibyl	Greeley,	Colo.
Pearce, Ruth	Grand Junction,	Colo.
Pearson, Bertha	Belton,	Mo.
Peavey, Mary C.	Denver,	Colo.
Peery, Clara M.	Greeley,	Colo.
Penley, Hazel E.	Sedalia,	Colo.
Peterson, Hazel	Idaho Springs,	Colo.
Perkins, Birdie	Newton,	Kan.
Peterson, Grace A.	Greeley,	Colo.
Phelps, Eleanor Phillips	Richfield,	Idaho
Phelps, Lona J.	McCook,	Nebr.
Phippeny, G. O.	Greeley,	Colo.
Picolet, Lucy	Wamego,	Kan.
Pierce, Pansy	Longmont,	Colo.
Pingrey, Maria	Estherville,	Iowa
Placida, Garcia	Conejos,	Colo.
Plessinger, M. Bernice	Cheyenne Wells,	Colo.
Plessinger, Gertrude Lenore	Cheyenne Wells,	Colo.
Poe, Eva	Greeley,	Colo.
Pool, Gladys	Greeley,	Colo.
Porter, Mary	Grover,	Colo.
Porter, Ralph M.	Grover,	Colo.
Potter, E. O.	Denver,	Colo.
Pray, Florence	Lamar,	Colo.
Preston, Genevieve	Fort Morgan,	Colo.
Prewett, Hattie O.	Fort Worth,	Texas
Prosser, Georgiana	Cheyenne,	Wyo.
Punttenney, Bertha	Bristol,	Colo.
Punttenney, Harriet E.	Loveland,	Colo.
Putnam, C.	Dallas,	Texas
Pyle, Ola	Julesburg,	Colo.
Quayle, Margaret	Little Rock,	Ark.
Quinn, Alice	Kenosha,	Wis.
Randle, R. M.	Clinton,	Okla.
Raney, Irene	Wichita Falls,	Texas
Rafferty, May	Kline,	Colo.

Raichart, Eva	Delta, Colo.
Rasar, Isa F.	McAlester, Okla.
Rackerby, Sue H.	Kansas City, Mo.
Rauscher, Katherine	Greeley, Colo.
Rasmussen, Cora M.	Fort Collins, Colo.
Rasmussen, Agnes E.	Fort Collins, Colo.
Read, Faye	Pueblo, Colo.
Read, Hazel U.	Pueblo, Colo.
Reathaford, Kate	Wichita, Kan.
Redman, Ora	Rock Island, Ill.
Reed, Barbara	Evans, Colo.
Reed, Truman G.	Lucerne, Colo.
Reese, Benita	Longmont, Colo.
Reid, Beneta	Dearborn, Mo.
Reynolds, C. E.	Dunap, Kan.
Reynolds, Irene M.	Denver, Colo.
Reynolds, Nona	La Veta, Colo.
Reynolds, Elizabeth	Stoneham, Colo.
Ricketts, Elizabeth	Boulder, Colo.
Richardson, Ruth V.	Colorado Springs, Colo.
Riggs, Christine	Ordway, Colo.
Riess, Blanche	Glen, Colo.
Riley, Grace E.	Council Bluffs, Iowa
Riley, Ione	Carbondale, Colo.
Riley, Laura	
Ring, Amy	Trinidad, Colo.
Rindskopf, Paula	Denver, Colo.
Riney, Blanche	Dodge City, Kan.
Rissman, Mildred	Greeley, Colo.
Roark, S. L.	McAlester, Okla.
Roberts, Isabel	Pueblo, Colo.
Roberson, Jennie	Wichita Falls, Texas
Robertson, Margaret	Broomfield, Colo.
Robinson, Beulah	Colorado Springs, Colo.
Robinson, Ethel	Hoxie, Kan.
Roche, Mary	Colorado Springs, Colo.
Rodgers, Blanche	La Salle, Colo.
Rodman, Grace	Fowler, Colo.
Rogers, Hettie	Salida, Colo.
Roman, Edith	Aspen, Colo.
Romick, Edna	Anadarko, Okla.
Romick, Lida G.	Anadarko, Okla.
Rose, Florence	Greeley, Colo.
Rose, Lila May	Greeley, Colo.
Ross, A. B.	Greeley, Colo.
Rothermel, Elizabeth	Denver, Colo.
Rumley, Maude	Loveland, Colo.
Rundquist, Winona	Greeley, Colo.
Rupp, M. Ethel	Brandon, Colo.
Russell, S. Alice	Denver, Colo.
Romick, Nell	Denver, Colo.
Reynolds, Davie	Amber, Colo.
Salberg, Eleanor J.	Boulder, Colo.
Saltus, C. N., Mrs.	Sterling, Colo.
Sandy, Ruth	Cañon City, Colo.
Sanger, Harriet	Mt. Morrison, Colo.
Saunders, Jennie A.	Kearney, Nebr.
Sanderson, Sadie	Kansas City, Mo.
Savage, Ella Grace	Pueblo, Colo.
Scanlan, Ella R.	Aspen, Colo.
Scanlan, Alice	Aspen, Colo.
Schenk, Erich	Greeley, Colo.
Schillig, Edna	Greeley, Colo.
Schmidt, Ellen	Omaha, Nebr.
Schneider, Antoinette	Westcliffe, Colo.
Schnakenburg, Regina	Kansas City, Mo.
Schneider, A. Marie	Denver, Colo.
Schott, Rose	Ellsworth, Colo.
Schueler, Martha	Fort Collins, Colo.
Scott, Malvina	Plainview, Nebr.
Scott, Nancy May	Denver, Colo.
Sears, Doris	Sugar City, Colo.
Searway, Irene	Denver, Colo.
Sedgwick, Myrtle	Greeley, Colo.
Selberg, Edith	Greeley, Colo.
Sellards, Mae	Lawrence, Kan.
Seymour, Melita, Mrs.	Central City, Colo.
Shaffer, Helene	Wilkinsburg, Pa.
Sharp, Mabel R.	Fountain, Colo.
Shank, Hazel F.	Grand Valley, Colo.
Shelton, Lutie B.	Roff, Okla.
Shawhan, Claribel	Creede, Colo.
Shay, Elsie	Eckley, Colo.
Shay, Verna	Eckley, Colo.
Sherlock, Norma	Denver, Colo.

Shively, Edna L.	Holly, Colo.
Shore, Bertha	Hiawatha, Kan.
Sherman, Douglass	Akron, Colo.
Shriber, Eva	Greeley, Colo.
Shoupe, Mary Louise	Carlyle, Ill.
Shufelt, Harlan	Boulder, Colo.
Shy, Edna M.	Cheyenne Wells, Colo.
Sickels, Cora	Hillrose, Colo.
Siess, Ermie	Grand Junction, Colo.
Sipple, Carrie Parks	Morrison, Colo.
Slindee, Agnes	Longmont, Colo.
Smiley, Josephine	Boulder, Colo.
Smythe, Adah	Colorado Springs, Colo.
Smith, Alice E.	Michigan City, Ind.
Smith, Cora W.	Parsons, Kan.
Smith, Earl R.	Carr, Colo.
Smith, Earl R., Mrs.	Carr, Colo.
Smith, Edith M.	Greeley, Colo.
Smith, Frances	Loveland, Colo.
Smith, Madame Gulliford	Pueblo, Colo.
Smith, Eleonore P.	Greeley, Colo.
Smith, Ethel L.	Denver, Colo.
Smith, Josephine	La Salle, Colo.
Smith, Kathryn	Greeley, Colo.
Smith, Lucille	Glenwood Springs, Colo.
Smith, Nettie	Sterling, Colo.
Smith, Ruth B.	Sterling, Colo.
Snedgen, Alfred T.	Greeley, Colo.
Snider, W. V.	Holdenville, Okla.
Snow, May F.	Cañon City, Colo.
Southard, Myrtle	Wiley, Colo.
Spaulding, Gertrude C.	Greeley, Colo.
Staley, Hazel	Colorado Springs, Colo.
Stapleton, Joan E.	Denver, Colo.
Stauffer, Myrtle, Mrs.	Rifle, Colo.
Steans, Josephine	Durango, Colo.
Sterrett, Erma	Wiley, Colo.
Stevens, Genevieve	Dixon, Mo.
Stewart, Eugene	Golden, Colo.
Stewart, Lulu	De Beque, Colo.
Stice, Bessie	Guymon, Okla.
Stice, Velma	Guymon, Okla.
Stobbs, Edna	Fowler, Colo.
Stoddard, Helen	Pueblo, Colo.
Stodghill, Corine	Greeley, Colo.
Stout, Ruth	Paonia, Colo.
Stover, Mary S.	Greeley, Colo.
Stranger, Mary	La Veta, Colo.
Sullens, Velma	Greeley, Colo.
Suess, Olive	Denver, Colo.
Sullivan, Claire	New Cambria, Kan.
Sutton, Anna Belle	Hays, Kan.
Sutton, Eunice	Tahlequah, Okla.
Svedman, Anna	Windsor, Colo.
Swanson, Esie M.	Manhattan, Kan.
Sweet, Maude	Sedalia, Colo.
Swenson, Blanda	Denver, Colo.
Swenson, Frances	Denver, Colo.
Swift, Jessie F.	Greeley, Colo.
Swigart, Mildred	Iola, Kan.
Schurman, Mary E.	Trinidad, Colo.
Tate, Anna E.	Florence, Colo.
Tate, Emma C.	Florence, Colo.
Taylor, Edna R.	Loveland, Colo.
Taylor, Florence	Denver, Colo.
Taylor, Lela E.	Trinidad, Colo.
Taylor, Nettie, Mrs.	Del Norte, Colo.
Taylor, Vena	Siloam Springs, Ark.
Thomas, Elsie	Lamar, Colo.
Thomas, Emily L.	Stoneham, Colo.
Thomas, Glades	Cañon City, Colo.
Thomason, Emma	St. Quincy, Ill.
Thomason, Pauline	St. Quincy, Ill.
Thompson, Lillian	Durango, Colo.
Thompson, Margaret	Monticello, Iowa
Thompson, Petra	Kiowa, Colo.
Thorp, Luella	Oklahoma City, Okla.
Thrall, Evelyn	Colorado Springs, Colo.
Tilton, Gertrude B.	What Cheer, Iowa
Tilton, Mabel I.	What Cheer, Iowa
Tinch, Mildred	Colorado Springs, Colo.
Tobin, Saidie M.	Denver, Colo.
Todd, Christie A.	Independence, Iowa
Tohill, Elizabeth	Greeley, Colo.

Traver, Alice B.	Fort Worth, Texas
Travis, Mary C.	Lamar, Colo.
Tressel, Jennie L.	
Trout, Marguerite	Cañon City, Colo.
Tucker, Jennie M.	Weldona, Colo.
Tully, Isabel	Ft. Collins, Colo.
Turner, Anis	Collbran, Colo.
Turner, Elmer	Greeley, Colo.
Turner, Evelyn I.	Ogden, Utah
Turner, Willie	Ignacio, Colo.
Tuttle, Lois L.	Paonia, Colo.
Tyler, Nellie	Trinidad, Colo.
Unfug, Gretchen	Walsenburg, Colo.
Unfug, Mary H.	Walsenburg, Colo.
Unger, John C.	Genoa, Colo.
Utter, Minnie A.	Lamar, Colo.
Vance, Lucile	Mankato, Kan.
Van Meter, Susan H., Mrs.	Cape Girardeau, Mo.
Van Deusen, Dorothy	Rock Springs, Wyo.
Van Winkle, Grace	Kirk, Colo.
Veal, Olive	Aspen, Colo.
Vermillion, Mildred N.	Denver, Colo.
Vegher, Mary	Rockvale, Colo.
Vezzette, Mary	Rockvale, Colo.
Vincent, H. H.	Denver, Colo.
Vincent, Mary L.	East St. Louis, Ill.
Vories, Emma S.	La Veta, Colo.
Wagner, Marguerite	Mead, Colo.
Ward, Alice T.	Denver, Colo.
Welch, Minnie Agnes	Central City, Colo.
Walker, Dexter B.	Denver, Colo.
Wall, Pauline J.	Denver, Colo.
Wallace, Jessie C.	Leadville, Colo.
Walsh, Mary C.	Denver, Colo.
Walsworth, Lutie	Colorado Springs, Colo.
Walter, Lavernia	Windsor, Colo.
Walter, Mary E.	Greeley, Colo.
Walters, Alice	Greeley, Colo.
Watkins, Beulah	Muskogee, Okla.
Warnock, Katherine	Ft. Morgan, Colo.
Warren, Jessie	Nunn, Colo.
Weaver, F. J.	Greeley, Colo.
Webster, Helen	Grand Junction, Colo.
Welborn, Anne Actor	Stewartsville, Ind.
Welch, Lyda	La Salle, Colo.
Wesner, Pauline L.	Sterling, Colo.
West, Wallace	Trinidad, Colo.
Westlund, Nellie	Center, Colo.
Wheaton, Anna	Greeley, Colo.
Wheaton, Esther	Greeley, Colo.
Wheaton, Libbie	Denver, Colo.
White, Edna, Mrs.	Sterling, Colo.
White, Esther L.	Norwood, Colo.
White, Mabel A.	Kendrick, Colo.
White, Mary Eleanor	Wellington, Kan.
Whitehead, Sarah R.	Denver, Colo.
Whitehouse, Pattie	Versailles, Ky.
Whiteman, Virgin Mary	Greeley, Colo.
Whitney, Leo J.	Manitou, Colo.
Wichmann, Irene	Telluride, Colo.
Wickham, Esther L.	Denver, Colo.
Wicker, Maul S.	Norton, Kan.
Wilkin, Esther	Laporte, Colo.
Willey, Nelle	Greeley, Colo.
Williams, Blanche	Florence, Colo.
Williams, Mae	Wiley, Colo.
Weller, William H.	Wray, Yuma Co., Colo.
Williams, Yoetts	Chama, New Mexico
Willis, Anna, Mrs.	Chandler, Okla.
Willisia, Mary A.	Denver, Colo.
Willson, A. M.	Greeley, Colo.
Willson, Lois	Greeley, Colo.
Wilson, Florence	Paonia, Colo.
Wilson, Isabel	Trinidad, Colo.
Wilson, Lillian	Wellington, Colo.
Wisroth, Minnie	Ft. Morgan, Colo.
Witter, Nellie	Aspen, Colo.
Wonders, Winifred N.	Delta, Colo.
Withrow, Emma	Tarkio, Mo.
Witteman, Nell	Glenwood Springs, Colo.
Wolfensberger, Alice	Castle Rock, Colo.
Wolfer, Dora C.	Ft. Collins, Colo.

Woods, Alberta.....Pueblo, Colo.
Woodward, Bernice.....Hardtna, Kan.
Woodward, Ethel.....Cripple Creek, Colo.
Winger, Albertus Z.....Colorado Springs, Colo.
Yardley, Hattie F.....Greeley, Colo.
Yeoman, B. F.....Delta, Colo.
Young, Della A.....Greeley, Colo.
Young, Edith.....Loveland, Colo.
Zerwer, Anna.....Ft. Worth, Texas.

COLLEGE ENROLLMENT

First, Second and Third Quarters 1917-1918

Adams, Albert.....	Greeley, Colo.
Adams, Margaret.....	Greeley, Colo.
Akers, Lucille.....	Longmont, Colo.
Akey, Ethel.....	Wray, Colo.
Alexander, Calvin.....	Greeley, Colo.
Allman, William.....	Denver, Colo.
Alpert, Ethel.....	Ft. Collins, Colo.
Alps, Gertrude.....	Loveland, Colo.
Amsbary, Jeannette.....	Delta, Colo.
Anderson, Bessie.....	Colorado Springs, Colo.
Anderson, Mrs. Elizabeth.....	Olathe, Colo.
Anderson, Florence.....	Wheatridge, Colo.
Anderson, Louise.....	Rock Springs, Wyo.
Anderson, Olga.....	Victor, Colo.
Anderson, Ruth H.....	Denver, Colo.
Annett, Mildred.....	Greeley, Colo.
Anderson, Ruth M.....	Greeley, Colo.
Annett, Olive.....	Greeley, Colo.
Arfsten, Innle.....	Denver, Colo.
Arnold, Genevieve.....	Paonia, Colo.
Arnold, Gladys.....	Lamar, Colo.
Atkinson, Edgar.....	Greeley, Colo.
Augustine, Mrs. Irene.....	Basalt, Colo.
Aultman, Lela May.....	Greeley, Colo.
Adams, Don.....	Greeley, Colo.
Aultman, Mrs. Lela May.....	Greeley, Colo.
Anderson, Agnes.....	Castle Rock, Colo.
Anderson, Henry.....	Greeley, Colo.
Atkinson, Mabel.....	Colorado Springs, Colo.
Amsbary, Katherine.....	Delta, Colo.
Axten, Stephen A.....	Greeley, Colo.
Aller, Blanche.....	Hastings, Nebr.
Anderson, Ruth.....	Kokoma, Colo.
Babcock, Eudora.....	Trinidad, Colo.
Baird, R. S.....	Greeley, Colo.
Baker, Ada A.....	Greeley, Colo.
Baldwin, Ruth.....	Hudson, Colo.
Barbeau, Ruby.....	Sterling, Colo.
Bardwell, Esther.....	Greeley, Colo.
Barnard, Virginia.....	Johnstown, Colo.
Bastedo, Cozette.....	Denver, Colo.
Bate, Helen L.....	Denver, Colo.
Bates, Helen.....	Greeley, Colo.
Baxter, Alfred.....	Greeley, Colo.
Beamer, Clara.....	Hailey, Idaho
Beattie, Mary.....	La Salle, Colo.
Beck, Olive.....	Denver, Colo.
Beer, Adeline.....	Greeley, Colo.
Benjamin, Heber C.....	Greeley, Colo.
Bennett, Ralph.....	Dolores, Colo.
Benson, Pearl.....	Denver, Colo.
Bergen, Marjorie.....	Colorado Springs, Colo.
Berner, Ola.....	Loveland, Colo.
Biebush, Beatrice.....	Greeley, Colo.
Billington, Emma.....	Pueblo, Colo.
Birkins, Grace.....	Romeo, Colo.
Blair, Mary.....	Greeley, Colo.
Blair, Minnie, Mrs.....	Gill, Colo.
Blank, Martha.....	Denver, Colo.
Bleifernich, Elizabeth.....	Pocatello, Idaho
Bohn, Nellie B.....	Denver, Colo.
Bond, Florence.....	Estes Park, Colo.
Bonds, Flora.....	Durango, Colo.
Brady, A. H., Mrs.....	Greeley, Colo.
Brandhorst, Lillie.....	Boulder, Colo.
Briggs, Eunice.....	Cedaredge, Colo.
Brodie, Angie.....	Denver, Colo.
Brown, Amy.....	Grand Junction, Colo.

Brooks, Christena.....	Rock Springs,	Wyo.
Brown, Gussie.....	Greeley,	Colo.
Brown, Lucille.....	Greeley,	Colo.
Brown, Marjorie.....	Greeley,	Colo.
Browning, Fern.....	Cherryville,	Kan.
Bruce, Helen.....	Paonia,	Colo.
Bruce, Maude.....	Denver,	Colo.
Buck, Vera.....	Greeley,	Colo.
Bugger, Edith.....	Arriba,	Colo.
Bull, Lucille.....	Delta,	Colo.
Bunnell, Inda.....	Trinidad,	Colo.
Burbridge, Geo.....	Platteville,	Colo.
Burfield, Gail.....	Greeley,	Colo.
Butler, Mary.....	Cripple Creek,	Colo.
Byxbe, Dorothy.....	Hillrose,	Colo.
Browne, Ethelyn.....		
Bennett, Merle.....	Ft. Collins,	Colo.
Bishop, Beatrice, Mrs.....	Greeley,	Colo.
Blanchard, Rae.....	Greeley,	Colo.
Bowe, Verna.....	Eaton,	Colo.
Brady, Mildred.....	Colorado Springs,	Colo.
Bruckner, Grace.....	Greeley,	Colo.
Butler, Marian.....	Denver,	Colo.
Bigham, Helen G.....	Glenwood Springs,	Colo.
Bracewell, Harold.....	Greeley,	Colo.
Barker, Lida Lea.....	Greeley,	Colo.
Barnard, Rae.....	Johnstown,	Colo.
Bastin, Marguerite.....		
Cadwell, Gladys.....	Cañon City,	Colo.
Calame, Alice.....	Greeley,	Colo.
Calhoun, Gladys.....	Denver,	Colo.
Callahan, Alice.....	Colorado Springs,	Colo.
Calvin, Lenna.....	Greeley,	Colo.
Candlin, Victor.....	Greeley,	Colo.
Canfield, Mary.....	Greeley,	Colo.
Capps, Evalyn.....	La Veta,	Colo.
Carney, Elizabeth.....	Greeley,	Colo.
Carson, Irma.....	Berthoud,	Colo.
Carter, Paul.....	Greeley,	Colo.
Cassin, Ruby.....	Winslow,	Colo.
Choury, Armande.....	San Luis,	Colo.
Glaasen, Mamie.....	Greeley,	Colo.
Clark, Ella.....	Lucerne,	Colo.
Clark, Margaret.....	Rock Springs,	Wyo.
Clashey, Elizabeth.....	Denver,	Colo.
Clough, Gertrude.....	Greeley,	Colo.
Clough, Ruth.....	Greeley,	Colo.
Clyncke, Mary.....	Boulder,	Colo.
Cobb, Jessie.....	Fowler,	Colo.
Colwell, Ruth.....	Loveland,	Colo.
Comin, Mary.....	Greeley,	Colo.
Connally, E. G., Mrs.....	Greeley,	Colo.
Coolidge, Elizabeth.....	Chattanooga,	Tenn.
Coons, Erma.....	Brandon,	Colo.
Cooper, Clara.....	Golden,	Colo.
Cooper, Margaret.....	Center,	Colo.
Corbin, Leila.....	Delta,	Colo.
Corlett, Jane.....	Monte Vista,	Colo.
Corthell, Norma.....	Carbondale,	Colo.
Cosgrove, Anna.....	Greeley,	Colo.
Cosslett, Gertrude.....	Longmont,	Colo.
Cowgill, Marion.....	Denver,	Colo.
Cox, Hazel.....	Cripple Creek,	Colo.
Cox, Marion.....	Cripple Creek,	Colo.
Crawford, Grace.....	Greeley,	Colo.
Crippa, Josephine.....	Rock Springs,	Wyo.
Criswell, Lillian.....	Paonia,	Colo.
Crittenden, Mabel.....	Paonia,	Colo.
Critzler, Ruby.....	Pueblo,	Colo.
Grosbey, Grace.....	Brighton,	Colo.
Cunningham, Alice.....	Cripple Creek,	Colo.
Cunningham Minnie.....	Wray,	Colo.
Culbertson, Virginia.....	Greeley,	Colo.
Cazin, Frances.....	Denver,	Colo.
Cole, Cassie.....	Denver,	Colo.
Croft, Bernice.....	Cheyenne,	Wyo.
Coontz, Helen.....	Freeville,	N. Y.
Cutting, Nora.....	Goodrich,	Colo.
Carr, Dorothy E.....	Green River,	Utah
Coming, Edith.....		
Crosby, Jean M.....	Greeley,	Colo.

Cochran, Grace.....	Greeley, Colo.
Courtney, Julia M.....	.....
Dahlgren, Alice.....	Eaton, Colo.
Dahlgren, Anna.....	Eaton, Colo.
Dalbey, Cora.....	Sterling, Kan.
Darlington, Helen.....	Berthoud, Colo.
Daugherty, Merle.....	Ft. Morgan, Colo.
Davis, Beulah.....	Loveland, Colo.
Davis, Claudia.....	Erie, Colo.
Davis, Elizabeth.....	Denver, Colo.
Davis, Genevieve.....	Ft. Lupton, Colo.
Davis, Helen.....	Craig, Colo.
Davis, Lillian.....	Holly, Colo.
Davis, Verna.....	Alamosa, Colo.
Davis, Miriam.....	Colorado Springs, Colo.
Delbridge, Lucy.....	Greeley, Colo.
Della, Josephine.....	Avon, Colo.
Delling, Minneola.....	Greeley, Colo.
Dempsey, Blanche.....	Greeley, Colo.
Denson, Mildred.....	Rocky Ford, Colo.
Desmond, Margaret.....	Denver, Colo.
Drtina, Rose.....	Denver, Colo.
Devlin, Melda.....	Hale, Colo.
Diggs, Carrie M.....	Childrass, Texas
Dillon, Agnes.....	Denver, Colo.
Dillon, Sarah.....	Greeley, Colo.
Dillon, Thomas.....	Greeley, Colo.
Dismukes, Irene.....	Steamboat Springs, Colo.
Dodge, Elizabeth.....	Denver, Colo.
Donald, Mildred.....	New Harmony, Ind.
Doney, Nelle.....	Greeley, Colo.
Doolittle, Mary.....	Pueblo, Colo.
Dotson, M. A., Mrs.....	Greeley, Colo.
Downes, Irma.....	Greeley, Colo.
Doyle, Gladys.....	Boulder, Colo.
Duncan, Nita.....	Esbon, Kan.
Dunlaixy, Lucile.....	Trinidad, Colo.
Durning, Bertha.....	Greeley, Colo.
Dwyer, Elizabeth.....	Boulder, Colo.
Dyer, Helen.....	Pueblo, Colo.
Darling, Dewey.....	Greeley, Colo.
Dempewolf, Mary.....	La Salle, Colo.
DeWeese, Blanche.....	Cañon City, Colo.
Donelson, Haze.....	Walden, Colo.
Dupuy, Genevieve.....	Montrose, Colo.
Dupuy, Marguerite.....	Montrose, Colo.
Dunlavy, May, Mrs.....	.....
Easton, Virginia.....	Trinidad, Colo.
Edgerton, Iva.....	Carbondale, Colo.
Edwards, Hazel.....	Grover, Colo.
Edwards, May G.....	Whittier, Calif.
Elam, Maude.....	Greeley, Colo.
Eldridge, Peggy Bernice.....	Greeley, Colo.
Elias, Minnie.....	Rock Springs, Wyo.
Elliott, Erma.....	Durango, Colo.
Ellis, Carolyn.....	La Junta, Colo.
English, Dorothy.....	Greeley, Colo.
English, H. C., Mrs.....	Pierce, Colo.
Epple, Florence.....	Roggin, Colo.
Ericson, Neoma.....	Denver, Colo.
Erickson, Clara.....	Greeley, Colo.
Evans, Goldie.....	Longmont, Colo.
Evans, Julia.....	Denver, Colo.
Evans, Phyllis.....	Pueblo, Colo.
Everett, Geary E.....	Greeley, Colo.
Eyler, Shirley.....	Denver, Colo.
Eaton, Lora A.....	.....
Eaton, Glenn.....	Fairplay, Colo.
Ennes, Hazel.....	Greeley, Colo.
Engle, Anna.....	.....
Elmer, Colgate.....	Greeley, Colo.
Elam, Mary.....	Greeley, Colo.
Erickson, Agnes.....	Ouray, Colo.
Farnsworth, Lucinda.....	Denver, Colo.
Farquhar, Ardis.....	Minatare, Nebr.
Farr, Gertrude.....	Greeley, Colo.
Ferguson, Lillian, Mrs.....	Greeley, Colo.
Ferrell, Nola.....	Greeley, Colo.
Finn, Nora.....	Denver, Colo.

Fish, Florence.....	Greeley, Colo.
Fisher, Elizabeth.....	Akron, Colo.
Fisher, Otto, Mrs.....	Greeley, Colo.
Flood, Mary.....	Denver, Colo.
Foley, Irene.....	Greeley, Colo.
Forney, Beula.....	Fosston, Colo.
Ford, Myrle.....	.....
Foresman, Sue.....	Denver, Colo.
Foster, Beryl.....	Greeley, Colo.
Foster, Fern.....	Loveland, Colo.
Fox, Lottie Maine.....	Greeley, Colo.
Fry, Esther.....	Ft. Lupton, Colo.
Fuller, Lorianna.....	Longmont, Colo.
Funck, May.....	Greeley, Colo.
Faith, Elsie.....	Denver, Colo.
Frasier, Alice M.....	Montrose, Colo.
Fulton, Harriet.....	Ft. Collins, Colo.
Fleming, Zella, Mrs.....	.....
Porsythe, James.....	Xenia, Ill.
Finley, Winona.....	Greeley, Colo.
Gale, Mae A.....	Cañon City, Colo.
Gard, Agnes.....	Loveland, Colo.
Garrison, Leah.....	Merino, Colo.
Gearin, Irene.....	Platteville, Colo.
Gedney, Beatrice.....	Denver, Colo.
Geiger, Helen.....	Pueblo, Colo.
Gibbeon, Lota.....	Greeley, Colo.
Gilbert, Helen.....	Colorado Springs, Colo.
Gilbert, Pauline.....	Lamar, Colo.
Gilmore, Mary.....	Ft. Collins, Colo.
Gloystein, Hope.....	Hastings, Colo.
Gookins, Helen.....	Loveland, Colo.
Grass, Florence.....	Denver, Colo.
Gray, Ruth.....	Greeley, Colo.
Gregory, Grace.....	Colorado Springs, Colo.
Griffith, Blodwen.....	.....
Guenzi, Julia.....	Delagua, Colo.
Gunnison, Esther.....	Sterling, Colo.
Guillet, Lucille.....	Aurora, Nebr.
Greene, Anna S., Mrs.....	Cortez, Colo.
Glaze, Hazel C.....	Denver, Colo.
Grever, Mina.....	Brandon, Colo.
Griffin, Agnes.....	Ordway, Colo.
Gilmore, Alice.....	Cedaredge, Colo.
Guillet, Irene.....	Colorado Springs, Colo.
Gilchrist, Eleanor.....	Cortez, Colo.
Gilpin-Brown, Helen, Mrs.....	Greeley, Colo.
Hale, Agnes.....	Grand Junction, Colo.
Haley, Idabell.....	Greeley, Colo.
Hall, Harriet.....	Socorro, N. M.
Hall, Octavia.....	Colorado Springs, Colo.
Hamilton, Catherine.....	Denver, Colo.
Hamilton, Irene.....	Greeley, Colo.
Hamilton, Marguerite.....	Greeley, Colo.
Hamilton, Vera.....	Greeley, Colo.
Hammond, Helen G.....	Lake City, Colo.
Hammond, Mary.....	Denver, Colo.
Hansen, Marie.....	Denver, Colo.
Hanson, Margaret.....	Kutch, Colo.
Harmon, Mary O.....	Greasy Ridge, Ohio
Harrington, Alice.....	Butte, Mont.
Harrington, Mae.....	Butte, Mont.
Harrington, Margorie.....	Butte, Mont.
Hart, Ida.....	Denver, Colo.
Hartman, Marguerite.....	Alamosa, Colo.
Harvey, Sarah.....	Rock Springs, Wyo.
Hauptman, Ruth.....	Denver, Colo.
Hawes, Josephine.....	Greeley, Colo.
Hay, Helen.....	Ouray, Colo.
Hayes, Ethel.....	Pueblo, Colo.
Hays, Mary.....	Savery, Wyo.
Heckert, Mable.....	Olathe, Colo.
Heffron, Marie.....	Victor, Colo.
Heighton, Edith.....	Greeley, Colo.
Henderson, Ethel.....	Lucerne, Colo.
Henderson, C. P.....	Denver, Colo.
Hennick, Anna B.....	Sharon Springs, Kan.
Henry, Elizabeth.....	Denver, Colo.
Herndon, Alice.....	Millerton, Okla.
Hickman, Lois.....	Greeley, Colo.
Hicks, Esther.....	Greeley, Colo.
Higgins, Ada.....	Pueblo, Colo.
Higgins, Marjorie.....	Denver, Colo.

Hill, Azalia	Greeley, Colo.
Hill, Florence	Fairplay, Colo.
Hinch, Helen	Colorado Springs, Colo.
Hinkley, Winifred	Windsor, Colo.
Hoag, Ruth	Lamar, Colo.
Hollister, Evaline	Leadville, Colo.
Hopkins, Mabel	Greeley, Colo.
Howard, Lavinia	Simla, Colo.
Hulme, Ida May	Stroud, Okla.
Hultquist, Mabel	Laird, Colo.
Humphrey, Alice E.	Twin Falls, Idaho
Hunt, Raymon	Greeley, Colo.
Howard, Mary	
Harvey, Abigail	Flagler, Colo.
Hastings, Marie	Pueblo, Colo.
Hicks, Elmer	Greeley, Colo.
Holland, Beulah Stauffer	Wheatland, Wyo.
Hotchkiss, Margaret, Mrs.	Greeley, Colo.
Hanger, Mary	Riverside, N. Mex.
Hart, Dorothea	Aspen, Colo.
Hughes, Clara	Greeley, Colo.
Humes, Inez, Mrs.	Greeley, Colo.
Howard, Florence	
Ingle, Erle	Greeley, Colo.
Isbill, Cecile	Telluride, Colo.
Inge, Maria	La Junta, Colo.
Ives, Marie	
Jacobson, Olivia	Denver, Colo.
Jensma, Anna	Newton, Iowa
Jenks, Helen	Greeley, Colo.
Jepperson, Bessie	Highland Lake, Colo.
Johnson, Bevie	Greeley, Colo.
Johnson, Loustallet	Greeley, Colo.
Johnson, Myrtle, Mrs.	Seward, Nebr.
Johnston, Helen	Denver, Colo.
Johnston, Helen	Evans, Colo.
Jones, Bernice	Goodrich, Colo.
Jones, Bertha	Brush, Colo.
Jones, Mary E.	Kemmerer, Wyo.
Jones, Victor	Denver, Colo.
Justice, Hazel	Fowler, Wyo.
Juel, Marie	Rock Springs, Wyo.
Jones, Marguerite	Green River, Utah
Jordon, Genievive	Hotchkiss, Colo.
Kelly, Howard	Greeley, Colo.
Keltner, Elizabeth	Greeley, Colo.
Kinder, Esther	Ft. Lupton, Colo.
King, Frances	Otis, Colo.
King, Helen	Greeley, Colo.
King, Ruth	Greeley, Colo.
Kinnikin, Jeannette	Colorado Springs, Colo.
Klein, Everett	Greeley, Colo.
Knott, Dorothy	Denver, Colo.
Knous, Miriam	Greeley, Colo.
Knowles, Glendola	Greeley, Colo.
Kohen, Nora	Greeley, Colo.
Kronen, Margaret	Ft. Collins, Colo.
Kussart, Jeannette	Greeley, Colo.
Kyler, Lela	Greeley, Colo.
Kah, Rowena	
Kane, Katherine	Greeley, Colo.
Kennedy, Hazel	Greeley, Colo.
Keyes, Margaret J.	Greeley, Colo.
Kindred, Dorothy	Greeley, Colo.
Kolz, Marie E.	Durango, Colo.
King, Wesley	Greeley, Colo.
Keena, B. W.	Haswell, Colo.
Kendel, Josephine	Greeley, Colo.
Labbo, Frances	Boulder, Colo.
Labriola, Elizabeth	Denver, Colo.
Laing, Margaret	Colorado Springs, Colo.
Lakin, Irene	Pueblo, Colo.
Lambie, Jean	Denver, Colo.
Lambie, May	Denver, Colo.
Lamma, Mary	La Salle, Colo.
Landers, Hazel	Eaton, Colo.
Lantz, Lucretia	La Junta, Colo.
Lappin, Georgia	Pueblo, Colo.
Laughlin, Eunice	La Salle, Colo.
Laycock, Alice	Manitou, Colo.
Layden, Marie	Delta, Colo.
Leavenworth, Helen	Las Animas, Colo.

Leavenworth, Marion	Las Animas,	Colo.
Lentz, Clyde	Canon City,	Colo.
Lilley, Vina	Greeley,	Colo.
Lillie, Agnes	Denver,	Colo.
Love, Josephine	Rio Blanco,	Colo.
Lowe, Florence	Greeley,	Colo.
Lowe, Lillian	Glenwood Springs,	Colo.
Lyons, Cecelia	Ft. Collins,	Colo.
Lyons, Mildred	Greeley,	Colo.
Lawler, Kate	Union,	Iowa
LeVan, Atlanta	Denver,	Colo.
MacNeil, Evelyn	Greeley,	Colo.
McAloon, Anna	Akron,	Colo.
McAndrew, Ellen	Denver,	Colo.
McCarthy, Abigail	Segundo,	Colo.
McCarthy, Mary	Ft. Collins,	Colo.
McCarty, Anna	Hannibal,	Mo.
McClelland, Alvin	Greeley,	Colo.
McCutcheon, Marjorie	Greeley,	Colo.
McDaniel, Mabel	Pueblo,	Colo.
McDonald, Gladys	Aurora,	Colo.
McEwen, Inez	Cortez,	Colo.
McFadden, L. E.	Greeley,	Colo.
McKinley, Ruth	Canon City,	Colo.
McLean, Gladys	McClave,	Colo.
McNew, Madge	Greeley,	Colo.
McVey, Romaine	Ft. Morgan,	Colo.
McWhorter, Fannie	Masonville,	Colo.
Malicky, Tillie	Oketo,	Kan.
Mallon, Irene	Denver,	Colo.
Marsh, Bertha	Chugwater,	Wyo.
Marshall, Helen	Denver,	Colo.
Martin, Norma, Mrs.	Greeley,	Colo.
Mason, Grace	Greeley,	Colo.
Mayer, Lena	Longmont,	Colo.
Mayes, Mildred	Manitou,	Colo.
Meacham, Ruth	Salida,	Colo.
Mellow, Marjorie	Central City,	Colo.
Merrich, Lettie	Golden,	Colo.
Miles, Florence	Brighton,	Colo.
Mills, Nannie S.	Brush,	Colo.
Miller, Norma	Trinidad,	Colo.
Mitchell, Delitha	Greeley,	Colo.
Magnuson, Lillian	Meade,	Colo.
Monsch, Hester	Pueblo,	Colo.
Morgan, Edna	Denver,	Colo.
Morgan, Lydia	Louisville,	Colo.
Morris, Helen	Greeley,	Colo.
Morrison, Benjamin	Ault,	Colo.
Morrow, Alice M.	Rock Springs,	Wyo.
Morrow, Mary	Denver,	Colo.
McLeod, Anna	Idaho Springs,	Colo.
Morrow, Mildred	Greeley,	Colo.
McManus, Genevieve	Greeley,	Colo.
McVey, J. P.	Adena,	Colo.
Mallot, Ellen	Greeley,	Colo.
Mason, Alice D.	Greeley,	Colo.
Montague, Joe B.	Greeley,	Colo.
Morrow, Helen		
McFarland, Hazel	Pueblo,	Colo.
Meece, Mimetta, Mrs.	Denver,	Colo.
Miner, Grace	Ft. Morgan,	Colo.
Moomaw, Helen	Seattle, Wash.	
Morgan, Blinmar	Buena Vista,	Colo.
Minter, Violet		
Moore, Rhoda	Greeley,	Colo.
McDuffie, Katherine		
McCreary, Grace		
Nance, Dorothy	Durango,	Colo.
Nakervis, Leota	Idaho Springs,	Colo.
Neeland, Mary	Greeley,	Colo.
Nelson, Edith	Cripple Creek,	Colo.
Nelson, Grace	Windsor,	Colo.
Nevins, Frances	Grand Junction,	Colo.
Newton, Florence	Denver,	Colo.
Newton, Pearl	Monte Vista,	Colo.
Nixon, Mary	Rico,	Colo.
Norman, Frances	Canon City,	Colo.
Nott, Helen	Kiowa,	Colo.
Nussbaum, Agnes	Greeley,	Colo.
Nussbaum, Nelda	Greeley,	Colo.
Nutt, Ruth	Pueblo,	Colo.
Nelson, Ruth	Delta,	Colo.

Neil, R. H.	.....
Naylon, Bernice	.....	Pueblo, Colo.
O'Donnel, Ellen	.....	Trinidad, Colo.
Olson, Lavinia	.....	Wheatridge, Colo.
Onstine, Eunice	.....	Greeley, Colo.
Ostman, Elvira	.....	Denver, Colo.
Oviatt, Inez	.....	Brighton, Colo.
Owen, Juanita	.....	Haswell, Colo.
O'Rourke, Mary	.....	Fleming, Colo.
Paden, Grace	.....	Carr, Colo.
Page, Helena	.....	Fruita, Colo.
Page, Mildred	.....	Greeley, Colo.
Palm, Helen	.....	Larkspur, Colo.
Pancake, Mary	.....	Berthoud, Colo.
Paterson, Myrtle	.....	Rock Springs, Wyo.
Patton, Ethel	.....	Buena Vista, Colo.
Pearce, Letitia	.....	Denver, Colo.
Penly, Hazel	.....	Sedalia, Colo.
Petit, Avis	.....	Greeley, Colo.
Phelps, Margaret	.....	Denver, Colo.
Phenix, Florence	.....	Greeley, Colo.
Phillips, Mary	.....	Cripple Creek, Colo.
Phippeny, Lael	.....	Greeley, Colo.
Pick, Gladys	.....	Colorado Springs, Colo.
Pickett, Sylvia	.....	Platteville, Colo.
Pierce, Pansy	.....	Longmont, Colo.
Pool, Gladys	.....	Greeley, Colo.
Poser, Anna Mae	.....	Cleveland, Ohio
Potter, Bernice	.....	Arvada, Colo.
Potter, Helen	.....	Arvada, Colo.
Preston, Harold	.....	Greeley, Colo.
Pomeroy, Miriam	.....	Westmoreland, Kan.
Price, Kathryn	.....	Cripple Creek, Colo.
Prosser, Georgene	.....	Cheyenne, Wyo.
Pierce, Hazel	.....	Greeley, Colo.
Peak, Irma	.....	Greeley, Colo.
Parsons, Gail	.....	Denver, Colo.
Perkins, Lillie	.....	Eaton, Colo.
Perry, Edith	.....	Braymer, Mo.
Plumb, Margaret	.....	Greeley, Colo.
Pumphrey, Grace	.....	La Salle, Colo.
Paine, Nimesia	.....	Greeley, Colo.
Phelps, Lona J.	.....	McCook, Nebr.
Phelps, Ruth	.....	Colorado Springs, Colo.
Quinby, Grace	.....	Fort Collins, Colo.
Quin, Alice	.....
Rafferty, May	.....	Kline, Colo.
Ramsay, Edith	.....	Twin Falls, Idaho
Rardin, Florence	.....	Colorado Springs, Colo.
Reed, Barbara	.....	Evans, Colo.
Rawlins, Edna	.....	Monte Vista, Colo.
Reh, Agnes	.....	Durango, Colo.
Reid, Beneta	.....	Dearborn, Mo.
Rettberg, Marion	.....	Pueblo, Colo.
Reynolds, Nora	.....	La Veta, Colo.
Reynolds, Pauline	.....	Greeley, Colo.
Rhiner, Ethelyne	.....	Greeley, Colo.
Rhoades, Helen	.....	Brush, Colo.
Rhoades, Inez	.....	Hereford, Colo.
Rhoades, Bessie	.....	Hereford, Colo.
Rhodes, Esther	.....	Leadville, Colo.
Rhea, Alda	.....	Colorado Springs, Colo.
Rice, Margaret	.....	Denver, Colo.
Richards, Madge	.....	Colorado Springs, Colo.
Richardson, Ruth	.....	Pueblo, Colo.
Ridley, Marion	.....	Esterville, Iowa
Riley, Stanley	.....	Greeley, Colo.
Rissman, Mildred	.....	Greeley, Colo.
Roberts, Mabel	.....	Alma, Nebr.
Robertson, Alverna	.....	Trinidad, Colo.
Robie, Janet	.....	Greeley, Colo.
Robinson, Beulah	.....	Colorado Springs, Colo.
Roop, Nora	.....	Westminster, Colo.
Rosenthal, Minnie	.....	Greeley, Colo.
Rowe, Teresa	.....	Denver, Colo.
Royer, Edna Levis, Mrs.	.....	Greeley, Colo.
Rule, Elizabeth	.....	Central City, Colo.
Rule, Emma	.....	Central City, Colo.

Rusk, Ethelda	Ravena, Nebr.
Reese, Pauline	Greeley, Colo.
Ritter, Gladys	Greeley, Colo.
Rose, Lila May	Greeley, Colo.
Sanden, Edith	Ault, Colo.
Scanlan, Alice	Aspen, Colo.
Scanlan, Gladys	Aspen, Colo.
Schenk, Eric	Greeley, Colo.
Schlessinger, Amy	Salida, Colo.
Schlupp, Julia	Longmont, Colo.
Schneider, A. Marie	Denver, Colo.
Schroeder, Agnes	Greeley, Colo.
Schwyn, Lydia	Flagler, Colo.
Scotfield, Aubyn	Sharon Springs, Kan.
Scott, Crystal	Greeley, Colo.
Scott, Fern	Golden, Colo.
Scott, Francis	Denver, Colo.
Scott, Iva	Golden, Colo.
Scott, Marie	Platteville, Colo.
Seem, Adela	Bangor, Pa.
Selberg, Edith	Greeley, Colo.
Schlessman, Nell	Colorado Springs, Colo.
Seastrand, Lillian	Greeley, Colo.
Shaddle, Edith	Loveland, Colo.
Shaffner, Wilma	Casper, Wyo.
Shank, Hazel	Grand Valley, Colo.
Sherman, Alma	Trinidad, Colo.
Sherlock, Norma	Denver, Colo.
Sheilds, Faye	Greeley, Colo.
Sheilds, Gertrude	Greeley, Colo.
Shultis, Alice	Greeley, Colo.
Sickelbower, Bessie	Hartman, Colo.
Sipple, Carrie	Denver, Colo.
Sitzman, Anna	Greeley, Colo.
Swiger, Olive	Haswell, Colo.
Slindee, Agnes	Longmont, Colo.
Smith, Carrie	Montrose, Colo.
Smith, Eleanore	Greeley, Colo.
Smith, Helen	Denver, Colo.
Smith, Lucille	Glenwood Springs, Colo.
Smith, Milo	Greeley, Colo.
Smith, Miriam E.	Greeley, Colo.
Smith, Viola	Arena, Colo.
Smythe, Adah	Greeley, Colo.
Snedgen, Alfred	Greeley, Colo.
Snook, Marvel	Greeley, Colo.
Sonne, Margaret	Central City, Colo.
Spalding, Irene	La Junta, Colo.
Speers, Ruth	Greeley, Colo.
Staley, Hazel	Colorado Springs, Colo.
St. John, Inez	Colorado Springs, Colo.
Stitt, Roberta	Denver, Colo.
Stobbs, Edna	Fowler, Colo.
Stoddard, Helen	Pueblo, Colo.
Stone, Helen	Greeley, Colo.
Stone, Marion	Greeley, Colo.
Stone, Blanche	Ogden, Utah
Siebring, Sievert	Greeley, Colo.
Summ, Johanna	Red Cliff, Colo.
Svedman, Anna	Windsor, Colo.
Swanson, Emma	Cañon City, Colo.
Swanson, Esther	Denver, Colo.
Swenson, Frances	Denver, Colo.
Swett, Lorraine	Oathe, Kan.
Syp, Louise	Lamar, Colo.
Stautz, Oona	Greeley, Colo.
Steele, Syrena	La Salle, Colo.
Sides, Lucille	Yoder, Colo.
Steidley, Mildred	Fort Collins, Colo.
Strain, Doris Lousley	Ignacio, Colo.
Schick, Mrs. Della	Greeley, Colo.
Shattuck, Dorothy	Greeley, Colo.
Shattuck, Marian	Greeley, Colo.
Shaw, Jesse R.	Greeley, Colo.
Sharp, Edith	Ogden, Utah
Simpson, Letty	Eaton, Colo.
Singer, Olive	Haswell, Colo.
Smith, Madame Guilliford	Pueblo, Colo.
Smith, Russel	Greeley, Colo.
Smillie, Dorothy	Greeley, Colo.
Smith, Rena	Greeley, Colo.

Shank, Elmira	Grand Valley, Colo.
Sparling, Dorothy	Denver, Colo.
Stapleton, Joan	Denver, Colo.
Straley, Fay	La Salle, Colo.
Saatoff, W. H.	Trinidad, Colo.
Sneed, Lucy	
Stephens, Alvin	Sterling, Colo.
Taggart, Winnifred	Ault, Colo.
Taylor, Florence M.	Denver, Colo.
Thomas, Eleanor	Castle Rock, Colo.
Thomas, Ruth	Castle Rock, Colo.
Thompson, Louise	Denver, Colo.
Thompson, Marion	Greeley, Colo.
Titsworth, Mary	Colorado Springs, Colo.
Tobias, Ruby	Colorado Springs, Colo.
Tobin, Lucille	Victor, Colo.
Todd, Vera	Goodrich, Colo.
Towne, Isabel	Castle Rock, Colo.
Tressel, Jennie	Greeley, Colo.
Tully, Elizabeth	Monte Vista, Colo.
Turner, Ruth	Brush, Colo.
Tuttle, Lois	Paonia, Colo.
Tucker, Irene	
Tennant, Mary	
Taylor, Beulah	Wenatchee, Wash.
Townsend, Beryl	Greeley, Colo.
Tarr, Adraith	Denver, Colo.
Talbot, Lois	
Theys, Henrietta	
Underhill, Harlan	Greeley, Colo.
Vance, Thomas	Greeley, Colo.
Van Deusen, Dorothy	Rock Springs, Wyo.
Van Why, Mary	Denver, Colo.
Vegher, Mary	Rockvale, Colo.
Vermillion, Mildred	Denver, Colo.
Vialpando, Romancita	Weston, Colo.
Wade, Bertha L.	Spicer, Colo.
Wilkinson, Eleanor	Greeley, Colo.
Wiescarver, Lucille	Fairfield, Iowa
Wadsworth, Blanche	Greeley, Colo.
Walker, Bonny	Ordway, Colo.
Walker, Margaret	Greeley, Colo.
Walsh, Helen McGirr	Greeley, Colo.
Walsh, T. F.	Denver, Colo.
Walter, Laura	Greeley, Colo.
Walter, Nellie	Greeley, Colo.
Warren, Winnifred	Gill, Colo.
Watson, Georgia	Lamar, Colo.
Weidman, Vera	Greeley, Colo.
Weierback, R. C.	Greeley, Colo.
Weitz, Bessie	Denver, Colo.
Wetherald, Estella	Cripple Creek, Colo.
Wharton, Ella	Moffat, Colo.
Wheatley, Esther	Aspen, Colo.
Wheeler, Helen	Denver, Colo.
White, Esther	Norwood, Colo.
Whitehouse, Pattie	Versailles, Ky.
Wilber, Marion	Colorado Springs, Colo.
Wilker, June	Wyo, Iowa
Williams, Florence	Greeley, Colo.
Williams, Francis	Goldfield, Colo.
Williams, Yvette	Alamosa, Colo.
Wilson, Lillian N.	Wellington, Colo.
Wilson, Gertrude	Greeley, Colo.
Wilson, Olive	Cedaredge, Colo.
Winans, Charlotte	Longmont, Colo.
Witter, Nellie L.	Aspen, Colo.
Wolfe, Lillie	Loveland, Colo.
Wolfe, Rosa	Loveland, Colo.
Wood, Myra	Greeley, Colo.
Woodruff, Hazel	Ogden, Utah
Woodward, Bernice	Greeley, Colo.
Wykert, Hazel	Eaton, Colo.
Waddingham, Nellie, Mrs.	Greeley, Colo.
Westen, Addie	Cedaredge, Colo.
White, Fern	Norwood, Colo.
Wilson, Florence	Mt. Morrison, Colo.
Wilson, Lynn	Lucerne, Colo.

Wigram, Ethel.....	Delta, Colo.
Walsh, Genevieve.....	
Welsh, Edna.....	Greeley, Colo.
Wilder, Ruth, Mrs.....	
Wilson, Grace.....	Greeley, Colo.
Williams, Helen.....	Silt, Colo.
Willis, Anna, Mrs.....	Chandler, Colo.
White, Marilla.....	Eaton, Colo.
Whelpley, Dorothy.....	Fremont, Nebr.
Williams, Lana.....	Montrose, Colo.
Williams, May.....	Leadville, Colo.
Yard, Mary.....	Casper, Wyo.
Young, Della.....	Greeley, Colo.
Youberg, Grace.....	Denver, Colo.
Yates.....	Greeley, Colo.
Zinn, Vivian.....	Hawksville, Canada

SCHOOL OF ADULTS

Summer Session

1917

Baldwin, Margaret.....	Durango, Colo.
Betts, Rilda.....	Lovington, Ill.
Billings, Elizabeth.....	Lisbon, N. Dak.
Blubaugh, Jeannette.....	Fort Morgan, Colo.
Bottoyson, Cornelia.....	Minturn, Colo.
Boyer, Ruth.....	Keota, Colo.
Bradfield, Lavina.....	Aroya, Colo.
Brandon, Elizabeth.....	Otis, Colo.
Brown, Osa C.....	Eaton, Colo.
Bryson, R. L., Mrs.....	Superior, Wyo.
Burbanks, Lillian.....	Richmond, Mo.
Campbell, Helen.....	Orchard, Colo.
Cook, Katherine.....	Aguiar, Colo.
Couch, Ethel.....	Merino, Colo.
Creese, Ethel.....	Wheatridge, Colo.
Crosby, Katherine E.....	3319 W. Twenty-ninth Ave., Denver, Colo.
Dardis, Francis.....	Grover, Colo.
Deakins, Myrtle.....	Windsor, Mo.
DeBoer, Sadie.....	Burlington, Iowa
DeBolt, Tina.....	Newton, Iowa
Elam, Maude.....	Greeley, Colo.
Emerson, Inez.....	R. R. 2, Box 54, Greeley, Colo.
Erskine, Cora.....	Rouse, Colo.
Farney, Christina.....	Karval, Colo.
Foster, Viola.....	Loveland, Colo.
Galt, Ruth.....	Hale Center, Texas
Glaze, Hazel C., Mrs.....	Brandon, Colo.
Greek, Blanche.....	Flagler, Colo.
Harbert, Lily E.....	Powersville, Mo.
Hardin, Alberta.....	Ordway, Colo.
Harris, Beth.....	Carbondale, Colo.
Harvey, Abigail.....	Sterling, Colo.
Hastings, Marie.....	Pueblo, Colo.
Haug, Bertha.....	Limon, Colo.
Haun, Olive.....	Pinon, Colo.
Hays, Mary E.....	Sterling, Colo.
Hewitt, Elizabeth G.....	Rye, N. Y.
Heeter, Elgie.....	Butler, Pa.
Hemphill, Nancy.....	1624 Ninth Ave.,
Hemphill, Georgia.....	Fort Morgan, Colo.
Henderson, Ruth.....	Goodrich, Colo.
Hill, Pearl.....	Kiowa, Kan.
Hix, Beulah.....	Estes Park, Colo.
Hodgin, Lena.....	Cañon City, Colo.
Hooker, B. L.....	Grantsburg, Ill.
Hunt, Gertrude.....	Florence, Colo.
Jacobson, Margaret.....	Boag, Wis.
Jensma, Anna.....	Newton, Iowa
Johnson, Vendla.....	Denver, Colo.
Jones, Adrienne.....	Fort Morgan, Colo.
Keenan, Julia E.....	Brudett, Colo.
Larson, Esther.....	Hugo, Colo.
Layland, Sadie.....	Colfax, Iowa
Leach, Dora M.....	Cheyenne, Wyo.
LeRoy, Frances R.....	Denver, Colo.
Linford, Leva V., Mrs.....	Stratton, Colo.
Lockart, Bruce.....	Greeley, Colo.

Maes, Alice.....	Trinidad, Colo.
Martinez, Marina.....	Conejos, Colo.
Martz, A. J.....	Byers, Colo.
Matthews, Mary.....	Ft. Garland, Colo.
May, Stella.....	Salyersville, Ky.
McBride, Grace.....	Akron, Colo.
McCammon, Verbena.....	Carlisle, Ind.
McCown, Gladys.....	Pryor, Colo.
McLean, Gladys.....	McClove, Colo.
Miller, A. DeFoe.....	Denver, Colo.
Minton, Frances.....	
Misemer, Hazel.....	Red Cliff, Colo.
Molander, Hilma.....	Ault, Colo.
Moreland, Grace.....	Simla, Colo.
Munter, Violet.....	Burlington, Colo.
Nauman, Blanche, Mrs.....	Mound City, Mo.
Neat, Elizabeth.....	Brandon, Colo.
Nelson, Alma.....	Lawrence, Kan.
Ohlson, Hannah L.....	Kiowa, Colo.
Payne, Opal L.....	Arickaree, Colo.
Perry, Viola M.....	Byers, Colo.
Puckett, Maude.....	Partridge, Kan.
Rabideaux, Raye.....	Edwards, Colo.
Robinson, D. E., Mrs.....	Loveland, Colo.
Roderick, Gladys.....	Agular, Colo.
Rose, Myrtle.....	140 Fifth St.,
Sanders, Olga V.....	Wild Horse, Colo.
Schiele, Charles H.....	Kirby, Wyo.
Schneider, Bessie.....	Archer, Iowa
Scott, Mina.....	Denver, Colo.
Schwartz, Walter F.....	
Soder, Sigfried.....	Yoder, Colo.
Staples, Lou T.....	Montrose, Colo.
Sterritt, Emma.....	Wiley, Colo.
Swift, Jessie F.....	R. R. 5, Greeley, Colo.
Todd, Edith.....	Monte Vista, Colo.
Townsend, Gladys M.....	Pampa, Texas
Turner, Carrie.....	Kiowa, Colo.
Van Hook, Marie.....	Stratton, Colo.
Van Hook, Seville.....	Kiowa, Kan.
Valdez, Teresa.....	Trinidad, Colo.
Ward, Ethel.....	Rush, Colo.
Ward, Olive.....	Eaton, Colo.
Ward, Sue.....	Denver, Colo.
Ware, Amy S.....	
Weaver, Carrie, Mrs.....	Weimer, Ark.
Williams, Hazel.....	Byers, Colo.
Williamson, Jessie E.....	Greeley, Colo.
Williamson, Elsie.....	Greeley, Colo.
Wilson, Isabel.....	Trinidad, Colo.
Wilson, Maud.....	Boulder, Colo.
Wisroth, Minnie.....	Fort Morgan, Colo.
Woodward, Bernice.....	
Wrenn, Elizabeth.....	Seibert, Colo.
Young, Mary M.....	Arickaree, Colo.

SCHOOL OF ADULTS

Three Quarters 1917-1918

Anderson, Lilly.....	Weldona, Colo.
Barnes, Orel.....	Greeley, Colo.
Bell, Fanny, Mrs.....	Greeley, Colo.
Bouchert, Anna.....	Goldfield, Colo.
Bruce, Mary E.....	Greeley, Colo.
Cook, Catherine, Mrs.....	Greeley, Colo.
Coontz, Helen.....	Greeley, Colo.
Davis, Helen.....	Greeley, Colo.
Faith, Elsie.....	Greeley, Colo.
Glaze, Hazel, Mrs.....	Brandon, Colo.
Glenn, Jessie.....	Greeley, Colo.
Hall, Winifred.....	Greeley, Colo.
Harvey, Abigail.....	Sterling, Colo.
Hastings, Marie.....	Pueblo, Colo.
Howard, Florence.....	Greeley, Colo.
Huston, Charles.....	Greeley, Colo.
Hunt, Ramon.....	Greeley, Colo.
Ives, Marie, Mrs.....	Greeley, Colo.
Johnson, Myrtle, Mrs.....	Greeley, Colo.
Jones, James.....	Greeley, Colo.
Jones, Mollie, Mrs.....	Greeley, Colo.
McCown, Gladys.....	Greeley, Colo.
McVey, Philip.....	Ft. Morgan, Colo.
Morrow, Mildred.....	Greeley, Colo.
Munter, Violet.....	Burlington, Colo.
Neiman, Nellie.....	Greeley, Colo.
Pierce, Alice.....	Craig, Colo.
Reddish, Mabel, Mrs.....	Greeley, Colo.
Romire, Sophie.....	Marrietta, Ohio
Smith, Eric.....	Greeley, Colo.
Tenney, Arthur B.....	Greeley, Colo.
Underhill, M., Mrs.....	Greeley, Colo.
Yeager, Edward.....	Greeley, Colo.
Young, Mary M.....	Greeley, Colo.

GROUP EXTENSION STUDENTS

1917-1918

Adams, Birdie.....	Congress Hotel, Pueblo,	Colo.
Adams, Roxana.....	York Hotel, Denver,	Colo.
Adkisson, Mary, Mrs.....	Plymouth Hotel, Denver,	Colo.
Akin, Eunice.....	1108 Remington, Ft. Collins,	Colo.
Alford, Ora W., Mrs.....	1025 Clarkson, Denver,	Colo.
Allard, Lucille.....	705 W. Eleventh, Pueblo,	Colo.
Allen, Florence, Mrs.....	1331 Court Place, Denver,	Colo.
Allen, Jamie.....	617 Remington, Ft. Collins,	Colo.
Allen, Louisa T.....	3390 W. Twenty-ninth Ave.,	Denver, Colo.
Anderson, Ana V.....	3635 Williams, Denver,	Colo.
Anderson, Hazel.....	345 York, Denver,	Colo.
Anthony, Hazel.....	Acacia Hotel, Colorado Springs,	Colo.
Atkinson, Mabel.....	515 Pike Ave., Cañon City,	Colo.
Atkinson, Blanche.....	1237½ E. Evans, Pueblo,	Colo.
Atkinson, Marguerite.....		
Baker, Lillian O.....	Court House, Pueblo,	Colo.
Balkin, Martha M.....	1634 Eudora St., Denver,	Colo.
Ball, Minnie.....	Akron,	Colo.
Barlow, Mary B.....	Denver,	Colo.
Barnes, Bernice.....	100 Nevada Ave., Trinidad,	Colo.
Beagler, Una.....	Denver,	Colo.
Beattie, Nettie.....	511 So. Third Ave., Sterling,	Colo.
Bell, Bessie.....	212 W. Thirtieth St., Pueblo,	Colo.
Bennett, Merle.....	314 E. Mulberry, Ft. Collins,	Colo.
Benson, Miriam, Mrs.....	911 Rudd Ave., Cañon City,	Colo.
Benton, Grace.....	116 E. St. Vrain, Colorado Springs,	Colo.
Berliner, Belle.....	603 W. Twelfth St., Pueblo,	Colo.
Beynon, Margaret.....	44 Grant St., Denver,	Colo.
Bishop, Ruth.....	1241 Lincoln, Denver,	Colo.
Blain, Maud.....	111 W. Eleventh, Pueblo,	Colo.
Blaine, W. D.....	1103 E. Fifteenth St., Pueblo,	Colo.
Blakeley, Lillian.....	151 S. Ogden, Denver,	Colo.
Bloch, Beatrice.....	4142 Julian, Denver,	Colo.
Boge, Ethel.....	2857 Stuart, Denver,	Colo.
Boggs, Erma.....	209 Evans, Pueblo,	Colo.
Bonham, Bonnie.....	Denver,	Colo.
Booth, F., Mrs.....	631 Van Buren, Pueblo,	Colo.
Boreing, Maud.....	1216 E. Eighth, Pueblo,	Colo.
Botting, Ethel.....	4142 Julian, Denver,	Colo.
Boucher, Anna.....	123 Lake Ave., Pueblo,	Colo.
Boyles, Hattie.....	3383 W. Thirty-first Ave., Denver,	Colo.
Bramkamp, Ethel.....	3440 Madison, Denver,	Colo.
Brauns, Florence, Mrs.....	Denver,	Colo.
Briggs, Anna M.....	2525 W. Thirty-fourth Ave.,	Denver, Colo.
Brinker, Olive.....	Denver,	Colo.
Brown, Clara M.....	Swallows,	Colo.
Brown, Leila.....	2929 W. Twenty-sixth St.,	Denver, Colo.
Bryan, Ethel.....	1838 Washington, Denver,	Colo.
Bryson, Elizabeth.....	400 S. Meldona, Ft. Collins,	Colo.
Budin, Christina.....	312 Beech, Sterling,	Colo.
Bunner, Katherine.....	Colorado Springs,	Colo.
Burgess, Louise.....	730 N. Nevada, Colorado Springs,	Colo.
Burgess, Elizabeth.....	1023 N. Eighth St., Cañon City,	Colo.
Burnette, Adda.....	139 Arden Place, Denver,	Colo.
Burton, Edith.....	1617 N. Ninth St., Cañon City,	Colo.
Cain, F. E.....	2323 Spruce, Pueblo,	Colo.
Cameron, Dora, Mrs.....	2645 Albion St., Denver,	Colo.
Campbell, J. H.....	522 So. College, Ft. Collins,	Colo.
Campbell, May C.....	423 W. Twenty-first St., Pueblo,	Colo.
Carlson, Edna.....	1835 S. Sherman, Denver,	Colo.
Carlson, Eloise.....	1217 Jefferson, Pueblo,	Colo.
Carpenter, Lavinia.....	Akron,	Colo.
Carson, Henrietta.....	813 Macon Ave., Cañon City,	Colo.
Cash, Mildred.....	Pinon,	Colo.
Cattell, Nancy.....	Tours Hotel, Denver,	Colo.
Chandler, Huda, Mrs.....	724 Fourth Ave., Trinidad,	Colo.

Charles, C. W., Miss.	51 S. Pearl St.,	Denver, Colo.
Chase, Lucile B.		Denver, Colo.
Cherrington, Mary		Pueblo, Colo.
Cherney, Frances	118 Grant,	Denver, Colo.
Christopherson, Genevieve	501 E. Colfax,	Denver, Colo.
Churchill, Ruth		Denver, Colo.
Clafin, Wm., Mrs.	512 N. Tenth St.,	Cañon City, Colo.
Clark, Annie M.	Plaza Hotel,	Denver, Colo.
Clark, May E., Mrs.	1643 Pennsylvania,	Denver, Colo.
Clerici, Antoinette	509 Short St.,	Trinidad, Colo.
Clow, Jean		Denver, Colo.
Coffran, Avis	1896 S. Washington,	Denver, Colo.
Cohn, Ida		Berwind, Colo.
Collins, Mary M.	1030 Washington,	Denver, Colo.
Combs, Ethel	2923 W. Twenty-eighth Ave.,	Denver, Colo.
Conesney, Hero		Denver, Colo.
Coney, Edna		Weston, Colo.
Converse, Barbara	801 E. Tenth St.,	Pueblo, Colo.
Cooper, Ellen		Denver, Colo.
Cornell, Laura	135 Logan,	Denver, Colo.
Courtwright, Theo.		Colorado Springs, Colo.
Coyle, Dena	Maine Hotel,	Pueblo, Colo.
Crawford, Ethel Dee	1114 So. Gaylord,	Denver, Colo.
Craze, Anna, Mrs.	209 S. Meldona,	Ft. Collins, Colo.
Culton, Edith	327 Vine,	Denver, Colo.
Cunningham, Daisy	1647 Emerson,	Denver, Colo.
Curtis, Bessie	2230 Grand Ave.,	Pueblo, Colo.
Cuthbert, James	1101 Rudd Ave.,	Cañon City, Colo.
Daily, Grace	1123 Sherman,	Denver, Colo.
Dalton, Agnes	1315 Conley,	Pueblo, Colo.
Daniels, Winifred	774 S. Penn.,	Denver, Colo.
Davidson, Eleanor	Shirley Hotel,	Denver, Colo.
Demmel, Margaret	605 Matthews,	Ft. Collins, Colo.
Dickinson, Amy		Sterling, Colo.
Dilts, Delphi	514 Remington,	Ft. Collins, Colo.
Donley, Edith		Pueblo, Colo.
Donnelly, Irene	1041 Lake,	Pueblo, Colo.
Donahue, Jessie	1725 Lake,	Pueblo, Colo.
Drummond, Mrs. Mary	807 E. Fifth,	Pueblo, Colo.
Duffes, Martha		Denver, Colo.
Dungan, Edith	2554 W. Thirty-second Ave.,	Denver, Colo.
Dunlavy, W. P., Mrs.	623 Colorado Ave.,	Trinidad, Colo.
Dye, Leota	813 Greenwood,	Pueblo, Colo.
Dyer, Anna Z., Mrs.	807½ E. Evans,	Pueblo, Colo.
Eagleton, M. R.	1581 Steele St.,	Denver, Colo.
Eagleton, W. H.		Denver, Colo.
Elliott, Agnes, Mrs.	20 Carlisle,	Pueblo, Colo.
Ellis, Ralph W.	623 N. Fifth St.,	Cañon City, Colo.
Ellison, C. W.	5300 W. Forty-first Ave.,	Denver, Colo.
Evans, Hattie	816 Cheyenne Road,	Colorado Springs, Colo.
Farr, Gladys	413 S. College,	Ft. Collins, Colo.
Farrell, Clara		Denver, Colo.
Farrell, Edna	3053 W. Twenty-sixth Ave.,	Denver, Colo.
Fessler, Margaret	302 E. Magnolia,	Ft. Collins, Colo.
Fisher, Annie C.	1244 Downing,	Denver, Colo.
Fischer, Elizabeth	631 Laporte,	Ft. Collins, Colo.
Fletcher, C. K., Mrs.	436 E. Eighth St.,	Pueblo, Colo.
Floyd, Catherine		Denver, Colo.
Force, Anna L.		Denver, Colo.
Foster, Josephine	1439 Steele St.,	Denver, Colo.
Foster, Luch		Denver, Colo.
Franks, Amelia		Berwind, Colo.
Frees, Anna	3334 Humboldt,	Denver, Colo.
Fruehling, Maude	215 Whedbee,	Ft. Collins, Colo.
Gaines, Louise	1317 Court,	Pueblo, Colo.
Gaines, Mary	1317 Court,	Pueblo, Colo.
Gallup, Mrs.	815 W. Twelfth,	Pueblo, Colo.
Gardiner, Mary E.	Y. W. C. A.,	Pueblo, Colo.
Gardiner, Ruby, Mrs.		Colorado Springs, Colo.
Gass, Maude	Plymouth Hotel,	Denver, Colo.
Gay, Ada	3632 Raleigh,	Denver, Colo.
Gayman, Harriett	1015 Colorado Ave.,	Colorado Springs, Colo.
Gayton, Julia	1025 E. Evans,	Pueblo, Colo.
Girardot, Augustine	1135 Fillmore St.,	Denver, Colo.
Glenn, Ada	1634 Eudora,	Denver, Colo.
Goddard, Susan	155 Harrison Ave.,	Denver, Colo.
Gookins, Clara, Mrs.	422 N. Lincoln,	Loveland, Colo.
Gossage, Thela		Sterling, Colo.

Graff, Fannie	275 S. Clarkson,	Denver,	Colo.
Graham, Lulu	1429 Vernon,	Pueblo,	Colo.
Greene, Mary		Denver,	Colo.
Griffith, Janet	151 Archer Place,	Denver,	Colo.
Grossmayer, Clara	628 Sherman,	Denver,	Colo.
Hall, Grace, Mrs.	1328 Corona,	Denver,	Colo.
Hall, Luella	315 N. Weber,	Colorado Springs,	Colo.
Hanerty, Estella	814 W. Eleventh St.,	Pueblo,	Colo.
Hansen, Katherine	1002 E. Seventeenth Ave.,	Denver,	Colo.
Hanson, Zelma	1320 Steele,	Denver,	Colo.
Harris, Catherine		Cañon City,	Colo.
Harris, Ruth		Akron,	Colo.
Harrison, Coy	716 Floral Ave.,	Cañon City,	Colo.
Hartford, Fred	Orchard Hotel,	Denver,	Colo.
Hartung, Belle	2328 Hooker St.,	Denver,	Colo.
Hassinger, Willamette	1728 Downing,	Denver,	Colo.
Hauptman, Ruth	620 Nineteenth St.,	Pueblo,	Colo.
Hayhurst, Adeline	408 E. Bijou,	Colorado Springs,	Colo.
Hazlett, Elizabeth	201 W. Eleventh,	Pueblo,	Colo.
Heabler, Grace	1085 Lowell Blvd.,	Denver,	Colo.
Hedges, Cecilia	1851 Logan,	Denver,	Colo.
Helander, Amelia		Denver,	Colo.
Henningan, Bertha	95 Adams Ave.,	Pueblo,	Colo.
Henry, Mabel	Congress Hotel,	Pueblo,	Colo.
Hill, Sallie	1029 Emerson,	Denver,	Colo.
Hoffman, Fern	941 S. Vine St.,	Denver,	Colo.
Holderer, Louisa	2345 Tenth St.,	Denver,	Colo.
Hollander, Ethel	638 E. Twelfth Ave.,	Denver,	Colo.
Holmes, Ethel		Denver,	Colo.
Hon, Clyde	285 Harrison St.,	Littleton,	Colo.
Hood, Lena M.	418 W. Eighth St.,	Pueblo,	Colo.
Horn, Ella	602 Walnut,	Trinidad,	Colo.
Horn, Mary	602 Walnut,	Trinidad,	Colo.
Howand, Elizabeth	716 E. First Ave.,	Denver,	Colo.
Hurford, Alice	1205 Lake Ave.,	Pueblo,	Colo.
Irving, Amelie D.	44 Lincoln,	Denver,	Colo.
Jacobs, Clara	129 W. Ninth St.,	Pueblo,	Colo.
Jamison, Vesta	Midland School,	W. Colorado Springs,	Colo.
Jay, Rose W.	1026 Berkley,	Pueblo,	Colo.
Johnson, Anna	1771 Pennsylvania,	Denver,	Colo.
Johnson, Anna M.	3340 Hayward Pl.,	Denver,	Colo.
Johnson, Charlotte		Denver,	Colo.
Johnson, Mae A.	3208 Hayward Pl.,	Denver,	Colo.
Jones, E. A., Mrs.	717 W. Fifteenth,	Pueblo,	Colo.
Jones, Mollie	707½ So. Union,	Pueblo,	Colo.
Jones, Sybil		Colorado Springs,	Colo.
Kauffman, Harriett	145 W. Byers,	Denver,	Colo.
Keller, Blanche	116 Logan,	Denver,	Colo.
Keller, Elizabeth	116 Logan,	Denver,	Colo.
Kennon, Emma		Denver,	Colo.
Kettle, Carolyn	619 S. Sherwood,	Ft. Collins,	Colo.
Kindall, Mabel	1407 Lake Ave.,	Pueblo,	Colo.
King, E. H., Mrs.	320 W. Tenth St.,	Pueblo,	Colo.
Kinport, Catherine		Denver,	Colo.
Knight, Helen	2370 Dahlia,	Denver,	Colo.
Kramer, Mary G.	221 W. Eleventh,	Pueblo,	Colo.
Kramer, Mary	2439 Vine,	Denver,	Colo.
Keiser, Jennie		Colorado Springs,	Colo.
Langdon, Mary	503 W. Eleventh,	Pueblo,	Colo.
Larsen, Agnes	822 Western Ave.,	Trinidad,	Colo.
La Velle, Mary	Arbuckle Apts.,	Lake Pl.,	Denver,
Laylander, Virda	420 W. Tenth,	Pueblo,	Colo.
Leonard, Gene	2023 Routt Ave.,	Pueblo,	Colo.
Lloyd, Jane		Rockvale,	Colo.
Lloyd, Sarah		Rockvale,	Colo.
Lowe, Irwin, Mrs.		Akron,	Colo.
Lowe, Naamah		Main Hotel,	Pueblo,
Lucas, Ethel	311 E. Magnolia,	Ft. Collins,	Colo.
Lyle, Ruth A.		Pierce,	Colo.
Maes, Alice	617 San Juan,	Trinidad,	Colo.
Martinez, Jose		Segundo,	Colo.
Mason, Prudence, Mrs.	1328 Washington,	Denver,	Colo.
Mathews, Ruth	2609 Third Ave.,	Pueblo,	Colo.
Maze, Nellie		Akron,	Colo.
Melgs, Isabelle	409 W. Thirteenth St.,	Pueblo,	Colo.
Meyer, Harriett	1081 S. Clarkson,	Denver,	Colo.
Michaels, Hollis	911 E. Tenth St.,	Pueblo,	Colo.

Middellkamp, M., Mrs.	1131 Lake Ave., Pueblo,	Colo.
Miller, Edith I.	406 E. Sixteenth St., Loveland,	Colo.
Miller, Gladys	314 N. Second, Sterling,	Colo.
Miller, Katherine	1272 Penn., Denver,	Colo.
Mills, Agnes	510 W. Twenty-first St., Pueblo,	Colo.
Mills, Ruthe E.	1356 Pearl St., Denver,	Colo.
Mitchell, Nellie	3419 High St., Denver,	Colo.
Montgomery, Mabel	1201 W. Third Ave., Denver,	Colo.
Moore, Dora	1027 Emerson, Denver,	Colo.
Moore, Earl B.	Colorado Springs,	Colo.
Moore, Edith	63 Van Buren, Pueblo,	Colo.
Moore, Jessie	528 W. Mt. Ave., Ft. Collins,	Colo.
Moore, Josephine	1639 Pearl, Denver,	Colo.
Moore, Pearl	528 W. Mt. Ave., Ft. Collins,	Colo.
Morris, Pearl	2525 Emerson St., Denver,	Colo.
Moreland, Genevieve	Denver,	Colo.
Morris, Hannah P.	Florence,	Colo.
Morrow, Margaret	Broadmoor, Colorado Springs,	Colo.
Mount, Julia	112 E. Ninth, Pueblo,	Colo.
Munn, Jennie, Mrs.	2111 Elizabeth, Pueblo,	Colo.
Myers, Blanche	Denver,	Colo.
McCausland, Callie	Golden,	Colo.
McClintock, Alva	731 W. Mt. Ave., Ft. Collins,	Colo.
McClintock, Mildred	Shirley Hotel, Denver,	Colo.
McClure, Stella	342 S. Corona, Denver,	Colo.
McDaniel, Grace	1739 E. Fifth St., Pueblo,	Colo.
McDonald, Mrs.	Denver,	Colo.
McDowell, Elizabeth	1527 Vine St., Denver,	Colo.
McFadden, Elizabeth	317 E. Cache La Poudre, Colorado Springs,	Colo.
McKelvey, Eva	3842 York St., Denver,	Colo.
McKissack, Ethel	317 Walnut, Ft. Collins,	Colo.
MacLiver, Mary	822 Arizona Ave., Trinidad,	Colo.
McMullen, Erma	Pierce,	Colo.
McNally, Mary C.	6 Carlisle Place, Pueblo,	Colo.
Nelson, Esther	Denver,	Colo.
Nichols, Irene	1055 Lincoln, Denver,	Colo.
Norris, Mrs. Josephine	1566 Kearney, Denver,	Colo.
Norris, Lillian G.	Harvard Hotel, Denver,	Colo.
Ogle, Mayme	126 E. Ninth St., Pueblo,	Colo.
Osborne, Myrtle	2059 Ogden, Denver,	Colo.
O'Toole, Clara	1054 S. Pearl, Denver,	Colo.
Pantall, Myrta	515 S. Third Ave., Sterling,	Colo.
Parker, Frances	1501 S. Washington, Denver,	Colo.
Parsons, Jessalyn	426 Corona, Denver,	Colo.
Peavey, Mary	2816 Douglas Ave., Denver,	Colo.
Pingrey, Jennie	605 Matthews, Ft. Collins,	Colo.
Poreing, Estelle E.	648 S. Grand St., Denver,	Colo.
Poston, Ella, Mrs.	Denver,	Colo.
Probst, Emma	2737 Champa, Denver,	Colo.
Raggs, Leila W.	1438 E. Eighth, Pueblo,	Colo.
Read, Faye	1425 Vernon, Pueblo,	Colo.
Read, Hazel	1425 Vernon, Pueblo,	Colo.
Rice, Harriett	1429 Bannock, Denver,	Colo.
Richardson, Hattie	2337 Dexter, Denver,	Colo.
Ritter, Garnett	721 W. Eleventh St., Pueblo,	Colo.
Ritter, Gladys	Denver,	Colo.
Robinson, Henrietta	52 W. Eleventh, Pueblo,	Colo.
Romick, Edna	1055 Lincoln, Denver,	Colo.
Romick, Lida G.	1055 Lincoln, Denver,	Colo.
Rowland, Sadie	1817 Glenarm, Denver,	Colo.
Rudolph, Elizabeth	3441 W. Thirty-ninth Ave., Denver,	Colo.
Ruggs, Josephine	1701 Grand, Pueblo,	Colo.
Rule, Beatrice	Colorado Springs,	Colo.
Rumley, Maude	915 Cleveland, Loveland,	Colo.
Russell, S. Alice	Denver,	Colo.
Ryan, Adela	Golden,	Colo.
Sansburn, Alvin	Akron,	Colo.
Sansburn, A., Mrs.	Akron,	Colo.
Sawyer, Dora	1272 Pennsylvania, Denver,	Colo.
Scofield, Ruby	406 W. Thirteenth St., Pueblo,	Colo.
Scott, Abigail	1042 Clarkson, Denver,	Colo.
Scott, C. E.	Pueblo,	Colo.
Scott, L. M., Mrs.	1042 Clarkson, Denver,	Colo.
Sleeper, Sara	63 Logan, Denver,	Colo.
Scott, May	7081 W. Mt. Ave., Ft. Collins,	Colo.
SeEVERS, Adalyn	405 W. Twelfth, Pueblo,	Colo.
Shoity, Maude	1209 E. Third St., Loveland,	Colo.

Shriber, Eva	731 W. Mt. Ave., Ft. Collins,	Colo.
Sidwell, Dessie	812 College Ave., Cañon City,	Colo.
Sieg, Elizabeth	500 Eighteenth, Golden,	Colo.
Simkins, Emma C.	1345 N. Weber, Colorado Springs,	Colo.
Slattery, Mary	2316 Grand, Pueblo,	Colo.
Smith, Frances	903 W. Fifth St., Loveland,	Colo.
Smith, Margaret	617 Remington, Ft. Collins,	Colo.
Smith, Norma Salmon	1745 Clarkson, Denver,	Colo.
Smith, Ruth	109 Denver, Sterling,	Colo.
Snyder, Rose	731 W. Mt. Ave., Ft. Collins,	Colo.
Songer, Ruth	221 Quincy, Pueblo,	Colo.
Sperry, Lillian	449 Park St., Trinidad,	Colo.
Spetnagel, Nedlie	Denver,	Colo.
Staples, Sibil	Sopris,	Colo.
Stapleton, Joan	1360 Quince, Denver,	Colo.
Staub, Isabella	4247 Umatilla, Denver,	Colo.
Steady, Millicent	502 Greenwood, Cañon City,	Colo.
Steele, J. H.	1041 Lafayette, Denver,	Colo.
Steffan, Eliza K.	844 S. Washington, Denver,	Colo.
Stein, Ethel, Mrs.	Akron,	Colo.
Stephens, Gertrude	1736 Race St., Denver,	Colo.
Stevens, Emma, Mrs.	1109 Wood, Colorado Springs,	Colo.
Stewart, C. E.	Akron,	Colo.
Stoelzing, Katrina	Colorado Springs,	Colo.
Stone, Gertrude	741 Brown Ave., Pueblo,	Colo.
Stone, Lulu	3768 Perry, Denver,	Colo.
Strauss, Elsie	1575 Galena, Denver,	Colo.
Strong, R. W.	3925 Woolf St., Denver,	Colo.
Suess, Olive	1131 Steele St., Denver,	Colo.
Summers, Edith H.	269 S. Clarkson, Denver,	Colo.
Sutherland, Clara	318 S. Division, Sterling,	Colo.
Sweeny, Frances	117 W. Fifth Ave., Denver,	Colo.
Sweet, Inez	4118 Xavier St., Denver,	Colo.
Swenson, Blanche	Denver,	Colo.
Tate, Anna	Florence,	Colo.
Tate, Emma	Florence,	Colo.
Taylor, Edna	747 Jefferson, Loveland,	Colo.
Taylor, Lela	Trinidad,	Colo.
Telfer, Annis	937 Palmer, Pueblo,	Colo.
Terrian, Myrtle	731 W. Mt. Ave., Ft. Collins,	Colo.
Thomas, Hattie	1351 Grant Apt., Denver,	Colo.
Tobin, Saidie	Shirley Hotel, Denver,	Colo.
Tohill, Elizabeth	219 N. Third St., Sterling,	Colo.
Torre, Frank	Madrid,	Colo.
Trehearne, Frances L.	1516 S. Clarkson, Denver,	Colo.
Trent, Gertrude	Fountain School, Pueblo,	Colo.
Tucker, Jennie	Weldona,	Colo.
Turcott, Cyprienna	Denver,	Colo.
Vigil, Don	508 Stonewall Ave., Trinidad,	Colo.
Walek, Anna	513 Chestnut, Sterling,	Colo.
Waller, Gretna	Denver,	Colo.
Walsh, Eva	1242 Ogden, Denver,	Colo.
Walter, Gladys	1000 E. Tenth, Pueblo,	Colo.
Weber, Edith	401 E. Eleventh, Denver,	Colo.
Weeber, Callie	3408 E. Sixteenth Ave., Denver,	Colo.
Wesner, Pauline	112 Taylor, Sterling,	Colo.
West, Georgia	Denver,	Colo.
Wheeler, Emma	2323 Dahlia, Denver,	Colo.
Whetsel, Anna	108 Rice, Pueblo,	Colo.
White, Edna, Mrs.	408 Jackson, Sterling,	Colo.
White, Julia	Denver,	Colo.
Whitehead	729 Emerson St., Denver,	Colo.
Wicks, Edna	753 S. Logan, Denver,	Colo.
Wieman, Emma	Colorado Springs,	Colo.
Williams, Ethel	814 W. Eleventh St., Pueblo,	Colo.
Williams, Francis	506 Washington, Trinidad,	Colo.
Williams, Sarah	419 N. Third St., Sterling,	Colo.
Williams, V. V., Mrs.	405 W. Twelfth St., Pueblo,	Colo.
Willis, Belle	416 E. San Miguel, Colorado Springs,	Colo.
Willsea, Mary	610 Logan, Apt. 19, Denver,	Colo.
Wilson, Clara	327 W. Tenth St., Pueblo,	Colo.
Wilson, Mary S.	1624 Grant, Denver,	Colo.
Wilson, May	Trinidad,	Colo.
Wolfenbarger, Bird, Mrs.	1250 Acoma, Denver,	Colo.
Woodford, Elton B.	131 Garfield St., Cañon City,	Colo.
Woodmansee, Clara	903 W. Fifth St., Loveland,	Colo.
Woods, Alberta	1219 Lake Ave., Pueblo,	Colo.
Young, Edith	604 N. Lincoln, Loveland,	Colo.
Zirkle, H. W.	357 Lincoln, Denver,	Colo.

INDIVIDUAL EXTENSION STUDENTS

1917-1918

Ahlstrand, Edythe, Mrs.	.....	Greeley, Colo.
Alouin, Sister M.	.....	Cañon City, Colo.
Allen, Louisa T.	.....	Littleton, Colo.
Allen, Mary E., Mrs.	.....	Denton, Texas
Amsbary, Louise	.....	Delta, Colo.
Anderson, Pearl J.	.....	Delta, Colo.
Anderson, Ruth	.....	Breckenridge, Colo.
Andrews, Lucille	.....	Morrill, Nebr.
Anthony, Hazyl	.....1760 Pennsylvania St.,	Denver, Colo.
Atkinson, Mabel	.....	Acacia Hotel, Colorado Springs, Colo.
Bailey, Ella	.....	Frederick, Okla.
Bailey, Iva M.	.....	Portland, Colo.
Baker, W. E.	.....	Telluride, Colo.
Barker, Anna	.....	Belvidere, Ill.
Barker, Georgia, Mrs.	.....	Burlington, Colo.
Barker, Miriam	.....231 Twenty-second St.,	Denver, Colo.
Barnard, Gladys	.....	Penrose, Colo.
Bastin, Marguerite	.....	Basin, Wyo.
Bean, Estella	.....1411 Exchange Ave., East St. Louis, Ill.	
Berliner, Belle	.....603 W. Twelfth St.,	Pueblo, Colo.
Billings, Daisy	.....	Flint, Mich.
Boge, Mabel	.....	La Fayette, Colo.
Bragg, Lottie	.....	Ft. Collins, Colo.
Brandon, Elizabeth	.....	Otis, Colo.
Brennan, Margaret	.....	Grand Valley, Colo.
Briggs, J. A.	.....	Grover, Colo.
Brosnan, Margaret	.....411 Main St., Ft. Morgan,	Colo.
Bryson, R. L., Mrs.	.....	La Junta, Colo.
Burke, Frances	.....	Beloit, Kan.
Burke, A. L.	.....	Shawnee, Okla.
Burnette, Adda	.....139 Arden Place,	Denver, Colo.
Buchanan, Sue	.....901 Cherry St., Ft. Worth,	Texas
Butler, Bernice	.....925 S. Fourteenth St.,	Greeley, Colo.
Calloway, Esther	.....	Corning, Iowa
Carey, Elma	.....	Council Bluffs, Iowa
Carter, F. A., Mrs.	.....	Hardin, Colo.
Chapman, Klyda	.....	Buhl, Idaho
Chapman, Orel	.....	Sheephorn, Colo.
Chesney, Bessie M.	.....	Allison, Mo.
Choisser, D. P.	.....	Milliken, Colo.
Christeson, Lulu	.....	Alta, Iowa
Clark, Georgia, Mrs.	.....405 E. Sixth Ave.,	Denver, Colo.
Clerici, Irma	.....	Estelene, Colo.
Clark, Gertrude	.....	Greeley, Colo.
Clark, Laura D.	.....	Longmont, Colo.
Cochran, Grace L.	.....	Kirksville, Mo.
Conant, Stanford	.....	Sterling, Colo.
Confar, Mary, Mrs.	.....	Crosby, Wyo.
Converse, Barbara	.....801 E. Tenth St.,	Pueblo, Colo.
Conway, Marie	.....	Pine, Colo.
Cook, Vinnie, Mrs.	.....221 S. Tenth St.,	Hannibal, Mo.
Couch, Gertrude S.	.....	Grandlake, Colo.
Cox, Marian	.....1614 Eighth Ave.,	Greeley, Colo.
Craton, Lily	.....	Evans, Colo.
Crawford, Julia	.....	Riffe, Colo.
Cross, Vanda	.....	Garden City, Kan.
Crowley, W. Irving	.....	Marietta, Okla.
Culp, Ruby L.	.....405 N. "C" St.,	Muskogee, Okla.
Damon, J. G.	.....	Pierce, Colo.
Damon, L. H.	.....	Lincolnville, Kan.
Davis, Jessie	.....	Jordan, Mont.
Davis, Ruth	.....314 Grant St., Ft. Morgan,	Colo.
De Hart, Mae	.....	Bovina, Colo.
Demmel, Margaret	.....605 Matthews St., Ft. Collins,	Colo.
Donelson, Hazel	.....	Coalmont, Colo.
Doney, H. H.	.....	Frederick, Colo.

Dotson, M. A., Mrs.	1311 Twelfth Ave., Greeley, Colo.
Dryden, Ida E.	Nederland, Colo.
Dunlavy, W. P., Mrs.	623 Colorado Ave., Trinidad, Colo.
Durkee, Clara	Adams Crossing, W. Colorado Springs, Colo.
Edwards, Hazel B.	Grover, Colo.
Eldridge, Jessie	Florence, Colo.
Elmer, Mary C., Mrs.	1303 Fourth St., Greeley, Colo.
Ely, Clara	2572 Quincy Ave., Ogden, Utah
Erwin, Eva	
Feist, Mildred	Aspen, Colo.
Felts, R. H.	Telluride, Colo.
Filbin, Addie Mae	Monte Vista, Colo.
Finch, Callie	Terry, S. Dak.
Finch, Carolina	Rush, Colo.
Fisher, Annie C.	1244 Downing St., Denver, Colo.
Fleming, A. L., Mrs.	Perry, Okla.
Floharty, Ada	Mancos, Colo.
Frasier, Alice M.	Montrose, Colo.
Galt, Ruth A.	Saratoga, Wyo.
Garber, Vera	Mankato, Kan.
George, Edyth	Silt, Colo.
Gilchrist, Evelyn	Wingler Hotel, Kansas City, Mo.
Glasse, Helen, Mrs.	Ft. Morgan, Colo.
Golladay, Grace	Holly, Colo.
Gossage, Thela	Sterling, Colo.
Graham, Glenes	Broken Bow, Nebr.
Graham, Mary E.	422 State St., Ft. Morgan, Colo.
Green, Prudence	Wellington, Kan.
Grever, Mina	Ordway, Colo.
Grisier, Orville	Wiggins, Colo.
Guanella, Clementine	549 W. Washington, Council Bluffs, Iowa
Guanella, Frances	549 W. Washington, Council Bluffs, Iowa
Gust, Katherine	1045 Tenth St., Denver, Colo.
Hadsell, Zeda	Kit Carson, Colo.
Haines, Mary E.	Sugar City, Colo.
Hamilton, Elsie B.	Gilchrist, Colo.
Harbert, Lily E.	Spense, Colo.
Harshman, Edith, Mrs.	Akron, Colo.
Harrison, Coy	Goldfield, Colo.
Hayden, Jessie	Arboles, Colo.
Hayton, Kate, Mrs.	Del Norte, Colo.
Hayes, Ethel	2320 Routt Ave., Pueblo, Colo.
Heitsman, Kathryn, Mrs.	R. F. D. No. 247, Cañon City, Colo.
Herrick, Flora L., Mrs.	Arena, Colo.
Heusi, T. Lilia	Kiowa, Colo.
Hewitt, Mildred	Carbondale, Colo.
Hill, L. Pearl	Waynoka, Okla.
Hinds, A. W.	Sedgwick, Colo.
Hoagland, Edgar A.	P. O. Box 193, Center, Colo.
Holland, Beulah	Wheatland, Wyo.
Hollearin, Susan	Ludlow, Colo.
Holmes, Mossie	Muskogee, Okla.
Hooker, B. L.	Kuner, Colo.
Heeter, Elgie	Kiefer, Okla.
Howard, Elizabeth	202 N. Fourteenth St., Albuquerque, N. M.
Hughes, Clara	1703 Eleventh Ave., Greeley, Colo.
Hunter, Annie	1414 E. Okmulgee St., Muskogee, Okla.
Hunter, Esther	1414 E. Okmulgee St., Muskogee, Okla.
Hunter, Emly	1414 E. Okmulgee St., Muskogee, Okla.
Jack, Alice	Two Buttes, Colo.
Jannanius, Sister M.	Sioux Falls, S. Dak.
Jerrell, E. W.	Rouse, Colo.
Johnston, J. Helen	Evans, Colo.
Jones, Lena	Littleton, Colo.
Justice, Hazel	Fowler, Colo.
Keller, Elizabeth	116 Logan St., Denver, Colo.
Kibby, Ira W.	546 E. Pasadena, Pomona, Calif.
Kindall, Mabel	1407 Lake Ave., Pueblo, Colo.
Kirke, Irene	1232 Baltimore, Tulsa, Okla.
Koogle, Rose, Mrs.	Greeley, Colo.
Kouns, Zella	Fowler, Colo.
Krueger, F. T.	Windsor, Colo.
Kyler, Lela	Wellington, Colo.
Landstrom, Elvera	1402 Fairmount Ave., Council Bluffs, Iowa
Larson, Ruth	Grand Junction, Colo.

Latronico, Mamie.....	Louisville, Colo.
Leonard, Helen F.....	534 W. Main St., Aspen, Colo.
Little, Rosamond.....	Limon, Colo.
Lockhart, Lee.....	Rupert, Idaho
Logan, Ivy.....	Grinnell, Iowa.
Loughery, Catherine.....	612 E. Second St., Trinidad, Colo.
Maes, Alice.....	Trinidad, Colo.
Marshall, Emily.....	Wasco, Ore.
Martin, Celeste May.....	Chromo, Colo.
Mason, Alice D.....	Georgetown, Colo.
Martz, A. J.....	Brooks, Mont.
Martz, A. J., Mrs.....	Brooks, Mont.
Massey, Margaret.....	Hoehne, Colo.
Maxey, Effie.....	Wood River, Ill.
Medill, Esther.....	Maybell, Colo.
Mehlman, Grace.....	Trinidad, Colo.
Miller, M. Elizabeth.....	1019 Seventeenth St., Greeley, Colo.
Miller, Hazel.....	Yoder, Colo.
Missimore, Alma.....	115 W. Tenth St., Oklahoma City, Okla.
Moderwell, Jessie.....	Penrose, Colo.
Montgomery, L. P., Mrs.....	Crawford, Colo.
Moore, Dorothy.....	Echeta, Wyo.
Moore, Maude.....	Santa Paula, Calif.
Moreland, Grace.....	Simla, Colo.
Murray, Laura.....	3338 Broadway, Kansas City, Mo.
McAllister, Nell.....	Eaton, Colo.
McArthur, Ethel.....	Salina, Kan.
McCray, Blanche.....	Telluride, Colo.
McCullough, A. M.....	Geneseo, Kan.
McCullough, W. O.....	Amity, Colo.
McGee, Edith I.....	Pagosa Springs, Colo.
McGetrick, Ada.....	Caldwell, Idaho
McGovern, Marie.....	Hugo, Colo.
McHenry, Della.....	Las Animas, Colo.
McKennie, Alice.....	613 Clement St., Hannibal, Mo.
McLaughlin, G. P.....	Montrose, Colo.
Nabors, Lela.....	Frederick, Okla.
Nash, Bessie.....	Bemis Hall, Colorado Springs, Colo.
Nash, Margaret.....	Cripple Creek, Colo.
Newcum, C. L.....	Bushnell, Ill.
Nordstrum, Florence.....	Grand Junction, Colo.
Nussbaum, Nelda.....	1115 Seventh St., Greeley, Colo.
O'Dea, Irene.....	Granite, Colo.
O'Hagen, Anna.....	Ideal, Colo.
O'Rourke, Mary.....	Fleming, Colo.
Randall, J. L.....	520 Seventeenth St., Greeley, Colo.
Randle, R. M.....	420 N. Eighth St., Clinton, Okla.
Redman, Ora.....	810 Fifteenth St., Rock Island, Ill.
Riess, Blanche.....	Glen, Colo.
Riley, Ione.....	Carbondale, Colo.
Ritter, Garnet.....	721 W. Eleventh St., Pueblo, Colo.
Roberts, Nellie C.....	720 Park St., Trinidad, Colo.
Robinson, Beulah.....	1124 N. Tejon St., Colorado Springs, Colo.
Robinson, Ethel.....	Hokie, Kan.
Robb, Eileen.....	Poseyville, Ind.
Rumley, Maude.....	Loveland, Colo.
Rundquist, Winona L.....	Stratton, Colo.
Park, Grace.....	Concordia, Kan.
Paterson, Anna.....	Independence, Kan.
Patrick, Grace.....	Cedar, Colo.
Patton, C. E.....	Wray, Colo.
Pearson, Bertha.....	Belton, Mo.
Peers, Katherine.....	2236 Twelfth St., Boulder, Colo.
Perry, Edith.....	Braymer, Mo.
Phelps, Loan J.....	McCook, Colo.
Phelps, Ruth M.....	Elbert, Colo.
Pingrey, Jennie.....	Fort Collins, Colo.
Poser, Anna Mae.....	723 Citizens Bldg., Cleveland, Ohio
Potter, E. C.....	716 N. Broad St., Guthrie, Okla.
Prewett, Hattie O.....	929 College Ave., Fort Worth, Texas
Pryor, Mary M.....	115 N. Bales, Kansas City, Mo.
Saathoff, W. H.....	Walsenburg, Colo.
Salberg, Eleanor.....	Greeley, Colo.
Sandy, Stella.....	631 Greenwood Ave., Cañon City, Colo.
Schmidt, Ellan.....	1524 Monroe St., Omaha, Nebr.
Schueler, Martha.....	Bellvue, Colo.

Scott, Beatrice, Mrs.	Wray,	Colo.
Sellards, Mae	Stratton,	Colo.
Sellars, Georgia	Hobart,	Okla.
Sharp, Mabel R.	Yoder,	Colo.
Shay, Verna	Norton,	Kan.
Shelton, Ada	919 Washington, Hobart,	Okla.
Shelton, Lutie B.	McAlester,	Okla.
Sless, Erma	Grand Junction,	Colo.
Smiley, Josephine	Sugar Loaf,	Colo.
Smith, May Gulliford, Mrs.	Colorado Springs,	Colo.
Smith, Mary Mrs.	1628 Eudora, Denver,	Colo.
Smith, Rena	Fort Garland,	Colo.
Smythe, Adah	1019 Seventeenth St., Greeley,	Colo.
Sparks, Earl G.	Governador, N. M.	
Stapleton, Joan E.	1360 Quince, Denver,	Colo.
Stewart, Lela	De Beque,	Colo.
Strain, Dorris T., Mrs.	Greeley,	Colo.
Swanson, Elsie M.	Manhattan,	Kan.
Swanson, Esther	Denver,	Colo.
Tate, Anna E.	Florence,	Colo.
Tate, Emma C.	Florence,	Colo.
Taylor, Edna	Loveland,	Colo.
Taylor, Lela E.	Trinidad,	Colo.
Taylor, Lola	Mancos,	Colo.
Taylor, Nettie, Mrs.	Del Norte,	Colo.
Thomas, Emily	Stoneham,	Colo.
Thomas, Glades	Cañon City,	Colo.
Thompson, Lillian	Kuner,	Colo.
Thorp, Luella	El Reno,	Okla.
Trump, Grace	Peyton,	Colo.
Van Hook, Leva	Stratton,	Colo.
Vandivier, Maude	Ironton,	Colo.
Voeltz, Eva	Mapleton,	Iowa
Wallace, Jessie	Wray,	Colo.
Walsworth, Lutie, Mrs.	Kearney,	Mo.
Walter, Lavernia	Rogen,	Colo.
Welbourne, Anna Acton	Stewartsville, Ind.	
Welch, Minnie	Central City,	Colo.
Webster, Lillian	Ft. Collins,	Colo.
West, Lucy	Pueblo,	Colo.
Westfall, J. E., Mrs.	Pueblo,	Colo.
Wheeler, Winnie	Montrose,	Colo.
White, H. Lou, Mrs.	Cripple Creek,	Colo.
Wilcox, Frances	Salida,	Colo.
Willis, Anna, Mrs.	Chandler,	Okla.
Williams, Hazel	Arena,	Colo.
Willson, Lois	Hardin,	Colo.
Wright, C. G.	Stratton,	Colo.
Yeoman, B. F.	Delta,	Colo.
Young, Edith	Loveland,	Colo.
Young, Agnes	Denver,	Colo.

INDIVIDUAL HIGH SCHOOL EXTENSION STUDENTS

1917-1918

Anthony, Florence.....	Colorado Springs, Colo.
Brandon, Elizabeth.....	Otis, Colo.
Burns, Ralph.....	Marion, Ill.
Cook, Katherine.....	Sunrise, Wyo.
Erickson, Frances.....	1215 Tenth Ave., Greeley, Colo.
Frye, Annie.....	Windsor, Colo.
Greek, Blanche.....	Seibert, Colo.
Haug, Bertha M.....	Limon, Colo.
Heeter, Elgie.....	Kiefer, Okla.
Hooker, B. L.....	Kuner, Colo.
Johnston, Blanche.....	Vona, Colo.
Maes, Alice.....	Trinidad, Colo.
Munter, Mabel.....	Burlington, Colo.
Maggs, Lee.....	Idalia, Colo.
Perry, Viola.....	Strasburg, Colo.
Pfost, E. E.....	P. C. Torpedo Station, Keyport, Wash
Saathoff, W. H.....	Walsenburg, Colo.
Underwood, Susie.....	Stratton, Colo.
Valdez, Teresa.....	Trinidad, Colo.
Van Hook, Ilalie.....	Stratton, Colo.
Wamberg, Bertha.....	Flagler, Colo.
Ware, Amy S.....	Darien, Wis.
Wilson, Maud.....	Ault, Colo.
Williams, Hazel.....	Arena, Colo.

COMMUNITY CO-OPERATION STUDENTS

1917-1918

Benjamin, H. C.	1020 Ninth Ave.,	Greeley, Colo.
Brown, Amy	1526 Ninth Ave.,	Greeley, Colo.
Buck, Vera	1221 Eighteenth St.,	Greeley, Colo.
Bruckner, Grace	1419 Seventh Ave.,	Greeley, Colo.
Cadwell, Gladys	1609 Tenth Ave.,	Greeley, Colo.
Callahan, Alice	1539 Tenth Ave.,	Greeley, Colo.
Calvin, Lenna	R. 4, Box 133,	Greeley, Colo.
Candlin, Victor	1110 Tenth St.,	Greeley, Colo.
Choury, Armande		Greeley, Colo.
Crawford, Grace	1434 Eleventh St.,	Greeley, Colo.
Croft, Bernicen	1521 Seventh Ave.,	Greeley, Colo.
Cunningham, Alice	1717 Tenth Ave.,	Greeley, Colo.
Dalby, Cora	1717 Tenth Ave.,	Greeley, Colo.
Darlington, Helen	1614 Eighth Ave.,	Greeley, Colo.
Desmond, Margaret	1919 Eleventh Ave.,	Greeley, Colo.
Diggs, Carrie Maie	1630 Ninth Ave.,	Greeley, Colo.
Doolittle, Mary	1825 Twelfth Ave.,	Greeley, Colo.
Doyle, Gladys	1620 Eighth Ave.,	Greeley, Colo.
Flood, Mary	1919 Eleventh Ave.,	Greeley, Colo.
Gibbeon, Lota	1217 Eighth Ave.,	Greeley, Colo.
Hamilton, Catherine	1427 Ninth Ave.,	Greeley, Colo.
Henry, Elizabeth C.	813 Seventeenth St.,	Greeley, Colo.
Johnson, Bevie	1303 Twelfth St.,	Greeley, Colo.
Inge, Marie	1625 Eighth Ave.,	Greeley, Colo.
Kelly, Chalice M.	1015 Fifteenth St.,	Greeley, Colo.
Knott, Dorothy	1709 Tenth Ave.,	Greeley, Colo.
Kussart, Jeannette	1820 Eighth Ave.,	Greeley, Colo.
Kyler, Lela	1544 Tenth Ave.,	Greeley, Colo.
Mayes, Mildred	1537 Eleventh Ave.,	Greeley, Colo.
Morrow, Mary E.	813 Seventeenth St.,	Greeley, Colo.
McAlvon, Anna	1717 Tenth Ave.,	Greeley, Colo.
McCarty, Anna	1609 Tenth Ave.,	Greeley, Colo.
Neeland, Mary	915 Sixteenth St.,	Greeley, Colo.
Newton, Florence	1539 Tenth Ave.,	Greeley, Colo.
Page, Mildred	604 Thirteenth Ave.,	Greeley, Colo.
Penley, Hazel	1724 Eleventh Ave.,	Greeley, Colo.
Petit, Avis	2022 Tenth Ave.,	Greeley, Colo.
Quimby, Grace	1802 Seventh Ave.,	Greeley, Colo.
Reid, Beneta	1821 Sixth Ave.,	Greeley, Colo.
Rhiner, Ethelyne	1533 Ninth Ave.,	Greeley, Colo.
Scanlan, Alice	Woman's Club Building,	Greeley, Colo.
Sipple, Carrie	1541 Eleventh Ave.,	Greeley, Colo.
Smith, Lucille	1933 Ninth Ave.,	Greeley, Colo.
Smith, May G., Mrs.		Greeley, Colo.
Stobbs, Edna	814 Nineteenth St.,	Greeley, Colo.
Swenson, Frances	1402 Tenth Ave.,	Greeley, Colo.
Thomas, Ruth		Greeley, Colo.
Taylor, Florence	1503 Ninth Ave.,	Greeley, Colo.
Thomas, Elenor		Greeley, Colo.
Underhill, H. A.	1128 Cranford,	Greeley, Colo.
Weidmann, Vera	1118 Tenth St.,	Greeley, Colo.
Wilder, Ruth, Mrs.	1622 Eleventh Ave.,	Greeley, Colo.

INDUSTRIAL HIGH SCHOOL ENROLLMENT

Summer Session
1917

NINTH GRADE

Barton, Helen A.
Bradbury, Elsie
Bradbury, Margaret
Calkins, Georgia
Carter, Albert
Cheyney, Edward
Coman, Dorothy
Conner, Kathleen
Dedrick, Mary F.
Dille, Elizabeth
Divily, Chester L.
Divily, George
Edwards, Jeannette
Fiedler, Hattie
Gaines, Aletha
Hauth, Clara B.
Hill, Hazel
Houston, Mabel
Johnson, Hazel
Kelley, Bernice

Klug, Cornelia
Mallot, Juanita
Mars, Ina
McConaughy, Leota
McMillan, Pauline
Mead, Pauline
Miller, Roberta
Milton, Anna
Mooney, Louis
Moss, Hallie
Palmer, Don
Penrose, Ellen
Piper, Lester
Poe, Maurice
Riley, Margaret
Ring, Olive
Robinson, Thelma
Schilynger, Esther
Stockover, Julia

TENTH GRADE

Anderson, Jeannette
Bickling, Elsie
Blair, Florence
Bonnell, Hannah
Brooks, Lorraine
Brooks, Violet
Brownfield, Elmer
Clark, Olive
Crist, Georgia
Croft, Geraldine
Curtis, Claire
Hanno, Sara

Hays, James
Howorth, Marion
Kessler, George
Lee, Beatrice
Lester, Kate
Mott, Irving
Platt, Irene
Runnels, Hazel
Smith, Winifred
Sprague, Erma
Veldron, Opal

ELEVENTH GRADE

Anderson, Gladys
Ball, Pearl
Dempewolf, Mary
Foster, Emma B.
Hays, Helen
Hoskins, James
Ives, Marie, Mrs.
Johnson, Dorothy
King, Helen
Larson, Bertha
Lee, Lola
Lowrence, Ward

McLeod, Lida
Onstine, Eunice
Priddy, Ina
Reynolds, Frances
Schoonmaker, G.
Sprangler, Mary M.
Stodgill, Daphne
Tarr, Adraith D.
Timothy, Eldred
Wagner, Josephine
Williams, Stella

TWELFTH GRADE

Baird, Ralph S.
Bickel, Lura
Calame, Alice
Candlin, Victor
Elam, Ruth
Ennes, Hazel
Erickson, Francis
Gabriel, Maud
Gunnison, Elizabeth
Hammond, Dolores

Hill, Florence
Jones, Elsie
Parsons, Gail
Rhoads, Bessie
Rhoads, Inez
Shrewsbury, Mary
Sitsman, Anna
Snook, Marvel
Stone, Marian

INDUSTRIAL HIGH SCHOOL

First, Second and Third Quarters 1917-1918

NINTH GRADE

Adams, Lois	Laurence, Wray
Adams, Elizabeth	Lewis, Donald
Alderette, Arthur	Markley, Arthur
Anderson, Archie	Martin, Earl
Armagost, Clair	Mashburn, Charles
Ashford, Ruth	McCarty, Bessie
Aultman, Wm.	McLucas, Solomon
Baird, Clyde	Meyer, Harry
Baird, Elsie	Milton, Anna
Ball, Lillian	Milton, Elsie
Bandomer, Martha	Moody, Matie
Bickel, Eva	Mooney, Lewis
Bloom, Frieda	Nims, Eleanor
Bly, Helen	O'Connell, Dan
Bradley, Willie	O'Neill, Margaret
Bullard, Arthur	Ostling, Herbert
Burnison, Ruth	Pierce, Myrtle
Cavey, Margaret	Piper, Lester
Cheyney, Redmond	Platt, Irene
Clarke, Fern	Raikes, Dean
Comstock, Verle	Rathbun, Blanche
Coons, Mayo	Rathbun, Hazel
Crispen, Lois	Raymond, Harry
Christman, Lloyd	Rea, Wm. Boyd
Dake, Ruth	Reddish, Carolyn
Davis, John	Reddish, Ruby
Devlin, Gertrude	Reese, Paulina
Dillon, Joseph	Robinson, Joe
Dunn, Errette	Runnels, Alieva
Durkee, Albert	Runnels, Leeta
English, Harold	Seastrand, Edna
Epple, Lillie	Seastrand, Ralph
Ewing, Kathryn	Schriber, Josephine
Fagerburg, David	Schriber, Paul
Finley, Winona	Short, Al Ray
Freeburg, Philip	Singleton, Charles
Gaines, Aletha	Spencer, Verlin
Geiser, Paul	Smilie, Dorothy
Ginther, Carrie	Smith, Sidney
Glover, Aaron	Stanke, Ruth
Hart, June	Swanson, George
Houston, Mabel	Swanson, Raymond
Howes, Lola	Taylor, David
Howes, Muriel	Tennant, Mary
Hugenberg, Edward	Thompson, Odessa
Jacobs, John	Timothv, Greeley
Johnson, Ebba	Tisdell, Dorothy
Johnson, Edwin	Twist, Lee
Johnson, Erroll	Van Horn, Mae
Johnson, Hazel	Van Wyke, Nellie
Johnson, Verna	Ward, Raymond
Jones, Alice	Ward, Thelma
Jones, Harold	Watkin, Robert
Kah, Rowena	Wilson, Ivy
Ketchum, Henrietta	Wilson, Ora
Kier, Searl	Wiedlund, Irene
Klug, Cornelia	Wood, Agnes
Kussart, Grace	Wood, Howard
Lagerstrom, Arthur	Wood, Lewis
Laurence, Alfred	Young, Leonard
Laurence, Hannah	

TENTH GRADE

Adams, Clarence	Hofschulte, Joseph
Allen, Jeannette	Howarth, Marion
Anderson, Lillie	Jacobs, Eastman
Balent, Albert	Jacobson, Samuel
Barber, Doris	James, Leota
Bardwell, George	King, Dorothy
Bickling, Elsie	Kyle, Blanche
Blair, Edith	Lewis, Edna M.
Blair, Florence	Lynch, Jack
Boyer, Eva	Marquis, Dell
Brooks, Loraine	Mathias, Harvey
Calkins, Georgia	McGill, Joe
Carlson, Esther	McWhorter, Leslie
Carter, Albert	Meyer, Harry
Case, Bernice	Moss, Hallie
Catterlin, Mabel	Mott, Irving
Cooperrider, Lela	Nutter, Faye
Dean, Marion	Offerle, Edwin
DeFord, Latelle	Old, Ellen
Dempewolf, Cecilia	Ostling, Lillian
Dickerman, Allen	Patterson, David
Downer, Dean	Peak, Irma
Downer, Marjorie	Pettigrew, Lewis
Dunn, Edwin	Pierce, Gladys
Dunn, Erwin	Pierce, Ruth
Edwards, Ruth	Piper, Walter
Evans, Dave	Poe, Aletha
Fiedler, Hattie	Robinson, Clifton
Gay, Frank	Runnels, Hazel
Gibson, Frank	Salberg, Lillie
Gifford, Fern	Seastrand, Ruth
Glover, John	Smith, Winifred
Grayson, Helen	Stephens, Horace
Hammond, Dolores	Stoneking, Grace
Hershiser, Joseph	Warner, Edris
Hill, Hazel	Wright, Omar
Hinch, Helen	Woods, Aeme

ELEVENTH GRADE

Anderson, Gladys	Lagerstrom, Hilma
Anderson, Grace	Lance, Florida
Backstrum, Ellen	Lebsack, Alice
Baldwin, Laura	Lee, Lola M.
Bassinger, Emery	Lovelady, Ernest
Bauer, Rose	McCune, Margaret
Bell, Curtis	McMillan, Myrta
Brooks, Violet	Mott, Frank
Bruckner, John	Mount, Mabel
Clark, Eula Olive	Paine, Sarah
Craven, Leo	Price, Mary
Delling, Alfred	Reese, Ruth
Dickerson, Elizabeth	Rhodes, Gertrude
Dunn, Irene	Robson, Eloise
Erickson, Lilly	Root, Stephen
Faulkner, Ronald	Singleton, Inez
Fisher, Frieda	Snook, Mern
Foley, Raymond	Sprague, Erna
Fortune, Ruby	Sputh, Olga
Graham, Vera	Stodghill, Daphne
Hardenburg, Earl	Theys, Henrietta
Henney, Catherine	Timothy, Eldred
Hoskins, James	Tucker, Irene
Huffman, Fern	

TWELFTH GRADE

Anderson, Henry	Eaton, Glen
Balent, John	Elam, Maude
Ball, Charles	Elam, Ruth
Ball, Pearl	Engel, Anna
Blair, Julia	Erickson, Francis
Brunstein, John	Flitner, Geraldine
Byxbie, Dorothy	Flitner, Howard
Cullings, Marguerite	Forsythe, James
Culver, Esther	Frazey, Earl
Darling, Dewey	Funck, May
Davis, Beulah	Funck, Vaughn
Delling, Rex	Gifford, Vivian
Dempewolf, Mary	Glover, May
Dillon, Leo	Graham, Robert
Ducker, Arthur	Guillet, Irene
Dworak, Clara	Haynes, May

TWELFTH GRADE—Continued

Hottel, Harry	Schoonmaker, Gertrude
Johnson, Dorothy	Shaw, Kenneth
Jones, Myrtle	Smith, Gladys
Lawrence, Carl	Smith, Ralph
Lowrance, Ward	Spangler, Mary
Lekander, Arthur	Sparling, Dorothy
LeVan, Atlanta	Straley, Fay
McCollum, Edith	Tarr, Adraith
Murray, Percy	Thomas, Glen
Neill, Russel	Thomas, Ruby Fern
Parsons, Gail	Thompson, Clyde
Pierpont, Leona	Wade, Bramlet
Proctor, Addie	Wadsworth, Syrena
Prunty, Lloyd	Wagner, Josephine
Pumphrey, Grace	Wilbur, Martha
Reynolds, Frances	Williams, Stella

KINDERGARTEN

Bliss, Barbara	Imboden, Neal
Bliss, Bobby	Kendall, Mary
Bliss, Valla	Marsh, Alexander
Confar, A. Eastgate	Martin, Earlene
Culbertson, Grace	Moody, Elizabeth
Dungan, Arthur	Phillips, Catherine
Elam, Winifred	Risman, Billy
Ellis, Ruth	Rutledge, Myrtle
Epplen, John Walter	Wiley, Della
Green, George	Neal, Stuart
Housch, Davie	

FIRST GRADE

Ahlstrand, Charline	Kraft, Rita
Alsbach, Orville	Kimbrel, Mottie
Barker, Billy	Lawrence, Elmer
Bliss, Jack E.	Madison, Jerald
Bliss, Mary J.	Mahlman, Nellie
Blout, Charles	Nauman, Sheldon
Bowman, Helen	Nelson, Corinne
Camden, Harold	Spaulding, Wm.
Clark, Margaret	Timmons, Virginia
Elam, Grace Alice	Upton, Bernice
Hamnett, Mary C.	Welch, Billy
Hoffman, Raymond	West, Verda
Houghton, Laura Lou	Wilcox, Clair
Humphrey, Hazel	

SECOND GRADE

Bishop, York Kyle	Hodge, Mozella
Bushey, Mitchel	Kelly, Cecil
Chambers, Kendrick	Kendel, Roma
Cross, Neal	Luff, Rose Mary
Culbertson, Ruth	Mays, Hazel
Davis, Lewis	McCandless, Charles
Draper, Arnold	McMechen, Helen
Ellis, Burr	Oldfather, Lloyd
Ferguson, Billy	Patterson, Helen
Fuqua, John	Patterson, Lillian
Green, Gretchen	Seastrand, Eugene
Greer, Alta	Robison, Mabel
Hagerman, Dorothy	Upton, Margaret
Hall, Marion	West, Lee Claire
Harbaugh, Robert	Wood, William

THIRD GRADE

Avery, Doris	Lehan, Ted
Border, Selma	Lester, Wayne
Confar, Hilda	Lindberg, Esther
Confar, Frances	McCandless, Lucile
Clark, Florence	McMechen, Ralph
Comer, Jack	Mallot, Emmett
Cushman, Esther	Mann, Claron
Emory, Chester	Mossman, Ralph
Gaines, Alice	Proute, Augusta
Gilpin, Grace	Proute, Edward
Gilbert, Donald	Raymond, Joe
Greer, Gladys	Stone, Frederic
Hadden, Margaret	Tarr, Mabel
Hill, Clifford	Wood, James
Kindred, Ward	Miller, Gurdon
Kraft, Allan	

STATE TEACHERS COLLEGE

FOURTH GRADE

Ahlstrand, Carol
 Allison, Hazel
 Bailey, Lydia
 Carlson, Stanley
 Crocker, Florence
 Curtin, Vesta
 Davis, Helen
 Dillon, George
 Ellis, Margaret
 Erickson, Ethel
 Flint, Leona
 Haley, Aloysius
 Hall, Ruth

Hodgson, Marion
 Hoffman, Frederick
 Lawrence, Edgar
 Lester, Willette
 Miller, Louise
 Robinson, Virgil
 Spaulding, Caswell
 Thompson, Virgel
 Timmons, Lee
 White, Marion
 Beesley, Bessie
 Wells, Ella
 Pestchenik, Edna

FIFTH GRADE

Becker, Addison
 Bonell, Agnes
 Carlson, Carl
 Crawford, Edward
 Hegeman, Vincent
 Hewitt, Alvin
 Kindred, Gordon
 Lanning, Randolph
 McMillen, Gordon
 McMillen, Kenneth

Murdock, Gladys
 Petschenik, Gertrude
 Rumbow, Roscoe
 Reed, Charles
 Rissman, Wilma
 Robinson, Bernice
 Schillinger, Edwin
 Sputh, Paul
 Stevens, Evalyn
 White, Volney

SIXTH GRADE

Austin, Eula Bella
 Baker, Ruth
 Beesley, Hazel
 Carl, Evelyn
 Culbertson, Virginia
 Cushman, Miriam
 Dunn, Thelma
 Hech, Ernest
 Hatch, Earl
 Imboden, Helen

Kohn, Marie
 Lewis, Mary Virginia
 McDouglas, Neil
 Moore, Hazel
 Peterman, Evelyn
 Robinson, Marjorie
 Sumner, Ruth
 Smith, Marcellus
 Wiedman, Harriett
 Williams, Roy

SEVENTH GRADE

Anderson, Gerald
 Crawford, Marcelline
 Cross, Carl
 Hamilton, Ned
 Hatch, Earl G.
 Hatz, Raymond
 Hays, Florence
 Houghton, Dorothy
 Johnson, Lester
 Jones, Elizabeth
 Kindred, Kathryn
 Lee, Margaret
 Mays, Ruby
 Mossman, Eulace

McMillan, Warren
 Widland, Elmer
 Norcross, Lyle
 Payne, Ilah
 Raymond, Harold
 Reed, Donald
 Shields, Mildred
 Stone, Esther
 Terbush, Leo
 Upton, William
 White, Raymond
 Wickstrom, Lareyl
 Whitman, Lee
 Williamson, Rosalind

EIGHTH GRADE

Campbell, Faye
 Dillon, Joseph
 Emanuel, Dennis
 Kussart, Grace
 Malone, Agnes

Miller, John
 Morgan, Helen
 Rathbum, Blanche
 Rathbum, Hazel
 Wells, Gladys

THE ELEMENTARY SCHOOL

First, Second and Third Quarters

1917-1918

KINDERGARTEN

Allnutt, Elizabeth	Jackson, Benita
Allen, Mary	Jones, Lucile
Augustine, Clara	Johnson, Katherine
Bliss, Valla	Johnson, Hamilton
Bader, Arthur	Kearns, Elizabeth
Baab, Everett	Kimbrell, Roberta
Bartle, Dalis	Kendel, Mary
Bauer, David	Kneipe, Jessie
Broman, Ebba	Lehan, Patrick
Beardsley, Darwina	Lundgreen, Carl
Butcher, Douglas	McCarty, Genieveve
Buehler, Walter	McCloud, Ross
Carter, Katherine	McMillan, Laura
Christopher, Mary Elizabeth	Marsh, Alice May
Culbertson, Grace	Meece, Fred
Campbell, John Howard	Miller, Marshall
Challgren, Dorothy	Myer, Myron
Camfield, Jack	Mooney, Ethel
Camfield, Dan	McFadden, Margaret
Cox, William	Newton, Olive
Coon, Gordon	Neff, Fred
Carke, Twilla	Neil, Stewart
Darrow, Mary	Palmer, Roy
Dungan, Arthur	Phillips, Katherine
English, Margaret	Pinkerton, Dale
Erickson, Helen	Phelps, Jay
Erickson, John	Phelps, Jean
Ellis, Ruth	Probst, Herbert
Evans, Vincent	Runnells, David
Fleming, Alma	Rische, Margaret
French, Florence	Roe, Arthur
Fidiam, James	Sanders, Margaret
Flint, Ruth	Snider, Russell
Freeman, Willis E.	Legtman, Kenneth
Gelder, Willis	Timothy, Elsie
Golish, Ellis	Turner, Zelta
Grable, Marjorie	Viehweg, Violet
Gilbert, Robert	Wagoner, Bruce
Gilbert, Virginia	Woolery, Dorle
Gustafson, Esther	Williams, Della
Hamilton, Betty	Weber, Bronson
Harbottle, Dorotha	Ware, Othol
Heighton, Helen	Wunderlick, John
Horne, Dana	Waggoner, Mona
Hersheiser, Virginia	Weaver, Helen
Hemingway, Elliot	Wiley, Della
Imboden, Neal	Wright, Homer Lee
Jackson, Nina	

FIRST GRADE

Ahlstrand, Charlene	Kimbrell, Mattie
Avers, Helen	Kraft, Rita
Bickle, George	Kirk, Russell
Blout, Charles	Lawrence, Elmer
Boye, Carrol	Lucas, Charles
Challgren, Maxine	Larsen, Merle
Crouse, Lansing	Linden, Carl
Elam, Winifred	Martin, Erlene
Gooden, Herbert	Mauhlman, Nellie
Green, George	Milton, Paul
Gustafson, Frances	Mitchell, Cleo
Hamilton, Kathleen	Moody, Billy
Hoffman, Raymond	Neff, Ray
Hotchkiss, Eleanor	Opdal, Olga
Jenkins, Martha	Patterson, Chauncy
Johnson, Clifford	Petrikin, Nancy

FIRST GRADE—Continued

Price, Robert
Rhoades, Virginia
Robison, Frances
Runnels, Laurel
Rutledge, Myrtle
Ross, Natalie
Saxton, Josephine
Scott, Lorraine

Strohl, Reuben
Styer, Mabel
Timmons, Virginia
Underhill, Marion
Viehweg, Margaret
Woolery, Gracie
Weber, Bertha
Weibert, Harry

SECOND GRADE

Barker, Billie
Baab, Clarence
Brecken, Helen
Butscher, Douglass
Burns, Billie
Campbell, Farry
Chambers, James
Cross, Neal
Durkee, Roger
Donner, Erwin
Elam, Grace
Fuqua, John
French, Winifred
Green, Gretchen
Hall, Marion
Hodgson, Mazella
Holland, Jo Ann

Kelley, Cecil
Patterson, Sue
Prunty, Beulah
Richards, Clara
Royer, Dean
Robertson, Helen
Searing, Robert
Seastrand, Eugene
Strain, Parker
Turner, Ollie
Ware, Thelma
Watkins, Harold
Williams, Dorothy
Woods, Henry
Woods, William
Weber, Otto
Welsh, William

THIRD GRADE

Alles, Amelia
Carter, Cornnell
Culbertson, Ruth
Cushman, Esther
Davis, Vera
Ellis, Victoria
Ellis, Burr
Evans, Ruth
Gaines, Alice
Galland, Harold
Jackson, Irene
Johnson, Thelma
Kindred, Ward
Kraft, Allen
Lehan, Edward

Mann, Claron
Myers, Dale
Milton, Ruth
Norcross, Edna
Raymond, Joe
Rhodes, Walter
Rush, Ernest
Strong, Grey
Stroh, Harry
Soper, Edna
Starry, Ella May
Stone, Frederick
Turner, Lester
Ware, Robert

FOURTH GRADE

Adams, Ralph
Ahlstrand, Carol
Bain, Donald
Bailey, Lydia
Baldwin, Jessica
Barber, Mary
Bickle, Margaret
Carlson, Stanley
Culbertson, Grant
Carter, Emma
Dempsey, Audrey
Dillon, George
Ellis, Virginia
Gates, Ruth
Hadden, Margaret
Haley, Aloysius
Hodgson, Marion

Hoffman, Frederick
Hill, Clifford
Kirk, Clarence
Meyers, Harold
Miller, Gurdon
Moser, Mary
Salberg, Arthur
Stephens, Pauline
Stedman, Ruth
Timmons, Lee
Travers, Harold
Underhill, Verlie
Walden, Clara
White, Marion
Weber, Carl
Yates, Joyce

FIFTH GRADE

Alles, Lydia
Alles, Mary
Allison, Hazel
Bain, Dorothy
Bickel, Eloise
Barker, Lida Lea
Breckon, Howard
Buchanan, Gilbert
Carlson, Carl
Davis, Blanche
Day, Alva
Dempsey, Robert
Dille, Frank
Deaver, Emery
Ellis, Margaret
Galland, Alva
Gosselin, Leslie
Hampton, Emmett
Harbottle, Lucille

Henderson, Madge
Heighton, Edith
Hill, Maxine
Hamilton, George
Ketcham, Lyle
Kindred, Gordon
Larson, Fordis
Neill, Margaret
Phillips, Gertrude
Schillinger, Edwin
Sitzman, Mollie
Strong, June
Scott, Louis
Small, Dorothy
Turner, Cora
Turner, Dorothy
White, Volney
Wood, Willie
Weber, Jake

SIXTH GRADE

Baird, Daniel
 Baker, Ruth
 Cushman, Miriam
 Culbertson, Virginia
 Coulter, Roy
 Christensen, Lolita
 Deaver, Sidney
 Downer, Earl
 Galland, Arthur
 Glidden, John
 Gosselin, Marjorie
 Gustafson, Ruth
 Harbottle, Marguerite
 Haun, Josie
 Imboden, Helen
 Jones, Henry

Lundberg, Alf
 Milton, Selma
 Mitchell, Arthur
 Rhodes, Ruth
 Raikes, Harold
 Runnels, Blanche
 Runnels, Olive
 Sitzman, Lydia
 Streck, Lucille
 Sumner, Ruth
 Timothy, Glendon
 Underhill, Vernie
 Upton, George
 Williams, Edward
 Williams, Roy
 Woods, Mary

SEVENTH GRADE

Anderson, Gerald
 Basse, Daris
 Hardwell, Electra
 Benskin, Eunice
 Bloom, Fannie
 Breckson, John
 Brown, Earl
 Buchanan, Ruth
 Butler, Leo
 Chetwood, Marcus
 Cross, Carl
 Day, Harry
 Dillon, Winifred
 Downer, Hattie
 Dralle, Herbert
 Dunn, J. Clyde
 Glidden, George
 Green, Frank
 Galland, Wilbur
 Lehrig, Teddy
 Heronema, Victoria
 Hodson, Dorothy
 Jackson, Bernice
 Johnson, Lester
 Johnson, Bernice
 Kindred, Katherine
 Klug, Wilbur
 Lindburg, Paul
 Lundberg, Carl

Mashburn, Ivan
 Mason, Lorena
 McCarty, Ernest
 Meyers, Leon
 Moss, Dixie
 McGaughey, Pherman
 McCleod, Elizabeth
 Myers, Dorothy
 Moore, Clarence
 Murry, Edwin
 O'Connell, Agnes
 Old, Ester
 Raymond, Harold
 Royer, Rowena
 Scott, Mattie
 Sitzman, John
 Stephens, Eleanor
 Shields, Mildred
 Thompson, Jennie
 Travis, Charles
 Tucker, Lloyd
 Turner, Anna
 Upton, William
 Vance, John
 Walden, Eva
 Warm, Anna
 Watkins, Raymond
 White, Raymond
 Wood, Katherine

EIGHTH GRADE

Alber, Vera
 Aultman, William
 Campbell, Fern
 Campbell, Faye
 Davis, John
 Durkee, Albert
 Dillon, Joseph
 Elam, Paul
 Frakes, Hoy
 Hill, Myrtle
 Howell, Vern
 Howes, Lola
 Howes, Merrill
 Kussart, Grace
 Lawrence, Alice
 Limbocker, Phyrene
 Langdon, Mary
 McCune, George
 McDuffie, Katherine
 McKee, Neil

Mead, Paul
 Mooney, Robert
 Montgomery, Blanche
 Miller, John
 Norcross, Lyle
 Onstine, Daniel
 Reynolds, Marion
 Raymond, Hazel
 Rea, Boyd
 Rhodes, Harry
 Schenck, Bessie
 Smilie, Dorothy
 Seastrand, Conrad
 Smith, Sidney
 Williams, Mary
 Widlund, Elmer
 Williams, Charles
 Whomans, Alcoque
 Young, Leonard

Ashton Demonstration School

1917-1918

FIRST GRADE

Brown, Johnny
 Farlow, Johnny
 Flora, Eva
 Mitchell, Tabor
 Neiberger, Mary
 Rehmer, Mary

Rehmer, James
 Redman, Roy
 Scheurn, Kathryn
 Woosley, Edna
 Woosley, Miller

	SECOND GRADE	
Farlow, Frank		Massberg, Mildred
Fowler, Artell		Neiberger, Crist
Jaris, Mary		Sitzman, Joe
Koehler, Leona		Voltz, Joe
Kohul, Peter		
	THIRD GRADE	
Lambert, Buelah		Redman, Robert
Munce, Harvey		Sitzman, Lydia
Neiberger, Charles		Voltz, Lydia
Parkinson, Michaelina		Weber, Otto
	FOURTH GRADE	
Carlson, Albion		Reed, Raymond
Cooperrider, Katherine		Rehmer, Alice
Fowler, Genese		Rehmer, Charles
Munce, Mildred		Voltz, Mary
Neiberger, Alexander		Weber, Carl
	FIFTH GRADE	
Koehler, Daniel		Sitzman, Martha
Mossberg, Clarence		Tisdell, Emma
Neiberger, August		Weber, Jacob
Reed, Faye		Woosley, Daniel
Reed, Mary		
	SIXTH GRADE	
Sitzman, Bertha		Weber, Bertha
	SEVENTH GRADE	
Balent, Ella		Koehler, Henry
Cooperrider, Leonard		Reed, Jay
Farlow, Winifred		Smith, Grace
Koehler, Conrad		Tisdell, June
	EIGHTH GRADE	
Sitzman, Daniel		Sitzman, Mollie
Sitzman, Esther		Smith, Albert

Bracewell Demonstration School 1917-1918

	FIRST GRADE	
Becker, Minnie		Kaiser, Annie
Brethauer, Emma		Klaus, Mary
Brethauer, Jake		Pfalzgraf, Marvin
Brethauer, John		Seilbach, Fred
Buxman, Lida		Seilbach, Robert
Ehrlich, Katie		Steinmark, Pauline
Ehrlich, Robert		Simon, Jake
Feit, Coney		Snider, John
Firestien, John		Stoll, Fred
Geisick, Katie		Weinmeister, Alec
Geisick, Philip		Weinmeister, Jake
Goodman, Marjorie		Weinmeister, Lena
Hergert, Frieda		Weinmeister, Mollie
Hergert, Odillge		Ehrlich, Robert
	SECOND GRADE	
Becker, Mollie		Hoffman, Edward
Becker, Edith		Leffler, Christine
Geisick, Mary		Pfalzgraf, Asa
Goodman, John		Weinmeister, Dave
Goodman, Zobrow		Weinmeister, Mollie
Hemple, John		Weinmeister, Alec
	THIRD GRADE	
Buxman, Samuel		Seilbach, Mary
Brethauer, Lola		Steinmark, Henry
Feit, George		Snider, Jake
Giltman, Henry		Weinmeister, George
Hoffman, Rose		Weinmeister, Lizzie
Knous, Dollie		Wiedeman, William
Seilbach, Emma		
	FOURTH GRADE	
Ehrlich, August		Klaus, John
Geisick, Jacob		Schwartzkoff, Lizzie
Goodman, Mollie		Seibel, David
Johnson, Robert		Seilbach, Jake
Kaiser, Henry		Simon, Mary
	FIFTH GRADE	
Hemple, Charlotte		Snider, Mollie

	SIXTH GRADE	
Claus, Mary		Kaiser, Mary
Firestien, George		Weinmeister, Dave
Johnson, Harold		Weinmeister, Mary
	SEVENTH GRADE	
Foos, Minnie		Leffler, Katie
Johnson, Ernest		Rydberg, Lillie
	EIGHTH GRADE	
Becker, Grace		Klaus, Anna
Claus, Willie		Rydberg, Reuben
Klaus, Jake		

Hazleton Demonstration School 1917-1918

	FIRST GRADE	
Achziger, Daniel		Rhen, Evelyn
Achziger, Leah		McIntyre, Sarah
Bailey, Ruth		Moody, Floyd
Fanning, John		Ninner, Glen
Lebsack, Pauline		Robertson, Nathan
Rhen, Hannah		White, Evelyn
	SECOND GRADE	
Deringer, Cecil		McIntyre, Catherine
Heimbigner, John		McIntyre, Sarah
Kitman, Fred		Peterson, Milford
Kitman, Jake		Rasmussen, Paul
Lebsack, Daniel		Robertson, George
Lebsack, Herman		White, Edward
Lebsack, Reuben		
	THIRD GRADE	
Achziger, Esther		Johnson, Evelyn
Bailey, Ethel		Kammerzell, Elsie
Bolander, Evelyn		Stiber, Marie
Hatch, Gladys		Steinmiller, Jake
Hergert, Ameilia		
	FOURTH GRADE	
Bolander, Clarence		Rhen, Alec
Deringer, Cleo		Rhen, Marie
Kammerzell, Alex.		Walker, Arnold
Peterson, Wesley		
	FIFTH GRADE	
Baily, Viola		O'Farrell, Sarah
Beetham, Scott		Peterson, Eleanor
Carlson, Paul		Rasmussen, Harold
Heimbrigner, Jacob		Stienmiller, Molly
Heimbriger, Lena		White, J. C.
Kammerzell, Fred		
	SIXTH GRADE	
Bailey, Lewis		Johnson, Ellen
Fanning, Opal		Johnson, Esther
Foster Robert		Whiteman, Irene
	SEVENTH GRADE	
Beetham, Wilma		Libsack, George
Foster, Vera		
	EIGHTH GRADE	
White, Nellie		

New Liberty Demonstration School 1917-1918

	FIRST GRADE	
Altergott, Henry		Rush, Pauline
Altergott, Marie		Rush, Eva
Altergott, Phillip		Rutz, Mollie
Bremer, Elsie		Roth, Willie
Deitz, Johnnie		Seibel, Dave
Greer, Opal		Simon, Jake
Harding, Lydia		Straman, Alex.
Harding, Minnie		Straman, Mary
Haas, Emma		Schneider, Mary
Haas, Henry		Smith, Emma
Hura, Mary		Smith, Elizabeth
Krause, Jake		Swatcope, Katie
Kerbs, Hannah		Weber, Carl
Lockman, Henry		Weber, John
Miller, Jake		Weinmeister, Millie
Pochack, Lee		Weinmeister, Dave

STATE TEACHERS COLLEGE

SECOND GRADE

Barnes, Inatha
 Eckhardt, Annie
 Greer, Alta
 Harding, Katie
 Krutz, Molly
 Kruse, Henry

Lind, Henry
 Rutz, Mary
 Weber, Mollie
 Weinmeister, Lizzie
 Weitzel, Eunision

THIRD GRADE

Altergott, Katherine
 Altergott, Elizabeth
 Bremer, Lena
 Deitz, Henry
 Greer, Gladys
 Hankle, Phillip
 Haas, Willie
 Harding, Fred
 Kerbs, Rachel
 Krause, Mary
 Kaufman, Fred
 Lamb, Sam

Lipsack, Henry
 Lind, Katheryn
 Lornez, Robert
 Miller, Dave
 Rush, Dave
 Smith, Jake
 Schneider, Katie
 Weber, Sam
 Weinmeister, Henry
 Weitzel, Grace
 Seibel, Conie

FOURTH GRADE

Deitz, Jake
 Hankle, Henry
 Handle, Lizzie
 Harding, Henry
 Kellar, Eva
 Kerbs, Lydia
 Lind, Mary

Roth, Henry
 Roth, George
 Rutz, John
 Rush, Fred
 Seibel, Pauline
 Simon, Mary
 Weinmeister, Henry

FIFTH GRADE

Brug, George
 Bremer, Arthur
 Kellar, John
 Keller, Willie

Lamb, Mary
 Rush, Henry
 Weinmeister, George
 Williams, Jack

SIXTH GRADE

Bremer, Henry

Weitzel, Willie

SEVENTH GRADE

Echardt, Alex.
 Lind, Orinda

Williams, Bessie
 Weinmeister, Marie

ATTENDANCE SUMMARY

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SUMMER SESSION 1917 AND FIRST, SECOND AND THIRD QUARTERS 1917-1918

I. TEACHERS COLLEGE:		
Summer Session 1917.....	992	
Three Quarters 1917-18.....	730	
Total	1722	
Counted Twice.....	107	
Net Enrollment.....	1615	
II. SCHOOL OF ADULTS:		
Summer Session 1917.....	113	
Three Quarters 1917-18.....	34	
Total	147	
Counted Twice.....	26	
Net Enrollment.....	121	
III. EXTENSION:		
Group Plan.....	378	
Individual Plan—		
College	269	
High School.....	24	
Total	293	
Institute Plan.....	434	
Community Co-operation.....	52	
Total	1157	
Counted Twice.....	77	
Net Enrollment.....	1080	
IV. INDUSTRIAL HIGH SCHOOL:		
Summer Session 1917.....	104	
Three Quarters 1917-18.....	307	
Total	411	
Counted Twice.....	32	
Net Enrollment.....	379	
V. ELEMENTARY SCHOOL:		
Summer Session 1917.....	213	
Three Quarters 1917-18.....	406	
Total	619	
Counted Twice.....	78	
Net Enrollment.....	541	
VI. DEMONSTRATION SCHOOLS:		
Ashton	61	
Bracewell	80	
Hazelton	62	
New Liberty.....	94	
Summer Session 1917.....	25	
Total	322	
VII. SCHOOL OF SPEECH DEFECTS.....		12
VIII. SHORT COURSE SUPERINTENDENTS CONFERENCE.....		18
Grand Total.....	4088	

1660
3008

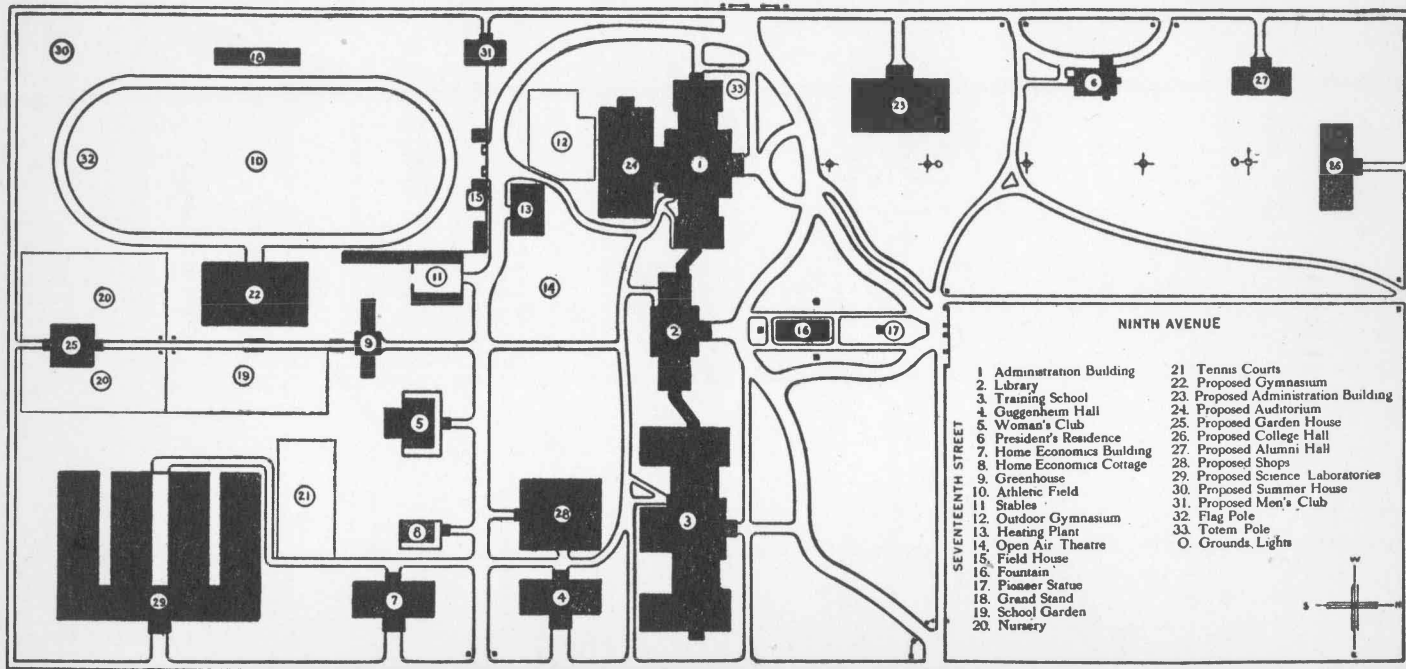
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TENTH AVENUE

STATE TEACHERS COLLEGE

TENTH AVENUE



EIGHTH AVENUE

SIXTEENTH STREET

SEVENTEENTH STREET

IMPORTANT NOTICE

Read pages 13 to 29. Bring a transcript of your high school record including a statement that you are a graduate. This must be filed with the college before you can be matriculated as a student.

COLORADO STATE TEACHERS COLLEGE BULLETIN

Series XVIII

May, 1918

Number 2

An Outline *of* The Field of Child Welfare

*Issued by the
Extension Department of Colorado State Teachers College,
Colorado Branch National Congress of Mothers and
Parent-Teacher Associations Co-operating*



THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

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“THE cause of failure is seen to be the difficulty of *organization*. . . . To make good intentions effective, they must be *extended into a system*. . . . The central fact of history may be said to be the gradual enlargement of social consciousness and rational co-operation. . . . There has always been a democratic tendency, whose advance has been conditioned by the possibility, under actual conditions, of *organizing* popular thought and will on a wide scale. . . . If a group does not function through its most competent instruments, *it is simply because of imperfect organization*.”

CHARLES HORTON COOLEY

An Outline
of
The Field of Child Welfare

By EDGAR DUNNINGTON RANDOLPH

INTRODUCTION

THIS bulletin is issued jointly by the Extension Department of the Colorado State Teachers College and the Parent-Teacher Associations of Colorado. About a year ago Mrs. Fred Dick, who was then the State President, began to urge us to get together material which would be of use to mothers and fathers who are busy people and who have not taken time to "read up" on the essential problems of rearing children. Professor Randolph of the Department of Sociology of Teachers College has made extensive and intensive studies of the subject of child welfare and consented to put into form some of the most significant facts he has found in this field. This material is presented to parents of Colorado by the Parent-Teacher Associations and Colorado Teachers College in the hope that it may give information to some one seeking light upon the most significant of human problems—efficient parenthood.

W. B. MOONEY

Director Extension Department

DENVER, COLORADO, *June 24, 1918.*

TO THE COLORADO BRANCH OF THE

NATIONAL CONGRESS OF MOTHERS AND PARENT-TEACHERS ASSOCIATIONS:

My dear Co-workers—It affords me great pleasure, as the crowning act of my closing administration of six years, to be allowed the privilege of uniting with the State Teachers College in presenting to the parents and teachers of this state this valuable Bulletin.

Parents are realizing as never before in the history of the world their obligations and responsibilities in the rearing of their children. We are all seeking information founded on study and experience. I believe this Bulletin, including the reading references, will be of the greatest value for mothers' circles and the programs for parent-teacher associations. I also recommend it for serious consideration to Social Welfare workers and all others who are interested in the welfare of children and the future of the human race.

As retiring president, I wish to acknowledge to the State Teachers College my appreciation of their interest in, and willingness to serve, our great organization.

MRS. FRED DICK

Retiring President

Colorado Branch National Congress of Mothers
and Parent-Teacher Associations

To Dr. J. D. Heilman are due acknowledgment and thanks for careful reading and constructive criticism of the manuscript of this material.

E. D. R.

Outline *for the* Study of Child Welfare

EDGAR DUNNINGTON RANDOLPH
Colorado State Teachers College

ALL parents wish to do well by their children; but a great many do not succeed very well, and few of those who fail know the reasons for their failure. In this world (especially in a democracy) it is never enough to be good, to mean well: it is necessary also to be wise, to have useful knowledge and apply it. Up to the period of parenthood we learn a great deal about almost everything in our environment or likely to be in it—except children. After parenthood whether we learn the most important knowledge about children or not depends largely, in most cases, upon accidents of location or circumstance. For the great majority of parents there is no school for learning about the basic needs and dangers of children except the wasteful school of experience. In this school children pay for their parents' education. They pay perhaps in weak constitutions; or in shattered physiques; or in permanent handicaps of other sorts—most of which trace ultimately to preventable conditions, to needs not understood, to dangers not appreciated. And so the anxious care of mothers is measurably thwarted. Next to children it is mothers who suffer most. If all the parents and prospective parents in the United States could have and make use of the practicable knowledge now possessed and applied by the more fortunate few, there can be no doubt that the number of children who annually die under one year of age in our country could at once be reduced to half the present number; nor that the number of children who for lack of adequate protection from customary evils now reach the ages of childhood permanently handicapped could be similarly reduced.

**The Gap
between Wish
and
Achievement**

But this would be an Utopian situation. In the real world lack of adequate income, lack of leisure to rear children properly, lack of wholesome surroundings, lack of sufficiently liberal schools and churches, lack of sufficiently democratic social organization are quite as common features of life for the bulk of Americans as lack of knowledge of the needs of children. Under these circumstances we shall never be able to trust wholly to individual intelligence to provide wholesome and stimulating conditions for all children. The best that we can hope for is that gradually it may become clear that there must be established by an informed and democratic public opinion certain minimum standards of *family* welfare; for the fortunes of children are bound up with the fortunes of their families. Unless we still contemplate the separation of parents and children, child-protection often involves family protection. This is first a problem of educating public opinion. Modern child-protection finally waits upon intelligent public opinion that will support the necessary programs. After that it becomes a problem of social organization.

**Conditions
that Make
Knowledge
Unavailable**

Beyond this it is worth remarking that though it is true that the death rate of children from preventable causes is twice as high in the poverty-group as among the fairly comfortable, still the problem of child-welfare is not primarily a problem of poverty. From the point of view of the *numbers* involved it is a problem of those with incomes below \$3,000 a year—for this group contains nearly all the race. *Poverty, like war, only accentuates or intensifies the ever-present dangers to children.* What these dangers are is better and better understood—but not by most people. It will help to show the scope of modern

**Whose the
Problem?**

child-protection—and incidentally suggest the standards now set up—if we summarize the movement in a brief list of

THE RIGHTS OF CHILDREN

- | | |
|--|---|
| <p>A New Field for Conscience.</p> <p>Blindness from Neglect; and Death from Improper Food.</p> <p>The Basic Educational Agency.</p> <p>Soundness of the Body the sine qua non</p> <p>Remarkable Handicaps</p> <p>The National School of Democracy</p> <p>Penny-wise, Pound-foolish</p> | <ol style="list-style-type: none"> 1. To be well-born—<i>i. e.</i>, to have <i>normal</i> parents, well-nourished and free from disease. Sound heredity is the basis of child-welfare; but the good native equipment of parents must have opportunity to manifest itself. Disease and heredity may prevent the realization of the benefits of good ancestry. 2. To have its eyes treated immediately after birth. In every 1,000 births there will be twenty cases of ophthalmia neonatorum, and eight of these will be blind, unless treated at once. 3. To be nourished during infancy by its mother's milk; and to be securely protected from all the diseases of infancy. The artificially fed infant is fifteen times as likely to die in the first year of life as the infant fed by its mother's milk. 4. To be reared in a normal family. There is no substitute for this. The best "institution" is not comparable to the "average" family—from the point of view of the normal mental and social development of children. According to Dr. Warner, children brought up in institutions learn to talk about two years later than children with the stimuli of family life—which, if a fact, is only one sample of the handicaps they suffer. The family (especially the mother) sets the varied standards of life—transmits attitudes and gives the basic sense of values. Most of this lessening is as unconsciously done as is the teaching of language, but none the less surely. We properly speak of "the <i>mother tongue</i>," for mothers are the teachers of language. We might equally well speak of "the <i>mother ethics</i>," and so on. From the efficient family the child has absorbed most of the standards of life before he enters the school. He is well adjusted to the normal pressures and premiums of life. The test of the family comes when the child begins to pass into the wider life of the community and the school. There should be little for the child to <i>unlearn</i>; and he should know all that he needs to know for his own well-being. 5. To be protected securely during the pre-school and the school age from all children's diseases; and, of course, to have abundant nourishing food—not displaced by the substitutes of soda fountain and confectionery. 6. To have all remediable defects corrected as soon as they are discernible. 7. To have much stimulation to active play, with wholesome companions, out of doors. Play with other children is essential to normal physical and social growth. Both aspects of play are suggested by President Hall's aphorism that "The boy without the playtime becomes the father without the job." If parents were all mindful of this imperious need of children our Juvenile Courts would be less imperious needs of society than they are. Play must not be confused with idleness; nor must intelligent people assume that the value of play lies mainly in the exercise it affords—great though that value is. In play the initiative lies always with the child and the exercise he gets is in response to the urge of his whole nature. In work the initiative does not lie with him, and the exercise he gets is not in response to his physical and social needs. It is enforced activity and often runs counter to his needs. Play with wholesome companions, while meeting physical needs, is highly educative. Parents must not be astonished if in the absence of due recognition of this imperious urge of nature children go astray. 8. To be free from the necessity of earning income for the family during the school age. If the family needs the income the child can earn, it is in the long run far cheaper for society to provide it by taxes than to allow the child to provide it by injurious work. In the sense that it embarks children prematurely upon a career of self-support, child-labor shortens the period of childhood. In a different sense it prolongs childhood somewhat, because it usually postpones or delays the onset of puberty and nearly always shortens the period of transition. At the same time it often causes this period to be incompletely passed through. In this situation lie the very gravest dangers—the dangers of sexual abnormality. No amount of later |
|--|---|

care or protection can repair damages of this sort. For all but ten per cent of the child-laborers there is a shortening of the period of maturity. Mr. Kingsbury's paradox that "If poverty is the cause of child-labor child-labor is the cause of poverty," and Mr. Roosevelt's terse analogy that "The farmer who put his colts to the plow when they were three years old would be considered a fool", both express conclusions of long racial experience with the wastefulness of child-labor. It is in effect a denial of physical and mental opportunity. It displaces school education and the normal play of children without offering stimulating experience instead. The less education, the less fitness for responsibility, and the smaller share in the beneficent undertakings of society; and—we may add—the less democracy, for democracy assumes intelligent participation in social enterprise. Those who know little and are "out of touch" must be prescribed to. They can not exercise initiative; they can not, as the British soldier says, "go on their own." The more complex life becomes the greater must be the fund of knowledge that is *common to all*. In a heterogeneous democracy like ours, little Mexicans, little Germans, little Italians, little Slavs, little negroes—all these no less than little Americans must be made the most of. It is the only way to do justice, first; and, second, it is the only way to secure safety, unity, and progress for our nation. Child-labor cuts off a part of each generation (two million in the United States) from the progressive currents of the time. In divers ways it creates low-standard families that can not give children a fair start. One low-standard family in a community may do much to negative the achievement of many high-standard families: if the single low-standard family contain girls who must grow up without privacy, then the standards of sex-relations built up by high-standard families for their boys may be set at naught. Childhood has a right to be free of economic responsibilities—free to play and grow with other children.

9. To have a full period of school-life—and not this alone but also to have school-life of a sort that provides not only full opportunity to capitalize whatever talent they possess, but also due and constant stimulation of their powers. Schools are not ends in themselves, but, properly considered, are agencies to serve the best ends of society through capitalizing the powers of children for social purposes. Hence, communities are bound to provide schools that consciously adjust themselves to the known variety of both human nature and social backgrounds. Schools must *equalize* opportunity—must *offset family deficiencies* and forward the best designs of society by providing, for all the more significant social situations, a progressive public opinion. A hungry child has no opportunity in school; nor has a gifted child full opportunity except where there are gifted teachers who to their natural gifts have added training; and talent as a rule turns constantly to the fields of largest money returns—so that communities must consider that in buying the services of teachers they have to compete with all the alternative opportunities for remunerative work. If into the work of feeding, clothing, healing, defending, and amusing people go most of the first rate intellects of each generation, while into the work of shaping the attitudes of the rising generation, directing their interests, forming their intellectual habits *et seq.*, go mainly the second, third, and fourth-rate intellects, then of course school-education can not be the dynamic influence in society that we expect it to be. It must, under such circumstances, be more or less a routine—with only a pretense of adjustment to the needs of children and the deficits of community life. The practice of schools must no longer illustrate the ancient belief that human nature is "naturally depraved"—so that what runs counter to it is infallibly best for it. All the experience of observant people reveals, infelicitably, the fact that *interest is the clue to capacity*; or, put the other way around, that *capacity is the main cause of interest*. To those who succeed largely in life their work is play. "When one finds his proper place," remarked The Autocrat of the Breakfast Table, "there is no friction." But though human nature thus provides the raw material for education, civilization requires that it be shaped to the complex values of the time. So, schools have the difficult task of both stimulating and giving

Incompatibility
of Ignorance
and Kindness

If not for
Others' Sake
then
for Our Own

Unsolved
Problems of
Our Schools
which in
Some Respects
Wait upon the
Initiative
of Parents

scope to individuality and of harmonizing it with the welfare of society. For our purposes here it is the first of these tasks that needs emphasis. An education suited to his capacities is the right of every child in a democracy.

Completing
the Cycle

10. Finally, to be duly started upon a career of self-support in a useful occupation which will both provide durable satisfactions and sufficient income to maintain for him a normal family life—so that in turn he may rear and duly protect children of his own: this also is a right of every normal child.

Reading References.

1. Hill: *The New Public Health*. Macmillan, 1916, \$1.25.
2. Wood: *Sanitation Practically Applied*. Wiley, 1918, \$2.50.
3. Mangold: *Problems of Child Welfare*. Macmillan, 1914, \$2.00.
4. Devine: *The Normal Life*.
5. Lee: *Health and Disease and Their Determining Factors*. Little, 1918, \$2.00.
6. Children's Bureau, Washington, D. C. *The Infant Mortality Series*; and *The Child Care Series*. (Free and valuable.)
7. The American Association for the Prevention of Infant Mortality, Cathedral Street, Baltimore, Md. (Ask for pamphlets on infant mortality. Free.)
8. Newman: *Infant Mortality*.
9. Newsholme: *Vital Statistics*.
10. Spargo: *The Bitter Cry of the Children*.
11. Saleeby: *Parenthood and Race Culture*.
12. Saleeby: *The Progress of Eugenics*.
13. Kellicott: *The Social Direction of Human Evolution*.
14. Howard: *Confidential Chats with Boys*. Clode, \$1.00.
15. Howard: *Confidential Chats with Girls*. Clode, \$1.00.
16. Healey: *The Individual Delinquent*.
17. Lapp and Mote: *Learning to Earn*. Macmillan, \$1.50.
18. National Child Labor Committee, 105 East 22nd Street, New York. (Ask for pamphlets concerning Colorado, e. g.) (Free.)
19. New York Committee for the Prevention of Blindness. 130 East 22d Street, New York City. (Ask for pamphlets covering the preventable causes of blindness.) (Free.)
20. Flexner: *The Modern School*. (Free.) General Education Board, 61 Broadway, New York City.

Professional men subscribe to the journals dealing with their problems. Doctors take the *Journal of the American Medical Association*, *The Lancet*, *et seq.*; lawyers take the *Case and Comment*, or some other legal magazine. Farmers usually take a farm magazine. Business men take *System* or some publication dealing with the field of their special effort. In a home where there are children the mother should take and read a reliable journal dealing with the needs of children—say, *The Child* (Kelynack, editor). In addition to this she should know what is being done from year to year by the great child-protection societies, the Federal Children's Bureau, *et seq.*

II.

The
Five Periods
cf
Child-
Protection

Without attempting a full discussion of the very numerous dangers to the life and normality of children, we here roughly classify the more important ones according to the four periods of life ordinarily covered by modern child-welfare work, in each case, after a few words of comment, indicating a few sources of reliable information—which may often be had at no cost beyond that of correspondence. The periods are: (1) The pre-natal period—up to the birth of the child; (2) The period of infancy—up to the age of one year; (3) The pre-school period—up to the age of six years; and (4) The school age—up to eighteen years of age. Upon the dangers to life and normality in each of these periods there exists a considerable body of information useful in the protection of children. The problems in each period fall into two large groups: (1) The problems connected with preserving life; and (2) The problems of securing normality of development. Of course the two overlap very greatly. Whatever menaces life also threatens normality. The basis of normality is sound heredity.

Children "take after" their parents, their *family, in all the traits of body and mind*, as certainly as do domestic animals. While there is always the *chance* of variations, there remains so much that is predictable that reasonable people will prefer to act upon the known sequences of qualities. The most significant differences among children are those that are inborn. By virtue of heredity alone they differ very greatly in energy, in ability to learn this or that, in taste for this or that, and so on, just as they differ in facial contour, ability, to run, *et seq.* The growing body of knowledge concerning the transmission of traits of mind and character has properly a place in the study of child-welfare—because, provided they know it before marriage, intelligent people can make use of it to improve the natural gifts of their children and lift somewhat the general level of racial potentiality. A woman of good inheritance and a fair knowledge of the laws of heredity will not "fall in love" with a man in whose inheritance the traits of unsuccess crop out at significant intervals. With these few general remarks we pass over the important field of eugenics, and assume that we are dealing with children of sound heredity, physical and mental.

1. *The Pre-natal Period*

The mother is the child's first environment. *After marriage*, the beginning of child-protection is the protection of the prospective mother. If the prospective mother understands that the life and usefulness of her baby depend heavily upon her own physical and mental condition during gestation, she may do much to insure it a fair start in life. "The normal outcome (of pregnancy) is the birth of a living child; and so powerfully does nature work toward this end that a very moderate amount of attention is usually sufficient to insure it." If this quotation from Devine's *The Normal Life* is held in mind, the emphasis placed upon the following points will not seem too ominous, since they can all be met successfully by "a moderate amount of attention."

- d. If the mother is under-nourished during gestation, so will her baby be under-nourished. Babies can not, either before or after birth, be under-nourished without bad results. Some of these may be mentioned.
- (1) It may be born dead (still-born)—as apparently about one in twenty is in New York.
 - (2) It may be born too weak to live (congenital debility).
 - (3) It may be born "weakly" and have a continual struggle for life.

Malnutrition of Mothers Affects Babies

Mothers must be "well-fed" for the sake of unborn children. It is better to say "well-nourished," probably, because the energy of the mother who has plenty of good food may be spent in late hours, "social dissipation," and the like.

- b. If the mother is overworked during the period of gestation, the unborn child suffers with her. Women differ as much as men in their capacity to "stand" hard work; but it must be remembered that extra energy is necessary to nourish a body for both work and the maturing of a baby. Some of the bad results that may follow overwork during gestation are as follows:

Overwork of Mothers

- (1) The baby may be still-born.
- (2) The baby may show congenital debility.
- (3) The baby may be born "weakly," so that life is a continual struggle. Such a baby has been robbed of the right to a *fair start*.

- g. If the mother is infected with syphilis—as often occurs innocently—the child is almost certain to be seriously endangered.

- (1) It may be still-born.
- (2) It may show congenital debility.
- (3) It may be prematurely born.
- (4) It may be born malformed.
- (5) It may be mentally defective.

Diseases which may be Eliminated by wiser Education of Women—Probably not Otherwise

- d. If the mother is infected with gonorrhoea—as often occurs innocently—the child may become blind soon after birth, unless the eyes are treated at birth with the proper medicine. Since there are at least

two other germs (colon bacillus and streptococcus) which may affect the eyes of *just any baby whatsoever*, it is *never wise* or safe to omit having the new-born baby's eyes made safe by this treatment. A blind baby is hopelessly handicapped for life. Now that the causes of infantile blindness are so well known we are entitled to say that the physician who neglects to give this treatment to *all babies whose birth he attends is not competent*—is ignorant. The same is, of course, to be said of the midwife. And the parents who do not insist upon this protection of their baby's eyes are either ignorant or criminally negligent. It is worth adding that Colorado is one of the three worst states in the United States in this respect. The other two are Vermont (the worst) and New Mexico (third). Is it the ignorance of our physicians, our mothers, or our midwives? To the blind children in our institutions it makes no difference. They are hopelessly handicapped.

Beyond this it is true that various other diseases of the mother by producing a toxic condition and interfering with nutrition may arrest the development of the unborn child. Where the parents are healthy and sound the whole force of nature operates to produce a normal child—but it is necessary to co-operate with nature.

Drugs and the Unborn Infant

e. If the mother uses alcohol or drugs, needless to say she poisons her infant. Patent medicines are for this reason especially obnoxious. They usually contain both, to the detriment of the child.

- (1) It may be still-born.
- (2) It may be prematurely born.
- (3) It may be born with congenital debility.
- (4) It may be idiot or mentally defective.

Probably schools can do a great deal to lessen the patronage of patent-medicine shops. Ignorance must be the main operative force—and schools are to dispel that. Pregnant women should be protected by the community from poverty that necessitates under-nourishment or over-work. It costs less in the end to prevent disasters to children than to pay for the results. Pregnant women should not be employed in factories, on farms, and elsewhere at hard work. Visiting nurses in every community should give pre-natal instruction to prospective mothers—especially the poor and the ignorant. This is probably the best missionary work now being done in the world. It is of the recommended charity that begins at home.

Christian Standards of Community Protection Needed

The following are useful sources of reliable information:

1. Mangold: *Problems of Child Welfare*. Macmillan, \$2.00.
2. Children's Bureau, Washington, D. C. *Prenatal Care*. Care of Children Series, No. 1—by Mrs. Max West. (Gratis.)
3. American Association for the Study and Prevention of Infant Mortality: Pamphlets on *Prenatal Care and Instruction*. (Gratis.) Cathedral Street, Baltimore, Md.
4. New York City Health Department, Division of City Hygiene, Dr. Josephine Baker. Pamphlets on Child Protection. (Gratis.)
5. Devine: *The Normal Life*. 1916, \$1.00. Survey Associates, New York City.
6. Wood: *Sanitation Practically Applied*. Wiley, \$2.50.
7. Saleeby: *Parenthood and Race Culture*. A. C. McClurg, Chicago, \$1.50.
8. Bailey: *Modern Social Conditions*. McClurg, 1908, \$2.50.

II. THE PERIOD OF INFANCY

The Most Expensive and Least Protected Crop in the United States

From various causes there die annually in the United States about 300,000 children under one year old—probably 365,000. Ten per cent of these die the first day; about 60% die the first week; and most of the rest die within three months. Those who know most about it assure us that at least half of these deaths are preventable—provided we apply in the community the knowledge we now possess concerning the protection of infants. In the most enlightened communities—certain cities and a few countries—the death rate of infants has, through the application of modern knowledge, been reduced in the last decade to half its former figure; *but for the United States as a whole the rate remains*

essentially what it was twenty-five or thirty years ago, in spite of the great advance in the control of the causes of death for the ages above one year. Dr. E. B. Phelps has shown that our infant death rate at present is over eleven times as high as the death rate of *all the other age periods* (159.3 per 1,000 for infants, as over against 14.1 per 1,000 for the whole population above one year old). Dr. Newsholme has made it clear that "a high infant death rate in any community implies a high death rate in the next four years of life; while a low infant death rate implies a low death rate in the next four years;" and that "counties having high infant mortality continue to suffer somewhat excessively through the first twenty years of human life, while counties having low infant mortality continue to have relatively low death rates through the first twenty years of life." When we consider the size of our infant death rate and its relation to subsequent viability, in connection with the clear demonstrations we have had that it can be reduced fifty per cent by proper organization of community effort—including school education—it seems that there can be no legitimate excuse for the continuance of the old nonchalant attitude in the presence of a wastage of life that exceeds that of soldiers at the front. In the United States cities vary widely in their success in preserving the lives of the babies born in them. For example, Fall River, Massachusetts, loses 239.5 annually from every 1,000 children under one year old, which is a decline of 21% in the last ten years. Richmond, Virginia, loses 197.6, which is a decline of 31%. Los Angeles loses 100.1, which is a decline of 43%. Apparently Seattle, Washington, is the best city in the United States in which to rear babies, its loss per 1,000 being only 82; and Dunedin, New Zealand, is the best city in the world, its loss being less than 50. In Colorado, there is no town or city that *knows* its infant mortality rate, or can more than guess, perhaps closely, at it. Our towns may or may not be as good places in which to rear families as towns of similar size and social composition in other states. We can *know* when we insist upon *complete* birth registration—and not before. This is a problem for our women, apparently—especially our parents' organizations. What are the causes of our high infant mortality rate in the United States? They are:

1. *Diseases of early infancy*: congenital debility, premature birth, malformation. These account for about 31% of infant deaths—about 100,000 annually. Two-thirds of the deaths on the first day of life are from these causes; and over one-half of the deaths in the first month are similarly accounted for. Most of the deaths during the first three months are also attributed to these causes. We know less of how to control these causes than those that are mentioned later. What we do know is the following:
 - a. The death rate from these causes is much higher among the poor and the ignorant than among the most fortunate.
 - b. The death rate is higher among the *city* poor—where housing conditions, exposure to disease, and poor food (old milk, *e. g.*) all increase the evil chances.
 - c. The death-rate is higher among the children of the unhealthy than among the children of healthy parents.

We have discussed the causes under the caption "Prenatal period," and have suggested there some sources of information.

2. *Diseases of the digestive tract*: diarrhoea and enteritis. These cause about 25% of the deaths of infants—and about as many of the deaths of all children under 5 years of age. Practically everything that needs to be known of these diseases and their control is known. They are preventable. They are transmitted from child to child by flies, or by the unwashed hands of mother or nurse, or are introduced into the milk of the artificially fed baby, or are mere derangements of digestion caused by unfit cows' milk, *et. seq.* Cows' milk more than 12 hours old is unfit for infants, and the very best of cows' milk still was meant for calves, not babies. It must be modified by a scientific physician's direction to protect the baby from the dangers of an unnatural food. How great those dangers are may be seen from the following statement of New York experience: "In New York about one-fifth of *all* deaths are the deaths of children under one year old, and about nine out of each ten of these infants are *artificially fed.*" It is everywhere a maxim now that the bottle-fed baby has very much less

The Wastage of
Life in
Time of Peace

Our Own
State

A Field for
Church Missions

The Sources of
Summer
Complaint

Further Work
for Schools

chance to live a year than the breast-fed baby. To prevent infant deaths from diarrhoea and enteritis, it is necessary to know the *food requirements* of babies and while meeting these to protect the food from flies, dirty hands, *et seq.* Proper food and perfect cleanliness are the protection needed. These diseases do their mischief chiefly in the summer.

1. Children's Bureau, Washington, D. C. *Child Care Series*, No. 2. "Infant Care," Mrs. Max West. (Gratis.)
 2. New York City Department of Health. Division of Child Hygiene, Dr. Josephine Baker. Annual reports. (Gratis—or only postage.)
 3. Children's Bureau, Washington, D. C. "*Infant Mortality Series.*" (Gratis.)
 4. New York Milk Committee.
 5. Federation of Day Nurseries. New York City, 105 East 22d Street. (Gratis).
 6. Spargo: *The Common Sense of the Milk Question*. \$1.25, Chicago, A. C. McClurg.
 7. Saleeby: *Parenthood and Race Culture*. \$1.50, Chicago, A. C. McClurg.
 8. Rosenau: *The Milk Question*. \$2.50, Chicago, A. C. McClurg.
 9. Children's Aid Society. 105 East Twenty-second Street, New York City. Pamphlets or annual report.
 10. Russell Sage Foundation, 130 East Twenty-second Street, New York City. Department of Child Helping. (Ask for *list* of pamphlets on child protection.)
 11. New York School of Philanthropy, 105 East Twenty-second Street, New York City. (Ask for list of publications.)
 12. New York Association for the Improvement of the Conditions of the Poor, 105 East Twenty-second Street, New York City. (Ask for pamphlets—especially *Flies and Diarrhoea.*)
 13. Hill: *The New Public Health*.
3. *Diseases of the respiratory tract*: pneumonia and bronchitis. These account for over 14% of deaths under one year of age. They, too, are largely preventable, but are harder to control than the diseases of the digestive tract. Exposure to infection is so much greater in the crowded quarters of the city; ventilation is frequently so poor; and the ignorance of poor parents in regard to the proper food, clothing, and care of infants—all these add to the difficulty. It is worth noting that it is in the winter that these diseases chiefly do their mischief. It is harder to get *good housing* for families than to get good food. In either case, however, *ignorance* can to some extent be removed.
- (1) Spargo: *The Bitter Cry of the Children*. Chicago, A. C. McClurg, \$1.25.
 - (2) Mangold: *Problems of Child Welfare*. Macmillan, \$2.00.
 - (3) American Association for the Study and Prevention of Infant Mortality, Cathedral Street, Baltimore, Md.
 - (4) Newman: *Infant Mortality*. McClurg, \$1.50.

Winter
Complaint

III. PRE-SCHOOL AND SCHOOL AGE

In these periods the diseases of children continue to work their mischief. Measles, mumps, whooping-cough, chicken-pox, scarlet fever, diphtheria, *et seq.*, cause about 29% of the deaths under one year of age, and about 39% of the deaths under five years of age. A great deal of defect, deformity and abnormality are due to these and other preventable diseases. From scarlet fever comes a certain amount of deafness and mental defect, a certain amount of kidney trouble and heart disease. Sight and hearing may both be affected by measles. From malnutrition comes a certain amount of deformity (*e. g.*, the results of rickets); and tuberculosis also gives a considerable amount of deformity. Children should be protected to the very utmost from *all* the common diseases. It is *always* bad to have any one of them. It is not "God's will," but the ignorance of parents, the lack of adequately modern community protection, *et seq.* Cities can not have modern health protection for ten cents per capita. It costs Seattle ninety-eight cents per capita, for instance. Dr. Hill (The *New Public Health*, q. v.) asks the question, "Who preserves and transmits the infectious diseases from generation to generation?" and answers his own question: "Most emphatically it is the *mothers!*" Of course they would not willingly do that; but the force of an earlier statement covers this case:

Mischievous
Beliefs about
Children's
Diseases
which
Schools
Can Remove

"It is never enough to meah well; it is also necessary to have useful knowledge." *Real* knowledge must displace pseudo-knowledge and superstition. High health probably does not offer any protection against contracting infectious disease; and it is certainly not protective to ignore the existence of "germs"—any more than in India it would be protective to ignore the existence of hungry tigers and cobras. "Germs" are real and always hungry. Ignorance and unkindness necessarily go hand in hand. Whoever would be kind or just to children must learn the *real* nature of the common menaces and what measures are really protective. The following table will show the folly of exposing children to diseases "to have them over."

The
Dangerous Age

The average age of death from various "children's diseases."	
Diphtheria	3 years
Measles	1 year
Scarlet fever.....	4 years
Whooping cough.....	Under one year
Diarrhoea	Under one year
Broncho-pneumonia	1 year
Meningitis	2 years
Congenital debility }	Under one week
Malformation	
Premature birth	

(Mangold: *Problems of Child-Welfare.*)

1. *Diphtheria* is now a controllable disease—because there is a scientific treatment for it. That treatment is *anti-toxin*. Is anti-toxin "as dangerous as diphtheria?" Here are the facts:

Death rate from diphtheria—per cent of cases fatal.

	Before anti-toxin was used, 1890	After anti-toxin was used, 1900-11
Brooklyn	63.6%	5 to 10%
New York.....	36.5%	5 to 10%
Baltimore	74.0%	5.88%

All over the United States since 1895 it has fallen similarly wherever anti-toxin is used—just as small-pox, once a children's disease, has declined before vaccination. The average age of death from small-pox is now about twenty-eight years. Only those who do not know when a thing is proved can today oppose these protective measures.

It is important to have the treatment given very early, as the following figures show. They are based on over 8,000 cases in Chicago between 1897-1906.

Death from diphtheria after giving anti-toxin:

Day of giving treatment	per cent of deaths
First day.....	.32% (1-3 of 1%)
Second day.....	1.51% (1½%)
Third day.....	3.38%
Fourth day.....	11.15%
Fifth and later.....	22.01%

Other
False Beliefs
which are
Mischievous

It seems decidedly unwise to postpone the treatment to see whether the case will be able to get along without it.

(Mangold: *Problems of Child-Welfare.*)

2. *Measles and scarlet fever*: Both these diseases are far more dangerous than popular opinion is aware of. Both may be followed by grave after-effects. Children may survive scarlet fever only to die of acute Bright's Disease. It is worth remembering that scarlet fever is confined to those countries that use cow's milk. In an epidemic this may be useful in protection. Measles causes more deaths in the United States than scarlet fever, because it is so much more prevalent. There are some common misconceptions in regard to both measles and scarlet fever that are responsible for many deaths and much needless suffering. One of these is that a mild or light case is *less contagious* than a severe case. This is not true. Light cases are just as contagious as severe ones. Some children are more

resistant than others. A light case in your child may kill your neighbor's child, and the other way around. A child does not have to be "run down" to catch a disease. Children in the pink of health only need to get the germ to have the disease—just as soldiers and sailors in the pink of condition succumb to German measles, typhoid, *et seq.*, so soon as they get the "germ." To escape the infectious diseases it is necessary either to have *immunity* (natural or artificial) or else to avoid taking the germ into one's system. Another mischievous belief is that a disease is not contagious until the doctor has named it. Unhappily many diseases are especially "catching" in the early stages—which is one reason they keep going. The belief that scarlet fever is "catching" from the *scales* is mischievous. It is not. It is the slightly inflamed *throat* of the child which carries and spreads the germ. By coughing, laughing, singing, whispering into neighbors' faces, as in school, the infected child spreads the disease to those near him. By putting his pencil into his mouth or handling things that others handle and put into their mouths he spreads to them the infection. Most *contagious (or infectious) diseases pass from person to person by way of infected hands.* That is the *usual* method. Sick children should never be allowed to go to school, or allowed to visit. A cold, slight or bad, is a most *admirable* excuse for staying at home. Careful cleansing of hands before eating is a protective habit; and the cleaning of nose and throat each day is a good routine.

3. *Whooping cough and other respiratory diseases.* About the same number of children die annually of whooping cough as of measles (about 10,000 in the United States). This is one of the few children's diseases which shows a higher death rate in country than in city. The reason is that whooping cough is less likely to be quarantined in the country. A boy can play ball even though he has the whooping cough. Thus he spreads the infection by mouth spray, by handling with infected hands the ball and bat which other boys handle, *et seq.* From mouth to hand and thence from hand to mouth goes the germ, and so from person to person goes the disease. The quarantine is an essential part of a system of health protection. Where there is no physician equipped to determine by bacteriological methods when the danger is over, it is wise and Christian to quarantine for the full period for each of the diseases.

Christian Ethics
for Parents
with
Sick Children

Chicken-pox	.....16	days for patient	(three weeks for exposed)
Diphtheria	.....21	" " "	(one week after exposure)
German measles	...16	" " "	
Measles	.....16	" " "	(two weeks beginning 7 days after first exposure)
Mumps	.....16	" " "	(ten days beginning 10 days after exposure)
Scarlet fever	.....30	" " "	(two weeks after first exposure)
Small-pox	.....30	" " "	
Whooping cough	...30	" " "	(three weeks or as long as whoops continue)

(From Wood: *Sanitation Practically Applied*)

1. Wood: *Sanitation Practically Applied.* Wiley, 1918, \$2.00.
2. Hill: *The New Public Health.* Macmillan, 1916, \$1.25.
3. Mangold: *Problems of Child Welfare.* Macmillan, 1914, \$2.00.
4. New York City Department of Health, Division of Child Hygiene. Pamphlets on Contagious Diseases. Gratis.
5. New York State Department of Health, Albany, N. Y. Pamphlets on *Contagious Diseases.* Gratis.
6. Children's Bureau, Washington, D. C., *Care of Children Series,* and *Infant Mortality Series.* Gratis.
7. Devine: *The Normal Life.* 1916, \$1.00, A. C. McClurg.

Important
Handicap
of the
Pre-Scientific
Age

4. Besides these infectious diseases there are various other handicaps of children in these two periods of life which the competent parent will wish to make safe against. The following are some of the important minor defects of children which are correctible.

a. Defective teeth.

From the third year every child should have his teeth regularly examined and attended to. With this care should, of course, go careful instruction in the cleaning of teeth and insistence upon a habit of regular cleaning of the teeth after every meal. In communities with many poor, free dental service should be provided for children not able to pay for work. To have bad teeth is a very real handicap. We now know that decaying teeth and pus-sacs about gums or at the roots of teeth often give serious cases of rheumatism in adults. Bad teeth, aside from their relation to health, are usually lost and their loss may affect the development of the jaw. All teeth should have treatment as soon as they *need* it.

b. Enlarged or diseased tonsils are responsible for many systemic infections. From a diseased tonsil the whole system may be poisoned. They should be removed by a competent specialist. Once it was the practice of specialists to merely snip the *tops* off; this is now the practice only of the uninformed. This makes the condition *worse than if nothing is done*. The tonsil must be *completely removed* to get the benefits of the operation.c. Adenoids are *usually* indicated by the habit of breathing through the mouth. They should be removed—since where they are large they may cause permanent deformity of the face and many other disturbances, both physical and mental. Dr. Wood insists that no health officer should insert his finger into the pharynx to examine for adenoids. He should, it is said, make a rhinoscope examination. The practice, however, is common among very successful specialists, so that possibly Dr. Wood is too emphatic in his disapproval.d. Vision and hearing should be known to be normal. *School work and normal growth and happiness* may be rendered more or less impossible where either sight or hearing is below par. Accumulations of wax often give *complete deafness* in one ear, and not infrequently make children seem dull. There are few defects which derange conduct more than defects of vision.

Delinquency
Often Related to
Defect

In a brief outline it is not feasible to go further in discussion. If it is understood, as it should be, that from any of these minor defects *derangement of conduct* as well as *impairment of health* may follow, the importance of attention to them will be clear. Delinquency, crime, truancy, apparent great backwardness—these and other effects may follow from the presence of such removable handicaps. The child has a right to a fair start in life. It is unhappily the case that many do not get it. But it is not too much to believe that if the importance of it were known they would. (See Healy, *The Individual Delinquent*, for cases.)

III

In conclusion we may reiterate that the welfare of children is inseparable from the welfare of mothers. Child-bearing is a natural function and should not be attended with either a large amount of sickness or mortality, or followed by invalidism. In connection with this it is worth noting that in the United States in 1913 a larger number of women between 15 and 44 years of age died in child birth and of its unnecessary sequelae than of *any other cause except tuberculosis*. This indicates the poor obstetrical service which was rendered, and should call attention to the fact that the United States alone of the important nations of the world offers very little protection to its mothers from the untaught midwife. In America we protect infants and mothers by a general requirement that physicians shall be of good character, spend four years in the study of medicine, and pass a state board examination before being licensed to practice medicine; and that nurses shall spend two or three years in hospital training before they are considered competent to carry out a physician's orders in caring for mother and infant in the period during and following child birth. This protects about *half* the mothers in the United States—in some states only one-fifth. For the rest, not trained physicians with the assistance of trained nurses, but *untaught*, usually ignorant and therefore careless and dirty, women called midwives must suffice. In all except a few localities

A Reproach
to America
for Her
Wastage of
Women

(New York City, *e. g.*) the expert service of both doctor and nurse are left to too large an extent to be covered by any woman who chooses to call herself a midwife. The United States is the only civilized country in the world where the health and life and future well-being of mothers and infants are not safeguarded by statutory requirements for *at least the training and licensing* of midwives. In most countries the practice of midwives is also supervised by the state. In the United States there are thirteen states that place no restriction whatever upon the practice of midwifery. In fourteen states there are no general laws relating in any way to the training, registration, or practice of midwives; and in twenty-one states and the District of Columbia where there are laws relating to midwives the condition is as follows:

1. In twelve states and the District of Columbia, it is required that they shall pass an *examination* before receiving a license to practice.
2. In six states, midwives are restricted to service in *normal* cases of confinement.
3. In seven states, the statutory provisions are so irregular and meagre as to be practically without effect.

(See Dr. Carolyn Van Blarcom: *The Midwife in England*, from which we have drawn generously for this section.)

Defective Public Opinion Due largely to **Defective Public Education** Colorado belongs in the last group. If we were to draw up an indictment of our state's child-welfare organization it would have to contain at least five important complaints.

1. That we lack birth registration—in spite of a good statute requiring it.
2. That we lack compulsory school attendance for all children—in spite of a good statute requiring it.
3. That we are one of the three worst states in the Union in regard to the number of children who become blind in infancy as a result of failure to treat the eyes of all children at birth.
4. That in prosperous communities we have a tremendous amount of child labor and school retardation (with early elimination)—in spite of good statutes.
5. That with us mothers and infants are not protected from the obstetrical practice of ignorant and dirty midwives.

The Duty of Those Who Know Of course, where good statutes exist and poor enforcement is the rule, we have to recognize the distinction between *laws* and *statutes*. *Laws* always receive the support of *public opinion*. Statutes may only reflect the most enlightened opinion of the state. Here, as elsewhere, the improvement of our practice will have to come through the education of public opinion; and, historically, this has always proceeded through conscious organizing and sustained effort on the part of the elite—the enlightened groups who represent the best will and knowledge of the community in which they live. Where (as in the practice of midwives) we lack statutes, it is the function of the enlightened to secure them. "Progress is possible but not inevitable. It is dependent upon our efforts."

1. New York Committee for the Prevention of Blindness, 130 East Twenty-second Street, New York City. *Pamphlets on Prevention of Blindness*—especially, *The Midwife in England*, by Carolyn Van Blarcom. (Gratis.)
2. New York City Health Department, Division of Child Hygiene, Dr. Josephine Baker. Pamphlets on *Ophthalmia Neonatorum*. (Gratis.)
3. Fifth Annual Report, Children's Bureau, Washington, D. C. (Gratis.)

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Number 3

A Conscious Program

AND

An Appendix
of Some Interest

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A Conscious Program
for the
Normal Schools
and Teachers Colleges
of America

Report of the Committee on Resolutions
and Restatement of the Declaration of Principles
of the Department of Normal Schools
of the National Education Association

ADOPTED UNANIMOUSLY
AT PITTSBURGH, JULY 3, 1918

Ordered Published

COMMITTEE

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1918

DECLARATION OF PRINCIPLES

A Foreword

To the teacher-training schools of America are entrusted the duties and responsibilities of leadership—the era of followership for us is past. Such progress as is to come to public education in the future is to come from the teachers who, though they may not “know their subjects better”, will certainly know the social bearings of their subjects better, and will certainly know the nature of the learning process better. If this is to be so, it will be because the institutions that prepare teachers have become better able to focus themselves upon the characteristic problems of teacher-training. And this in turn implies that a better method of determining what are the pressing tasks of normal schools has been adopted. After a long period of largely *unconscious* experimentation we are reaching the vantage from which our progress—our advance in efficiency of service—can become conscious. To have leadership we must have a *CONSCIOUS PROGRAM*. When we have this we can dispense with the ornaments of rhetoric and will take the pains to work out the implications of the blanket phrases in which we have long cast our philosophy.

I

A PURPOSEFUL EDUCATION FOR THE ENDS OF DEMOCRACY

We stand first of all for a purposeful education for the ends of democracy. The great war has done us at least this service. It has summarily shown us that in the phrase of the man of affairs, “we must get down to brass tacks.” It is clear to us now that if in America for the past fifty years we had had an education as purposefully focused upon the main problem of democracy as Germany’s was focused upon the main problem of autocracy, we should not now be so abruptly and embarrassingly faced with the difficult job of readjustment. We have very suddenly and brutally been shown that our old devotion to German education was childishly naive. That system was never for us. It rests upon theories of the proper relation of individuals to state which are totally hostile to all that our forefathers struggled to establish and that we now prize and fight for. German education is a perfect tool for the ends of German society. And in that fact always lay the single lesson of German education for America. It was and is simply the lesson of *purposeful organization for the ends of society*. Unhappily we long missed that obvious lesson. Happily, however, the war has italicized it for us. The aim of German education is to make people “passionately subservient” to the purposes of autocracy. To that end every detail of it is organically adjusted. We, therefore, phrase our new insight clearly: *We stand first of all for a purposeful education for the ends of democracy.*

II

EVOLUTIONARY NOT REVOLUTIONARY METHOD OF PROCEDURE— A PROFESSION RATHER THAN AN OCCUPATION

To this end we regard it as both essential and inevitable that in a democracy education shall more and more consciously take its cues for courses of study and the organization of activities from a full knowledge of both the

upward endeavors of the time and of the deficits which whoever looks may plainly see in our life. We grant that in the past, history has sometimes been taught in so blind a fashion, with so little sense of its social function, as to increase international and sectional frictions. We grant that the teaching of civics in the past has often had little or nothing to do with the quality of our citizenship. We grant that there is perhaps some basis for the recent complaint that children's notions of what democracy means would probably have been little affected had they studied no history and civics. Civics in a democracy, to serve the ends of patriotism, must have the advantage of contrast with less liberal forms of government; but beyond that it must find its major material in the study of the concrete problems of the thoughtful American citizens. History, whatever else it may do, must show American boys and girls the evolution of the more pressing problems of a democratic society, preferably beginning with the present problems. But it should be clearly understood that we do not sympathize with the desire of the radicals to make immediate wholesale changes in public school curricula. Those who wish to do so should take counsel of the history of institutional readjustments. The successful method is typically not revolutionary but evolutionary. What is needed in public school courses of study is not so much new courses of study as such a shifting of emphases within established courses as will clearly bring into the foreground their social virtues.

This commits us to the expectation that school-men shall henceforth be so liberally and dynamically educated that they may deserve the more significant title of men-of-the-world, in a new and fine sense. We ally ourselves with all the forces which are now suggesting that teacher-training look to the goal of four years of study beyond the high school—or to such extension of the preparation of teachers as will enable us to have a *profession* of teaching instead of merely a beloved and consecrated *occupation*. Not, therefore, merely four years of study of no matter what "liberality, culture, and vision-giving" subjects, but a set of curricula in which each and every course is warranted by analysis of the definite and concrete responsibilities involved for the teacher, or of definite and concrete deficits in social life and the public schools' success with its subjects.

III

SCIENTIFIC PROCEDURES IN THE PRACTICES OF EDUCATION

Since in common with all thoughtful students of the facts of civilization and the operative factors behind them we recognize that "the only way of thinking that has ever proved fruitful in this world is the way of science", we commit ourselves definitely to the positive advancement of all scientific procedures in the practices of education. This will cover not only the now common support of courses in the sciences basic to education—such as biology, psychology, and sociology—but also such courses in the fields of mental tests and educational measurements as will enable teachers to co-operate with the spirit and in the technique of modern education.

We regard these tottering first steps as prophetic of the better day when teaching and the directing of education shall, like medicine and philanthropy, industry and agriculture, have passed beyond the stage of rule-of-thumb and reached the level of expert service through the technique of scientific procedure. The basis of professional service is now, as it has always been in the past, simply the ability to render expert service in the conservation of the precious possessions of man. This involves the constant adjustment of scholarship to exigencies. An occupation which makes no demand of this sort upon individuals can never be a profession. We see the hope of greater regard for teachers, as well as the secondary asset of greater compensation, in the possibility of professionalizing teaching. As teaching passes from rule-of-thumb procedures to the assured activities of scientific method, we may confidently expect that its greater responsibilities will draw to it men of ambition and ability in ever greater numbers, just as, since farming has come under the transforming method

of science, it has become, so to speak, respectable, and is claiming annually its share of the talent of the rising generation; and just as industry by its constant premium upon initiative, upon the ability "to deliver the goods," has in the past half-century drawn ever more heavily upon the groups of men who, in former times, would have felt that only the learned professions offered scope for a real man.

IV

SCHOOL-SURVEYS—SELF-SURVEYS—DEPARTMENTAL RESEARCH IN
THE INTEREST OF READJUSTED COURSES OF STUDY

In keeping with our conviction that through the method of science there is to come a great increase in the value of the service given by teachers, and in turn a significant widening of their scope, we commit ourselves to the furthering of school-surveys. School-surveys, however, to make their real contributions to educational progress in purposefulness must be *self-surveys*. Properly regarded, a school-survey is merely a first step in scientific procedure. In a teacher-training school it is a taking-stock of the whole educational situation of the tributary region of the school. If it is not that in the beginning, if guided by a wholesome conception of the leadership function of the school, it inevitably widens to that scope. It is a critical examination of the details of the school's adjustment to the operative factors of its problem. In its data concerning the number and kinds of positions opened annually in the state it finds some check upon the direction of expansion, or else it finds the need of securing co-operation from the state educational office in the gathering of relevant statistics. In its attempts to check up its work by the study of the after-careers of its graduates it finds the evidence of insufficiently purposeful organization of curricula or else learns the value of keeping statistics of its graduates. The value of self-surveys lies, of course, in the discovery of the weak points of service, with the sole end of increasing the value of the service that can be given. Every self-survey will reveal the normal schools' need of organized research in the interest of the daily work of teacher-training. For this we possess the strategic position in education.

Perhaps our most immediate need for guidance in framing courses of study is to know what are the characteristic failures of the public schools in their teaching of each of the school subjects. It is both untrue and exceeding naive to say that we do know. We know in part—as children do. In advance of inductive investigation in his own field no one knows very much of the characteristic shortcomings of public school instruction in English, mathematics, history, civics, language and science. In an elective class in geometry which presumably contained students who had felt themselves to be successful in the subject, one mathematics teacher found that fifty-eight and one-third per cent of the students had successfully done their public school geometry by memorizing the theorems and demonstrations as they would have done so much poetry. The diverse findings of investigations into the teaching of English in the last five years are sufficient to show the *naivete* of much of public school work. The field is still fresh and unoccupied, and the framing of proper courses for normal schools must wait largely upon our organizing and encouraging by the means in our power a great deal of such work.

We commit ourselves, therefore, to the support of departmental research in the interests of courses better adjusted to the actual and discoverable deficits of public school education in each of the school subjects; and so far as may be feasible we commit ourselves to the proposition that research upon such vital problems of teacher-training is as truly our duty as leaders as it is to secure the most excellent teaching of unquestionable subject-matter in any field. It is one part of our executive responsibility for training in service. It is also a part of our responsibility for the advancement of professionalization of teaching. It is a part of our responsibility to the state which creates normal schools for leadership. And finally it is probably a very important part of whatever

thoughtful plans may be set afoot for increasing the number of competent men in education and keeping them there. To whom are they worth more? If teaching is an expert service the adjusted teacher cannot be replaced by the unadjusted teacher. If as administrators we possess a valuable point of view, the adjusted teacher is worth more than the unadjusted.

V

EXPERIMENTAL SCHOOLS, PHILANTHROPY, AND OUR ATTITUDE TOWARD EXPLORATION

In line with our advocacy of the encouragement of scientific method in first discovering and later dealing with school problems we are bound to look not with the hostile eyes of suspicion but with the friendly gaze of the open-minded upon the increase of experimental schools; where, without cost to the public, ventures not warrantable by us may be carried through to sure conclusions, either of success or failure. With similar friendliness we welcome the entrance of philanthropy into the field of education. Our knowledge of the inner, or social, history of education, which somehow seldom comes to the surface in courses in the history of education, informs us of the value of organized exploration and demonstration outside the ranks of teachers. We shall in the future, as in the past, profit from whatever they do that opens vistas or demonstrates more fruitful ways of doing. We, therefore, look upon them as our allies in this cause, not as aggressive rivals. But we do not yield to them or any institution the field of exploration and experiment. However pressed we may be with heavy work, this is clearly not the way nor the time to seek to lighten our burden. Instead, the best way to lighten our load is to assume the additional burden which aggressive exploration of the actual results of public school teaching will involve. For the sake of our own growth, but more for the sake of a vital scholarship in our teachers that will open vistas for their students, we must do it.

VI

DUALISM OF THEORY AND PRACTICE

As the representatives of the leadership institutions of public education we stand firmly for the elimination of the present vicious dualism of educational theory and school practice, which still very widely characterizes present school practice and exhibits over and over the unhappy division of mind that permits teachers to declare in most modern terms the aims of education, but in their actual procedure to reveal the outworn philosophy of the old disciplinary view of value.

VII

WINNING A FULL AND UNQUESTIONED VICTORY

Representing the institutions whose function it is to educate and train teachers for the schools of our country, we hereby express our deepest conviction that the principles for which the allied nations are fighting in this most awful struggle are sacred and holy and that in their triumph are bound up the future well-being and happiness of humanity, and we solemnly and unreservedly pledge ourselves and the institutions which we represent to the support of our government and her gallant allies in the winning of a full and unquestioned victory which shall guarantee for the future of the world that right and democracy rather than might and plutocracy shall be the guiding course of international relations.

VIII

FEDERAL AID FOR GENERAL PUBLIC EDUCATION

We believe that in a democracy the public schools, from the kindergarten to the college, constitute the first line of national defense and that to cherish

and develop them is the prime duty of our legislators and of Congress. Democracy should imply equal and ample opportunity for education for all classes of citizenship throughout our several states. At present the states of our union are not equally capable of supporting an adequate system of public education and for that reason we favor federal aid so distributed as to equalize educational advantages and financial burdens for education throughout our entire country.

IX

FEDERAL AID FOR TEACHERS' SALARIES

The elementary school, rural and urban, is the foundation of our educational system. All that may be done later in high school or university must depend upon what is done there. Moreover, it is the only school attended by the vast majority of the children of our country. The future welfare of the nation demands that this school must be vastly improved in efficiency. The most direct way of improvement is by elevating the standard of qualification for teachers. Higher standards imply a longer time for preparation, and this in turn a larger expense to persons fitting for teaching. The salaries of teachers at present will not warrant the expenditure of more time and money in preparation, and since past experience and present conditions give no hope that the states will soon be able or be inclined to increase the salaries of teachers sufficiently to meet the added cost of additional preparation, we favor federal aid for teachers' salaries.

X

VOCATIONAL EDUCATION AND THE SMITH-HUGHES ACT

We view with deep concern the policy pursued by the Director and Board of Vocational Education in administering the National funds provided under the terms of the Smith-Hughes Act. Instead of promoting vocational education this policy threatens to hinder some efforts to promote vocational education already well begun in many states; it threatens to interfere in a wholly unwarranted manner with the administration of education within the states; it threatens to inflict upon the states a dual system of public education.

We believe that vocational education is the work of all the public schools and not the work of a few special vocational schools. To the end that proper vocational education may be provided in the public schools every normal school and teachers college should train teachers to teach the vocations in the public schools; the training of teachers to teach the vocations must become a large part of the work of every normal school and teachers college before vocational education can be properly developed in the public schools.

XI

A NORMAL SCHOOL COMMISSION

Since the problems of this World War bring to us a definite realization of the necessity for the reconstruction of our educational system, we recommend the appointment of a Normal School Commission for the specific purpose of discussing problems of reconstruction in public school education, the reorganization of school curricula, and the place of the normal school and teachers college in the readjusted national and state systems of education; and that this Commission make a comprehensive report to this body.

XII

FUNCTION OF THE NORMAL SCHOOL—FORECAST OF THE SCHOOL OF TOMORROW—MOVEMENT TOWARD TEACHERS COLLEGES

The Normal schools were originally established upon the belief that there is a science and an art of teaching and that young people, aspiring to become

teachers, can be taught the science and trained in the art. No reason appears today to cause them to recede from that conviction. No other educational agency has yet arisen and assumed the responsibility of training teachers fully in both subject matter and the material and methods to be used in the public schools. The normal schools, therefore, reassert their conviction in their calling to train young men and women in the science and art of teaching and in the subject matter to be taught, and declare their purpose to extend their activities not only to meet the demands of the most progressive school systems of the country but to forecast the school of the immediate future and to make ready the teachers to man these schools.

With the increasing complexity of social life and the better understanding of the psychical life of children and their physical needs, the normal schools and teachers colleges have assumed the duty of educating teachers to take charge of the various types of special schools organized to meet these conditions. These schools and colleges also recognize the necessity of a fuller training, a deeper culture, a greater maturity of mind in the teacher of the modern school than were required of the teacher of twenty years ago. These conditions necessitate the movement toward a training extending over a period of four years or the equivalent therefor beyond the usual cultural and vocational four-year high school. The whole movement is toward making technical, *vocational colleges* out of the normal schools. Each school must serve its community as that community's needs call for service, but all must recognize the drift in the evolution toward real professional colleges as the standard and adjust itself to that drift as rapidly as possible.

Appendix A

1913

DECLARATION OF PRINCIPLES

Department of Normal Schools

N. E. A.

The American normal school has created, stimulated, idealized, and in this generation brought ideals to the knowledge of the people. The normal school stands for democracy in education and is unalterably opposed to the centralization of educational power.

Its professional spirit is a spirit of consecration.

The normal school has been established in all lands where there exists a system of state-supported schools. It is a vital part of the public-school system because well-trained teachers are a prime requisite for efficient schools.

Teaching is an art, based upon a body of professional knowledge—knowledge of the purpose of the school and of the laws of development of the child. It is the business of the normal school to organize this knowledge and develop this art.

The public schools were very elementary in character in the early days of the normal school. Today they are no longer elementary; special forms have developed, courses have broadened and new researches in science, new demands for vocational training, and new problems in rural community and in society have found lodgment in the public schools. There is need for the departmental teacher and the special teacher, while school supervision and administration have become a profession. Principals and superintendents should be trained in a professional atmosphere where the same ideals are set up, the same principles and methods taught, as are taught to the teachers who are to work under their leadership. The normal school should regard these problems of public-school education as distinctly its own and attack them with the enthusiasm and energy inspired by a great mission.

The twentieth-century normal school is dedicated to higher education, with the special function of supplying teachers for the rural schools, the elementary schools, and the high schools.

Its entrance requirements as to scholarship will be practically the same requirements that are now demanded by the colleges—graduation from a four-year high school.

It will extend its courses of instruction and practice, as conditions may demand, to four-year courses, thus giving it as high a standing in the way of discipline and scholarship as the college now possesses.

It will widely extend the field of professional experimentation and investigation.

It will try out its graduates as to their ability to teach and manage schools by such a period of practice-teaching as will settle the case beyond peradventure.

It will plan effectively to train teachers for rural schools, to stimulate and foster every educative agency toward the development of rural community life, and to elevate the professional position of the rural teacher.

It will set up definite ends of education that will relate themselves to the

life of the people in all departments of human interest and will thus become a great social energy. As the public school is going to become, next to the family, the most potent social agent, so the normal school is going to fit teachers to perform this educative function.

For a half-century the leaders among normal schools in this country have been devoted enthusiasts and of boundless ideas; they had the greatest faith in education and the intensest love for teaching; they were superior teachers possessing remarkable skill in the conduct of instruction and inspiration. We reaffirm our faith in the devotion, the patriotism, the consecration of these men and women who have made possible the achievements of the American normal school.

But the twentieth-century normal school will develop such a spirit of enthusiasm and devotion in its pupils as will do for the schools of the country at large what is now done in a limited number of centers.

Appendix B

List of Public Normal Schools

REVISED AS REPORTED BY THE U. S. BUREAU OF EDUCATION,
JANUARY 10, 1918

<i>Location</i>	<i>Institution</i>	<i>President</i>
Alabama.....	Daphne..... State Normal School.....	H. H. Holmes
	Florence..... State Normal School.....	H. J. Willingham
	Jacksonville..... State Normal School.....	C. W. Daugeette
	Livingston..... State Normal School.....	G. W. Brock
	Moundville..... State Normal School.....	R. W. Greene
	Troy..... State Normal School.....	E. M. Shackelford
Arizona.....	Flagstaff..... Northern Arizona Normal School.....	R. H. H. Blome
	Tempe..... Tempe Normal School of Arizona.....	A. J. Matthews
Arkansas.....	Conway..... Arkansas State Normal School.....	B. W. Torreyson
California....	Arcata..... Humboldt State Normal School.....	N. B. Van Matre
	Florence..... State Normal School.....	Allison Ware
	Fresno..... State Normal School.....	C. L. McLane
	Los Angeles..... State Normal School.....	E. C. Moore
	San Diego..... State Normal School.....	E. L. Hardy
	San Francisco..... State Normal School.....	Frederick Burk
	San Jose..... State Normal School.....	Morris Elmer Dailey
	Santa Barbara... State Normal School of Manual Arts and Home Economics....	F. H. Ball
Colorado.....	Gunnison..... Colorado State Normal School.....	J. H. Kelley
Connecticut... Bridgeport.....	Bridgeport City Normal School.....	E. E. Cortright
	Danbury..... State Normal Training School.....	J. R. Perkins
	New Britain..... State Normal Training School.....	Marcus White
	New Haven..... State Normal Training School.....	A. B. Morrill
	Willimantic..... State Normal Training School.....	H. T. Burr
District of Columbia....	Washington..... J. Ormond Wilson Normal School.....	Anna M. Goding
Georgia.....	Athens..... State Normal School.....	J. M. Pound
	Atlanta..... Atlanta Normal Training School.....	Mary W. Postell
	Milledgeville.... Georgia Normal and Industrial College.....	Marvin M. Parks
	Valdosta..... Southern Georgia State Normal College.....	R. H. Powell
Idaho.....	Albion..... State Normal School.....	Geo. A. Axline
	Lewiston..... State Normal School.....	Oliver M. Elliott
Illinois.....	Carbondale..... Southern Illinois State Normal University.....	H. W. Shryock
	Charleston..... Eastern Illinois State Normal School.....	L. C. Lord
	Chicago..... Chicago Normal School.....	Wm. B. Owen
	De Kalb..... Northern Illinois State Normal School.....	John W. Cook
	Macomb..... Western Illinois State Normal School.....	W. P. Morgan
	Normal..... Illinois State Normal University.....	David Felmeley
Indiana.....	Fort Wayne..... Fort Wayne Normal School.....	Flora Wilber
	Indianapolis..... Indianapolis Normal School.....	Marion L. Webster
	Terre Haute..... Indiana State Normal School.....	Wm. W. Parsons
Iowa.....	Shenandoah..... Western Normal College.....	Chas. F. Garrett

<i>Location</i>	<i>Institution</i>	<i>President</i>	
Kansas.....	Emporia.....	State Normal School.....	Thos. W. Buters
	Hays.....	Fort Hays Kansas Normal School.....	Wm. A. Lewis
	Pittsburg.....	State Manual Training Normal School.....	W. A. Brandenburg
Kentucky....	Bowling Green....	Western Kentucky State Normal School.....	H. H. Cherry
	Louisville.....	Louisville Normal School.....	Eliz. Breckinridge
	Richmond.....	Eastern Kentucky State Normal School.....	T. J. Coates
Louisiana....	Natchitoches.....	Louisiana State Normal School.....	Victor L. Roy
	New Orleans.....	New Orleans Normal School.....	Margaret C. Hanson
Maine.....	Castine.....	Eastern State Normal School.....	A. F. Richardson
	Farmington.....	Farmington State Normal School.....	W. G. Mallett
	Fort Kent.....	Madawaska Training School.....	Mary P. Nowland
	Gorham.....	Western State Normal School.....	Walter E. Russell
	Lewiston.....	Lewiston Normal Training School.....	Adelaide Finch
	Machias.....	Washington State Normal School.....	Wm. L. Powers
	Presque Isle.....	Aroostook State Normal School.....	San Lorenzo Merriman
Maryland....	Baltimore.....	Baltimore Teachers Training School.....	Norman W. Cameron
	Frostburg.....	Maryland State Normal School.....	C. L. Staples
	Towson.....	Maryland State Normal School.....	Henry S. West
Massachusetts	Boston.....	Boston Normal School.....	Wallace C. Boyden
	Boston.....	Massachusetts Normal Art School.....	Jas F. Hopkins
	Bridgewater.....	State Normal School.....	Arthur C. Boyden
	Fitchburg.....	State Normal School.....	John G. Thompson
	Framingham.....	State Normal School.....	Jas. Chalmers
	Hyannis.....	State Normal School.....	Wm. A. Baldwin
	Lowell.....	State Normal School.....	John J. Mahoney
	North Adams.....	State Normal School.....	Frank F. Murdock
	Salem.....	State Normal School.....	J. A. Pitman
	Westfield.....	State Normal School.....	C. A. Brodeur
	Worcester.....	State Normal School.....	Wm. B. Aspinwall
Michigan....	Detroit.....	Wales C. Martindale Normal Training School.....	John F. Thomas
	Kalamazoo.....	Western State Normal School.....	D. B. Waldo
	Marquette.....	Northern State Normal School.....	Jas. H. Kaye
	Mount Pleasant.....	Central State Normal School.....	Chas. T. Grawn
	Ypsilanti.....	Michigan State Normal College.....	Chas. McKenny
Minnesota....	Duluth.....	State Normal School.....	E. W. Bohannon
	Mankato.....	State Normal School.....	Chas. H. Cooper
	Moorhead.....	State Normal School.....	Frank A. Weld
	St. Cloud.....	State Normal School.....	Joseph C. Brown
	Winona.....	State Normal School.....	Guy E. Maxwell
Mississippi..	Hattiesburg.....	Mississippi Normal College.....	Joe Cook
Missouri....	Cape Girardeau..	State Normal School.....	W. S. Dearthmont
	Kirksville.....	State Normal School.....	John R. Kirk
	Maryville.....	State Normal School.....	Ira Richardson
	St. Louis.....	Harris Teachers College.....	E. George Payne
	Springfield.....	State Normal School.....	Wm. T. Carrington
	Warrensburg....	State Normal School.....	Eldo L. Hendricks
Montana.....	Dillon.....	Montana State Normal School.....	Joseph E. Monroe
Nebraska....	Chadron.....	State Normal School.....	Robt. I. Elliott
	Kearney.....	State Normal School.....	Geo. S. Dick
	Peru.....	State Normal School.....	D. W. Hayes
	Wayne.....	State Normal School.....	U. S. Conn
New Hampshire.	Keene.....	State Normal School.....	W. E. Mason
	Plymouth.....	State Normal School.....	Ernest L. Silver
New Jersey..	Jersey City.....	Teachers' Training School.....	J. H. Brensinger
	Montclair.....	New Jersey State Normal School.....	Chas. S. Chapin
	Newark.....	New Jersey State Normal School.....	W. S. Willis
	Paterson.....	Paterson Normal Training School.....	Frank W. Smith
	Trenton.....	New Jersey State Normal School.....	Jas. M. Green

<i>Location</i>	<i>Institution</i>	<i>President</i>	
New Mexico	East Las Vegas	New Mexico Normal University..F. H. H. Roberts	
	Silver City	New Mexico Normal School....E. L. Enloe	
New York	Albany	Teachers' Training School.....Thos. S. O'Brien	
	Brookport	State Normal and Training School..A. C. Thompson	
	Brooklyn	Training School for Teachers....Emma L. Johnston	
	Buffalo	State Normal School.....Daniel Upton	
	Cohoes	Cohoes Training School.....Harriet L. Knapp	
	Cortland	State Normal and Training School..Harry D. DeGroat	
	Fredonia	State Normal and Training School..Myron T. Dana	
	Geneseo	Geneseo State Normal School....Jas. V. Sturges	
	Jamalca	Training School for Teachers...A. C. McLachlan	
	New Paltz	State Normal School.....John C. Bliss	
	New York	New York Training School for Teachers.....	Hugo Newman
		Oneonta	State Normal School.....Percy I. Bugbee
	Oswego	State Normal School.....Jas. G. Riggs	
	Plattsburg	State Normal School.....Geo. K. Hawkins	
	Potsdam	State Normal and Training School..J. M. Thompson	
	Rochester	City Normal School.....Ed. J. Bonner	
	Schenectady	Teachers' Training School.....G. B. Jeffers	
	Syracuse	Syracuse Training School for Teachers.....	J. Ed. Banta
		Watertown	Watertown Training School....Ella M. Walratt
	Yonkers	Yonkers Training School for Teachers.....	Eleanor M. Taylor
North Carolina		Cullowhee	Cullowhee Normal and Industrial School.....A. C. Reynolds
	Greenville	East Carolina Teachers' Train- ing School.....Rob't H. Wright	
	Greensboro	State Normal and Industrial College.....Julius I. Foust	
	Pembroke	Indian Normal College.....H. A. Neal	
North Dakota	Ellendale	State Normal and Industrial School.....Ryland M. Black	
	Maryville	State Normal School.....Thos. A. Hillier	
	Minot	State Normal School.....A. G. Steele	
	Valley City	State Normal School.....Geo. A. McFarland	
Ohio	Akron	Perkins Normal School.....James C. Bay	
	Athens	State Normal School.....John J. Richeson	
	Bowling Green	State Normal School.....Homer B. Williams	
	Cleveland	Cleveland Normal Training School..R. W. Himelick	
	Columbus	Columbus Normal School.....M. W. Sutherland	
	Dayton	Dayton Normal School.....Grace A. Greene	
	Kent	State Normal College.....John S. McGilvrey	
Oxford	Teachers College.....Harvey C. Minnich		
Oklahoma	Ada	East Central State Normal School..J. M. Gordon	
	Alva	Northwestern State Normal School.....A. S. Faulkner	
	Durant	Southeastern State Normal School.....T. D. Brooks	
	Edmond	Central State Normal School....J. W. Graves	
	Tahlequah	Northeastern State Normal School.....G. W. Gable	
	Weatherford	Southwestern State Normal School.....James B. Eskridge	
Oregon	Monmouth	State Normal School.....John H. Ackerman	
Pennsylvania	Bloomsburg	State Normal School.....D. J. Waller, Jr.	
	California	Southwestern State Normal School.....	Walter S. Hertzog
		Clarion	State Normal School.....Amos P. Reese
	East Stroudsburg	State Normal School.....E. L. Kemp	
	Edinboro	State Normal School.....Frank E. Baker	
	Erie	Erie Normal Training School....Celestia J. Hershey	
	Harrisburg	Teachers' Training School.....Anne U. Wert	
	Indiana	State Normal School.....John A. H. Keith	
	Kutztown	Keystone State Normal School..A. C. Rothermel	
	Lock Haven	Central State Normal School....Charles Lose	
	Mansfield	State Normal School.....Wm. R. Straughn	
	Millersville	State Normal School.....P. Munroe Harbold	

<i>Location</i>	<i>Institution</i>	<i>President</i>
Pennsylvania.	Philadelphia. Philadelphia Normal School for Girls.	J. Eugene Baker
(Continued)	Philadelphia. Philadelphia School of Pedagogy.	Francis B. Brandt
	Shippensburg. Cumberland Valley State Normal School.	Ezra Lehman
	Slippery Rock. State Normal School.	J. Linwood Eisenberg
	West Chester. State Normal School.	George M. Philips
Rhode Island.	Providence. Rhode Island State Normal School.	John L. Alger
South Carolina.	Rockhill. Winthrop Normal and Industrial College.	David B. Johnson
South Dakota.	Aberdeen. Northern Normal and Industrial School.	Willis E. Johnson
	Madison. State Normal School.	John W. Heston
	Spearfish. State Normal School.	Fayette L. Cook
	Springfield. State Normal School.	Gustav G. Wenzlaff
Tennessee.	Johnson City. East Tennessee State Normal School.	Sidney G. Gilbreath
	Memphis. West Tennessee State Normal School.	John W. Brister
	Murfreesboro. Middle Tennessee State Normal School.	R. L. Jones
Texas.	Canyon. West Texas State Normal School.	R. B. Cousins
	Denton. North Texas State Normal School.	W. H. Bruce
	Huntsville. Sam Houston State Normal School.	H. F. Estill
	San Marcos. Southwest Texas State Normal School.	C. E. Evans
Vermont.	Castleton. State Normal School.	Charles A. Adams
	Johnson. State Normal School.	Bessie B. Goodrich
Virginia.	East Radford. State Normal School for Women.	John P. McConnell
	Farmville. State Normal School for Women.	Joseph L. Jarman
	Fredericksburg. State Normal and Industrial School for Women.	E. H. Russell
	Harrisonburg. State Normal and Industrial School for Women.	Julian A. Burruss
Washington.	Bellingham. State Normal School.	George W. Nash
	Cheney. State Normal School.	Noah D. Showalter
	Ellensburg. State Normal School.	George H. Black
West Virginia.	Athens. Concord State Normal School.	L. B. Hill
	Fairmont. State Normal School.	Joseph Rosier
	Glenville. State Normal School.	E. G. Rohrbough
	Huntington. Marshall College, State Normal School.	O. I. Woodley
	Shepherdstown. Shepherd College, State Normal School.	Thomas C. Miller
	West Liberty. State Normal School.	John C. Shaw
Wisconsin.	La Crosse. State Normal School.	Fassett A. Cotton
	Milwaukee. State Normal School.	Carroll G. Pearce
	Oshkosh. State Normal School.	H. A. Brown
	Platteville. State Normal School.	Asa M. Royce
	River Falls. State Normal School.	Jesse H. Ames
	Stevens Point. State Normal School.	John F. Sims
	Superior. State Normal School.	V. E. McCaskill
	Whitewater. State Normal School.	Albert H. Yoder

Appendix C

List of State Teachers' Colleges

REVISED AS REPORTED TO THE SECRETARY OF THE AMERICAN
ASSOCIATION OF TEACHERS COLLEGES, JULY 1, 1918

<i>Location</i>	<i>Institution</i>	<i>Degrees Offered</i>
Colorado.....	Greeley.....Colorado State Teachers College.	B.A., M.A.
Georgia.....	Milledgeville.....Georgia Normal and Industrial College.	B.S.
Illinois.....	Carbondale.....Southern Illinois State Normal School.	B.A., B.Ed., B.Ph.
	Normal.....Illinois State Normal University.	B.Ed.
	Macomb.....Western Illinois State Normal School.	B.S.
Indiana.....	Terre Haute.....Indiana State Normal School.	B.A., B.S., B.Ph.
Iowa.....	Cedar Falls.....Iowa State Teachers College.	B.A.
Kansas.....	Emporia.....State Normal School.	B.S.
	Hays.....Fort Hays State Normal School.	B.S.
	Pittsburg.....State Manual Training Normal School.	B.S.
Michigan....	Ypsilanti.....Michigan State Normal College.	B.A., B.S.
Missouri.....	Cape Girardeau..State Normal School.	B.A., B.S., B.S. in H.Ec.
	Kirksville.....State Normal School.	B.S.
	Maryville.....State Normal School.	B.S.
	Springfield.....State Normal School.	B.S.
	Warrensburg.....State Normal School.	B.S.
Nebraska....	Chadron.....State Normal School.	B.A.
	Kearney.....State Normal School.	B.A.
	Peru.....State Normal School.	B.A.
	Wayne.....State Normal School.	B.A.
New Mexico..	Las Vegas.....New Mexico Normal University.	B.Pd., M.Pd., B.A.
	Silver City.....New Mexico Normal School.	B.A., B.Pd., M.Pd.
New York....	Albany.....New York State College for Teachers.	B.A., B.S., M.A.
Ohio.....	Bowling Green..State Normal College.	B.S.
	Kent.....State Normal College.	B.S.
	Oxford.....Teachers College of Miami University.	B.S.
	Athens.....State Normal College of Ohio University.	B.S.
South Carolina.....	Rock Hill.....Winthrop Normal and Industrial College.	B.A., B.S., M.A.
Utah.....	Salt Lake City...State Normal School of the University of Utah.	B.S., B.A., M.S., M.A.

COLORADO STATE TEACHERS
COLLEGE
BULLETIN

Series XVIII

July 1918

Number 4

S. A. T. C.

A MILITARY SUGGESTION
WITH A
MAN'S PROGRAM

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.

S. A. T. C.

TO THE YOUNG MEN OF AMERICA.

“How can I render the most valuable service to my country during the period of the war? Every young man over eighteen is asking himself this question.

The War Department has just offered a new answer to the question. They say: “Enter college if you are fitted to do so or return to college if you already enrolled, and enlist in the Student Army Training Corps.”

By enlisting in the Student Army Training Corps you will become a member of the United States Army. You will receive a uniform and be given military drill under officers detailed by the War Department. During the early part of your course you will receive ten hours military instruction a week, six of which will be drill, rifle practice, and other outdoor training, and four of which will be academic work, for which military credit is given, such as mathematics, English, foreign languages, history, science, etc. You will be carefully rated both by the college authorities and by the military officer, who will help you to discover a special line of military service for which you have the greatest capacity and preference. Later in your course you will have an opportunity to specialize in a branch of training designed to fit you to become an officer of field artillery, medical or engineer officer, and expert in some technical or scientific service, and so on.

On reaching the age of twenty-one you must register with your local board. You may remain in college until your call is reached under the Selective Service Law. At that time it will be decided whether you will be called immediately to active service or whether you should remain in college to complete the course you are

LATER FACTS
Concerning the
STUDENT ARMY TRAINING CORPS

1. The S. A. T. C. is being established by the Government of the UNITED STATES in various colleges throughout the country in order to give young men necessary military training.

2. The Government asks that all young men and women who are graduates of High School and who are of college rank enter college and continue useful training.

3. All young men over eighteen years of age, and regularly enrolled students, should enlist in the S. A. T. C.

4. High School graduation is necessary for induction in the corps.

5. The Government will at once establish a unit of the S. A. T. C. at Colorado State Teachers College.

6. It will be placed in charge of an officer of the United States Army.

7. Rifles, uniforms, overcoats, and other equipment will be shipped at an early date.

8. Men over eighteen will register September 12th with local boards and be inducted into the S. A. T. C. about October 1st.

9. Members of the S. A. T. C. will be soldiers, subject to discipline and with the pay of privates.

10. No units of S. A. T. C. are at present being established at High Schools, but the Government hopes to extend military instruction at secondary schools at an early date.

11. Academic instruction will be modified to have direct military value.

For further information write to

J. G. CRABBE, President.

September 4, 1918.

Greeley, Colo.

pursuing. The decision will depend upon the needs of the service and upon your achievements in your military training and in your studies as determined by the military officers at the college and by the college authorities.

During the summer you will have an opportunity to attend a summer camp for intensive military training. Your traveling expenses to and from camp will be paid and you will be on active duty under pay and subsistence by the War Department.

As a member of the Student Army Training Corps you will be subject to call to active duty at any time in case of emergency. If you desire to enter active service before completing your college training, transfer to active duty may be arranged through military channels with the consent of the military officers at the college and of the college officials. It will be the policy of the Government, however, to allow you to remain in college until you reach the age of twenty-one, or until you complete your course.

Young men can enlist in the S. A. T. C. at Colorado State Teachers College at Greeley, and receive military instruction under a regular army officer, assisted by five special instructors from the college who have been in the Officers' training camp at Presidio, California, this summer, and each of whom will instruct in a different subject, such as bombing, bayonet practice, muscular drill, etc. Those who enroll in any of the War Courses offered at Teachers College will also be furnished with uniform and other equipment, and be sent to California or some other training camp at the end of the school year at government expense for six weeks training for which they will receive pay.

Boys, can you beat it?

SPECIAL WAR COURSES

Colorado Teachers College at Greeley offers the young man who enlists in the S. A. T. C. a wide range of Military subjects of which the following are a part:

Radio Service.	Mechanical Designing.
Automobile Mechanics.	Blue Printing.
Gas Engine.	Carpentry.
War Chemistry.	Spoken French.
Military Mathematics.	Contemporary History.
Architectural Drawing.	Good Plain English.
Accounting, Stenography, Typewriting.	

DO ATHLETICS APPEAL?

Colorado Teachers College, to meet the demand for athletic coaches, playground instructors, and physical directors, has secured one of the very best athletic instructors in the west, and possesses in addition, unusually excellent equipment, including a fine athletic field and cinder track, two gymnasiums, several tennis courts and much modern playground apparatus.

Graduates of our athletic coaching course for men are filling responsible positions as coaches and physical directors. Twenty positions are now open in Colorado for manual training teachers and athletic coaches and for principals and superintendents at beginning salaries better than in any other profession.

The usual teachers training courses for men and women are also offered as heretofore.

For Bulletins and all information address

JOHN G. CRABBE, President,
State Teachers College,
Greeley Colorado.

SUPPLEMENT TO
COLORADO STATE TEACHERS COLLEGE
BULLETIN

Series XVIII

August, 1918

Number 5

REVISED SPECIAL PROGRAM
FOR THE
Students' Army Training Corps

What the Government Offers

Note: Soldier-students will go thru the same routine of Registration as other students. See "Official Program."

This year a young man eighteen to twenty-one and a graduate of a high school may attend college at government expense until he is called into active service. At the end of this period of training the student-soldier, in accordance with his fitness, capacity, and preparation, will be assigned by the War Department as follows:

- a. To a central officers' training camp.
- b. To a non-commissioned officers' training school.
- c. To another school or college for intensive work in some special line.
- d. To a vocational training section of the corps for technical military training.

- e. To a cantonment for duty as a private.

While attending college and getting training as an officer or a technical specialist the young man is provided as follows:

- a. Military uniform and equipment.
- b. Quarters in barracks.
- c. Army regulation rations.
- d. Medical attention.
- e. Tuition.
- f. The pay of a private, thirty dollars a month.

This is a very generous offer. No ambitious young man will let it pass. The alternative is to wait for the call and then enter the army as a private. Every young man 18 to 21, physically and mentally fit, will be in active service by July 1.

The War Department prefers that young men should enroll in colleges near home. It has approved Colorado State Teachers College and entered into contract with the institution for this service. Enrollment in the S. A. T. C. is voluntary. Students who do not wish to submit to army regulations and the prescribed course of study are not obliged to do so; but such students when called into active service will enter as privates.

Students eighteen years old with only 13 high school units will be admitted to the college and the S. A. T. C. as special students. Others with less than 13 units will be enrolled in the high school and allowed to complete the required units up to 13 in as brief a time as possible (twelve

weeks or more as each case requires.) In the mean time they may provide their own equipment and drill, room, and board with the enlisted men at the cost of housing and meals.

The War Department directs that the college offer the following courses. All of these are elective except Military Instruction and Hist. 27. These must be included in every student-soldier's program. Two hours college credit will be given for Military Instruction and Drill.

Time Designation	Description	Days	Teacher	Credit Hrs	Room
8:00-8:50					
Phys. 6	The Automobile	Daily	Abbott	5	1
Art 3	Freehand Drawing	M. T. W. Th.	Baker	4	G203
Geog. 100	Geology	M. T. W. Th.	Barker	4	L 1
Chem. 1	General Chemistry (Two periods)	T W. Th. F.	Bell	4	309
French 1	Beginning Spoken French	Daily	DuPoncet	4	102
9:00-9:50					
Phys. 1	General Physics	M. T. W. Th.	Abbott	4	1
Biol. 2	General Biology	M. T. W. Th.	Adams	4	303
Geog. 5	Geography of Europe	M. T. W. Th.	Barker	4	L 1
Com. Arts 50	Accounting	T. W. Th. F.	Colvin	4	G201
Psych. 2	Educational Psychology	M. T. W. Th.	Heliman	4	103
10:00-10:20	General Assembly				
10:30-11:20					
Eng. 4	Speaking and Writing	Daily	Cross	3	108
Math. 3	Trigonometry and Survey.	M. W. Th. F.	Finley	4	304
Ind. Arts 10	Mechanical Drawing (Two periods)	M. T. W. Th.	Hadden	4	G100
Hist. 6	Recent European History	M. T. W. Th.	Smith	4	104
11:30-12:20					
Phys. 108	Wireless	Daily	Abbott	4	1
Geog. 105	Topography and Map Making	M. T. W. Th.		4	L 1
Math. 106	Descriptive Astronomy	Daily	Finley	5	304
Germ. 1	Beginning Spoken German	Daily		4	203
Soc. 110	Economics	M. T. W.	Miller	3	208
12:20-1:30	The Noon Intermission				
1:30-2:20					
Hist 27	Contemp. Hist. and War Aims	M. W. F.	Smith	3	104
Hist. 123	International Law	T. Th.	Smith	2	104
2:30-3:20					
Bact. 2	Hygiene and Sanitation	M. W. F.	Adams	3	303
Geog. 103	Meteorology and Climatology	M. T. W. Th.	Barker	4	L 1
French 1	Beginning Spoken French	Daily	DuPoncet	4	102
Hist. 125	Military Law and Gov't.	M. T. W. Th.	Smith	4	104
3:30-	Military Instruction				

A student-soldier's program will be made up as follows:

1. Military Instruction and drill	2 hours credit
2. History 27 War Aims, etc.	3 hours credit
3. Other courses chosen from the list above	10 or 11 hours credit
TOTAL	15 or 16 hours

NOTE: A student may obtain permission from the military director to include in his program a two or three-hour course from the general college program not listed in this special program.

COLORADO STATE TEACHERS COLLEGE BULLETIN

Series XVIII

September, 1918

Number 6

THE FARM AND THE SCHOOL

*A Resumé of a Survey of the Public Schools of
Weld County, Colorado*

Made by

THE JUVENILE DEPARTMENT OF THE
COUNTY COURT

Issued by

THE EXTENSION DEPARTMENT OF
COLORADO STATE TEACHERS COLLEGE
Greeley, Colorado

THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

-3-

The Farm and the School

A *Resumé* of a Survey of the Public Schools
of Weld County, Colorado

DIRECTOR OF SURVEY, J. WALTER LEE, A. B.
Chief Probation Officer of the County Court
Weld County, Colorado

PART ONE

The Survey and Its Applications

By HERBERT M. BAKER
Judge of the County Court of Weld County, Colorado

PART TWO

Educational Interpretation of the Survey

By EDGAR DUNNINGTON RANDOLPH, A. M.
Professor of Sociology, Colorado State Teachers College

Appendix

Reprint and Explanation of Forms Adopted for the
Enforcement of the Compulsory Education Law
in Weld County, Colorado

FOREWORD

The school survey described in the following pages was made by the Juvenile Department of the County Court of Weld County, Colorado, under the supervision of Mr. J. Walter Lee, Chief Probation Officer, with such assistance and suggestion as I was able to give. The onerous task of planning the various forms, collecting and collating the data, and making findings, was shared by each of us. Part One of this Bulletin was written by me, but it has been changed so much from its original draft under the criticism of Mr. Lee that it is really a collaboration.

During the progress of this work, we were in constant consultation with Hon. A. B. Copeland, County Superintendent of Schools, whose long experience in school affairs generally, and intimate knowledge and appreciation of the needs of the Weld County rural school in particular, made his counsel of inestimable value. Indeed, the survey was undertaken in view of the requirements of his office as well as our own.

We also had frequent recourse to the advice of Dr. J. D. Heilman and Professor E. D. Randolph, of the faculty of the Colorado State Teachers' College. The second part of the Bulletin was written by Professor Randolph.

Superintendent G. E. Brown of the Greeley Public Schools conducted the extension term of these schools in the summer of 1917, and it is in no small measure due to him that we are in a position to offer one remedy for retardation and elimination, the effectiveness of which has been tested. The success of this experiment was largely assured by the material and moral support of The Great Western Sugar Company and its officers.

Credit should also be given to Superintendent H. E. Black of the Eaton public schools, and Superintendent E. A. Lanning of the Windsor public schools, for their support of our campaign for a hundred per cent school enrollment last year, and for the courage, impartiality, and energy with which they have enforced the school laws within their respective districts.

We should indeed be guilty of gross ingratitude if we did not here express our sincere thanks and appreciation to the teachers of the county for the promptness, thoroughness, and painstaking care and intelligence with which they answered the several questionnaires sent to them. Without them, the survey would have been impossible. Weld County has just reason to be proud of its teachers.

HERBERT M. BAKER.

County Judge's Chambers, September, 1918.

PART ONE

The Survey and Its Applications

By HERBERT M. BAKER

CHAPTER I.

The Purposes and Methods of the Survey.

Part One of this Bulletin was written primarily for the eyes of the layman interested in the public schools of Weld County. Many explanations are indulged in that are unnecessary for the statistician, and there is no attempt to adopt the style or language of the scientist. Technical and pedagogical interpretations of the survey described herein will be found in Part Two.

The survey was undertaken because there was not sufficient accurate information in the possession of the Juvenile Department of the County Court for it to act intelligently in all cases in the discharge of its duties pertinent generally to the public schools and their pupils, and more especially to the enforcement of the compulsory education laws where they came within its jurisdiction. There was even doubt among many comparatively well-informed men as to whether or not there was any crying need for a more stringent enforcement of these laws. The belief was general that Weld County possessed schools of highest efficiency, and there was much ground for this opinion. Indeed, there have been innuendoes, amounting to thinly veiled accusations, that the officers of the court were embarking upon this work for political or other ulterior motives. The onerous task of gathering and arranging the great mass of data, but casually described in these pages, was not assumed for trivial reasons. It has consumed over a year of the most painstaking, patient, and laborious efforts of many persons, justifiable only by an earnest desire to obtain exact knowledge of important matters.

It is not our intention to create the impression that our schools are in an utterly poor condition. In view of all the circumstances, we have exceptionally good schools. Our rural schools have maintained a high standard of efficiency in spite of a large infiltration of foreign students and the rapid growth of population. Ambiguous, antediluvian school laws, but poorly designed for our needs, have been made to operate wonderfully well. An experienced and progressive educator in the office of the County Superintendent of Schools has placed the rural schools in an enviable position in comparison with those of many other counties of the state.

Nevertheless, our schools have not reached that degree of perfection that they should. There are many evils to be remedied. Some of them are the direct concern of the County Court; but it has been difficult—nearly impossible—to place one's finger upon them. That they existed was indubitable; but, as to just what or where they were, opinions differed widely. For years, wide-awake superintendents have appealed to the coercive powers of the County Court in cases of truancy and absences from school. The court gave the meager assistance it could with the limited equipment, personal and material, it had. It could render assistance, however, only in extreme cases, and that rendered was necessarily sporadic and often without effect. No one was more painfully aware of these facts than the officers of the court; but they were helpless to rectify them.

The re-classification of the county, bringing with it increased powers to the court in the employment of additional clerks and officers, furnished an opportunity to increase in a like measure its usefulness in all things pertaining to the welfare of children in school and out. It was determined to act in the dark no longer. Experience had convinced us that in no work is accurate and positive knowledge more essential than in the

administration of the Juvenile Court. In no other sphere have meddlesome gush and sentiment found a more inviting opportunity or worked greater injury. So delicate and easily influenced are the mental operations of youth that the experience of a session of the children's court may very well determine a child's future career for good or evil. This is a momentous issue, requiring intimate and scientific study. Usually it has received the amiable attentions of good-hearted but ignorant persons, who fancied something ought to be done and forthwith commenced doing it without the least idea of what it was or how to do it. To avoid this silly procedure, we sought the counsel of those qualified by study and experience to give intelligent advice. Closer relations between the Juvenile Court and the office of the County Superintendent of Schools were established where their duties touched or overlapped. The enforcement of the compulsory education laws is within the purview of both offices; but because finally all cases involving these statutes come to the court, and because it was in many ways in a better position to conduct them, the investigations involved in the instant census were undertaken by it.

Breach of the compulsory education laws by children of school age consists in absence from school without legal excuse. In other words, non-attendance, whether brought about through the insubordination of the child himself or through influences beyond his control, constitutes the usual breach of these statutes. With reference to the **extent**, there are two classes of non-attendance; **complete** and **partial**. Complete non-attendance exists when a child of school age ceases to attend school. He is then said to have been **eliminated**. If he is so irregular in his attendance that he becomes backward in his classes and loses grades, he is said to be **retarded**. Another classification may be made, including children who have never entered school. These are so few, however, that it is more convenient to consider them eliminated children.

Elimination and retardation, as to **character**, may be either **avoidable** or **unavoidable**. From our standpoint as officers of the law, avoidable elimination and retardation are such as occur on account of infringements of the school laws, whether such infringements are the faults of the students or those having control over them. Feebleness of mind or body, distance from school, or circumstances bringing the pupil within the exemptions specified in the statute as grounds for the issuance of permits to be absent from school, are examples of causes of unavoidable elimination or retardation. This division is not pedagogically correct. It is the division that most logically describes the artificial classes produced by legislation, and that is the line of demarkation by which courts must abide.

There are many causations of elimination and retardation besides non-attendance, and while all eliminated children are necessarily out of school and all retarded children are in school, yet the causations for both conditions are practically identical. Retardation itself is a fruitful cause of elimination. The pupil who becomes hopelessly behind in his studies, finds himself in a class with younger students, and feels that he is not benefited by the school, is discouraged and usually drops out altogether.

To arrive at the amount of elimination is nearly impossible on account of lack of data. Statisticians have, however, evolved divers formulæ by which the elimination may be more or less closely approximated from retardation and a comparison of the enrollments of children in the different grades, after making allowances for losses by death and increment to populations by natural increase, migration, etc. No such complicated calculations will be attempted here, because the facts are so obvious that they indicate generally the condition, although not its precise extent.

An analysis of retardation should give us a reliable foundation upon which to ascertain the extent of avoidable non-attendance which may be reduced by a systematic enforcement of the compulsory education laws. Through this analysis, we are able not only fairly to measure the degree of such non-attendance, but we can also determine where and among whom it exists. This is the object of the survey. The following recapitulation of its purposes may be made.

To ascertain:

1. The percentage of retardation in the public schools from the first to the eighth grade, inclusive.
2. The proportion of retardation due to avoidable non-attendance.
3. The causes of avoidable non-attendance.
4. The appropriate remedies therefor.

With these facts, we should be in a position to estimate the extent of, and apply the same remedies to, elimination.

The first step was to send to each teacher an "enrollment questionnaire" in order to obtain a complete enrollment of pupils with their ages and dates of birth. The replies to this questionnaire were extremely gratifying. The completeness of the returns is evidenced by the few cases in which the ages of the children were not reported, and by the small number of pupils the natiivities of whose parents were omitted. Complete returns were received from 104 districts out of 108, in all, 9,693 pupils. It is worthy of note in discussing the care with which this sheet, as well as subsequent sheets, was prepared, that the returns from no school which replied had to be rejected on account of careless or fragmentary reports. A few questionnaires were sent back for correction, but very few. So far as the reliability of the data is concerned, full faith may be given them. Whether or not our conclusions are correct, depends upon the intelligence used by us in our constructions.

We assumed, from the standpoint of officers of the law, that any child who had entered school at the age of six and thereafter had progressed through the eight grades without the loss of more than two years on the way, was receiving a proper education. Our inquiry was, "Are children receiving the education the law commands?" It was not, "Are they being educated according to the dictates of educational science?" As the basis of our computation, we adopted the recognized standard which allows a loss of two years before a child is deemed to be retarded. That is, if a child enters school at six, he is retarded in the first grade at eight, in the second grade at nine, in the third grade at ten, etc. In speaking of a retarded child, therefore, we mean a pupil who is two years or more behind the grade he would occupy had he entered school at six and advanced a grade each year. We have not taken fractions of a year into consideration. Errors of six months or less tend to compensate themselves, and the deductions should be close enough for all practical purposes.

Although the questionnaires were made out during the months of December, 1917, and January, 1918, the census was compiled as of date the third of September, 1917, the day on which most of the schools opened. All ages stated on the first sheet were considered as of that date. For instance, a child whose birthday occurred after September third was one year younger for the purposes of the census than the questionnaire showed. If he became nine years of age on October tenth, he was actually eight, or more accurately, not yet nine, the day school opened. The interpretations of this questionnaire are shown on sheet No. Two, "grade and age distribution sheet", which will be considered in its proper place.

There are obviously many causes for retardation, and the percentage of children retarded from each of them would be of undoubted interest to school men. Our interest limited itself to avoidable retardation, and particularly retardation that might be prevented by a stricter enforcement of the law. Those who have studied this subject assert that the chief cause of retardation is non-attendance. Our "causation sheet" was framed on this premise. Subsequent researches amply justified this course. This sheet might more properly, perhaps, have been called "attendance sheet". Upon this blank, teachers were requested to designate the retarded children who entered school late, had been transferred frequently from one school to another, were markedly deficient mentally or physically, had difficulty with language, were incorrigible or insubordinate, or lived far from the schools, as well as to state the actual number of days in attendance for two years. The names placed on the third sheet were solely of retarded children.

The fourth sheet was named the "occupation sheet" upon which the name of only one pupil was placed. Just as on the third sheet we studied only the retarded child, on the fourth we studied only the child who, from the returns on the causation sheet, probably was retarded wholly or in part on account of non-attendance. This exclusion was made on the hypothesis that if a pupil attended school three-fourths or more of the time school was in session, he was not retarded on account of non-attendance. The names on the fourth blanks were those of pupils who were shown by the third sheet to have been absent from school more than twenty-five per cent of the time school was in session.

Each of these retarded pupils then constituted a separate case for study. It is true that we had gained a shrewd idea from an examination of the third sheet whether or not a pupil was retarded through lack of attendance; but we desired to have his teacher's opinion to check our own. Then, too, it was important to know what the teacher believed was the reason for the non-attendance. If the child remained away from school on account of poor health, poverty, distance, or any other cause except truancy on his own part or truancy induced by others, such child did not come within the purview of our inquiries. As the fourth sheet expresses the meat of our survey, it is reproduced in full.

JUVENILE DEPARTMENT, COUNTY COURT, WELD COUNTY,
COLORADO

No. 4, Occupation Sheet

.....Grade.School. District No.....

.....
Student's Name	Parent or Guardian's Name	Address

1. What is the occupation of:
 - (a) Father? Ans.
 - (b) Mother? Ans.

2. What is the child's occupation outside of school? Ans.....

3. (a) Is the child taken out of school to work? Ans.....
 (b) At what work? Ans.....

TABLE I
Total Grade and Age Distribution Sheet.

Age	Grade 1	2	3	4	5	6	7	8	Total	Below Normal Grade	% Below Normal Grade
5.....	344	17							361		
6.....	848	162	13						1,023		
7.....	<u>482</u>	471	174	18					1,145		
8.....	178	<u>346</u>	434	177	25				1,160	178	15.4
9.....	83	183	<u>323</u>	442	149	10	2		1,192	266	22.3
10.....	32	82	<u>183</u>	<u>298</u>	359	122	22		1,098	297	27.1
11.....	22	45	82	<u>183</u>	<u>243</u>	329	111	14	1,029	332	32.3
12.....	9	16	49	104	<u>150</u>	<u>258</u>	288	82	956	328	34.3
13.....	5	9	28	58	110	<u>142</u>	<u>226</u>	246	824	352	42.7
14.....	2	6	22	32	49	79	<u>153</u>	<u>220</u>	563	343	60.9
15.....	2	1	5	14	22	23	60	130	257	257	100.
16.....	2	1	1	3	1	6	12	37	63	63	100.
17.....			1		1	2	4	11	19	19	100.
18.....								3	3	3	100.
Total.....	2,009	1,340	1,314	1,329	1,109	971	878	743	9,693	2,438	25.15
Above Normal Age	.....	335	344	370	394	333	252	229	181	2,438	
% Above Normal Age	.....	16.7	25.7	28.2	29.7	30.0	26.0	26.1	24.4	25.15	

It will be noted that the ages are distributed according to the vertical column to the left, reading from the top to the bottom. The grades are designated in the horizontal line at the top, from left to right. Thus there are 344 pupils five years old in the first grade and seventeen in the second. Reading down the column according to ages, there are 344 children five years old, 848 six years old, 482 seven years old, etc., in the first grade. All numerals below the heavy line indicate retarded pupils. The totals at the bottom of the table show the whole number of pupils in each grade. In the line opposite the words, "Above Normal Age" is given the aggregate number of students two or more years retarded in their classes in each grade without regard to age. In other words, this line contains the total of the figures below the heavy lines in each grade. The numerals opposite, "% Above Normal Age" give the percentage of children in each class who are retarded. The "Total" column to the right of the eighth grade column states the whole number of children of each age irrespective of grade. It is obvious that the sum of this column should be identical with that of the horizontal total line. The two last columns to the right bear the same relations to the number of children below normal grade that the two bottom lines do to the same children above normal age.

In comparing this table with those of other schools, it should be ascertained at what portion of the school year the computations were made, because a difference of a few months makes a very noticeable difference in the percentages of retardation among the same students occupying the same grades. In other words, if the third of December had been chosen instead of the third of September, as the date upon which to base the calculations, there would have been a greater percentage than is shown. In one district this change of dates increased the retardation from 28.6 per cent to 30.2 per cent.

Comparisons of tables are certain to produce misleading conclusions, if all the conditions under which the different schools operate are not known and taken into consideration. Mere percentages are not in themselves indicia to the comparative standards of scholarship maintained by schools under different environments. Indeed, a high percentage frequently indicates high efficiency. The school in which the compulsory education laws are strictly enforced, with a consequently large proportion of the population of school age in school, will probably show more retardation than the school which pays no attention to the enforcement of the school laws and where only the children of intelligent parents, anxious to obtain an education, attend. Strict grading and systems of promotion and special rooms that attract over-age pupils may also tend to increase retardation. Distance from school, character of population, sufficiency of equipment, and many other influences affect it. These elements must be taken into consideration in attempting to apply these records to another community.

Attention is called to a few salient features of the table bearing directly on the question of non-attendance. The total number of students listed is 9,693, of whom 2,438, or 25.15 per cent, are retarded two years or more. This means that over one-fourth of the pupils in the first eight grades are at least two years below their proper classes.

The next outstanding feature is that while there are 2,009 children in the first grade, there are only 743 in the eighth. Obviously, there were not so many children in the first grade in 1909, the year in which those in the eighth grade entered school, as there were in 1917 when the census was taken. Statisticians have perfected formulae by which the number of children in the first grade eight years before the date of survey may be closely measured. It is sufficient for our purpose merely to call attention to the discrepancy between the populations of these two grades without entering into such calculations which, on account of deaths, births, and the variations of population from migration, remain largely conjectural. It must be evident, even to the most casual reader, that if all the children had remained to finish their eight years of study, many more eighth grade students would have been enrolled, and that many boys and girls dropped out of school before they finished their "common school education". This process of dropping out is known as "the process of elimination."

The above observations may seem, at first sight, to be startling, but in light of other surveys the results are rather gratifying than otherwise. While we have cautioned against *prima facie* comparisons, we venture to refer to Professor Ayers' survey of the schools in fifty-five cities in the United States. He found the retardation to be 33 per cent or nearly one-third, while the retardation in the Weld County schools is only a little over one-fourth. This may be considered a good showing in an agricultural community where a large proportion of the children attend rural schools. It is fair to assume that elimination in the Weld County schools differs in the same degree from the elimination in the schools considered by him, that the retardation does.

While our retardation may be comparatively low, it is still too high. The fact that the average retardation among 9,693 pupils in 104 districts is 25.15 per cent implies that in some of those districts the percentage must be higher. It is essential to discover in just what districts the high percentages are, so that if a remedy is to be applied, it may be applied in the place needed, thus avoiding scattered, and consequently weakened, effort. In order to limit the locus of effort, the county was divided into six divisions, having regard to both geographical and industrial unity, as follows:

Division 1. School District No. 6, including the Greeley City Schools and the Training School of the State Teachers' College.

Division 2. The three largest towns except Greeley in the County, to-wit: Eaton, Windsor, and Fort Lupton.

Division 3. Including small towns in the irrigated area.

Division 4. Districts in the irrigated area having no towns.

Division 5. The unirrigated portions of the county.

Division 6. Mining localities.

Division 7. All schools not included in the other divisions.

The percentages of retardation for these divisions are:

Division 1, 18.01 per cent.

Division 2, 31.24 per cent.

Division 3, 27.07 per cent.

Division 4, 26.28 per cent.

Division 5, 24.79 per cent.

Division 6, 25.68 per cent.

Division 7, 19.52 per cent.

If the average retardation is taken as the dividing line between satisfactory and unsatisfactory conditions, this segregation of territory specifies Divisions Two, Three, Four, and Six, as the particular parts of the county requiring the greatest attention. This, at first glance, may seem surprising. It would be supposed that the mining towns with their floating populations of foreign laborers would show a high percentage of retardation. These districts, however, are only .68 of one per cent above the average. It is equally surprising that Division No. Two comprising the three largest towns, except Greeley, in the county, with their superior equipments and teaching corps, shows the greatest retardation. The explanation that in these towns there is a stricter enforcement of the compulsory education laws with a consequently larger proportion of the children of school age in school, and that the standards of promotion are more stringent, is not, in itself, sufficient.

In summarizing these findings we are driven to the conclusion that the greatest retardation is in the irrigated rural communities and the mining districts. The mining districts also contain large agricultural populations. These communities are among the richest and most densely populated in the county, have schools much more convenient to their pupils than in many parts of the dry lands, and are on the whole much better provided with equipment and teaching force.

Examining the reports with relation to the population, we made tables of age and grade distribution for each nationality, fixing the nationality of the student by the birthplace of the parents. Thus, a child of Russian born parents was classed as Russian, although he, himself, was born in this country. The child whose father and mother were born in different foreign countries was given the nationality of the father. If one of the parents was born in America and the other in another country, the child was classed as of "mixed" parentage. A separate table was prepared for the children whose parents' nationalities were not given. These were comparatively few. The first table below is of children of native born parents. This table includes negroes, and Mexicans whose fathers and mothers were born in the United States. These two races show a high retardation, but there are so few of them that they do not materially change the percentages.

TABLE II
Native Grade and Age Distribution Sheet.

Age	Grade 1	2	3	4	5	6	7	8	Total	Below Normal Grade	% Below Normal Grade
5.....	215	14							229		
6.....	535	121	12						668		
7.....	254	320	134	14					722		
8.....	61	185	313	133	19				711	61	8.6
9.....	23	71	184	317	109	6	1		711	94	13.2
10.....	3	23	82	185	253	93	18		657	108	16.4
11.....	6	15	28	95	163	238	85	10	640	144	22.5
12.....	5	2	22	43	86	179	203	65	605	158	26.1
13.....	1	3	6	17	56	96	154	179	512	179	35.
14.....	1	2	7	4	18	42	106	173	353	180	51.
15.....	1			2	13	19	47	88	169	169	100.
16.....				3	1	4	7	27	43	43	100.
17.....							1	2	10	13	100.
18.....									3	3	100.
Total.....	1,105	756	788	813	718	678	623	555	6,036	1,152	19.09
Above Normal Age	.....	101	116	145	164	174	162	162	128	1,152	
% Above Normal Age	.....	9.1	15.4	18.6	20.2	24.2	23.9	26.0	23.1	19.09	

The next table is of children of foreign-born parents

TABLE III
Foreign Grade and Age Distribution Sheet.

Age	Grade 1	2	3	4	5	6	7	8	Total	Below Normal Grade	% Below Normal Grade
5.....	112	3							115		
6.....	260	27							287		
7.....	202	122	25	1					350		
8.....	103	130	95	29	3				360	103	28.6
9.....	57	108	130	80	26		1		402	165	41.1
10.....	28	55	97	86	73	18	1		358	180	50.3
11.....	16	28	50	80	62	58	13	2	309	174	56.3
12.....	4	15	28	59	56	52	47	11	272	162	59.6
13.....	4	6	23	40	49	33	67	44	266	155	58.3
14.....	1	3	15	27	28	31	33	40	178	138	77.5
15.....	1	1	5	12	10	3	12	29	73	73	100.
16.....	2	2	1				2	10	17	17	100.
17.....					1	1	2	1	5	5	100.
18.....											
Total.....	790	500	469	414	308	196	178	137	2,992	1,172	39.17
Above Normal Age	.....	216	218	219	218	144	68	49	40	1,172	
% Above Normal Age	.....	27.3	43.6	46.7	52.6	46.7	34.7	27.5	29.2	39.17	

It will be quickly noticed that the percentage of foreign retardation is more than twice that of the native, the exact figures being: Native, 19.09 per cent; foreign, 39.17 per cent. The native retardation is materially less than the average for the county, and the foreign is materially more.

Another striking feature is that while the foreign table shows 790 pupils in the first grade, there are only 137 in the eighth grade. That is to say that the eighth grade enrollment is only 17.34 per cent of the first. On the other hand there are 1,105 native children in the first grade and 555 in the eighth, the percentage being 50.23 per cent. This proves that the element of elimination among foreign children is much greater than among American; that is, that more children of foreign parentage fail to receive the education the law demands than American. The following tabulation will show how the foreign school population is distributed.

TABLE IV.

	Native	Foreign	Total	Percentage Foreign
Division No. 1.....	1,369	463	1,832	25.27
Division No. 2.....	711	544	1,255	43.35
Division No. 3.....	1,266	620	1,886	32.87
Division No. 4.....	1,146	1,274	2,420	52.64
Division No. 5.....	1,169	491	1,660	29.58
Division No. 6.....	175	195	370	52.70
Division No. 7.....	200	51	251	20.32
Total	6,036	3,638	9,674	37.60

The seeming discrepancy between these totals and those in Tables I and III is accounted for by the fact that in this table those students for whom the nationalities of the parents were not given are omitted. Those of "mixed" parentage are included in the "foreign" column, which increases the percentage of children of foreign born parents. Omitting those of mixed parentage, the percentage would be 30.87 per cent, a difference of 6.73 per cent.

The fact that the number of children of foreign born parentage increases directly as the percentage of retardation increases demonstrates that the problem of retardation rests among the children of alien parentage. The retardation among these children, however, varies widely. The following table explains this:

TABLE V.

	Percentage of retardation.
Swedes	12.12
Russians	49.19
Italians	22.62
Germans	36.05
Mexicans	66.67
Japanese	31.82
Swiss	12.50
Poles	25.00
French	26.32
Bohemians	44.44
Danes	20.59
English	18.97
Norwegians	27.27
Belgians	47.06
Irish	20.83

	Percentage of retardation
Dutch	21.74
Scotch	16.67
Canadian	15.38
Austrian	34.15
Negro	29.03
Mixed	16.91
None	32.56

Note: The Mexicans here considered do not include those whose parents were born in the United States. They are included in the native tables.

It is of interest to know that there are no retarded Japanese children under fourteen years of age. All those who are retarded are so, at least partially, because of late entrance.

The negroes are placed in this table merely as a matter of interest. Elsewhere they are included among the native children. There are only 31 of them in the schools.)

This table discloses that it is erroneous to include all children of foreign born parents among those who increase the proportion of retarded children in the schools. Except the Mexicans, the Russians show the largest retardation. They comprise 1,484 out of a total of 3,638 children of alien parents. The remaining children are divided among so many nationalities, leaving so few in each, that the percentage given for any one of them is not based upon a sufficient aggregate to be at all persuasive. As there are enough Russians to form a typical example of backward children of this nationality, their age and grade distribution sheet is given in full.

TABLE VI
Russian Grade and Age Distribution Sheet.

Age	Grade 1	2	3	4	5	6	7	8	Total	Below Normal Grade	% Below Normal Grade
5.....	59								59		
6.....	145	8							153		
7.....	129	57	2						188		
8.....	69	79	26	6					180	69	38.3
9.....	31	78	64	25	6	1	1		206	109	52.9
10.....	13	44	67	36	19	2			181	124	68.5
11.....	5	22	36	51	28	12			154	114	74.
12.....	2	10	18	43	28	15	8	2	126	101	80.2
13.....	1	4	15	26	25	12	14	3	100	83	83.
14.....	1	2	10	22	22	17	14	7	95	88	92.6.
15.....			4	8	7	1	8	9	37	37	100.
16.....			1	1				1	3	3	100.
17.....							2		2	2	100.
18.....											
Total.....	455	304	243	218	135	60	47	22	1,484	730	49.19
Above Normal Age	122	160	151	151	82	30	24	10	730		
% Above Normal Age	26.8	52.6	62.1	69.3	60.7	50.	51.1	45.5	49.19		

The differences between the Russian and native tables are much greater than between the foreign and native. The Russian retardation is 49.19 per cent as against 19.09 per cent native. In round numbers, nearly one-half of the Russian children are retarded, while less than one-fifth of the native children are. Comparing the Russian table with the total table (Table I) it will be seen that out of 9,693 children tabulated, 1,484, or 15.31 per cent, are Russian, and, out of 2,438 retarded pupils, 730, or 29.94 per cent, are Russian. The mere statement of these figures is sufficient indication that one of the greatest, if not the greatest, problem of retardation is found among the Russian school population.

Turning again to the native table (Table II), we find other significant facts, aside from those of retardation. While among the native children over one-half as many are found in the eighth grade as there are in the first, among the Russians there are only 4.8 per cent as many children in the eighth grade as there are in the first. On the basis of 1,000 children in the first grade, the proportions would be:

	First Grade.	Eighth Grade.
Native	1,000 pupils	502 pupils
Russian	1,000 pupils	48 pupils

Without attempting to compute the exact elimination among the Russians, the above figures plainly disclose the deplorable fact that very few children of Russian parents complete the eighth grade. Again examining the table of grade and age distribution of the native children (Table II), we find that after the first grade the decrease in number of pupils from the second to the eighth grades is gradual. Until the sixth grade is reached the number is practically stationary, there being in fact more pupils in the third grade than in the second, and still more in the fourth. There is after the first grade but slight difference between any two successive years. Turning to the Russian table (Table VI) we find a heavy decrease from the fourth to the fifth. There are more than twice as many pupils in the fifth grade as there are in the sixth, the numbers being 135 and 60 respectively. The deductions from these comparisons are too obvious to need further comment. The average Russian child does not complete the fourth grade. He drops his schooling at the place reached by the normal child of nine. With this inadequate education he is supposed to attain a responsible position in a land whose welfare depends upon an intelligent citizenship. It would seem that here is urgent need for the enforcement of the compulsory education laws!

CHAPTER III.

Causations of Retardation and Elimination.

In the last chapter we discussed briefly the incidences of retardation and elimination. We ascertained where and among whom retardation was greatest. These findings were not made from reports of all of the school children in the county, but they were made from returns of so many that the percentages found are correct, and an analysis of the retardation of more children would be merely cumulative. The percentage of retardation among 9,693 school children is so nearly what the percentage would be among many times that number that the difference which might be found in the examination of more children would be negligible.

In this chapter we are about to discuss not the mere facts of retarda-

tion and elimination, but the reasons therefor. Here again we do not have returns for all of the retarded children in the county, but we do have returns for so many of them that the percentages we find would apply with equal correctness to the children not reported upon, however many more there may be. The foundations for the analysis attempted in this chapter are the third and fourth sheets described in Chapter I. These sheets were not returned for all of the retarded children tabulated in the age and distribution sheet. That sheet showed that there were 2,438 retarded children reported. Of these 2,078 were included in the third and fourth questionnaires.

This chapter limits itself to retarded children. On account of lack of data concerning eliminated children, we are compelled to suppose that the causations for elimination and retardation are identical. This supposition is fair, because the reasons that keep a child from school a part of the time cannot be very different from those that keep him out altogether.

It would be impossible to enumerate all of the causes of retardation. Different persons are influenced by different stimuli, and each stimulus has in turn varying effects upon different individuals, so that even if all of the causes of retardation could be stated, it would be impossible to ascertain the degree of influence exercised upon each student, by each of these causes. It is possible, however, to divide the causations of retardation into classes which will include practically every case, as follows: Late entrance into school, frequent transfers from one school to another, non-attendance, incorrigibility or poor conduct in the school, difficulty with language, mental defects, physical defects, unstimulating environments, and distance from the school house. Manifestly, so far as the compulsory education laws are concerned, we are interested primarily in non-attendance as a cause of retardation, because, as we have heretofore set forth, the gist of the breach of these laws is failure to attend school. If mere intentional absence from school were the only form of non-attendance, our task would be comparatively simple. But absence from school may be due to many reasons, such as distance from the school house, illness, and other operating factors that readily suggest themselves. These reasons cannot be removed by any proper enforcement of the law. Then, too, late entrance and frequent transfer are merely different forms of non-attendance. Retardation from these causes may to some extent be relieved by keeping in close touch with the children so that they will be compelled to go to school immediately they reach the proper age, and that as little time as possible shall be lost in changing from one school to another.

Our object was only to obtain the number of retarded pupils who are retarded because of avoidable non-attendance. Figures relative to those retarded by other causes would be of interest from an educational standpoint, but they have only an indirect bearing upon our goal.

They do, however, have an indirect bearing that is important, because it is seldom that a child is retarded for only one reason. Usually two or three causations enter into retardation. Thus, it has been necessary to inquire not if a child is retarded solely because he has failed to attend school, but whether or not his failure to attend school has been so prolonged that it may be reckoned as a cause, among others, of retardation.

In order to determine the extent to which non-attendance is a factor of retardation, we have divided time of attendance into four classes. The first class comprises all retarded pupils who attended school 75 per cent or more of the time school was in session. The second class comprises those who attended 50 per cent and less than 75 per cent of the time. The third class comprises those who attended less than 50 per cent, but more than 25 per cent of the time; and the fourth class com-

prises those who attended less than 25 per cent of the time school was in session. In computing this time we took into consideration the whole school year beginning September, 1916, and the portion of the school year beginning September, 1917, which had elapsed prior to the return of the first questionnaire. Just as we have eliminated for the purpose of further study all accelerated or normal students, we now eliminate all retarded pupils whose attendance was of the first class. In other words, we have drawn an arbitrary line and have said that any pupil who attends school three-fourths or more of the time school is in session is not retarded on account of non-attendance. This arbitrary demarcation is based upon the experience of teachers in the school room, and our investigations have shown that for Weld County it is correct. So, for the purpose of enforcing the school laws, we are interested principally in children included in the second, third, and fourth classes as above defined. For convenience we have designated those children in the last three classes as "irregular" in attendance.

Having divided the retarded children into these classes and finally into the two classes of "regular" and "irregular" attendants, our next inquiry is, "Why are those who are irregular in their attendance, so irregular?" In other words, having first determined broadly that non-attendance is a causation of retardation, we now direct our investigation to ascertain what are the causations of non-attendance. A child who is not attending school comes under one of two classes. The first class comprises those who are occupied in some outside vocation, and the second class comprises those who have no vocation at all away from school.

Just as two or more causations of retardation may combine to create that status, so two or more causations of non-attendance may apply to the same retarded child. For instance, a child may be taken out of school to work on a farm. Even if he had been allowed to go to school continuously, it might have been that because he had language difficulty he would still have been retarded, or it might have been that if he had been permitted to stay in school, his language difficulty alone would not have kept him behind his classes. Clearly, however, to form any approximately correct idea of the causes for this child's retardation, both of these elements must be considered.

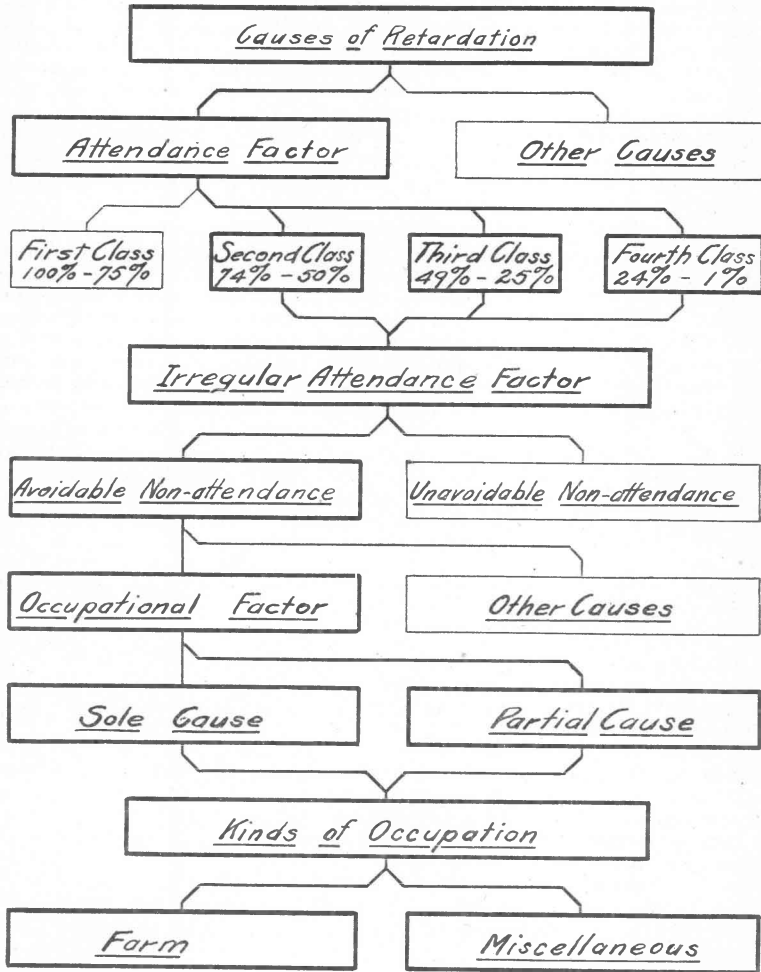
From these premises we find these two divisions. First, the child whose non-attendance is contributed to by outside occupation, and second, the child who, though he is absent from school, has no outside occupation. In turn the outside occupation may be to blame, either wholly or partially, for such non-attendance.

The number of activities that a school child may indulge in outside of the school, is many. In the large cities children are likely to drift into what is known as the "blind alley trades", such as those of messenger boys and cash girls in department stores. In Weld County few are engaged in these occupations. By far the most of the children who are withdrawn from school to work are found on the farms, so that for the purpose of convenience we have divided the outside occupations into two classes, to-wit: farm and miscellaneous.

As a resume of our argument: For the purposes of this survey, we have divided outside occupation as a cause of non-attendance, into five classes, to-wit: As a sole cause, a partial cause, as no cause (that is to say, there is no outside occupation), farm, and miscellaneous.

The following diagram graphically pictures what is attempted to be explained above.

Diagram of Causations of Retardation. *



* Light lined rectangles indicate factors eliminated during progress of survey.

In this diagram the classifications found within the heavy lines are those coming within the direct scope of our investigations. In the rectangles with light lines are shown the classifications that we have eliminated from time to time. The classifications within the light lines, if carried out logically, could be divided into a great many more subdivisions than we have divided those in the heavy blocks. Such subdivision would have thrown little light upon our argument. We have thus eliminated for our purposes much material that it would be necessary to consider if we were attempting a complete pedagogical summary. Further examining the diagram, it will be noted that the process of exclusion there portrayed tends to limit all researches to avoidable non-attendance.

Without attempting to detail the process of elimination, we content ourselves with giving merely the results, dividing the retarded pupils into the same classes as to nationality that we have divided the whole school population in our grade and age distribution sheets shown in the last chapter.

Out of a total of 2,078 retarded pupils of all nationalities, 668 are in the first class as to attendance, 720 in the second class, 539 in the third class, and 151 in the fourth class. The sum of the second, third, and fourth classes is 1,410. These are the retarded pupils classified as irregular in attendance, because they have attended the school less than 75 per cent of the time. The percentage of irregular attendants is 67.9 per cent.

Now, considering the 1,410 irregular retarded pupils as to their outside occupations, we find 197 are retarded solely on account of outside occupations, 960 partially, and 253 have no outside occupation whatever so far as our reports show. In other words, 1,157 of the 1,410 irregular retarded pupils are retarded wholly or in part on account of outside occupation. Of these, 1,121 are taken from the school to work on the farm and only 36 are engaged in other outside occupations which we have classed as miscellaneous.

Reducing these figures to percentages we find that 82.1 per cent of "irregular" retarded pupils are retarded solely or partially because of outside occupation, and that 79.5 per cent of these "irregular" retarded pupils are retarded in whole or in part on account of work in the fields.

Referring these same figures to the whole number of 2,078 retarded children, the retardation of 53.9 per cent is attributable, in part at least, to farm work. In other words, more than half of the retarded children of the county of all nationalities and both sexes are retarded in whole or in part because they are taken out of school to work on the farm.

Following this same method, we have tabulated the percentages of retarded pupils which our records show fall into the occupational division, first, that of all retarded children, and then among the native, foreign, and Russian retarded children. This table shows the comparative percentages and the relative influences of outside occupations on these several groups.

TABLE VII.
Comparative Percentage Table.
(Nationality.)

	Per- centages, Total.	Per- centages, Native.	Per- centages, Foreign.	Per- centages, Russian.
Per cent of total retarded pupils irregular in attendance; i. e., they who attend less than 75 per cent of the time.....	67.9	51.0	85.4	92.5

	Per- centages, Total.	Per- centages, Native.	Per- centages, Foreign.	Per- centages, Russian.
Per cent of total retarded pupils to whose retardation outside occupation contributes	55.7	30.9	80.7	90.7
Per cent of irregular attendance class to whose retardation outside occupation contributes.....	82.1	60.7	94.5	98.0
Per cent of total retarded pupils to whose retardation farm work contributes	53.9	28.5	79.5	90.2
Per cent of irregular attendance class to whose retardation farm work contributes	79.5	55.9	93.1	97.5

The foregoing table shows that by far a larger proportion of Russian children are retarded on account of outside occupation than any other group. Only three Russians are retarded on account of miscellaneous occupations. The exact figures for the Russian group are as follows: Out of a total of 653 Russian retarded pupils considered, 49 are in the first class as to attendance, 254 in the second class, 278 in the third class, and 72 in the fourth class, making 604 under the irregular classification, or 92.5 per cent of all Russian retarded pupils. In other words, over nine-tenths of Russian retarded children attended school less than three-fourths of the time school was in session.

Turning to the occupational classification, 131 are retarded solely because of outside occupation, 461 partially on that account, and 12 have no outside occupation, or a total of 592 Russian retarded pupils out of 653 are retarded solely or partially on account of work out of school, and of these 589 or 90.2 per cent are engaged in farm labor, while 97.5 per cent of those listed as irregular in attendance are engaged in farm labor, and 98 per cent are engaged in some outside occupation. Therefore, outside occupations enter as factors of retardation for practically all Russian retarded pupils.

With regard to elimination, on account of lack of any reliable statistics, we assume that the same causations exist in relatively the same proportions that we have found in reference to retardation.

It may be inquired whether or not these findings apply equally to the boys and girls. Our returns show 1,187 male retarded pupils and 891 female retarded pupils. The percentage of retardation of girls as found by our No. 2 sheets is 22.71 per cent, while that of the boys is 27.47 per cent. The following table of percentages shows the difference between the sexes in relation to outside occupation.

TABLE VIII.
Comparative Percentage Table.
(Sex.)

	Per centages, Boys.	Per- centages, Girls.
Per cent of total retarded pupils irregular in attendance, i. e., they who attend less than 75 per cent of the time	69.7	65.4
Per cent of total retarded pupils to whose retardation outside occupation contributes.....	58.4	52.1
Per cent of irregular attendance class to whose retardation outside occupation contributes.....	83.8	79.6
Per cent of total retarded pupils to whose retardation farm work contributes.....	56.4	50.6
Per cent of irregular attendance class to whose retardation farm work contributes.....	81.0	77.4

Of the 1,187 boy retarded pupils, 827 are classed as irregular in attendance, while 360 show a first class attendance, the percentage of irregular attendants being 69.7 per cent. Of a total of 891 girl retarded pupils, 583 are classed as irregular in attendance, while 308 are in the first class. The percentage of the whole number classed as irregular is 65.4 per cent, or a difference of 5.3 per cent. As to occupation, the boys' classification shows that 56.4 per cent of the total number of boys are retarded by work on the farm, while 50.6 per cent of the girls are retarded. The percentage of irregular boy retarded pupils in whose retardation farm work is an element is 81 per cent, while the percentage of the girl retarded pupils of this class is 77.4 per cent. There are only 23 boys and 13 girls retarded because of miscellaneous outside occupations. The conclusion is unavoidable that while as a whole there are fewer girl retarded pupils than boy retarded pupils in proportion to the whole number of pupils of each of the respective sexes in the schools, the causations of this retardation do not vary materially, and on the whole the difference between the percentages of retardation of the sexes, to which farm labor contributes, is approximately 5 per cent, which is for all practicable purposes negligible.

Summarizing the last two chapters, our deductions are:

1. The greatest retardation exists in the rural irrigated districts of the county.
2. The greatest retardation exists among the foreign populations, and particularly among the Russians.
3. The greatest single causation of retardation among children of all nationalities is irregular attendance.
4. The greatest causation of irregular attendance among children of all nationalities is the withdrawal of children to work upon the farm, and this accounts for practically all of the avoidable retardation among children of Russian parentage.
5. The first task before the officers entrusted with the enforcement of the compulsory education laws is to compel the attendance in school of children withdrawn to the fields, in such a way that it will work the least hardship upon the children themselves or their parents, and least interfere with the agricultural needs of the county.

CHAPTER IV.

The Remedies.

"If there is so much need for the enforcement of the compulsory education laws, why aren't they enforced?" good people have demanded, implying that it is easy enough if the authorities wish. That there has been laxity on the part of some school officials cannot be disputed; but this laxity is not so much the result of indifference or incompetence as of inherent defects in our school laws.

The first obstacle is an inexplicable apathy on the part of many toward the schools. The schools are taken as a matter of course, and money is voted for their maintenance. The school election is attended if one happens to think about it or if a scandal has been spread about one of the teachers. The man on the streets believes in education. He is proud of the schools, and upholds the enforcement of the laws. More is needed than this. Officers experienced in executing laws know that no statute can be enforced without the active demand of the people. Mere passive acquiescence is not enough. Opposition by a considerable minority is sufficient to repeal nearly any statute so far as its effective operation is concerned. If there had been a real demand for

the enforcement of these laws, the conditions depicted in the last two chapters would not exist. School officials would have reacted to such demand, and their tasks would have been made much lighter, for the demand itself would have accomplished much toward such enforcement.

Not only has there been little demand, but in many places there has been effective though subtle opposition. Let us imagine a case, not so far-fetched as may be thought. Suppose that the school board of Fair Valley District is composed of three farmers, each having a Russian family on his place. And suppose, further, that the truant officer (if by any happy accident there is one) is also a farmer with a Russian family on his farm. Each Russian family has its usual brood of *kinder* rising like stairs from Conrad, the six-months-old baby, to Katie, the sixteen-year-old girl. It is late in October and a heavy frost is expected at any time. The potatoes are in the ground. If they are not dug immediately, they are liable to be lost. Perhaps help is scarce. The Russian children make excellent potato pickers. Are the members of the school board likely to compel these children to attend school at the cost of their potato crops? Is it probable that the truant officer will enforce the law and lose his crop, his job, and the friendship of his neighbors as well? Will the little girl teacher employed by the school board, rooming with its president, desirous of renewing her contract, insist that the Russian children are permitted to go to school? The questions answer themselves. These people do not want the law enforced, whatever they may assert to the contrary. Men who keep their own children from school to harvest their crops will not compel other people's children to attend.

After all, are the members of the school board so much to be censured? Is there any logical reason why young people should not assist in the agricultural and industrial pursuits of the community so long as their labor is not exploited or their bodies injured? Should not the father have the assistance of his son in the busy seasons of the year, to plant his crop or harvest it? Should not the mother receive the help of her daughter when the threshers come and there is a score of extra men to cook and wash dishes for? The boy who can drive a four-horse team dragging seventy hundred weight of beets over the dump is an asset to the community. He is adding to the wealth of the country. To drive a team well is just as necessary to his proper education as it is to sit in the school room trying to comprehend an incomprehensible interpretation of "An Ode to a Skylark."

This hypothetical case suggests the remedies we desire to offer. They are three. The first one is

A Campaign of Education.

This bulletin is a part of that campaign. For over a year we have written personal letters and letters to the press, sought interviews, made speeches, conversed, argued, and cajoled. Every teacher in the county has been bombarded with our literature, and we have allowed no member of a school board to escape. The good word is spreading, and the gospel is being preached to the four corners of the county.

The second suggestion is,

A Centralized School Control.

The real seat of school authority is in the local school board. The powers of the County Superintendent are less than supervisory—more truly advisory. Districts of the first class are practically divorced from even this advice. The boards of directors of the school districts through the fifteen specifications of powers enumerated in the statutes, have within their control all essential administrative authority, including the

right to employ teachers, truant officers, and others, to determine all salaries, to fix the courses of study under the general regulations of the State Superintendent, to adopt text-books, to provide school houses and school equipment of all kinds, to suspend and expel pupils, to determine the number of teachers and the length of time over and above three months that the schools shall be kept, to fix the time for the opening and closing of schools, etc., etc. One is impelled to ask why the office of County Superintendent of Schools was created at all. It may be made an important one if the Superintendent is able, courageous, and zealous. Lacking these qualities in the incumbent, it is worse than useless.

With the actual authority in the local boards, there are as many kinds of schools as there are boards. The Board of A District may be composed of intelligent, wide-awake, public-spirited citizens; the board of B District may be composed of persons of very different characters. One district may employ competent, progressive, teachers; the abutting district may employ indifferent ones. The school laws may be enforced in this district, while in that they may not be. By moving a mile, the head of a family finds himself freed from obligations to send his children to school. One school has an efficient truant officer, but a dozen schools have none at all. It is difficult for the Judge of the Juvenile Court to explain to an irate father why he should be compelled to take his children out of the field to attend school when his friend only a few miles distant is permitted to keep his children out of school. Instances of this kind are not infrequent.

Under the present system, teachers are hampered in adopting progressive policies if they do not happen to meet the peculiar views of the school boards. Their discipline is lowered because of the interference of fond and unreasonable parents. One patron objects to the teacher's religion; another, to his lack of religion. If he is active in politics, he is condemned. If he is not, he does not take the interest in public affairs one in his position should. A thoughtless act or indiscreet word will bring down upon his head the villification of a community. His reputation is the subject of discussion in the sewing society, and that reputation, like Sir Peter Teazle's, is left with the society. He can take only his character away. He is the scapegoat in all cases of inefficiency and mismanagement. If the teacher does not wish to become a martyr to the petty prejudices of a neighborhood, he is compelled to become spineless and hopelessly politic. If he cannot please everyone, he is careful to displease no one.

The truant officer who enforces the law is in a difficult position. Even with extreme tact, he is certain to incur the enmity of some of his neighbors. Like the policeman's, his "lot is not a happy one."

Teachers and truant officers should be relieved from these influences and disabilities. Probably more Weld County teachers have been compelled to resign their positions because they have antagonized some of the parents in their districts, in the proper exercise of their duties in enforcing discipline and introducing advanced methods, than because of incompetency or misconduct. It is a law well recognized that no teacher can long remain in one position. These conditions should not exist; but they cannot be removed so long as local boards have unrestricted authority in employment and fixing salaries.

Many of the powers now vested in the local boards should be placed in a board or commission of county-wide jurisdiction, which should have power to employ all teachers and truant officers in the county, and assign them to the different schools. This commission should have coercive authority to compel obedience to the law both by teachers and the people generally. In this way, uniformity in administration, not only of the statutes pertaining to school attendance, but of courses of study,

text-books, equipment, standards of scholarship, durations of terms, and many other reforms, could be brought about that are impossible under the present system.

The Judge of the Juvenile Court should be a member of this board, or at least closely identified with it. The court should have plenary, original jurisdiction through its probation officers in all matters of incorrigibility, insubordination, and truancy in the schools. Teachers and school officials should feel the strong arm of the law acting through the court, back of them to sustain their authority. As it is, the Juvenile Court has only appellate or indirect jurisdiction. It may not act in the issuance of permits to be absent from school except on appeal by the parents when the County Superintendent or local superintendent has refused them. So also with regard to the child labor laws. It cannot compel the attendance of a truant in school unless the local officers have acted and exhausted their powers without avail. If the local officers do not see fit to act, the Probation Officer can do nothing but sit by and twiddle his thumbs. The court has no powers whatever over the expulsion or suspension of pupils, yet if a child is so incorrigible as to necessitate expulsion from school, he is a juvenile delinquent, and should be under the supervision of the court.

It is not intended to be argued that local boards should have no voice in school affairs. In many matters, particularly in voting bonds, taxation for school purposes, and the financial affairs of the district, their wishes should control within reasonable limits to be defined by the legislature. The creation of a central county board or commission with the powers above indicated, among others, seems essential to the solution of the problems here presented. In no other way can there be county wide uniformity of school administration.

The third remedy is,

The Adaptation of School Session to the Industrial Needs of the Community.

A concise statement of this remedy may be given in the language of Chief Probation Officer Lee:

"The school board should choose for school sessions those portions of the calendar year which are best suited to the economic needs of the majority of the people of its district; and, if an appreciable minority exists which is not well served by this readjustment of sessions, such extended terms or extra assistance during regular terms should be provided as will be sufficient to guarantee that every normal child will make at least one school grade during each school year."

The arguments in favor of such a plan are as well expressed in an article written for the Windsor "Poudre Valley", and appearing in the issue of that paper of September 27th, 1917, as they could be here. We copy the article.

"Continuous Schools as Solution of Compulsory Education Problem.

"I have heretofore asked space in your paper to set forth some of the problems confronting the authorities in the enforcement of the compulsory education law, and in a former letter I recited at some length the Greeley summer school plan to give the children who expected to be withdrawn from the schools to aid in the harvest, an opportunity to attend school during that part of the summer when they would not be needed on the farm. The summer school proved to be a success beyond our most sanguine expectations. At some later time I hope to place before your readers the facts and figures showing the results of this experiment. For the present I shall content myself with the statement that it is believed by those who were active in making the summer school a success, that it demonstrates the solution of the problem that

confronts us. That problem is: How may the compulsory education law be enforced in such a way that it will not interfere with the agricultural and industrial necessities of the county?

"The condition of war, carrying with it the withdrawal of men from all industrial pursuits into the army and munition factories, emphasized the necessity of replacing the labor of these men, so far as possible, with that of school children. It was, of course, self-evident, if these children were allowed to be taken from the schools, that they would lose a part of their education, particularly in ideals of good citizenship and Americanism, the need for which this same war condition has also emphasized. The reasonable industrial assistance of the older school children and their proper education are both of them necessities—necessities which it is the duty of the government to provide for.

"We find that these necessities conflict; that is, that children under the law are required to attend school during periods when they are demanded for other activities. The schools are opened in the beginning of September and remain open more or less continuously until the first of June. The portion of the year during which the schools operate has been fixed by a custom, the origin of which is difficult to determine. It is probable that the cooler months were chosen for school work because of the climatic conditions prevailing in the more humid portions of the United States. In the large eastern cities the heat of summer precludes, in a large measure, the successful operations of the schools. Yet, even in New York City summer schools have proved to be marked successes. It is probable, also, that the tendency of persons of means to take their vacations away from the cities and the schools during the summer has contributed to this custom. In Colorado, however, with its high altitude, dry climate, and cool summers, the reasons that obtain in the East for closing the schools during the summer months do not exist. There is no valid reason that occurs to me why the large sums invested in school buildings and equipment should remain idle one quarter of the year. Argument aside, the summer school in Greeley has demonstrated the feasibility of keeping the schools in Weld County open the year around, so far as any natural obstacles are concerned.

"On the industrial side of the question we meet with a very different condition. Potatoes grow only in the summer time and beans mature only in the fall. We cannot adapt agriculture and the rotation of the seasons to suit our school customs. The laws of nature will not bow to the laws of man. Necessities, therefore, require that instead of attempting to operate our schools during the months that these children are needed elsewhere, we should operate them at such times as will permit all children to attend school for a minimum number of weeks in each year. In other words, while the schools keep open only from September to June, it is frequently a hardship to say to the parent that he must have his children in school during all of the intervening months. If, however, we may say to the parent that the schools are open from January to January and that his children must attend them a minimum number of weeks each calendar year, a certain number of which must be in succession, he has an opportunity to choose the time when his children shall attend school that will best fit his needs or conveniences. To enforce a law requiring a minimum time of attendance in school at appropriate periods would work no appreciable hardship on any person, would give the farmer an opportunity to avail himself of the aid of his boy in harvesting his crops, and at the same time insure to the boy the education that his own welfare and the welfare of his country require.

"It must be obvious to anyone who has read thus far that I am endeavoring to recommend to the school authorities in Weld County that the schools should be in continuous session the year around, with such a

sufficient force at all times to take proper care of the children in attendance. It is probable that for several months of the year it would not be necessary to employ the number of teachers that are now regularly employed. Let us try to see what the results of such action would be.

"On the basis of a nine months' term, we find that it requires thirty-six weeks' attendance of the normal child to finish a grade in a year, a school week comprising five days. These thirty-six weeks, under the present system, comprise the months from September to May, inclusive. Suppose, then, that we take as a basis for a minimum requirement of attendance a total of thirty-six weeks of five days each, or one hundred eighty actual school days each year. From the middle of November to the end of March work on the farms is comparatively light, and the necessity for the assistance of the school children correspondingly light. During this portion of the year continuous attendance might be required in all schools. This would comprise about twenty-two continuous school weeks. It is necessary for the best results that there should not be too many breaks in attendance, for the reason that it takes some time after the child has been out of school for him to conform himself to the routine of his work. It is, therefore, desirable that some considerable portion of his attendance should be without intermission. If he attends twenty-two weeks continuously from November until March, there then remains fourteen weeks for him to attend his school in order to comply with the law. That is, between March and November of each year the child may be sent to school at those times which will least interfere with his other work.

"The above program is suggested merely for meeting the demands of agriculture. In some other community it might be more convenient that the child should attend continuously during other months than those mentioned. However, if the school is open at all times the child is at liberty to choose the most propitious times, subject only to the restrictions that he attend in each year a minimum number of weeks and that a certain number of weeks are successive.

"The plan of continuous operation of the school also provides an opportunity for the child who, on account of sickness or other reasons, has been forced to be absent, to make up his school work so that he will not miss his grade. It also gives an opportunity for the child who has become backward in his lessons to attend school for more than the minimum time required by law and thus keep up with his classes. Numerous other benefits might be suggested that are unnecessary to mention here.

"In view of the above facts, I earnestly urge that all readers of the 'Poudre Valley' who are members of school boards or are interested in school affairs, as well as all other good citizens, should give this matter close consideration. The question is one that demands a solution, and the welfare of the community will be greatly enhanced by an early solution. If such a plan can be put in operation by the next school year, the constant conflict between the personal interests of citizens and those who are charged with the duty of enforcing the school laws will be ended. It is a matter for public thought, and I submit this letter not as an argument, but to suggest a plan that seems to me to be practicable and feasible, and which, for its best success, demands the co-operation of an understanding community.'

"Very truly yours,

"HERBERT M. BAKER, County Judge."

The above article was written in contemplation of the summer school at that time in session in Greeley, and has reference more particularly to the larger districts. It is probably true that a continuous school would not be practicable in many of the less populous districts. Dis-

districts adjoining large towns could arrange for the attendance of their children in the town schools at such times as their own schools are not in session. Several districts could combine for the purpose of holding extension terms. In still others, vacations could be better adapted to industrial and agricultural needs. It may be that in some instances the present program best fills the requirements. If so, it is better to let well enough alone. In the main, the arguments set forth in the article quoted apply to all conditions. There is no reason, so far as we have been able to discover, why the economic and educational necessities of each community should not be correlated. That they frequently are not is indubitable.

In 1917, one school had an enrollment of seventeen pupils. During the month of October, only one was in attendance. The other sixteen were assisting in the harvest. October was not a proper month to hold that school open. Very possibly the sixteen absentees had been idle during the whole summer vacation. A better adjustment of vacation periods could have been made, the crops could have been gathered, and the children could have received their needed schooling. Similar conditions exist all over the county, and these conditions should be corrected.

We do not advocate this policy merely because it tends to make it easier to enforce the school laws, although it would undoubtedly have that effect. We advocate it as a matter of principle, believing that as boys and girls grow older they should take their places in the practical activities of life. They should learn the responsibilities of citizenship, among the more important of which is that of self-support. It is their privilege, as well as their duty, to render their parents increasing assistance as years advance. Knowledge of the practical problems of life is just as true an element of education in a broad sense as "the three R's". The habits of industry, thrift, and accountability to others are as necessary to true culture and well-rounded citizenship as familiarity with the classics and rules of grammar. Any system of education that deprives the child of one for the sake of the other is fundamentally false. The school and the home and the farm should be welded into one institution for the welfare of childhood and the glory of the nation.

CHAPTER V.

Application of the Remedies.

Sufficient time has not yet elapsed to make thorough tests of the remedies suggested in the last chapter. The campaign of education has been described generally. We have been pleased and encouraged by increasing support of our propaganda, much of it from wholly unexpected sources.

Nothing can be undertaken looking toward a comprehensive centralization of school control until the legislature acts. While there is no statutory authority to put this plan into complete execution, in conjunction with the County Superintendent of Schools, we have been able to accomplish much under the law as it stands, largely outside of the required scope of our duties, but wholly within official discretion.

One of the first things we attempted was to obtain the active cooperation of the Colorado State Teachers' College. We felt that the public schools and the college could be reciprocally helpful. The college, in preparing its students to be teachers, we thought, could not give them more instructive training than by bringing them into actual contact with the practical problems of the schools. The schools, in turn, would be benefited by the expert advice and assistance the college could offer. We carried our plan to President Crabbe, and were assured of his hearty support. All that was lacking to put our scheme into operation was a

medium through which the college and schools could be brought together. The court, through its probation officers and its connection with truant officers in every district, potentially at least seemed to be the best intermediary.

One of the first results of the President's assurance was to establish a psychopathic clinic at the college, under the supervision of Dr. J. D. Heilman. All children before the court are taken to this clinic for mental tests. Often, physical examination is recommended, in which event we have not hesitated to avail ourselves of the advice of physicians. Specialists in Greeley have freely given their time, learning, and experience for the benefit of wards of the court. County physicians acting under appointment of the Board of County Commissioners have never failed to respond on request. Ultimately, we hope to have attached to this clinic a staff of physicians, dentists, nurses, and social workers, as a permanent adjunct of the court.

While compiling our records it was noticed how frequently a pupil marked for poor conduct would also be marked mentally or physically defective. The coincidence was even more noticeable among the physical defectives than the mental defectives. While the teachers were not in a position to detect any but the most glaring defects, and no scientifically accurate inferences can be drawn from their reports, we believe that much bad conduct in school can be traced directly to these causes. If our impressions are correct, great good can be accomplished by thorough psychopathic examination of all unruly school children.

Our greatest handicap in carrying out this work has been lack of institutional equipment. The State Home and Training School for Mental Defectives at Arvada is overcrowded, and for several years it has been impossible for us to commit any of these unfortunate ones to that place. Weld County alone could probably fill it to capacity with children in need of immediate care.

Another pressing need is a county detention home. There is now absolutely no accommodation for children in *custodia legis*. It frequently happens that it is necessary to detain children several days before final disposition can be made of them. Often, they should remain under observation for some time in order to determine the proper treatment for them. For lighter juvenile misdemeanors, too slight to warrant commitment to the industrial schools but still deserving some punishment, a detention home is indispensable. As it is, these children, many of them in court through no fault of their own, have to be sent to the county hospital, or receive such care and attention as we, for the time being, can furnish them.

The Teachers' College has also co-operated with the court along sociological lines. Professor E. D. Randolph is a member of the Board of County Visitors, and in that capacity attends all trials of boy delinquents. He has formulated drafts of reports for investigations of applications for mothers' compensation and dependent or neglected children. Professor Randolph has also been of material aid in interpreting this survey.

Through Professor Shriber, Director of County School Administration, we have been in close touch with the demonstration schools established in different districts. Through them, we have an opportunity to make practical application of many of our plans.

In short, we have brought this great institution into closer relations with the schools of the county, rendering valuable services to them. Also, we have received the appreciated assistance of many agencies, governmental and private, which lack of space prohibits us from mentioning here. In this way we have endeavored in a measure, to supply many things that a well-organized juvenile court should have, and to

provide a makeshift substitute for a county board, which, while it has few coercive powers, nevertheless, with the support of all school authorities, may be made into a potent instrument of good.

In connection with the County Superintendent of Schools, we are now installing a card index system of enrollment of the public school population. It will be kept up to date by periodical reports of incoming and outgoing students. In case of transfer, the County Superintendent will be immediately informed thereof, and he, in turn, will forthwith notify the officers of the district to which the pupil has moved, so that his attendance in school may be procured without delay.

Uniform forms of permits to be absent from school have been prepared not only for the use of the County Superintendent but for the local superintendents who are empowered to issue them. Thereby, there will be a complete record of all permits granted for the use of the Superintendent as well as the Chief Probation Officer. These forms supply all necessary information so that if any permit is obtained by false pretenses or is granted under misapprehension, proper steps may be taken to cancel it, and, if necessary, to institute legal proceedings against the person wrongfully obtaining the same.

One of our most perplexing problems has been to arrive at an effective method of handling truancy. The court, under the law, is a tribunal of last resort in these cases. Just where the jurisdiction of the schools ended and where that of the court began has been difficult to determine. Our first step to unravel this confusion was to insist that each school board appoint a truant officer, which is made mandatory by statute. Prior to the autumn of 1917 there were three truant officers in the county. That is, there were three gentlemen who were truant officers *de jure* and janitors *de facto*, whose time was monopolized by their *de facto* duties. That fall, ninety truant officers were appointed. Some of them were efficient; others were—not so efficient. Few of them had any comprehension of their duties. Some wrote letters informing us that this child or that was not attending school, thinking that that was all that was required. Plainly, the Probation Officer could not travel to Grover today to see that Johnnie Jones was returned to school, and be in Erie tomorrow to discover why Mary Moore was absent. It was necessary that the burden of caring for all usual cases should be borne by the local authorities. After many letters of explanation and instruction, we at last hit upon a method that we think is feasible. We have provided each teacher with blanks containing instructions to the truant officer to investigate the absence of pupils, with forms of report for the truant officer attached thereto. There were also left spaces for report of the teacher to the Chief Probation Officer if a child should not be returned to school after legal notice to the parents. The blank is here reproduced, together with instructions for its use furnished by our office.

TEACHER'S NOTICE TO TRUANT OFFICER.

Form T 8., 19....

To Truant Officer, District No.....

Kindly investigate absence from school of child named below and make immediate report of your findings.

.....
Teacher.....School,

.....
Name of Child. Age. Grade.

.....
 Name of Father. Post Office Address.

 Distance and Direction from School.
 Occupation of—Father
 Mother
 Dates of Absence from School.....

TRUANT OFFICER'S REPORT.

Number and Dates of Visits to Parents.....

 Parent's Reasons for Child's Absence.....

 Parent's Attitude toward Child's Attendance.....

Disposition of Case

1. Has Parent promised to return child?.....If so, When?.....
2. On.....19...., I notified parents to apply for a permit.*
3. On.....19...., I notified parents to return child to school within five days from said date, on form supplied by Chief Probation Officer of Weld County.*

Remarks:

*Erase in accordance with fact. Truant Officer.

TEACHER'S SUPPLEMENTARY REPORT.†

To Chief Probation Officer, Weld County:
, 19....

The child named above was due at school on the.....
 day of, 19.... and has failed to report.

P. O. Address. Teacher.

†Use reverse side for additional information you have to offer.

For Use of Form T 8

GENERAL DIRECTIONS TO TEACHERS AND TRUANT OFFICERS.

(Please Preserve Carefully)

1. Each school has been sent a stock of these forms. The forms are in the hands of the teacher. The teacher should order a new supply from the Chief Probation Officer before the stock in his hands is too far depleted.
2. Each blank and report must be fully and carefully filled in.
3. Upon the absence of any child from school for any inexcusable reason, or where the teacher is in doubt as to the justification of the child's absence, or the absence is of long duration, or the teacher desires further information concerning the pupil, or if for any other reason he thinks it is desirable, he will fill in the blanks under "Teacher's Notice to Truant Officer" and sign same. The teacher should not stop with his signature but fully fill in all blanks down to "Truant Officer's Report."
4. Immediately upon receiving the blanks the Truant Officer should investigate the pupil and in all cases confer with the parent, with neighbors and other persons likely to know of the circumstances.
5. If the child's absence has been due to some justifiable cause and he expects to return to school in a few days, under sub-head "Disposition of Case" the truant officer will fill out the first disposition, drawing a line thru the other two and return the same to the teacher.
6. If the child is out for some justifiable cause, such as sickness, the truant officer should notify the parents to obtain permit for absence. Remember that no child between the ages of eight and sixteen years has a right to be absent from school for any cause without a permit. Blank forms of application for permit will be in the hands of all teachers and any parent desiring one will be able to obtain an application from the teacher. Be careful to see that the parent of each child remaining out of school over three or four days even from justifiable causes obtains a permit.
7. In case the child is absent from school for some reason that is not justifiable in the eyes of the law, where the parent is obstinate, or where frequent notice has been given previously, or where permits have been suggested and parents refuse or fail to obtain same, notice should be served on parent by the truant officer on blank forms hitherto supplied to the truant officer or to the secretary of the school district. In case you have no such forms, notify the Chief Probation Officer, who will forward them to you.
8. Under "Remarks," first, give the names and post-office addresses of all persons present when you serve notice, then note any other facts that you think will be of interest to the teacher or to the probation officer concerning the case. Use the reverse side in case of need. Full but brief comments will be greatly appreciated by the Probation Officer.
9. When you have made the investigation and prepared your report, return it to the TEACHER. DO NOT SEND IT TO THE CHIEF PROBATION OFFICER.
10. If the truant officer reports the first disposition; viz., that the parent has promised to return the child to school, and the child has not been returned on such date, the teacher shall give another blank to the truant officer with instructions to serve notice as provided for in Disposition No. 3, on blank, unless extremely good reasons have developed why this course should not be taken.
11. If the truant officer reports the second disposition; viz., that parent was notified to obtain a permit, and the parent does not obtain a

permit within three days after date of such notification, the teacher shall give another blank to the truant officer with instructions to serve notice as provided in disposition No. 3 on blank and to report.

12. If the truant officer reports the third disposition; viz., that he has served notice to parent to return child to school, and the child is not in school within five days from the date of the notice, the teacher should fill out "Teacher's Supplementary Report" at the bottom of the blank, being sure to fill out properly all information required and forward the same to the Chief Probation Officer in envelope furnished. In figuring the number of days from date of notice, exclude the date of notice and then figure only the school days. For instance, if the notice is made on Thursday, and Saturday is not a school day, figure the five days commencing Friday as the first day, Monday the second, and Thursday the fifth day.

13. Truant Officers must not send to the Chief Probation Officer any reports unless requested to do so by him, nor shall the teacher send to the Chief Probation Officer any reports until five days have elapsed after such service of notice, and the child has not then reported. **If these conditions exist, the teacher must in no event fail to forward the report to the Chief Probation Officer.**

14. The local school authorities must be sure they have exhausted every effort to compel the attendance of the child before they take recourse to the County Court.

15. At the time of mailing the report to the Chief Probation Officer, the teacher should include all former notices given the truant officer and reported on concerning such pupil.

J. WALTER LEE,
Chief Probation Officer.

The procedure provided for in this form not only relieves the court from wasting its time on trivial cases, but it complies with all the prerequisites of the statute for the prosecution of persons responsible for truancy.

In our treatment of juvenile delinquents, we have adopted a practice not explicitly contemplated by statute. If the strict letter of the law were followed, immediately upon lodgment of complaint against a juvenile offender, information would issue from the District Attorney's office, and the child would be taken into custody. Thereupon, a formal trial would be held, and, if the defendant should be found guilty, he would be sentenced to the Industrial School. If it was the first offense, or where mitigating circumstances surrounded its commission, the court would suspend sentence and place the delinquent on probation. This procedure presents no insuperable difficulties in large cities where the delinquent lives near the court; but it creates great expense to the county when, as frequently happens in Weld County, the child lives far from the county seat. Besides, it involves a waste of time and trouble to court officers, and no little inconvenience to witnesses and parents.

When the misdemeanor charged is not serious and when neither sentence nor commitment is likely to follow trial, we have adopted a very different procedure. Instead of bringing the child to the court, the court goes to the child. The Probation Officer talks with the parents and neighbors, and with others who have knowledge of the alleged offense and who are acquainted with the general reputation of the offender. If the child is in fact a delinquent, the Probation Officer places him on probation without a formal hearing, warning him that if he gets into any further trouble, he can expect no leniency. This has been found to be fully as efficacious as probation after sentence.

Someone may ask, "What has all this to do with the schools? Benefit to the individual may be admitted, but its application to the school system is somewhat obscure."

It may seem a far cry from the one-room school house in a sparsely settled corner of the county to the college president's study, the physician's office, or the judge's chambers. It is our desire to bring all these factors together as units of one comprehensive scheme. There is not a school in the land in which there is not some troublesome, backward or defective pupil. We want him brought to the court as soon as he is discovered, and before his case becomes so extreme that the law is forced to intervene. If this is done, juvenile crime will be reduced to a minimum, teachers will be advised of the child's true condition, superior methods of teaching him can be suggested, and preventive treatment can be administered before it is too late. We conceive our duty to be to forestall delinquency rather than to punish it. A few cases from our records may illustrate what we mean.

A boy 12 years old was brought to the court by his parents after having been expelled from school for incorrigibility. He was guilty of about all the school boy pranks on the calendar, would depart from the school room in spite of the remonstrances of his teacher, was restless in his seat, constantly fought with other boys, and was a source of terror to the girls. He interfered with the water fountains and destroyed considerable school property. He paid no attention whatever to his studies and was badly retarded. It was impossible for his teacher to discipline him, and he was given a desk in the office with the principal.

The clinic found that while he did not test mentally as high as a boy of his age should, he was not feeble minded, and a physical examination was recommended. The physician removed a quantity of ear wax from his ears, and found that his eyes were astigmatic, that he was afflicted with adenoids and his tonsils were diseased. His father thought that the boy's bad conduct was the exuberance of abundant good health! Glasses were adjusted to the boy's eyes, and the adenoids and tonsils were removed. After a while he was returned to the school. Now he can hear what the teacher says, and to his surprise finds something of interest therein. He can see what she writes upon the blackboard, and discovers that it is worthy his attention. Because of the removal of his adenoids, for the first time in his life, he is able to breathe naturally through his nose. Without the diseased tonsils, his throat is not dry and feverish, and he is not constantly wanting a drink of water. The result is that he is quiet in the school room, has ceased to fidget in his seat, and his school work has improved so much that he has taken his proper place in his studies with his class-mates.

As another example: A girl was brought before the court charged with immoral delinquency. Her physical appearance indicated that she was seventeen or eighteen years of age. She was taken to the psychopathic clinic and given a mental test. She tested thirteen years of age, and the psychologist noted that her mental age corresponded exactly with her chronological age, but that her bodily development was equal to that of a sixteen to eighteen year old girl. In other words, she had a thirteen year old mind in an eighteen year old body. This girl had all of the natural passions and desires of the grown woman with the mentality of a child. The inevitable happened. In default of parents of sufficient intelligence to appreciate this condition, the only treatment was to place her in an institution where she will be under strict supervision until such a time as her mind has had a chance to catch up with her body.

One more case: A boy was brought into court for stealing about everything he could lay his hands on. He had been the scourge of candy and novelty stores. At last, in spite of his shrewdness, he was

caught red-handed. This seemed to be a very plain case of youthful thievery, and the first impulse was to send the boy to the State Industrial School without further ado. In line with our policy of examining well into the environments of all delinquents, a probation officer was sent to the home of the boy. He found that the mother had fled with a man whom she considered to be more desirable than her husband, and that the father was what would be known in Vermont as "wuthless". The furniture was scanty, there was no coal in the bin, and no food in the pantry. On the stove were the remains of cold and indigestible flap-jacks, fried in three inches of grease. The boy's clothes were rags, and his body begrimed with the dirt of weeks. His hair was inhabited by a species of animal life that is not mentioned in the best of society. This boy was not a thief because he was bad. He was a thief solely because his surroundings compelled him to be one. He was not sent to the Industrial School; but he was sent to the Home for Dependent and Neglected Children. From last reports he is getting out of the habit of stealing. He has an opportunity to be adopted into a good family where he will be treated kindly.

The subjects of these three cases were all in the public schools, but came to our attention through other sources. If the teachers, and particularly the truant officers, can be made to understand that they are officers of the court, many of these children would be brought to its attention before they have committed such gross offenses that disciplinary measures seem necessary. We wish to impress upon the school boards and the teachers throughout the county that they and the County Court form component parts of one system. When the time comes that teachers realize that the function of the children's court is not that of a super-child-spanker to the county, but on the contrary that of a super-parent, with the welfare, comfort, and happiness of the children its single object, we have placed ourselves in the position we are striving to attain. We desire teachers and parents to come to us in confidence and faith in our good intentions, instead of compelling us to seek them, only to find erected between us a barrier of suspicion and distrust.

The schools are in theory a department of government, and it remains for the school officials clearly to comprehend this to make them so in truth. When this takes place the concentration of school administration in a central body will have become in a large measure an established fact. Then it will remain for the legislature to confirm by statutory enactment a condition already existing, instead of attempting to revolutionize school administration by radical legislation.

We have placed in an appendix with comprehensive notes, copies of the forms that have been prepared for the purpose of systematizing and consolidating the common functions of the court and the schools.

In the adaptation of school sessions to the industrial and agricultural needs of the community, happily we have had some experience. Rather than ask the reader to take our judgment of the success of this plan, we herewith submit the opinions of others. We quote, first, from a letter written by Mr. H. P. Brunnell, of the Greeley schools, at the request of Superintendent G. E. Brown. After reviewing the work of the court in behalf of extension schools, Mr. Brunnell says:

"It was recognized by these officials that there is a certain justice in the claim of the beet workers, that they actually need the assistance of their children in tending the beets in the spring and again in harvesting the crop in the fall. To make provisions for this exigency, the cooperation of the sugar company and the Greeley city school officials for the establishment of a school during the lax season in which these children could make up the attendance lost during the spring or fall terms, was secured."

"The first such school was opened in the East Ward school buildings

in Greeley last July and the attendance rose rapidly to a total of 217 children requiring the services of 7 teachers."

"The plan was then evolved of permitting any child who thus enrolled to work in the beets either last fall, or this past spring, a certain number of days, not to exceed the number of days which he attended the summer school. Permits were absolutely refused to those who had not attended the school."

"This summer school has now (August 9, 1918) been in operation in the East Ward for two weeks and the enrollment thus far is 188. Superintendent G. E. Brown has been petitioned by the parents of 36 such children to open up the West Ward school, which accordingly will be done, arrangements having been completed for Miss Grace Cochran to begin school there next Monday morning. This will make a total attendance in Greeley, considerably in excess of that for last year. Nor does that betake the full growth of the movement for summer schools are now operating in various districts of the county including Evans and Galeton. It truly appears that our county court has found a method of law enforcement that is agreeable to all concerned."

The following is a letter from Superintendent H. E. Black of the Eaton Public Schools:

"My dear Mr. Lee,

"You have asked me why the Eaton Schools are to open August nineteenth this year instead of on the traditional day of school opening, the first Tuesday after Labor Day in September.

"Tradition may govern us here in the Eaton Schools to some extent, but we are not so loyal to it as to allow it to get in our way.

"We have studied the immediate needs of this community and planned to conduct the schools in such manner as best to serve the needs of both children and adults."

"One of the conflicts that we early discovered was that late May and early June school conflicted with the labor needs of this community in seeding time of farm crops.

"We also discovered that there is practically no farm work to be done here in the month of August. Also, the weather records will show that the latter half of the month of August is cooler from year to year than are parts of September, therefore a better month even than September for commencing work.

"We have found that high school people do not as a rule care to go to the beet and potato fields during the harvest time. Their work is over so far as the crops are concerned by the first of August.

"And too, we find likewise that those German-Russian children above the age of 14 years who do finally go to the fields about the first of October can get at least a month of schooling before the harvest time arrives if we open school early as about August 20, but that when the school does not open until some time in September these children dodge around and manage to mark time until after harvest before entering school at all.

"We find it more desirable to commence early, take the usual Christmas vacation of two weeks and Easter vacation of one week and close about the middle of May than to begin late and rush through without vacation rests and try to use energy that is already consumed. The pupils and teachers come out in much better condition in the spring and economic conflicts are avoided in this community.

"Yours very truly,

"H. E. BLACK,

"Superintendent of Schools."

Our third exhibit is a portion of a news item appearing in the Windsor "Poudre Valley" of August 8, 1918.

"School for Beet Workers in Session."

"School opened in Windsor Monday morning for the benefit of beet workers and others who expect to have to be taken out of school later for the harvest work."

"Superintendent Cohagan is in charge, having just arrived in time to take up this early term. He has a corps of five teachers instructing the enrollment of 265 pupils, which is considered exceptionally good."

"Miss Brooks, who had the first grade last year, has returned and is in charge of the same department this term. Miss Putenny of Greeley has first and second grades; Miss Anna Svedman of this city has third grade; Miss Nichols of Greeley the fourth, and Miss Myrna Laybourn the fifth and sixth grades."

"This is the first experiment of this kind made by the Windsor district, and is in line with the suggestions of Judge Baker and recommendations of the outgoing superintendent, Mr. Lanning. Some plan had to be devised to make possible the attendance of the beet-working children a full nine-months' term without depriving the farms of their labor during the harvest month of October. The summer school term seems to be the solution, and the result of this experiment will be awaited with interest. The enrollment indicates that it will prove a boon to those families and their children who would find it difficult to comply with the law with only the regular term of school."

"One drawback that can be noted at the outset is that children living too far out during the summer will have difficulty in attending on account of poor means of getting to town daily. As no school at this season of the year is in progress in the country districts they cannot attend there and get credit for such attendance. A possible solution for this would be in the use of an auto bus to make the rounds and pick them up daily, and return them to their homes at night. One or two heads of families concerned are reported to have expressed a willingness to pay a monthly sum for the support of such means of transportation if the district should deem it advisable to inaugurate a service of that kind. However, that is a problem that may have to be left for solution after the practicability of the summer term experiment is established."

"The splendid enrollment not only shows a disposition on the part of the beet-working people to take advantage of the school, but also proves that the ministers of the churches to which these families belong have urged a full attendance in the interest of education and better citizenship."

Educators of experience and high repute all over the state have assured us of their hearty agreement with our contentions. Indeed, we have yet to hear a dissenting voice from any school man of responsible position. Typical of many letters received by us is the following from Doctor Gove, for many years Superintendent of the Denver City Schools:

"October 11, 1917.

"Hon. Herbert M. Baker,
County Judge,
Greeley, Colorado.

"Dear Sir:

"Your paper on continuous Schools, reprinted from the Poudre Valley of September 27, has fallen into my hands.

"I hasten to write, assuring you that its substance is to me, of real value.

"Your position is unassailable; one that some of us, by experience, have already assumed.

"The changes of society relations and progress in administering community interest in the country, are unprecedented and almost radical.

"That the school has supplanted the home, in parental and family responsibilities, however regrettable, must be accepted.

"The parent no longer owns the child, except in a modified form; the school has undertaken the greater half of the task.

"The long summer vacation, a custom naturally acquired in earlier days, is no longer necessary: older and more experienced nations did never know of it. It has been said that the language of the oldest nation China, has no word synonymous with our 'vacation.'

"The methods in child training where elementary text-book learning was the sum and substance of our own school days has been relegated to the past. Vocational training in its varied aims is well in hand.

"Intense application for long and uninterrupted periods is no longer demanded. Change from head-to-hand-work, and interests in field and factory, intervene daily. The old-fashioned mental application for the youth no longer is 'au fait.'

"And so eleven months in the year the growing boy can healthfully and properly be set to what is modern school work.

"One of the first decisions as to 'in loco parentis' status of the school, early came down from the Supreme Court of Vermont, when the father insisted that his boy was his absolute possession; that the school could not decide what part of his boys' time could be confiscated; that he would send the boy to school or keep him at home at pleasure; that the school's province was to take charge of the boy, only when the father sent him.

"The Court fifty years ago, failed to sustain the father's position. From that time, the school has, step by step advanced over home territory until the surrender is nearly complete. Slight remonstrances now appear; the mother looks not with displeasure in the morning when a day's relief from responsibility commences and ease from a burden is obtained for the day.

"The writer fails to view the future as promising, while the old-time home training, loving, and directing is disappearing.

"And so I am pleased to read your paper, the tendency of which is to permit healthful business activities to be a part of child-education.

"The School regulations in every district can be modified in required days of pupils' attendance so as to accomplish what your paper so plainly intimates.

"You have suggested one of several reforms, any one of which if adopted will secure to the parent the needful manual assistance, without lessening the value of school instruction.

"Respectfully,

"AARON GOVE."

In addition to Greeley and Windsor, extension schools have been opened this summer at the following places: Evans, Galetton, District No. 1 (Dailey School). Children who attend these schools will be given a leave of absence during the harvest season for as many days as they have attended the extra session, provided that their services are actually needed. Children who do not attend these extension terms will be compelled to go to school during the regular session.

We recommend to school boards throughout the county that they watch the progress of the summer schools now in operation, and note the effect they will have upon the scholarship of the pupils attending them. Our confidence in this remedy is so supreme that we are willing to abide the decision of any fair, unprejudiced investigator.

It will undoubtedly be said that the above remedies cannot take the place of energetic enforcement of the compulsory education laws. This asseveration cannot be disputed. It has been and will continue to be our policy rigidly to enforce these laws whether the reforms advocated herein are adopted or not. If these remedies are adopted, the task of enforcing the laws will be much lighter; but, more to the point, they can then be enforced without injustice or hardship to anyone; whereas, under present conditions their enforcement will inevitably entail unnecessary injury to many persons, including the children themselves. Perhaps, when the good people understand what the strict enforcement of compulsory education laws means to them individually and when this understanding is transmitted into realization by the personal application of these laws to parents here and there throughout the county, they will then perceive the seriousness of the situation and the necessity of changes in our school laws and customs along the lines we have indicated.

But whether these changes are made or not, there is one thing we wish to emphasize. That is, that under the law as it exists the County Court is nearly powerless to act until the local school authorities have exhausted their resources. No parent can be convicted of unlawfully keeping his child out of school until the local truant officer has notified him to have his child in school. The Chief Probation Officer, living in Greeley, cannot keep in touch with each of the fifteen thousand school children of the county, and cannot handle all minor offenses of truancy and delinquency occurring from the Wyoming line to the border of Adams County. All unimportant cases must be taken care of by the local authorities.

The law provides the machinery by which this may be done by the appointment in each district of a tactful, fearless, and impartial truant officer. With such an officer in every school district acting in close harmony with the Chief Probation Officer, infinite good may be done for the schools and for the children in them. School boards should realize that good truant officers are as necessary to the proper conduct of their schools as their teachers. It is futile to establish schools for children who do not attend them, and it is foolish to conduct those schools in a haphazard, inefficient manner, when, by exercising a little discretion and a modicum of intelligence they may be made efficient.

We fear that the reader may have obtained the impression that we are too ambitious in our work and too sanguine of its good results—that we have painted possibilities in too rosy a hue. No one can be better aware than are we of the almost insurmountable obstacles that stand in the way of reaching the ends toward which we are striving. That the work is not only meritorious but, as we believe, necessary for the best welfare and prosperity of the growing generation, can be our only apology for undertaking so herculean a task. As one progresses, he becomes appalled at the labor and time it will be necessary to expend to achieve widespread and permanent results; but as he advances his horizon also broadens, and manifold opportunities for the alleviation of suffering and promotion of happiness become apparent. We believe it to be a practical application of the benign philosophy of Jesus Christ.

PART TWO

*Educational Interpretation of the
Survey*

By EDGAR DUNNINGTON RANDOLPH

THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

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From the Teacher's Point of View

Aside from the fact that it was promised, there is little reason for the inclusion of another chapter of interpretation of the results of the study of school retardation in Weld County which has been so lucidly described in the foregoing chapters. The investigation has accomplished its initial purpose—the bringing together of the essential facts of the attendance situation in the county for the sake of a clear definition of the problem of the Court in the enforcement of the compulsory attendance law. The weakness of our existing local organization of educational administration and child protection, and the lack of a purposeful correlation between economic and educational activities are revealed with altogether unusual clarity and concreteness. The facts reported are indisputable. They may be verified by just anybody who is interested enough to do the necessary drudgery. And the cautiously drawn conclusions in regard to the appropriate action for the community to take are thoroughly warranted both by the conditions now existing in the county and by the best educational thought of the day. It would seem as if all those who have a notion of the nature of evidence and know when a thing is proved, must give their energetic support to the necessary administrative reorganization of the educational and child-protective agencies of the county. So, what follows here in this final chapter amounts only to casual comment on a few matters of personal interest and a few others of more or less general significance:

In the first place, it is worth remarking that in a real and very important sense this published report of the results of a long and laborious piece of educational research is pioneer work of much more than local importance. It is the first survey of its kind made in the United States. Though for more than ten years gifted students of educational problems have been reporting to the public the facts of retardation among elementary school pupils, up to this time practically all the useful studies have been confined to city school populations. Such random surveys of rural regions as have been made have been in the main not very conclusive—because done at long range on the basis of available reports in the offices of county superintendents. This report invites us out of the metes and bounds of “estimates” and guess work—thanks to the incisively straightforward method of getting at the facts; and offers us the challenge afforded by an interpretation of the discovered facts in terms of our own related community problems. It thus breaks new ground in the most neglected field of American education. It will be easy, with this example, for other similar communities to take stock accurately of their condition.

From another point of view, however, this survey is still more notably a piece of pioneer work. It is the first approach to the study of retardation from the angle of the Juvenile Court. An attack upon the problem from this angle has long been needed, and has in fact only awaited some one with the necessary initiative, energy, and insight to plan and undertake it; for, consider what the Juvenile Court is. It is a “stop-gap”, an “emergency treatment”—a treatment of the symptoms of a bad social condition. Or, less figuratively, it is a new institution which was made necessary by the increased complexity of modern life and the consequently lowered power of home and school to adjust children to things as they are. Methods of child-rearing and educating which were evolved under prevailing rural and provincial conditions of life a century ago are not adequate when life has become essentially urban and cosmopolitan. What was “good enough for us”, even, becomes

quite inadequate for our children simply because "times have changed!" Under new conditions, to hold inflexibly to old ways of doing is merely stupid. Every Juvenile Court case represents, first, the failure of a family to adjust a child to the existing conditions of life; second, the failure of a public school to offset a family's inadequacy; and, third, the failure of a community to provide an adequate organization of protective agencies to guard its children from growing into anti-social and ruinous habits. An efficient Juvenile Court must continually feel the futility of a routine handling of delinquent children. It must, in proportion as its Judge and probation officers are wise, continually seek for means of lessening the stream of warped or gravely endangered young humanity. To hear cases and pass judgment, however wisely, is still in the main only to deal with a bad situation too late. It is too like taking morphia to escape pain—too like using headache tablets when the trouble inhabits eyes or alimentary tract. Behind each delinquent are the efficient causes of delinquency, and delinquency itself remains untouched until the causes are removed. One of the chief causes of delinquency among normal children is non-attendance of school, whether as truants or otherwise; and while non-attendance of school is a main cause of retardation, retardation is equally effective in causing non-attendance—especially truancy. The handling of delinquent children in Weld County constantly discloses the coincidence of non-attendance and delinquency; so, the close relation between the Court's function of enforcing the attendance law and its function of dealing in a curative manner with delinquency is obvious. The two fields overlap. Juvenile Court and public school are parts of one whole. Judge and teacher have in part a common problem. Both have responsibilities created by family and community.

The hopeful aspect of juvenile delinquency is that so many of the causes are removable, so many of the predisposing factors are preventable by an intelligent readjustment of existing organizations to the conditions of life. The aim of society is to secure the greatest values of life. The readjustment which will make least disturbance of existing activities is the best one, provided it secures these values. A further hopeful aspect of juvenile delinquency is the fact that Americans are in general promptly responsive to any clear need of readjustment. Usually all that is needed to insure a beneficial readjustment of established arrangements is to present full evidence of the need. That is, after all, what is done in this bulletin. Those who read it with ordinary attention can not avoid the conclusions which the authors reach. As members of a democratic state they can not accept the conclusions without also accepting their responsibility for promoting the necessary changes. The groups upon which this responsibility rests are probably clearly enough indicated in the bulletin. The Court, upon which responsibility for enforcing the existing law rests, has vigorously enforced that law, and then in this published study has reacted as an intelligent citizen to the conditions that make law enforcement socially painful. The teachers, upon whom rest the varied responsibilities for giving the most useful instruction, forming the most socially useful habits, shaping the attitudes, and determining the effective motives of the rising generation have reacted in their official capacity by thorough co-operation with the Court throughout this investigation, and must further react in their capacity as intelligent citizens by supporting the necessary readjustments of established arrangements which have been proved not to work well under existing conditions. The families of the community are of course vitally interested in every condition that affects their children. Where existing conditions involve a seeming conflict between present and remote interests (as where for the necessary end of saving crops children are, when other labor is not available, withdrawn from school

at the cost of retardation and its cumulative evil results) a clear consciousness of their responsibilities for the general welfare of society must stimulate them to interest themselves in the adjustments necessary to secure an immediate good without sacrificing a more remote but wholly indispensable good. While it is necessary to make a living, it is not necessary to lower the chances of having a progressive community by arrangements which threaten to give the community an undue proportion of half-literate and provincial citizens. So the compulsory attendance law must be enforced, therefore. But it is not necessary to choose the very hardest conditions for the successful operation of the law. A readjustment of the period of school sessions to the periods when children are most needed at home will lessen the injustice to the children and the difficulties of the teachers, and the problems connected with the physical effects of seasonal farm labor on children will then be in turn for investigation.

Since in the matter of school retardation, as in all other conditions, every community represents a somewhat different combination of operative factors, it is peculiarly useful in promoting the general well-being to have so full and clear an exposition of the various causes that contribute to our present state of school attendance and retardation. It should and no doubt will make a cogent appeal to all those who prefer to be guided in their action by the realities of the situation rather than by heedlessly acquired preconceptions about it. If this bulletin can be timely brought to the attention of those who have the power to promote the needed reorganization, the response given to it by the people may fairly be regarded as a measure of the estimation in which they hold public education—or, better, as a measure of their foresight and progressiveness. It may, therefore, be worth while in this concluding chapter to focus attention upon the social significance of the elementary or grade schools in a democracy like the United States. The essential purpose of the elementary schools was long ago perceived and stated by the leaders who established our nation. But custom tends to obscure reasons, and changing conditions of life always create a need for restatement of ends and readjustment of means to suit the unforeseen conditions. So, the question, "Why do we tax ourselves to have public schools carried on?" may profitably be reconsidered in the light of such facts as Judge Baker and Mr. Lee have collected and interpreted for us.

The public schools are not merely a customary or traditional activity. They exist for definite ends far other than "to tax citizens to employ teachers to occupy children when they are not needed at home"—as they have been cynically described. However it may have come to seem to casual opinion or near-sighted self-interest, the public schools of a democracy exist primarily to maintain and forward the purposes of democracy—for the sake of insuring that the kind of social life established in America by liberty loving people, the kind of individual freedom now possessed by both men and women in America, the kind of opportunities now open to both men and women, and so on, may continue to exist and be extended. In other words, the public schools are an expression of our belief in (1) the desirability of institutions that give scope to all individuals to make the most of their capacities, and in (2) the moldability of children to common ideals and attitudes that will promote the ends of democracy. Or, in other words, the belief that the success of democratic government rests upon an intelligent citizenry. This is in brief the traditional description of the social warrant for free public schools. True though it is, it is probably less moving today than when America first sought to give it effect. It, like all formulations produced by a particular past set of conditions, needs to be translated into terms of present social needs. This need is freshly suggested by the

facts of the Weld County Survey of Retardation which adds its eloquent local testimony to the astounding conditions which the world war has shown to exist in America.

Briefly, from a social point of view, the elementary or grade schools are a public agency for the promotion of social harmony, stability, solidarity, national unity—call it what you like. One essential condition of national survival in the presence of rival and hostile civilizations is an ingrained cohesiveness of the people—such as comes only from unity of ideals and attitudes and a sense of common life and interests, a feeling of interdependence and mutual worth, and a “consciousness of kind.” In times of crisis the social value of national unity of this sort needs no emphasis. It is rather the neglected means to unity and the unheeded conditions that promote disunity that require to be stressed. Disunity, instability, division, and the like are the product of effective or deeply felt differences of many kinds.

Now, one of the chief functions of the public school, probably its basic function, is to **reduce disorganizing differences in the rising generation**; to reduce or remove the potent causes of friction and ill-will **between elements of the community, between sections of the nation, and finally between nations.** In other words, it is to make us alike. It is to off-set effective and demoralizing differences due to significant contrasts of social background, custom, language, and the like. It is likewise to offset family inadequacy; to transmit the socially needed standards and attitudes, the essential approvals and disapprovals. It is to **equalize opportunity** and increase and diffuse the possibility of cooperation for the general welfare. In short, the “common” school, as the elementary school is often called, is the place in which young Americans are educated, among other things, in what should be the “common” possession of all Americans. The purpose is to **make us alike in certain fundamentals**, and the warrant for this is at bottom, simply the warrant for national self-preservation; it is an essential condition of the general well-being, and even perhaps of the survival of the peculiar civilization represented in the group, its prized institutions, and so on. All this does not mean that general “uniformity” is required for effective social education. Social efficiency is as necessary to social survival as is social unity; and efficiency requires making the utmost of individual abilities and useful variations. The real problem of education in a democracy like ours is simply the problem of harmonizing a great deal of individual freedom, initiative, scope to live one’s own life, and the like, with such a degree of willingness to put public welfare before private ends as will insure national security. So much for this.

Now, to make the application in a few words! To do all these things requires exposure to proper influences during a considerable period of time. The greater the differences to be removed, the longer the time necessary. The native American child from an inefficient home is the native child most in need of the socializing contacts and instruction of the public school. The child from an essentially foreign home obviously, from a social point of view, can least of all children be freed from the democratic discipline of American school life and associations. If our democratic desire to secure social justice for all and our humanitarian urge to protect the “inalienable” rights of children will not move us to put and keep the children of aliens in school until they are Americanized, then our selfish interest in our own safety and in the continuance of our prized institutions must move us to insist that little Germans, little Russians, little Slavs, little Italians, little Greeks, and so through the round of American-dwelling foreigners, all, no less than little Americans, be kept in school through the entire eight grades. This is little enough. The growing complexity of life is such that we should now contemplate urging high school graduation—and making it possible

for all. England and France are now both planning to make education compulsory up to eighteen and twenty, and so in turn must the United States eventually. But at all events the compulsory attendance law which we have should undoubtedly be enforced upon all. If we do not like to "extend the privileges of Americanism" to aliens in this way, perhaps our only active response to the danger involved in increasing the proportion of foreign-minded to native will have to be found in urging a new policy of immigration restriction. But in the meantime that is not our problem. We have to Americanize the foreign whom we have with us and use for our purposes. As the proportion of foreign to native increases, the impossibility of leaving this essential change of language, customs, family standards, and the like to **accomplish itself** is ever more obvious. When every foreigner was surrounded by a score of Americans we had a condition which automatically and quickly effected the necessary transformations. Now, we have to become conscious of the means to Americanization. The most important means at hand is the public school; and the social warrant for a compulsory education law is stronger than it ever was. Only at grave risks can we suspend its operation for **any** cause whatever. The first draft of young men for the present war revealed thousands of young men who were unable to speak or understand English—because it was not necessary in their communities; and other thousands were illiterate—because we had not enforced the existing compulsory attendance law.

To maintain and constantly improve the schools of the people is essential to democracy. The task is difficult enough when the schools have only to serve a homogeneous people, like the French, for example. The changing conditions of life make constant readjustments of courses of study necessary—because the function of the schools is not only to safeguard the peculiar institutions of a people, but also to **adjust the young to the conditions of life**. In this problem alone there is enough to employ the best intellects among teachers constantly. Every extraneous duty hampers the school in essential work. Retarded pupils "clutter up the program". They are "out of place" by several years, inches, pounds, and life experience. Under normal conditions boys and girls of an age flock together—just as do "birds of a kind". Everybody knows, or should know, that it is abnormal and unnatural for boys or girls 13, 14, 15, and 16 years old to group themselves voluntarily with boys or girls 6, 7, 8, and 9 years old. That is what the feeble-minded do by choice. They thus reveal themselves to us upon the playground—as they unconsciously class themselves with their mental peers. The retarded child is not a feeble mind, but is grouped with much younger children, as if he were sub-normal. The normal child is deeply conscious of something unfit and wrong in this school-grouping—in his "out-of-place-ness", though he does not analyze it as an insult to his intelligence. Nothing short of genius on the one hand, with an insatiable desire to master the tools of culture, or sheer stupidity on the other, with vegetable-like resignation to his lot, should be expected to enable a retarded child to accept this situation as a fitting one. It is normal to resent it, to shrink from it with crude and unexpressed shame, and to **escape it**. So the retarded child has usually a short school career—which in modern times means shortness in many essential matters, with corresponding loss to both the individual and society.

From the point of view of the teacher the situation is equally unsatisfactory. The teacher has to **teach**—which means that he has to help children capitalize themselves for social purposes. The technique of the teacher is called **method**—or "method of presentation". Method is nothing obscure after all. It consists purely and simply of the concessions that have to be made to immaturity and inexperience. But the amount and the kind of concessions which must be made by the teacher to the

pupils' immaturity and inexperience are obviously determined mainly by the age of the children he teaches—since, normally, age and experience go somewhat together. In short, the method of teaching, no less than the subject-matter taught in a given grade of the elementary school, is usually quite unadapted to the over-age or retarded pupil. This is as distressing to the teacher as it is to the pupil, and as unjust. It "clutters up" the program. It makes much effort ineffective. From the teacher's point of view, the chemist's definition of dirt as "simply matter out of place" applies to the retarded child, and the general consequence of all these circumstances is that the child suffers the common fate of dirt, so far as the school is concerned; that is, is swept out or "eliminated".

From the point of view of society the case is no more satisfactory. Enough "retardates" in a community gives a general tone of provincialism and unprogressiveness; and if the "retardates" are from foreign-minded homes it gives, in addition, un-Americanism. So we are back again to the considerations earlier set forth concerning the function of the school as an agency for promoting the ends of democracy. "The community that bravely insists on protecting its young from being used up in helping families make a living, soon finds itself getting a better living, and with it other things of much more worth"; so speaks one of the wisest living students of human affairs.

The conclusion of the whole matter is simply this: that today's education is tomorrow's defense. The school children of today will tomorrow have to deal with questions of international relationship which are altogether new in the world. They will not be able to do this successfully with such insight and outlook as are provided by the incidental training given by farm and home and a narrow, broken district-school education. If free governments are to endure in the world, they must expect to endure not by the sufferance of autocratic nations, where all the thinking is done at the top, but by enough of such equally distributed public education as will provide us with a unified, intelligently-informed, thoughtful, law-abiding, liberty-loving citizenry; for in a democracy thinking must be done by all who have a part in determining what all are to do through the government. About one-half of the children in the United States are enrolled in rural and village schools—where today they do not have opportunities at all comparable to those possessed by children enrolled in our city schools. Are not country children "as good as" city children? as worthy of due preparation for life's responsibilities? No one doubts it. But under our present system of school support, under our present district organization, it is altogether impossible to give them equal opportunity. What a rural district school can do for its children is limited not by the good will of the rural people but by their purses. They have perhaps done as well as they could by their school—but that has never been enough to equalize opportunity. Country children as a group get less education than city children, and must continue to be so handicapped until we adopt an organization which gives them a share in the benefit of the superior wealth of the urban communities. A county organization will do this—and in due season Federal Aid to the States will give effect to a principle long recognized in the United States: namely, that in the interest of the nation as a whole, it is just to tax all the people for the support of education for all the people's children.

This chapter began with a tribute to the originality of this study of retardation, and if I, a teacher, fairly represent the other teachers who will read it, it may properly enough close with another. It needs no effort to appreciate the impersonal attitude of the scientific student of affairs which is so finely exemplified in this piece of work. It may not be so readily appreciated that the method employed in working on the problem is the method used by those whose only concern is to find out

what is true—in order that what is done may be useful. Perhaps one of the greatest services rendered by the report here published will be in its concrete illustration of the only fruitful way of working upon any educational problem. Education is, unhappily, one of the last of the vital human activities to avail itself of scientific methods of working upon its difficulties. Its way has typically been “rule-of-thumb”, or unscientific procedure. It has typically relied upon the mere opinions of “educators” and “influential citizens”. Though today it is rapidly adopting the methods of inductive science, it is still true that even national gatherings of teachers spend much time in rediscussing the same problems that were discussed in the time of their great, great grandfathers—and many are content thus to dawdle in the face of things to be done. This would not be possible except in the absence of a general tendency to use scientific methods of investigation and determination. The gatherings of scientists (say, physicists and chemists) and of those whose work relies upon scientific method and its results (say, physicians and surgeons or farmers) exhibit in the main no repetitions of identical topics, because every year sees definite advance over last year’s state of definite knowledge. Problems get settled, and the necessary applications of knowledge are made and fresh undertakings are initiated. The adopting of the inductive method of science by school men will do for education much the same sort of service that it has already done for industry, medicine, philanthropy, and finally, for agriculture. The sample scientific study of an educational problem provided in this bulletin should be highly suggestive to educational administrators and the more thoughtful part of the public.

APPENDIX

The following forms are those which have been thus far adopted in our plan to correlate the common powers of the court and the school, described in the fifth chapter of part one. They were adopted after conferences with the following:

Hon. A. B. Copeland, County Superintendent of Schools, Greeley, Colorado.

Miss Rilda Betts, Superintendent of Schools, LaSalle, Colorado.

G. E. Brown, Superintendent of Schools, Greeley, Colorado.

H. E. Black, Superintendent of Schools, Eaton, Colorado.

E. A. Lanning, Superintendent of Schools, Windsor, Colorado.

T. E. Burns, Superintendent of Schools, Ault, Colorado.

George J. Mayer, Superintendent of Schools, Severance, Colorado.

Ray Fitzmorris, Superintendent of Schools, Gill, Colorado.

Edgar W. Burbridge, Superintendent of Schools, Gilcrest, Colorado.

B. V. McCready, Superintendent of Schools, Galeton, Colorado.

E. A. Hotchkiss, Director Training School, State Teachers College, Greeley, Colorado.

I.

The first form is a general letter of instruction issued to all truant officers, secretaries of school boards, and teachers.

JUVENILE DEPARTMENT County Court of Weld County

J. WALTER LEE
Chief Probation Officer

To the Truant Officer:

The school board of your district informs us that you have been appointed truancy officer. Please get the copy of the school laws in the care of the secretary and read carefully the paragraphs dealing with compulsory education, truants and truant officers. This letter has to deal especially with the word "Truant".

As defined by the law:

74. TRUANT—WHO IS JUVENILE DISORDERLY PERSON. Every child within the provisions of this act who does not attend school, as provided in section one of this act, or who is in attendance at any public, private or parochial school, and is vicious, incorrigible or immoral in conduct, or who is an habitual truant from school, or who habitually wanders about the streets and public places during school hours without any lawful occupation or employment, or who habitually wanders about the streets in the night time, having no employment or lawful occupation, shall be deemed a juvenile disorderly person, and be subject to provisions of this act.—R. S. 533.

You will see by this definition you have a much greater field than is implied by the title "Truant Officer". You are a probation assistant and as such I trust you will keep me informed not only of children who are persistently absent from school but also of the following:

(a) Blind or deaf children not being educated or cared for particularly.

(b) Feeble-minded, epileptic or neglected crippled children or children with marked speech defect.

(c) Children who are being brought up in vicious surroundings or whose parents systematically overwork them or otherwise abuse and neglect them.

(d) Boys up to sixteen and girls up to eighteen who are incorrigible, who indulge in persistent street loafing and unruliness, or immoral conduct, or who commit crimes.

This office has done its best work when we have been able to give a child such timely assistance as tended to forestall any necessity for bringing him into court. This preventive work especially needs your assistance and is one of the reasons I have worked to get a truant officer appointed in every district. We have a fine organization of over eighty men and women, and those districts who have as yet not appointed some one have promised to do so in the near future. It is reasonable, therefore, to hope that the children whom we may be able to help will not be neglected because of our ignorance of their very existence and that no case will become a neighborhood scandal before we have an opportunity to adjust it.

You will probably want to know about those children whose parents wish to use them during school session. I enclose a form of permit issued by the County Superintendent, Mr. Copeland of Greeley. Every child not in school must have a permit. The grant of a permit is up to your Superintendent or the County Superintendent. I may state that the teacher can get as many of these blank applications as she may need from the County Superintendent of Schools, Greeley, Colorado.

Please feel free at any time to consult me personally or by letter. In case of emergency wire or phone at our expense.

May I suggest that you keep letters from this office in a file as I shall have to refer to them?

Yours very truly,

J. WALTER LEE,
Chief Probation Officer.

II.

The following is a copy of card used in our enrollment record printed for use in card index 3½ by 5 inches. As pupils are withdrawn the card is taken out. As they are transferred, new cards are filed under the school to which the transfer has been made.

ENROLLMENT RECORD							
1918-1919							
District No.				Name of School			
Name of Student		Year		Grade		Room	
Month	Day	Year	||	Month	Day	Year	
Age		Date of Birth		Date of Enrollment			
Name of Parent or Guardian				Nativity of Father			
Post Office Address of Parent				Phone No.			
Occupation of Parent							
Name of Teacher				Address of Teacher			

III.

The following is a copy of notice of transfer to be filled out by the teacher of the pupil who is moving to another district. This card is sent to the Chief Probation Officer. The form immediately following is a copy of the notification of transfer sent by the Chief Probation Officer to the teacher in the district to which the pupil has removed. It is our intention to place these forms in the office of the County Superintendent of Schools when the system has been better worked out. The form that will probably be adopted is a return postal form addressed to the County Superintendent and containing in duplicate the information as outlined in these forms and combining the instructions therein.

TRANSFER NOTICE

(Fill out as completely as possible and mail upon withdrawal of pupil from school.)

This is to certify that the pupil named below has removed from this district to the.....School, Dist. No....., near the town of.....in the County of....., State of.....and of which the teacher is.....as I am informed
Name of pupil.....
Grade.....Age.....Years. Date of Birth.....
Date of withdrawal.....Present this year.....days
Parent's Name
Occupation of parent.....
Postoffice address of parent while in your district.....

Signed.....Teacher
.....School, Dist. No.....

Herbert M. Baker, Judge

J. F. Redman, Clerk

JUVENILE DEPARTMENT
County Court of Weld County

J. WALTER LEE
Chief Probation Officer

NOTICE OF TRANSFER

To.....,
....., Colorado.

Dear.....:—

This is to notify you that the pupil named below has removed from
.....School, District....., into

your District. If such pupil is enrolled in your schools, kindly notify us immediately. If not, give this notice together with the attached notice to your Truant Officer with instructions to report in accordance with the usual procedure concerning Form T 8.

Name..... Grade..... Age.....years.

Date of Withdrawal....., 19..... Present this

year.....days. Father's Name.....

Yours truly,

J. WALTER LEE,
Chief Probation Officer.

Dated at Greeley, Colo.,....., 19.....

IV.

The following is a copy of application to the County Superintendent of Schools for permit to keep child out of school. Copies of these applications are furnished each teacher in those districts where the local superintendent has not authority to issue permits. The teacher sees that the application is properly filled out and sent to the County Superintendent of Schools.

APPLICATION TO COUNTY SUPERINTENDENT TO BE
ABSENT FROM SCHOOL

Grounds. (Specified by Law)

1. That the child's help is necessary for its own or its parent's support.
2. That the child has been duly certified by a reputable physician to be physically or mentally unable to perform school duties.
3. That the child shall receive adequate instruction as provided by law during the time of such absence, from a qualified teacher in the home or in a private school. This instruction must be in the following subjects: viz., Reading, Writing, Spelling, Arithmetic, Geography and English Grammar.
4. That the superintendent be satisfied that some other condition exists under which it is for the best interest of the child to be excused from school duties during the time of such permit.

I,, hereby make application to
*Parent or Guardian)

THE COUNTY SUPERINTENDENT OF SCHOOLS, GREELEY, COLORADO, to permit....., a pupil of School

District No....., to remain out of school from.....the.....

day of....., 19..... to.....the.....

.....day of....., 19....., inclusive, for the.....

.....of the grounds stated above, and hereby certify that the grounds upon which this permit is asked, actually exist and that I will promptly return said pupil to school at the expiration of the permit or as soon as the grounds upon which it is granted cease to exist prior to the termination of this permit.

Data to be Furnished by Parent or Guardian.

Date of Child's birth.....Place of birth.....

Physical defects or weakness.....

Occupation of parents.....

Nativity of parents.....

Number in family.....Number of wage earners.....

Residents of present school district since what date.....

In cases requiring physician's certificate such certificate must accompany the application.

If the pupil is to be instructed outside of the public school the following data is required:

Name of proposed teacher.....Age.....

Education.....

Teaching experience.....

License to teach,—by whom issued.....

When issued.....For how long.....

Further information.....

.....

Dated at.....Weld County, Colorado, this.....

day of.....19.....

(Signed).....
 (*Parent or Guardian)

*Erase according to fact.

On the back of these applications are printed the following instructions and blanks for data.

INSTRUCTIONS TO TEACHER

(Read carefully before filling blanks)

The absence from school, for any cause, of any pupil between eight and sixteen years of age who has not passed the eighth grade is illegal unless such pupil has a permit, from the superintendent, for such absence and no permit to be absent for work can be lawfully issued except to pupils past fourteen. These permits can be issued only by the County Superintendent, unless the district has a district Superintendent (the principal teacher in a school employing five or more teachers is recognized as a District Superintendent). To enable the Superintendent to determine whether his issuance of a permit would be in compliance with the law he should require a signed application from the parent or guardian giving all necessary data, but it should be made clear to such parent or guardian that the mere signing of such application does not constitute a permit and that the pupil has no right to be out of school until the Superintendent has received the application and issued the permit (if he finds the facts justify him in issuing the permit).

It will often be necessary for the teacher to fill the blanks in the application and after the meaning is made perfectly clear to the parent

or guardian he should sign it, after which the teacher will supply his or her own data, as called for by the following form, and mail to the County Superintendent. If he issues the permit he will send one copy to the applicant, one to the teacher and one to the truant officer of the district. Any blanks remaining unused should be carefully preserved for use next year by yourself or your successor.

.....Weld County, Colo.,....., 19....

To the County Superintendent of Schools.

I have the following data to offer regarding the pupil mentioned in this application:

Grade....., Date of birth....., Place of birth.....

Attendance record

Attitude toward school.....

Standing. (State briefly in common language)

.....

Mental or moral defects if teacher chooses to give any such information

.....

Financial condition of family as understood by teacher.....

.....

(Signed).....

(Teacher)

V.

The following is a copy of the permit to be absent from school as granted by the County Superintendent of Schools. This permit is issued in quadruplicate. The original is given to the applicant, a copy is sent to the teacher, another copy to the truant officer, and a third copy filed.

PERMIT TO BE ABSENT FROM SCHOOL

Grounds. (Specified by Law)

1. That the child's help is necessary for its own or its parents' support.
2. That the child has been duly certified by a reputable physician to be physically or mentally unable to perform school duties.
3. That the child shall receive adequate instruction as provided by law during the time of such absence, from a qualified teacher in the home, or in a private school. This instruction as required by law must include Reading, Spelling, Writing, Arithmetic, Geography and English Grammar.
4. That the superintendent be satisfied that some other condition exists under which it is for the best interest of the child to be excused from school duties during the time of such permit.

Upon the grounds checked above, permission is hereby given.....

.....a pupil of.....School, Dist.

.....to be absent from school beginning the.....day of

.....19..... and ending not later than the.....
day of.....19.....

This permit applies only to District No....., Weld County, Colorado, and is revocable at any time prior to its termination if in the opinion of the Superintendent it was not obtained in good faith or if the reasons for issuing it no longer exist. It must be preserved and shown on demand of any police officer or school official. Loss of permit automatically cancels it and a copy must be obtained or the child returned to school.

.....
County Supt. of Schools.

On the reverse side is printed an outline for three reports by the truant officer as follows.

Report of Truant Officer.

Date officer investigated.....

Officer saw

Officer's recommendations in regard to continuance of permit.....
.....
.....
.....
.....

VI.

The following is a copy of the uniform application for permit to be absent from school with which the permit or denial of permit is combined. This form is used by the superintendents of school districts authorized to grant their own permits. For the above purpose we have ruled that a superintendent is one under whom there is employed not less than four grade teachers. These forms are printed in quadruplicate on different colored paper and bound in books of fifty with instructions printed on the cover of each book.

COPY OF COMBINED APPLICATION AND PERMIT.

Form T-4. Original, to Applicant. NO.....

APPLICATION AND PERMIT TO BE ABSENT FROM SCHOOL GROUNDS.

1. () That the child's help is necessary for its own or its parents' support.
2. () That the child has been duly certified by a reputable physician to be physically or mentally unable to perform school duties.
3. () That the child shall receive adequate instruction as provided by law during the time of such absence, from a qualified teacher in the home, or in a private school.
4. () That the superintendent be satisfied that some other condition exists under which it is for the best interest of the child to be excused from school duties during the time of such permit.

I, _____, hereby make application
 *(Parent or Guardian)
 to the superintendent of School District No. _____, to permit _____
 _____ to remain out of school from _____
 the _____ day of _____, 19____ to
 _____, the _____ day of _____, 19____
 inclusive, for the _____ of the grounds stated above, and hereby
 certify that the grounds upon which this permit is asked actually exist,
 and that I will promptly return said pupil to school at the expiration of
 the permit, or as soon as the grounds upon which it is granted cease to
 exist prior to its expiration.

Dated at _____ Weld County, Colorado, this
 _____ day of _____, 19____

 (*Parent or Guardian)

† Upon the grounds checked above, permission is hereby given said
 child to be absent from school beginning the _____ day of
 _____, 19____, and ending not later than the
 _____ day of _____, 19____

 Superintendent School District No. _____

This permit applies only to District No. _____, Weld County,
 Colorado, and is revocable at any time prior to its termination if in the
 opinion of the Superintendent it was not obtained in good faith or if the
 reasons for issuing it no longer exist. It must be preserved and shown
 on demand of any police officer or school official. Loss of permit auto-
 matically cancels it and a copy must be obtained or the child returned
 to school.

† For good and sufficient reasons to the Superintendent appearing, said
 application is hereby denied.

 Superintendent School District No. _____

* Erase according to fact.

INSTRUCTIONS.

1. Read and follow directions carefully.
2. Fill out all blank spaces.
3. Applications should be made in quadruplicate. Fill out applica-
 tions that are refused as well as those that are granted.
4. If the application is granted, the following instructions apply:
 - (a) Give the original in white to the applicant, after tearing off
 the refusal form at the bottom.
 - (b) Give the first copy in blue to your truant officer and instruct
 him to keep in touch with the case. He will find forms for three investi-

gations. He should return the blank to you with his report fully made out after each investigation, which should be kept by you for your information. You should not fail to have frequent investigations made of each pupil for whom a permit is given. In case the pupil does not return to school when the permit has expired, or the reasons for granting it were unfounded, or have ceased to exist, the truant officer should immediately be instructed to serve notice on the parent to have the pupil in school within five days, on form of notice heretofore furnished him, and make report on blank T 8 heretofore furnished you. If pupil fails to report, proceed according to instructions accompanying form T 8.

(c) Forward the second copy in pink to the County Superintendent of Schools at Greeley, Colorado, in addressed envelope furnished for that purpose.

(d) The third copy in canary is permanently attached to this pad and should be kept by you for your records. On the back of the second and third copies are data forms for your convenience.

5. If the application is **refused**, the following instructions apply:

(a) Forward the original in white with your refusal noted and signed at bottom of the blank left intact thereon, to the Chief Probation Officer of the County Court, at Greeley, Colorado, in the addressed envelope furnished for that purpose.

(b) Treat all copies in the same manner as when the permit is granted, as nearly as may be. Leave the refusal form intact on each copy.

6. Do not grant any permit unless you think proper grounds actually exist. Remember that the first and fourth grounds apply only to pupils over fourteen years of age. No pupil under fourteen may be granted a permit under either of these grounds.

7. **NO CHILD OF SCHOOL AGE HAS A RIGHT TO REMAIN OUT OF SCHOOL WITHOUT A PERMIT FOR ANY REASON WHATSOEVER.** If a pupil is absent for more than two or three days, or is frequently absent for short periods, hand your truant officer form T 8 and instruct him to investigate. Insist that each pupil either have a permit or be in school.

8. Let us have 100% attendance in your school.

A. B. COPELAND,
County Superintendent.

On the back of the copy of permit given to the truant officer are three forms for reports of truant officer as follows:

Date officer investigated.....
Officer saw
Officer's recommendations in regard to continuance of permit.....
.....
.....
.....

Signed.....

On the back of the copy sent to the County Superintendent of Schools and on the back of the copy retained by the local superintendent is printed the following:

THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

Data to be Furnished by Parent or Guardian.

Date of child's birth.....Place of birth.....

Physical defects or weakness.....

Occupation of parents.....

Nativity of parents.....

Number in family.....Number of wage earners.....

Residents of present school district since what date.....

In cases requiring physician's certificate such certificate must accompany the application.

If the pupil is to be instructed outside of the public school the following data is required:

Name of proposed teacher.....Age.....

Education

Teaching experience

License to teach,—by whom issued.....

When issued.....For how long.....

Further information

Dated at.....Weld County, Colorado, this.....

day of.....19.....

(Signed).....

(*Parent or Guardian)

*Erase according to fact.

.....Weld County, Colo.,....., 19.....

I have the following data to offer regarding the pupil mentioned in this application:

Grade....., Date of birth....., Place of birth.....

Attendance record

Attitude toward school.....

Standing. (State briefly in common language)....

Mental or moral defects if teacher chooses to give any such information

Financial condition of family as understood by teacher.....

(Signed).....

(Teacher)

The following is a copy of notice served by the truant officer on parents to cause the child to attend school. On the back of this form is printed excerpts from Revised Statutes, Colorado, 1908, Section 535, giving the penalty for keeping the child out of school. One service of this notice during any part of the school year is sufficient for the remainder thereof, and intermittent attendance thereafter does not require another notice in order to make the parents liable under the statute.

NOTICE TO CAUSE CHILD TO ATTEND SCHOOL

To.....

You are hereby notified, under and by virtue of Section 535 of the Revised Statutes of Colorado of 1908 to cause..... a child of school age in your custody to attend school in District No. of Weld County, Colorado, within five (5) days from the date of this notice.

Dated at.....this.....day of.....19.....

.....
Truancy Officer.

(Over)

VIII.

Form T 8 together with instructions for its use is printed in full in Chapter V, Part One of this bulletin.

COLORADO STATE TEACHERS COLLEGE BULLETIN

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Number 7

A Study in Spelling

J. D. HEILMAN
Professor of Educational Psychology



RESEARCH BULLETIN
No. 2

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A Study in Spelling

IN the spring of 1911 I made an experimental study of one of the many problems involved in the teaching of spelling. The investigation was undertaken for the purpose of finding out whether the syllabized or unsyllabized form of the word was more favorable to the task of learning how to spell it. But the data yielded by the experiments have been used to throw light upon such additional problems as the significance of testing spelling ability directly after the learning period; changes in the tenacity or permanency of retention with age; changes in the efficiency of mechanical learning with age; the quantitative relationship of the errors due to the defective functioning of such mental processes as observation and immediate memory, temporary memory, and delayed memory; and sex differences in the efficient functioning of the mental processes just enumerated.

At the close of the investigation a number of deficits appeared. The children's ability to spell the words used in the experiments should have been determined before the controlled learning was undertaken, in order to obtain the proper base for calculating the improvement of the delayed recall. This would have made the results on delayed recall more convincing if not more reliable. A record of the errors of every child should have been kept throughout the whole series of experiments. This would have made it possible to allow more adequately for the disturbing effects of absences and to use all of the data of the study for the determination of sex differences. The word lists should have been shorter or more time should have been given to learn them, because this would have made the numerical expression of the amount of improvement larger and thus point more decidedly in one or another direction. With these shortcomings in mind I thought it would be desirable to repeat the investigation in improved form, but as the necessary coincidence of time and opportunity for the repetition have failed to appear, and as I have repeatedly been asked for the results, I have abandoned my former decision.

The subjects of the experiments were seventy-three school children of the fourth, fifth and seventh grades. At the beginning of the investigation their numerical distribution was 23 in the fourth grade, 26 in the fifth grade, and 24 in the seventh grade. During the course of the investigation the numbers in the fourth and seventh grades changed slightly on account of withdrawals from school. The children of every one of the three grades were divided by their teachers into two sections so as to make them approximately equal in spelling ability. Apart from the fourth grade this purpose was fairly well realized. As nearly as possible each sex was equally divided between the two sections of a grade.

The materials consisted of one hundred words per grade. Practically all of them were selected from the misspellings which appeared in the children's written school work. The selection was made in this way so that the investigation might be of direct practical value to the children. The children were of the opinion that the work was no more than a regular schoolroom exercise in spelling. Judging from the number of errors made in the first test the materials were not quite equally difficult for the different grades, but as the results of the first tests were taken as the bases from which to calculate subsequent improvement, this difference was of little or no consequence in making intergrade comparisons. On the first test the percentage of errors per child in the fourth grade was 19.73; in the fifth grade 24.21; and in the seventh grade 23.10. Because there were just one hundred words in the list of each

grade, the average percentage of errors is the same as the average number of errors.

Every word of the lists was written on a separate card of heavy white bristol-board with a rubber pen and thick black ink in such large letters as to enable the children to read it readily from their seats. In fact every word was written twice, once as a unit and again in syllables. For one section of each grade the unsyllabized words were used and for the other section the syllabized words. From the standpoint of spelling a much better than syllable division can be made of many words, because it is undoubtedly a disadvantage to break units which are already well known into smaller parts. If *tables* in *vegetables* is known by the learner nothing can be gained by syllabizing, at least so far as learning its spelling is concerned. The same is true of entire words which are familiar to the learner. According to some of the results obtained in this study it is also disadvantageous to syllabize a many syllabled word. For example "miscellaneous" was spelled very poorly by the section for which it was syllabized, very much poorer than by the other section. Such words, to avoid extreme complexity, should be divided into larger parts than syllables. The fact that all of the words, whether composed of many or few syllables, whether known or unknown, were syllabized was undoubtedly a disadvantage to the section which studied the syllabized words.

WORD LISTS

Fourth Grade	Fifth Grade	Seventh Grade
monkey	grandfather	ignorant
needles	delighted	moisture
mending	pleasure	bamboo
neatly	courage	pumpkin
chestnuts	amazement	chocolate
roasting	journey	colony
many	villages	necessary
copper	understand	usually
voluntary	dividend	received
excusable	daffodil	different
carriage	improper	softens
chimney	commerce	region
dining	potatoes	statement
familiar	result	solution
guardian	woolen	Indians
eager	canals	significant
distinct	numbers	prosperous
mistake	exactly	occurrence
puzzling	units	America
promptly	manufacture	tobacco
enjoyment	mining	responsible
defeat	vegetables	requirement
correct	iron	satisfactory
accomplish	associate	implements
hindrance	people	cereals
column	subject	criminals
yellow	sentence	negroes
instead	traveled	population
engine	armies	intelligence
evening	attack	machinery

kettle
handkerchief
organ
director
companion

sermon
minister
behavior
congregation
mellow

really
misspell
accurate
pretty
ceiling

pronounce
earnest
success
along
copied

whistling
discovered
something
presently
joyful

again
between
shoulder
repeat
reciting

accustom
addition
benefit
containing
diminish

coyote
guitar
inquired
bruises
volunteered

appointed
buried
wriggle
difference
polite

nectarine
heavier
amusement
employed
crimson

beautifully
decided
accept
presents
neighbor

modifier
adjective
lying
enjoyed
measure

kingdom
college
disappeared
wounded
selected

valleys
believe
heroes
palace
kitchen

ladies
rescuer
direction
festival
patiently

treasurer
encamped
established
eleven
finished

victorious
justice
lances
agreed
selected

window
protects
drawbridge
approach
England

anvil
faithful
instructions
suddenly
soberly

shadows
gallant
kinsman
traitor
rebellion

warrior
impetuous
councilor
chieftain
disastrous

dormant
terminal
origin
glaciers
mating

resources
alternately
suitable
granary
Spaniards

commercial
quotient
ferment
chivalry
temperature

cucumbers
cylinder
diameter
latitude
allowance

pirates
circumference
jewelry
labeled
Providence

trading
entirely
determined
starving
estuary

palfrey
statement
raisins
Britain
punctuation

increase
irrigate
attacked
governor
colonists

minstrel
withered
equator
disease
character

climbing	accomplish	lodging
leafy	daughter	disobeyed
lengthen	glycerine	ruined
medicine	civilization	tyrannous
avenue	tempest	miscellaneous
nickel	heathen	insurance
excitement	pavilion	similar
regular	timbrels	jealousy
compelled	wrestling	spirit
mosquito	mercy	signifies
suggest	complete	personal
difficult	honor	subtrahend
costume	truthfully	valuation
picnic	journey	natured
prairie	adjoining	marry
easily	messengers	sociable
probably	reproachful	education
repetition	severely	challenge
secret	coming	triangle
shepherd	soldier	trapezoid

The whole investigation may be divided into four parts or periods. The first extended over ten days and was devoted to preliminary work; the second lasted twenty days and was spent in controlled learning and in testing the effects of the learning; the third period lasted ten days and like the second was spent in learning and testing; the fourth period lasted five days and was used to make a final test of the children's ability to spell the words of the lists. The preliminary work of ten days was thought to be necessary for the purpose of getting the children and the experimenter accustomed to the methods of the controlled learning, and to give the children of the syllabized sections some practice in learning to spell syllabized words. Fifty words per grade were used for this work, the last five of which appear as the first five in the above lists. The results of the preliminary work were discarded.

The twenty-day period was devoted to learning and testing. On the first day the first and second groups of five words each in the above lists, were presented to the children for learning and directly after the learning they were dictated for a written test. On the second day the first group of five words was dropped, the second group reviewed and the third group added. On the third day the second group was dropped, the third group reviewed and the fourth group added. This procedure was continued until the whole list of one hundred words had been covered. As every group of five words was reviewed the day after its introduction into the lesson and as every lesson was composed of ten words, a period of twenty days was required to cover the whole list of one hundred words.

The ten-day period also was spent in learning and testing. For the first lesson the first two groups of five words each were used; for the second lesson the next two groups; for the third lesson the next two groups. This procedure was continued until the whole list of words had been covered, ten days having been required for the purpose. Directly after the ten words of the lesson had been presented for learning they were dictated for a test. At the close of this period the whole list had been gone over three times both in learning and testing. For the purpose of understanding the nature of the results it is necessary to bear in mind that the first review of the list occurred the day after the first presentation and the first test, and that the second review occurred from 10 to 20 days after the first review, not counting off school days. The words were always presented in the same order.

On the last five days the words, at the rate of 20 per day, were dictated for a final test. These dictations were not preceded by any learning period. They occurred from 7 to 12 days after the last review. From this general description of procedure it is evident that the whole investigation extended over a period of 35 school-days, exclusive of the time devoted to preliminary work. During this time there were several withdrawals and a number of absences. Just how these are distributed over the various sections and grades is shown in the following table.

TABLE I
Absences, Withdrawals, Etc.

	Grades	20-Day Period		10-Day Period		Final Test	
		Uns*	SS	Uns	SS	Uns	SS
Number of withdrawals.....	Fourth	00	00	00	00	00	00
Number belonging.....		11	12	11	12	11	12
Number of absentees.....		14	22	9	5	00	00
Percent of attendance.....		94	91	92	96	100	100
Number of withdrawals.....	Fifth	00	00	00	00	00	00
Number belonging.....		13	13	13	13	13	13
Number of absentees.....		19	5	7	15	00	00
Percent of attendance.....		93	98	95	89	100	100
Number of withdrawals.....	Seventh	00	00	1	0	00	1
Number belonging.....		12	12	11	12	11	11
Number of absentees.....		20	25	12	7	00	00
Percent of attendance.....		92	90	89	94	100	100

* Uns—Section for which words were not syllabised.

SS—Section for which words were syllabized.

For the two first periods, during which the learning occurred, the percentage of attendance in the two sections of every grade is approximately equal, slightly lower for the SS of the fifth grade and a trifle higher for the SS's of the fourth and seventh grades. In the final test the SS's of the fourth and seventh grades also had the advantage of having their best attendance during the last review period. The reverse of this is true for the SS of the fifth grade. The final test was given to all of the children who had not left school. In the SS of the seventh grade one of the children withdrew before the final test, making the number of each section equal. Judging from his previous work, the spelling ability of this boy was exactly of average grade. For the purpose of making the number of children in each section equal the results of one child in the SS of the fourth grade were not used in calculating the results of the final test. The errors made by this child on the final test were equal to the average number of errors for the section. It is important to remember that absences did not interfere with calculating the average number of errors, for they were found by dividing the whole number of errors of a section by the average attendance and not by the number of children belonging.

We must next describe the method of presenting the individual words. The children with pencil and paper were placed at such distances from one another as to make copying impossible. The experimenter, facing the children, sat in front of a desk with the ten cards on which the words had been written in his left hand. The cards were held in such a way that the long edges rested on the surface of the desk and the sides with the words faced the children. A blank card was used to prevent the children from seeing the word on the last card or the one nearest them. The card nearest the experi-

menter was shown first. After the children had looked at the word the card was placed, face downward, on the desk beyond the remaining cards.

At the signal now all of the children looked for the word which the experimenter raised with his right hand and placed with the long edge on the upper edges of the remaining cards. Upon presenting the word the experimenter pronounced it twice in succession, once by syllables and again as a unit for the SS's and twice as a unit for the UnS's. The children of the fourth and fifth grades were given a period of seven seconds to look at the word, while the children of the seventh grade were given only five seconds for this purpose. After the period of seven seconds the word was turned down and the children wrote it, the SS's in syllables and the UnS's as a single unit. In the fourth and fifth grades thirteen seconds were allowed to write the word and in the seventh grade only ten seconds were allowed. The time periods for looking at and writing a word were made so short as to keep the children on the alert. The time for showing a word and that for turning it down were indicated by a tap from an assistant who used a stop-watch for the purpose of keeping tab on the time intervals.

After the ten words of the lesson had been gone over in the way described, the children's papers were collected and the words which they had just written were at once dictated for a test. This time all of the sections wrote the words as single units. At the close of the dictation the papers were collected. Then both sets of papers were examined for errors by the experimenter and the assistant. Every misspelled word was counted as only one error even though more than one letter in the word was missed. Probably the method of counting letter-errors is somewhat more reliable than that of counting word errors, but it has its disadvantages. It increases the task of tabulating the results and the liability to mistakes in counting the errors. In as many trials—from three to four thousand for each section—as were given in this investigation, the reliability would have been increased very little if any by counting letter-errors.

In classifying the data of the investigation, I have attempted to show the effect of syllabication upon the performance of the mental processes involved in learning to spell—upon the performance of these processes in isolation as much as possible. Thus, the errors which were made in the written responses following the presentation of the words, may be ascribed to faults of observation and immediate memory combined. The errors made after a dictation may be attributed to the shortcomings of temporary memory and the preceding faults of observation and immediate memory. The excess of errors made on a dictation over those made on the preceding presentation may be taken as a measure of the weakness of temporary memory alone. Moreover, the excess of errors on the final dictation over the errors of the first dictation, may be taken as a measure of the weakness of the delayed memory or permanency of retention, bearing in mind that two learning periods intervened. The final test was begun about 50 days after the beginning of the first dictation. The weakness of delayed memory might also be measured by subtracting the errors of the third dictation from those of the final test, but this would exclude the effect of the second and third learning periods upon the delayed memory. The best way to measure the effect of syllabication upon retention would be to subtract from the errors of an initial test those of the final test, but as such an initial test was not given this is impossible. The results, then, will show whether the syllabized or the unsyllabized word had the most favorable effect upon observation and immediate memory combined; observation, immediate and temporary memory combined; temporary memory alone; and delayed memory. The main purpose, however, of showing the number of errors due to the faults of these several mental functions is to find out what attention the functions should receive in the teaching of spelling.

Before presenting the results of the investigation, we must discuss one more point—the bases from which the improvement in the performance of

the various mental processes, from one learning period to another, was calculated. The number of errors made in the written responses to the first presentation were taken as the base for calculating the improvement made on the subsequent responses to presentation. More in detail, the base for calculating the improvement of a section in observation and immediate memory, is the percentage of errors per child made in the written response to the first presentation of the list. In a similar manner the errors made on the first dictation were taken as the base for calculating the improvement made on the subsequent responses to dictation. Restated, the base for calculating the improvement in observation, immediate and temporary memory combined, is the percentage of errors per child made on the first dictation of the list. The base for determining the improvement in temporary memory is the numerical difference of the two bases just described. The base for determining the improvement in delayed memory should be the number of errors made in response to an initial test before any attempt at learning was made, but as I failed to give such a test, I have compared the errors of the final test with those of the first dictation to determine which section made the best improvement in delayed recall or showed the best permanency of retention.

The following table shows the percentage of errors per child, made in the written response to the first, second and third presentations. It also shows the percentage of improvement of the second and third presentations over the first.

TABLE II
Average Percentage of Errors of Observation and Immediate Memory

	Fourth Grade		Fifth Grade		Seventh Grade	
	UnS	SS	UnS	SS	UnS	SS
First presentation.....	14.95	9.45	14.11	13.18	12.45	13.40
Second presentation.....	8.43	5.69	9.63	8.86	8.27	6.98
Per cent improvement.....	6.52	3.76	4.48	4.32	4.18	6.42
Third presentation.....	11.09	5.57	10.08	10.35	7.04	7.35
Per cent improvement.....	3.86	3.88	4.03	2.83	5.41	6.05
Av. of 3rd and 5th lines....	5.19	3.82	4.26	3.59	4.80	6.24
Improvement per grade.....	4.25		3.93		5.52	

In the fourth and fifth grades the UnS's excelled, but in the seventh grade the reverse occurred. The average per cent of improvement of the UnS of the fourth grade exceeds that of the SS by 1.37, and in the fifth grade by .67; but in the seventh grade the improvement of the SS exceeds that of the UnS by 1.44 per cent. The sections with the syllabized words, therefore, gain upon those with the unsyllabized words with age until they overtake and finally surpass them. The probable explanation for this is that the task of holding in mind the letters and syllables of a word until it was written (especially if it had many syllables) was too great for the immediate memories of the younger children. Moreover, the task of observing and holding in mind a word which is already known as a unit is greater than it would be were the word not syllabized. While the spelling of none of the words was known by all of the children, nevertheless the spelling of many words was known by many of the children before the investigation was begun.

One of the interesting and practically important facts shown by Table II is the high percentage of errors made by the children in writing the words directly after having seen them. The child of average spelling ability in the UnS of the fourth grade fails in accurate observation and immediate retention on 14.95 words out of the whole list of 100. Indeed, it would be more

accurate to say out of half of the list, for surely half of the words of the list presented no spelling difficulties to the average child. Nobody who observed the conduct of our investigation would ascribe this high percentage of errors to a lack of effort on the part of the children. Practically all of the children enjoyed the work and tried hard. The work was carried on as a regular lesson in spelling. If these figures are at all reliable, it is very important in the teaching of spelling to make certain that the children can at least write the word correctly directly after having seen it. A comparison of Table II with Table IV shows that more errors are due to observation and immediate memory than to faults of temporary memory. Excepting three results, this is true of every grade and each section of every grade for every presentation. In some cases the errors due to faults of observation and immediate memory are almost three times as numerous as those due to faults of temporary memory.

Table III shows the percentage of errors per child made on all but the final dictation, and the per cent of improvement of the second and third dictations over the first.

TABLE III

Average Percentage of Errors of Observation, Immediate and Temporary Memory

	Fourth Grade		Fifth Grade		Seventh Grade	
	UnS	SS	UnS	SS	UnS	SS
First dictation.....	21.65	17.80	23.40	25.02	21.55	24.65
Second dictation.....	14.17	10.83	16.02	19.22	14.18	15.44
Per cent improvement.....	7.48	6.97	7.38	5.80	6.37	9.21
Third dictation.....	15.25	9.57	17.64	16.87	12.94	15.04
Per cent improvement.....	6.40	8.05	5.76	8.15	8.61	9.61
Av. 3rd and 5th lines.....	6.94	7.51	6.57	6.98	7.49	9.41
Improvement per grade....	7.23		6.78		8.45	

In every grade the percentage of improvement of the section with the syllabized words exceeds that of the section with the unsyllabized words, the percentages being .57, .41 and 1.92 for the fourth, fifth and seventh grades respectively. These differences are rather small, but it must be remembered that they represent the percentage of improvement per child and that the time allowed for studying the words was very short. The gain was all made during two observations of the word, if writing the word after a presentation be not counted as a part of the learning. At one presentation, the fourth and fifth grades were allowed seven seconds for looking at the word and the seventh grade only five seconds. During the two learning periods in which the excess gain was made, only 14 seconds were devoted to the learning of a single word, and 1,400 seconds or 23 and 1/3 minutes to the learning of the one hundred words. The total amount of time spent in learning by the seventh grade during the two periods was only 16 and 2/3 minutes. The probability is that with another review, the SS's would have surpassed the UnS's by much larger amounts in at least the fourth and fifth grades. In these grades (see Table III) the UnS's improved much more than the SS's on the second dictation, but on the third dictation the reverse occurred. It is likely, therefore, that the SS's of these grades were just beginning to show the superior effects of syllabication when the experiments had to be concluded. In learning to spell a syllabized word the effect of the learning may be retained longer than when the word is unsyllabized, and this advantage may not appear until the word is relearned. It is also likely that teaching the children to

syllabize their words in spelling gives them a better method of learning to spell strange words, and this would be a permanent acquisition. When asked to spell a strange word of considerable length, all of us find it advantageous to syllabize the word.

The last series of figures in Table III shows the average improvement per grade. The fifth grade did not improve quite as much as the fourth, but the seventh grade surpassed both the fourth and the fifth grades, the fourth by 1.22 per cent and the fifth by 1.57 per cent. We may therefore conclude that the kind of mechanical learning involved in spelling can be done more effectively by the children of the upper grades than by those of the intermediate grades. In this connection it is well to remember that the learning time of seventh grade children was much shorter than that of the other children. In this respect our results are in line with those of other experimental work. As many of the children of the seventh grade are adolescent we may infer that adolescent children like this kind of mechanical work as well as the younger children and that they can do it better. The children of the seventh grade showed just as much interest in the work as did those of the fourth and fifth grades.

The figures of Table IV were obtained by subtracting those in Table II from the corresponding figures in Table III. The table shows the percentage of errors per child due to what was forgotten during the short interval between a presentation and the subsequent dictation. About six minutes elapsed between the presentation of a word and its subsequent dictation. It also shows the percentage of improvement of the second and third dictations over the first.

TABLE IV

Average Percentage of Errors Due to Faults of Temporary Memory

	Fourth Grade		Fifth Grade		Seventh Grade	
	UnS	SS	UnS	SS	UnS	SS
First dictation.....	6.70	8.35	9.29	11.84	9.10	11.25
Second dictation.....	5.74	5.14	6.39	9.36	5.91	8.46
Per cent improvement....	.96	3.21	2.90	2.48	3.19	2.79
Third dictation.....	4.16	4.00	7.56	6.52	5.90	7.69
Per cent improvement....	2.54	4.55	1.73	5.32	3.20	3.56
Av. 3rd and 5th lines.....	1.80	3.83	2.32	3.90	3.20	3.18
Improvement per grade....	2.82		3.11		3.19	

In the fourth and fifth grades, the sections which studied the syllabized words again surpassed the other sections, but in the seventh grade the sections have the same average improvement. The figures on the improvement per grade indicate that temporary memory improves somewhat with age. In general, therefore, the deductions made from this table run parallel to those of the preceding table.

The errors due the weakness of delayed memory or recall are given below in Table V. The table also shows how much the errors of the delayed recall or final test exceed those of the first dictation. This excess is taken as a measure of the permanency of retention. While permanency of retention is here not measured in the usual way by relearning, it is probably just as accurate for the purpose of making comparisons between the sections and among the several grades. The figures represent the percentage of errors per child for the whole list of words. As there were just one hundred words in

the list, the percentage of errors is the same as the actual number of errors per child.

TABLE V
Errors of Delayed Memory

	Fourth Grade		Fifth Grade		Seventh Grade	
	UnS	SS	UnS	SS	UnS	SS
First dictation.....	21.65	17.80	23.40	25.02	21.55	24.65
Final dictation.....	30.91	23.91	31.07	30.69	25.00	22.45
Difference in percentage...	-9.26	-6.11	-8.67	-5.67	-3.55	2.20
Loss per grade.....		-7.69		-7.17		-0.68

In the final test which was not preceded by any learning period and which began seventeen days after the beginning of the third dictation, the sections studying the syllabized words surpassed the other sections by 3.15 per cent in the fourth grade, 3 per cent in the fifth grade, and 5.75 per cent in the seventh grade. Teaching the children spelling by dividing the words into syllables apparently gives more permanent results than not dividing the words. Of course, we should not continue to divide the word after the purpose of the division has been attained.

The fact that all but one of the sections made a much larger percentage of errors on the final dictation than on the first, and the further fact that all of the sections made from two to three times as many errors on the final dictation as on the third which preceded the final by about fifteen days, shows very clearly how poorly the child's spelling ability is tested by the dictation which directly follows the learning period. Testing the child's spelling ability directly after the child has attempted to learn the words is, if not frequently supplemented by other tests, very bad practice for a number of reasons. As brought out above it is not a true test of the child's spelling ability, and is therefore likely to deceive both the teacher and the child with the consequence that neither makes the right effort. It also fails to impel the child to learn with the right intention. The child, to secure the best results, should learn his spelling lesson with the intention of remembering the spellings permanently, and this can be secured only by tests for which the child has received no immediate preparation. If the child knows that tests in spelling will be given without warning, this very knowledge will have the effect of greater permanency in the results of the learning or preparation. The child should not be trained to study his spelling lesson with the sole intention of making a good recitation directly after the learning.

The last line of figures in the table shows that the children of the seventh grade lost much less of what they had learned than the children of the other grades. Therefore the tenacity or permanency of retention increases with age. At what age the greatest tenacity has been attained is not definitely known. James was of the opinion that the tenacity of retention diminished with age, that it was best in infancy and poorest in old age. Meumann believed that it was better in school children of all ages than in adults. In his "Economy and Technique of Learning" Meumann reviews studies on the permanency of retention in which it was found that children reached the greatest permanency at the ages of eleven to twelve. But in these reviews nothing is said about the number of repetitions which the children made during the original learning. If a child of six must repeat a given material twenty times to learn it and a child of fourteen only ten times then it is very likely that the six year old will retain it the longer, for frequency of repetition makes for permanency.

If permanency of retention increases with age until the close of the elementary school period and if learning ability also increases up to and beyond this period (on the latter point there appears to be no disagreement) then, from

the standpoint of child psychology, children should not be permitted to leave school at the close of the elementary school period. At present children are kept in school by the compulsory attendance laws during the period of relatively poor learning ability, and are permitted to leave school about the time when increased learning ability and permanency of retention make it possible for them to profit substantially from schoolroom education.

For the sake of facilitating comparisons I have placed together in the following table, the average per cent of improvement in all of the mental functions for each section in every one of the three grades.

TABLE VI
Average Percents of Improvement

	Grade	Uns	SS	Dif.
Observation and Immediate Memory	Fourth	5.19	3.82	-1.37
Observation, Immediate and Temporary Memory		6.94	7.51	.57
Temporary Memory		1.80	3.83	2.03
Delayed Memory		-9.26	-6.11	3.15
Observation and Immediate Memory	Fifth	4.26	3.59	-.67
Observation, Immediate and Temporary Memory		6.57	6.98	.41
Temporary Memory		2.32	3.90	1.58
Delayed Memory		-8.67	-5.67	3.00
Observation and Immediate Memory	Sixth	4.80	6.24	1.44
Observation, Immediate and Temporary Memory		7.49	9.41	1.92
Temporary Memory		3.20	3.18	-.02
Delayed Memory		-3.55	2.20	5.75

Excepting the results for observation and immediate memory combined in the fourth and fifth grades and those for temporary memory in the seventh grade, the results of all of the grades show that syllabizing words has a favorable effect upon the functioning of all of the mental processes involved in spelling and isolated in this investigation. But, as pointed out before, it is probable that words with many small syllables should be separated into larger than syllable-divisions to obtain the form most favorable to learning how to spell them. This appears to avoid needless complexity and a futile arrest of the synthetic activity involved in spelling. Small syllables by themselves usually present no spelling difficulties, and therefore they do not require individual attention. The synthetic or unifying activity in spelling is again needlessly arrested when words or parts of words are syllabized for children who can already spell them but who may have to repeat them for the sake of permanency or because they appear in connection with unknown elements.

As individual records of the children's errors were kept during the ten-day period and for the final test, these data were used for the purpose of making a comparison of the sexes. During the ten-day period there were seventy-two children, forty-two boys and thirty girls, and for the final test there were forty boys and thirty girls. Taking children as they are found in the grades, these numbers are rather small for the purpose of obtaining reliable results on sex differences in spelling ability. Nevertheless the general results are in agreement with other results somewhat similar in character.

The following table will show the number of boys and girls belonging to every one of the three grades and the percentage of their attendance. It will also show for each of the sexes the average percentage of errors in observation and immediate memory as made on the third presentation; the errors of observation, immediate memory and temporary memory combined as made on the third dictation; the errors of temporary memory as shown by the

difference between the two sets of errors just described; the errors of delayed memory as shown by the final test; and the errors of retention as indicated by the difference between the errors of the third dictation and the final test. The third column of figures in the table shows the excess percentage of errors for the boys.

TABLE VII
Sex Differences

		Av. Percent of Errors		Excess of Errors	No. Children belonging		Av. Percent of Attendance	
		Boys	Girls		Boys	Girls	Boys	Girls
Grade 4	1 Third Presentation...	8.63	7.50	1.13	14	9	94	93
	2 Third Dictation.....	12.37	12.14	.23	14	9	94	93
	3 Difference	3.74	4.64	-.90				
	4 Final Test.....	27.08	27.89	-.81	13	9	100	100
	5 Dif. between 2 and 4..	14.71	15.75	-1.04				
Grade 5	1 Third Presentation...	11.14	7.58	3.56	19	7	93	89
	2 Third Dictation.....	18.12	14.84	3.28	19	7	93	89
	3 Difference	6.98	7.26	-.28				
	4 Final Test.....	33.16	24.71	8.45	19	7	100	100
	5 Dif. between 2 and 4..	15.04	9.87	5.17				
Grade 7	1 Third Presentation...	8.00	6.67	1.33	9	14	94	90
	2 Third Dictation.....	15.77	12.94	2.83	9	14	94	90
	3 Difference	7.77	6.27	1.50				
	4 Final Test.....	23.50	23.86	-.36	8	14	100	100
	5 Dif. between 2 and 4..	7.73	10.92	-3.19				
All Grades	1 Third Presentation...	9.62	7.13	2.49	42	30	93	91
	2 Third Dictation.....	15.69	13.12	2.57	42	30	93	91
	3 Difference	6.07	5.99	.08				
	4 Final Test.....	29.25	25.27	3.98	40	30	100	100
	5 Dif. between 2 and 4..	13.56	12.15	1.41				

In compiling the above table the ages of the children should have been taken into consideration, but the numbers were too small for this purpose and a record of the ages was not kept. The results of the table would be more significant if the sex differences in the amount of improvement for the several mental functions were shown, but this was impossible because the individual records for the twenty-day period were not kept. If the amount of improvement could be shown the disturbing effect of previous training would have been eliminated. The disturbing effects of a lack of uniformity in previous training are, however, eliminated for temporary memory (see lines numbered 3 in Table VII) and for permanency of retention (see lines numbered 5 in Table VII). The figures therefore on temporary memory and permanency of retention are the most significant and I shall limit the discussion to these. In the fourth and fifth grades the boys excelled in temporary memory, but in the seventh grade the girls excelled to such an extent as to offset the boys' advantage in the other grades. In permanency of retention the boys excel in the fourth and seventh grades, but are excelled by the girls in the fifth grade to such an extent as to offset the advantage of the boys in the other grades by 1.41 per cent. In general the figures on sex differences support the contention that the girls have a memorial superiority over the boys. Whether this is due to a difference in endowment or physiological maturity it is impossible to say. At all events the difference is slight, but might have been somewhat greater had the girls' attendance been as good as that of the boys. The girls'

superiority in permanency of retention may act as a handicap to originality in which the male sex is supposed to excel.

In conclusion I wish to enumerate the statements which are supported by the results of this investigation. Taken in connection with the results of related investigations, perhaps most of them may be regarded as sufficiently reliable to be of service in making predictions. The girls surpass the boys in permanency of retention as shown by the fact that they lose less in the interval between the temporary and the delayed recall. In general the syllabized form of the word promotes the learning process in spelling. Permanency of retention, when measured by the amount of loss between temporary and delayed recall, improves with age, until the close of the elementary school period at least. A very large percentage of the errors made in spelling is due to faults of observation and immediate memory. The results of the spelling test which is given directly after a learning period are a very inadequate measure of spelling ability. The efficiency of observation and immediate memory combined and that of temporary memory, as these are involved in spelling, increase with age until the close of the elementary school period at least.

of Mable's purse—ten dollars. When the Summer School student had gone home and the season's accounts were cast up, it was found that 104 students had availed themselves of the trips, had visited the National Park, hadn't had an accident, been gone two days and a half, and hadn't missed a class on account of it, all thru the cooperation of Colorado Teachers College. The net loss to the college was negligible.

The enterprise will be enlarged and continued during the Summer School sessions of 1919 with such modifications as are suggested by the experience of last season. The trip will be open not only to students, but also to any relative or friend who desires to accompany them. If you contemplate attending Colorado Teachers College next summer and are interested in such a mountain trip, write for illustrated National Park folder giving further details.

Colorado State Teachers College,
J. G. Crabbe, President,
Greeley, Colorado

COLORADO STATE TEACHERS COLLEGE BULLETIN

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A Venture That Won:
The Week-End
Vacation

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A Venture That Won: The Week-End Vacation

“MABLE, I wish there were some way that we could get up to the Rocky Mountain National Park while we're here. If we could only spend the week-end there without its costing us a fortune,” said a little school-ma'am to her chum one day as they were sitting in the shade of the big trees that grace the beautiful campus of Colorado State Teachers College at Greeley.

“Yes,” said Mable, “that would be great. If we could leave here after the Friday-noon class, make the 60-mile trip thru the canon and land at some cool, quiet, comfy place right up in the mountains. I wouldn't care for much style; just plenty of good eats and a clean bed, and a big open fire, and a chance to go rambling among the hills and the pines on Saturday and Sunday and get back in time for class Monday morning. I'd go in a minute if it didn't cost too much. And I know a lot of the other girls here who would go during Summer School too. But I don't feel as if I could afford the \$25 that such a trip would cost in the regular way. If it were only ten, now, I'd spend it.”

A saucy robin who had her nest in the branches peeped over the edge and listened,—and told. And finally it came to the Dean's ears. “Why couldn't it be done?” he mused. “Why couldn't

the cost of such a trip be cut in two for the benefit of the Summer School-ma'am?” He consulted the Mountain Climber of the Faculty, who thought it could. Together they visited the president, who heard them through, then, with a smile, said: “All right, go ahead and work it out; and if it doesn't put us in the hole too deep, we'll try it.”

That was the beginning. The outcome of the matter was that a big, rambling old ranch-house was secured a short distance from Estes Park Village, high and sightly. It was in full view of the Rocky Mountain Main Range, with plain but comfortable furnishings. A good cook and a good manager, the wife of one of the faculty members, was put in charge of the house. Contract was made with an automobile transportation company for passage in groups at a greatly reduced rate, with a schedule arranged that would allow students to leave the campus at one o'clock, and return in time for early classes Monday morning. A series of excellent menus for hungry people were worked out by the Matron at a cost of 50 cents per meal, while the Mountain Climber planned for Saturday a side-trip to the snow-line on Long's Peak, or even higher for those who were “game.” For the most part, however, the guests were to spend the time after their arrival just as they pleased.

The scheme proved entirely practical, and the cost came very close to the size

COLORADO STATE TEACHERS COLLEGE BULLETIN

Series XVIII

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The Teaching of Civics AN OUTLINE FOR STUDY

By EDWIN B. SMITH
Professor of History and Political Science



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The Teaching of Civics

A general aim of American education, over a long period, has been the preparation for citizenship in a democracy. Although this has been the purpose of the public school, not as much has been accomplished toward making the training in the duties of citizenship directly effective as appears desirable. The recent experiences in this country have been such as to justify the renewed interest that is being taken in the subject. The apparent need for directly teaching the rights and obligations of citizenship has led to the study of the problem which has resulted in the preparation of this outline for the teaching of civics.

The outline embodies some of the features of outlines previously prepared, some of the principles suggested in the publications of the Bureau of Education, and some of the practices in teaching the subject in the Training School of Colorado Teachers College. It is intended as a suggestive outline for the teaching of the subject, which may be helpful to the teacher in presenting the privileges and the responsibilities of citizenship.

Experience in teaching civics in the various grades of instruction will reveal the need for changes in the outline of work; it will show deficiencies. Suggestion for improvement of the outline or comment on the difficulties encountered in teaching the subject is solicited.

EDWIN B. SMITH,
Professor of History and Political Science.

"We stand first of all for a purposeful education for the ends of democracy.....To this end we regard it as both essential and inevitable that in a democracy education shall more and more consciously take its cues for courses of study and the organization of activities from a full knowledge of both the upward endeavors of the time and of the deficits which whoever looks may plainly see in our life..... We grant that the teaching of civics in the past has had little or nothing to do with the quality of our citizenship. We grant that there is some basis for the recent complaint that children's notions of what democracy means would probably have been little affected had they studied..... no civics. Civics in a democracy, to serve the ends of patriotism, must have the advantage of contrast with less liberal forms of government; but beyond that it must find its major material in the study of the concrete problems of the thoughtful American citizens."

A CONSCIOUS PROGRAM FOR NORMAL SCHOOLS
and TEACHERS COLLEGES.

THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.

The Teaching of Civics

PART I. Introductory Discussion.

For the fourth time in the history of the United States the teaching of civics, or what is now included in that term, has been introduced into a place of prominence in the course of study. Whenever the principles of democracy or of republicanism have been threatened, this interest has been aroused. The indication seems to be that the interest in civics is becoming so strongly entrenched in the school system that it is to be permanent this time.

1. The new interest that attaches to civic relationships is probably due to the following:
 - a. Increased contact between the individual citizen and the community interests.
 - b. Growth in the feeling that democracy is the greatest feature of government, that it is the greatest factor in American citizenship.
 - c. The stress that is placed upon citizenship by the Great War.
 - d. Appreciation of the basic principles that are the foundation of democracy in a republic.

“The future of the republic depends upon its citizenship. We are not building permanently unless the youth of the land are made fully acquainted with the meaning of American citizenship. We must give patriotism a vitality which will find expression in service. We cannot make democracy safe for the world by writing treaties. The spirit of democracy must be in the minds of the people, and this means that they must understand the basic principles of democratic government.”—Thomas Marshall.
 - e. The appeal of the government for this work in the schools.
 - f. The experience of European countries with Bolshevism and the threat of it in this country.
2. The obligation is placed upon the school to serve the government and to render permanent service through improving the quality of the citizenship.

“Both the positive demands of the war and the prospective demands of the necessary readjustments inevitably to follow emphasize the needs of providing in full measure for the education of all the people.

“With the year there has been in this country an increase in the tendency toward democracy in education, toward giving to every child of whatever condition a full and equal opportunity with all other children for that degree and kind of education, that quality and quantity of education, which will develop in the fullest measure its manhood and womanhood, its human qualities, prepare it for the responsibilities and duties of democratic citizenship, for participation in civic and social life, and for making an honest living, contributing its part to the Commonwealth, and serving humanity by some useful occupation, followed skillfully and intelligently with good will and strong purpose.”—P. P. Claxton, United States Commissioner of Education.

3. The opportunity of the school to serve the people should be used:
 - a. To create sane attitudes toward present-day problems.
 - b. To instruct in the essentials of democratic living.

“The cornerstone of the new state will be education—not merely instruction in things worth knowing, but also discipline in things worth doing. It will be education for citizenship in a society that is pledged to maintain justice for all and to guarantee to each the attainment of what he deserves.”—J. E. Russell, Dean of Teachers College, Columbia University.
4. New attitudes toward the teaching of civics have developed.

The earlier civics, or civil government as it was called, was merely a study of the Constitution of the United States. Later the interest centered around the study of the machinery of government; only recently it has become a live interest, emphasizing the citizens' relations to the whole scheme of government and community living. Community civics now is a study of the conditions of the community, local, state, national, and international; and the relations between the individual citizens and these communities.
5. The aim of civics is to encourage and develop:
 - a. Healthful living.
 - b. The habit of being co-operatively active in community affairs; a willingness to contribute a proper share to the community interest.
 - c. The ability to evaluate leaders and measures; the habit of considering all sides of a question before forming an opinion.
 - d. The practical knowledge of politics, party platforms, and the management of political parties.
 - e. An understanding of the functions of the government of the several communities.

The chief emphasis should be upon the obligation of the individual to serve the community. This quality of citizenship cannot come from mere accumulation of facts, nor from generalization about the facts of government; they must come from a live interest, which can be cultivated best by direct contact with community affairs.
6. The instruction should be based upon these principles:
 - a. The pupil is a citizen with the interests and the responsibilities of citizenship.
 - b. Direct contact with community living should be recognized as largely as possible.
 - c. The interests of the community are the interests of the individual citizen.
 - d. What is desired among the people should be placed in the school, for people are influenced by the school experience of their children.
 - e. Co-operative action is the first principle of community living.
 - f. The creation of attitudes and interests is more important than the learning of facts about government.
 - g. Such material should be used as will be of value to the citizen in his experiences in community living.

PART II. Civics in the Elementary School.

GRADE I.

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: conservation of food, finances of the war (war savings stamps, etc.), and 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. Bibliography. 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.*
 *A Course in Citizenship.* Material for grade one.
 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.

THE TEACHING OF CIVICS

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 Wolfe.

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.

 GRADE II.

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, milkmen, 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: conservation of food, war savings stamps, liberty bonds, and 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.

GRADE III.

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, conservation of food, military education, occupations in the community concerned with war and 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 excursion.
- 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 Civics.
 - Beard, C. A., American City Government.
 - Howe, F., The Modern City and Its Problems.
 - United States Bureau of Education Bulletin No. 17, 1915, Civic Education in Elementary Schools.
 - b. Stories for children: (See bibliography in Grade II.)

GRADE IV.

- 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, sewage, 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 had 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).

GRADE V.

1. Aims in teaching:
 - a. To help the children appreciate themselves 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 co-operating 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 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 department—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 improvement: 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. The school program should provide definitely for this work.
4. Bibliography.

United States Bureau of Education, Bulletin No. 23, 1915, 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.

GRADE VI.

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).

GRADE VII.

1. Aims in teaching:
 - a. To show the relation of the local government to the state government.
 - b. To teach an appreciation of the relations of the individual citizen to the state government.
2. Outline of material. The general subject is the people living under state government.
 - a. The government of Colorado.
 - (1) Division of powers between state and local government; county government and city government.
 - (2) The suffrage.

- (3) Political parties and party platforms.
 - (4) Conduct of elections.
 - (5) The departments of government and the relations of the citizen to them.
 - (6) Direct participation of the people in government as expressed by the initiative, referendum, recall, and recall of judicial decisions.
 - (7) The place of public opinion.
 - (8) Education provided by the state.
- b. Services of the state for the citizen: protection and liberty, freedom of speech and of religion, good roads, care of health, provision for education, and industrial and social legislation.
 - c. Obligation of the citizen toward the state: financial support, respect for laws, intelligent interest in the issues effecting the interests of the people of the state, earning an honest living, and the care of one's health.
 - d. Special organizations within the state to meet temporary needs, such as the state council of defense, food administration, state constabulary, etc.
3. Procedure: The work of the year centers around problems whose solution cultivates the civic qualities in children which are desired in citizens.
4. Bibliography.
- Hughes, R. O., *Community Civics* (excellent text for the grade).
 Hatch, D. R., *Civil Government of Colorado*. 1917 edition.
Statutes of Colorado.
 Material published by the state government: Reports of bureaus and commissions, reports of departments, etc.
 Holcolmbe, A. N., *State Government in the United States*. A college text of value for the teacher.

GRADE VIII.

1. Aims in teaching:
- a. To teach the form and functions of national government.
 - b. To develop the spirit of internationalism.
 - c. To create the right attitudes and feelings toward the ideals of Americanism.
 - d. To encourage right thinking toward the political and economic problems of the people.
 - e. To aid the pupils in selecting a life work by giving them a knowledge that will guide them.
 - f. To show the value of education so that the school course will not be interrupted.
2. Outline of material. The first part of the year is given to a study of the people under the national government; the latter part, to a study of the economic problems connected with citizenship.
- a. The people living under a national government.
 - (1) Obvious connection between the citizens and the national government through the money system, the postal service, taxation, control over commerce, and the administration of law.

THE TEACHING OF CIVICS

- (2) Political parties and elections: organizations of parties, platforms, campaigns, suffrage, and elections.
 - (3) The process of law-making, which involves an understanding of the national legislative procedure.
 - (4) The place of the executive in our government.
 - (5) The protection of the individual against oppression by the government:
 - (a) The Constitution and its amendments.
 - (b) The national court system.
 - (6) The ideals of American government as expressed in the Constitution and the amendments.
 - (7) International relations—the application of American ideals internationally.
 - (8) The meaning of citizenship in a democracy like the United States.
- b. Economic phases of citizenship.
- (1) The civic responsibility connected with the production of wealth (this term needs to be interpreted in its larger sense).
 - (a) The social significance of all work.
 - (b) The social value and interdependence of all work.
 - (c) The social responsibility of the worker for the character of his work.
 - (d) The duty of the community to the worker.
 - (e) The necessity for social control, governmental or other.
 - (f) The part that government actually plays in regulating the production of wealth.
 - (2) The civic responsibility connected with the use of wealth.
 - (a) The accumulation of wealth is possible, due to the services of the government.
 - (b) The possession of wealth carries with it an obligation to the government.
 - (c) It carries with it an obligation to the community.
 - (d) It obligates the holder to use it for meeting his own needs and for advancing the welfare of others.
 - (3) "Vocational guidance" an important factor in citizenship.
 - (a) The good citizen must earn a living for himself and for dependents.
 - (b) Vocational information is important from the standpoint of the individual and of the community.
 - (c) The characteristics of a vocation must be considered. They include: healthfulness, remuneration, value to society, social standing, natural qualifications, general education, and special preparation.
 - (d) The study of vocations: professions, trades, and other occupations, grouped under agriculture, commerce, railroading, civil engineering, building trades, learned professions, and miscellaneous openings.
 - (e) Discussion of life work: preparation, securing a position, efficient service and its reward. There is opportunity to show the values of education, and especially the money value.

- c. Interests in the national government which are the outgrowth of the war: The conservation movement, government operation of railroads, finance, influence of the war on the government, democracy versus autocracy, obligations of the citizen in time of war, the enemy alien, and the Americanization of foreigners.
3. Procedure: The problem is the basis of the work for the year. Through problems the material is selected and used to accomplish the aims indicated. Investigation and observation on the part of the pupils are encouraged at all times.
4. Bibliography.
- Hughes, R. O., *Community Civics*. This is excellent for class use as a text.
- War-Modified Course of Study.
- Ashley, R. ., *The New Civics*.
- Turkington, G. A., *My Country*.
- Weaver, E. W., *Profitable Vocations for Boys*.
- Profitable Vocations for Girls.
- Gowin, E. B., and Wheatley, W. A., *Occupations*.
- Davis, J. B., *Vocational and Moral Guidance*.
- Pressy, P., *A Vocational Reader*.
- Money Value of Education. *Bulletin of Bureau of Education*, 1917.
- Leavitt, F. M., and Brown, E., *Elementary Social Science*.
- Tufts, J. H., *The Real Business of Living*.

PART III. Civics in the High School.

The suggestions contained in Part I will be found applicable in the teaching of civics in the high school. No restatement of the aims appears necessary. The main effort is to suggest the material that should furnish the basis of the instruction in civics in the high school.

I. Citizenship in a Democratic Community.

1. The term citizenship, its implications: (only suggested here). For every privilege conveyed by citizenship there is the corresponding duty to the community; for every right that is exercised there is the corresponding obligation.
2. The term community is applied to every group that does service for the citizen. It is not restricted to any locality; it may be the state, the nation, or even the larger world community.
3. Relationship between the citizen and the community.
 - a. The community serves the individual citizen through educational institutions, through protection of life, property, etc.
 - b. The citizen has obvious duties toward the community, some of which are the following:
 - (1) Intelligent participation in civic activities.
 - (2) Willingness to contribute a proper share to the community activities.
 - (3) Obedience to law regularly enacted.
 - (4) Healthful living.
 - (5) Earning a living.

II. The Community Organization.

1. Purpose of community organization.
 - a. Early conception: The individual entirely subservient to the community, usually meaning the ruling faction.
 - b. Modern conception: communities organize to maintain peace, order, security, and justice among individuals that compose them; to further the interests of the individual members.
 - c. Compare these two conceptions using modern organizations for illustrations; the two extremes have been Germany and the United States, autocracy versus democracy.
2. Forms of community organization.
 - a. The simple forms such as the home, the school, etc.
 - b. The local community organization such as the town, the city, and the county.
 - c. The state government.
 - d. The federal government.
 - e. The international organizations already formed: educational, religious, industrial, commercial, and others.
 - f. International organizations proposed: various forms of the league of nations.
3. The services of these organizations to the individual.
 - a. The home establishes the foundations of community living through encouraging habits of co-operation and of assuming responsibility, while directing the general physical and mental growth of the child.
 - b. The school supplements the home in developing the young citizen by extending the community experiences of the child, while providing for its physical and mental growth.
 - c. The church develops the religious qualities of the citizen and encourages higher standards of social living.
 - d. The city is organized to promote the welfare of the citizen through its normal activity; such as, the maintenance of order, the guarding of health, the provision for education, and encouraging recreation.
 - e. The county serves by providing through regular agencies for education, the building and maintenance of roads, the protection of the poor, and the care of the criminal and insane.
 - f. The state government is organized to further the interests of the citizens through the control of marriage and divorce, the supervision of education, the promotion of health, the care of the unfortunate, and the regulation of the special interests of labor and of business.
 - g. The federal government exercises control over commerce and manufacture, directs foreign relations, promotes the interests of the farmer and industrial worker, collects taxes, distributes the mail, provides a currency system, and administers the laws.
 - h. The international organizations attempt to establish satisfactory relations between the citizens of this country and those of neighboring nations.

III. The Responsibilities of the Individual as a Citizen.

1. Responsibilities of the individual with respect to his own development.
 - a. To maintain himself in the best possible health.
 - b. To secure the best education open to him.
 - c. To avail himself of the opportunities to develop his religious life.
 - d. To perform the work that he decides to do to the best of his ability. Here is suggested one phase of the problem of labor and capital.
 - e. To administer the wealth that he may have in his possession, not only for his own individual interest but in the interest of the community. The opposite phase of the problem of labor and capital is suggested.
2. Responsibilities of the individual with respect to the communities which serve him.
 - a. To support the various community organizations through recognition of the regulations and obedience to them.
 - b. To maintain right attitudes toward fellow citizens.
 - c. To have appreciation of appearance of surroundings (civic beauty).
 - d. To appreciate relationship to the community in administering wealth and in performing labor or service of any kind.
 - e. To share in all community activities.

IV. The Political Party as a Factor in Citizenship.

1. The part of public opinion in a democracy.
2. The relation of public opinion to the political party.
3. The party as an agent for expressing the will of the people.
4. The suffrage privilege and the corresponding obligation. Study party platforms, state and national; consider the character and qualifications of candidates.

The place of the political party in political life may be shown by careful tracing of the method of selection of the presidential candidates, using the party machinery that has been developed.

V. American Political Ideals.

The statement of American ideals may be found in the documents: such as, the Declaration, the Preamble, the Bill of Rights, and in the statements of political leaders, such as Patrick Henry, Thomas Jefferson, George Washington, Andrew Jackson, Abraham Lincoln, Daniel Webster, Elihu Root, Theodore Roosevelt, and Woodrow Wilson. There are many others who may be included or who may be substituted for the ones mentioned.

These ideals may be compared to or contrasted with the ideals of some of the European peoples in order that the American ideals may be appreciated more fully.

VI. The Application of American Ideals to Some of the More Important Community Problems.

In this work it is not so important that the problems are considered and some solution attempted as it is that the right habits of considering

them shall be encouraged. Opinions and prejudices should not determine the attitude toward the current problems; attitudes should be reached after a study of all sides of the question, and then there should not be the feeling that it is necessarily settled.

Some problems of present importance which may be given consideration are:

1. Making the press the faithful leader of public opinion.
2. A league of nations to control international relations.
3. A military policy for the United States.
4. Americanization of the foreign population.
5. The effect of immigration upon the social life of the country.
6. An effective law to restrict immigration.
7. Child labor in the local community.
8. National protective legislation for children.
9. The permanent effects of the war upon women in industry.
10. The desirability of establishing pension systems in the United States.
11. The further breakdown of the "laissez-faire" theory of government.
12. The prevention of unemployment.
13. The care of criminal offenders.
14. The conservation of human resources.
15. Other problems of reconstruction.

VII. "Vocational Guidance."

The consideration of the various problems that may properly be a part of the course in civics, especially the problems of industrial life, suggests the part that the individual citizen should have in the economic life of the community. It is the function of the public school to train the student so that he will be able to select the particular field of work in which he can give the greatest service. Only as he does this is the individual the best citizen in his community.

1. The increasing number of vocations open to young men and young women.

The United States census recognizes twenty-two professions and approximately four thousand occupations.

2. The selection of the vocation is dependent upon two considerations:
 - a. Individual fitness through inheritance, education, natural inclination, moral qualities, social efficiency, and vocational experience.
 - b. The nature of the vocation as expressed in the following:
 - (1) The character of the work: importance in the community, prospect of growth, healthfulness, stimulation to effort, remuneration, and opportunity for advancement.
 - (2) The demands for training: general equipment, and specialized experience.
 - (3) The social value of the work.
 - (4) The social standing of those who follow the vocation.
3. The relation of the citizen toward the community activity.
 - a. The good citizen earns a living for himself and his dependents.

- b. He has a responsibility for the conditions of industry and employment.
- c. He has a responsibility for the production and the consumption of wealth.

VIII. Bibliography.

- Ashley, R. L., *The New Civics*. A text book for secondary schools.
 Beard, C. S., *American Citizenship*.
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 Towne, E. T., *Social Problems*.
 Young, J. T., *The New American Government and its Work*.
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PART IV. General Bibliography.

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 Bailey, C. S., *For the Children's Hour*. Milton Bradley Company. 1906.
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 (Arranged on psychological basis, home, children, family, clothing, food, school, patriotism, etc.)
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- Munro, W. B., The Government of European Cities. Macmillan Company. 1912.
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- Poulsson, E., In the Child's World. Milton Bradley Company. 1905.
- Pressy, P., A Vocational Reader. Rand McNally Company. 1916.
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- Towne, E. T., Social Problems. Macmillan Company. 1916.
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- Profitable Vocations for Girls. A. S. Barnes Company. 1915.
- Woodburn, J. A., and Moran, T. F., The Citizen and the Republic. Longmans, Green & Co. 1918.
- Young, J. T., The New American Government and Its Work. Macmillan Company. 1916.
- Zueblin, C., American Municipal Progress. B. W. Huebsch. 1910.

course gives a Colorado Life Certificate. Graduation from the four-year course the degree of Bachelor of Arts in Education, and the Life Diploma. The degree of Master of Arts is granted for a year of specialization beyond the A. B. Degree.

Population of Greeley 12,000.

Altitude 4,597 feet.

Fifty-two miles from Denver.

Sunny days and cool nights. Low percentage of humidity.

Pure Mountain water.

Sixty-two miles from Estes Park (Colorado National Park.)

Low-priced week-end trips to the Rocky Mountain National Park under college auspices, including meals and lodging and competent guide, are open to Summer School students. These trips proved quite popular last season. Folder on request.

The first class period during the Summer Quarter begins at 7 o'clock; final class period closes at 12:50, leaving the afternoon open for study, Physical Education and recreation.

Free—The final Summer School bulletin, attractively illustrated, with complete program and much additional information, yours for the asking. Ready about April 1. Regular annual catalog—also free—will be ready about May 15.

Colorado State Teachers College,
J.G. Crabbe, President,
Greeley, Colorado

COLORADO STATE TEACHERS COLLEGE BULLETIN

Series 18

December, 1918

No. 9

Preliminary Announcement of Summer Quarter 1919

First Half begins June 16,
closes July 18

Second Half begins July 21,
closes August 22

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*Complete Bulletin
with final announcements
ready in March*

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

GREETING:

To its thousands of friends in Colorado and other states, Colorado State Teachers College is pleased to say that the changes in the plan of its Summer School inaugurated last season have met with marked approval on the part of teachers and students generally. So successful did last year's Summer Quarter prove, not only in the total attendance, but also in the work accomplished, that the same general scheme will be carried out in the Summer School for 1919.

The Summer Quarter for 1919 will consist of two half-quarters. The First Half-Quarter will open June 16 and close July 18. The Second Half-Quarter begins the following Monday, July 21, and closes August 22. Students may attend either or both, and obtain corresponding credits.

The Quarter's program will be fully up to the standard of former years. There will be at least 120 courses offered in 21 departments. The entire College faculty in residence will be supplemented by a strong special faculty including in its membership some of the best-known educators from other colleges and public school systems. The general lectures which have played so great a part in the interest of other seasons will be continued with many big men on the program. Lectures will be given in the College gymnasium, which has been fully

screened, adding materially to the comfort of the audience.

Expenses will not be materially higher than last year. In some instances they may be somewhat lower. The installation of a college cafeteria, offering well-cooked foods at cost, gives not only an opportunity to cut board costs, but makes possible a light mid-session lunch between the 10- and 11-o'clock classes. With a little care expenses should easily come within the following figures:

Your board, \$3.50 to \$5.00 a week.

Your room \$6.00 to \$10.00 per month.
(Housekeeping rooms, about \$10.)

Your fees, full quarter, \$30.00; half-quarter, \$15.00. (Non-residents of Colorado, \$5.00 in addition to 10-weeks' fees.)

APPROXIMATE EXPENSES FOR 10 WEEKS

Board	\$35.00 to \$50.00
Room	15.00 to 25.00
Fees	30.00 to 30.00
	<hr/>
	\$80.00 \$105.00

Five weeks, one-half of above.

Can you put time and money to better use?

DIPLOMAS AND DEGREES

Full credit is given for courses satisfactorily completed. Diploma courses, Degree courses, Graduate courses—all Life Certificate courses—may be completed in summer quarters. Normal credit: Full quarter, 16 hours; half quarter 8 hours. Graduation from two-year

Colorado State Teachers College Bulletin

Series XVIII

FEBRUARY, 1919

Number 11

THE SUMMER QUARTER 1919



The Quarter—June 16 to August 22

First Half Quarter—June 16 to July 18

Second Half Quarter—July 21 to August 22

READ THE BACK COVER OF THIS BULLETIN

Published Monthly by State Teachers College, Greeley, Colorado

Entered as Second Class Matter at the Postoffice at Greeley,
Colorado, under the Act of August 24, 1912

Important Announcements

Advanced Standing

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 those as soon as possible together with credentials to the College, so that they may be considered before the opening of the Summer 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.

Practice Teaching in the Training School

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 Director E. A. Hotchkiss or Dr. John R. Bell, Principal of the Industrial High School, before the opening of the quarter.

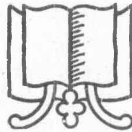
CERTIFICATES OF HIGH SCHOOL GRADUATION

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 will be enrolled in the School of Reviews or in the Ungraded School for Adults. Mature students who have had the equivalent of a high school course, and teachers with several years of practical experience may in exceptional cases be assigned to College classes as Special Students.

Colorado State Teachers College Bulletin

THE
SUMMER QUARTER
1919



June 16 to August 22
First Half Quarter—June 16 to July 18
Second Half Quarter—July 21 to August 22

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GREELEY, COLORADO

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Summer Quarter, 1919

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 M. EVA WRIGHT, Piano and Pipe Organ.
 GEORGE P. YOUNG, A.B., Training Teacher, Junior High School.

SPECIAL LECTURERS AND TEACHERS

Summer Quarter, 1919

- EDWARD HOWARD GRIGGS, A.M., L.H.D., New York City.
 HON. SIMEON D. FESS, LL.D., Member of Congress from Ohio.
 LEON HENRY VINCENT, Ph.D., Boston, Massachusetts.
 GEORGE D. STRAYER, Ph.D., Professor of School Administration, Teachers College, Columbia University.
 LINCOLN HULLEY, Ph.D., President of Stetson University, Deland, Florida.
 THOMAS H. BRIGGS, Ph.D., Professor of Secondary Education, Teachers College, Columbia University.

OSCAR T. CORSON, A.M., LL.D.

EDWARD ALLSWORTH ROSS, Ph.D., Professor of Sociology, The University of Wisconsin.

E. C. HAYES, Professor of Sociology, The University of Illinois.

FRANKLIN B. DYER, LL.D., Superintendent of Schools.

HARVEY S. GRUVER, Ph.D., Superintendent of Schools, Worcester, Massachusetts.

WILLIAM A. WIRT, Ph.D., Superintendent of Schools, Gary, Indiana.

H. W. HILL, M.D., Minnesota Department of Health.

MAJOR LEWIS F. TERMAN, Ph.D., Specialist in Psychology, Surgeon General's Office, U. S. Army, and Professor of Educational Psychology, Stanford University.

H. W. FOCHT, Ph.D., Rural School Specialist, U. S. Department of Education.

BERTHA WHITMAN, A.M., Teacher of History and English, Greeley Public High School.

MABEL COCHRAN, Training Teacher, Rural Demonstration School, Greeley, Colorado.

CHALISE KELLEY, Pd.M., Special Teacher for children with defective speech.

J. P. CULBERTSON, Secretary to the President.

GEO. P. WILLIAMS, Bookkeeper.

RALPH S. BAIRD, Stenographer.

W. F. MCMURDO, Stenographer.

TOM BELLWOOD, Stenographer.

FLORENCE WILLIAMS, Stenographer.

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The Summer Quarter, 1919

Colorado State Teachers College last year made an important change in its summer school plans, by which the former six weeks' session was lengthened to two half quarters of five weeks each, to be known as the Summer Quarter. This change gives teachers an opportunity to spend the entire summer vacation in college work if they so desire, and thus accomplish materially more than under the former arrangement.

Students who wish to spend less than the full ten weeks in school may, of course, enroll for either the first or the second half of the summer quarter, instead of both.

By sheer force of merit, Colorado Teachers College Summer School has grown within a few years until it is now one of the very strongest Summer Schools in the entire West, with an enrollment last year of almost 1,200 students, under the instruction of a well-balanced faculty of 75.

For the summer of 1919 the Special Faculty has been greatly strengthened. The completion of the temporary gymnasium and auditorium, with a seating capacity of 1,400 makes the lectures much more enjoyable, and the students more comfortable.

Teachers College recognizes the Summer Quarter, supplemented by the Individual and Group Extension Work as its large means of serving the teachers of the state who are in active service.

To make itself as useful as possible in this direction the college is attracting all the working teachers it can reach by means of advanced courses in supervision, tests, sub-normal and super-normal children, and by more advanced courses in all departments than it offers in the regular year.

Regular Courses will also be given during the Summer Quarter in all departments: Education, Psychology, Physical and Biological Science, History, Sociology, English, French, German, Spanish, Latin, Reading and Dramatics, Geography, Arithmetic, Higher Arithmetic, Music, Physical Education, Manual Training, Practical Arts, Domestic Science and Art, Business Courses, Nature Study, Teaching, Supervision, Primary Methods, Special Methods, Fine and Applied Art, Gymnasium, Athletics, Agriculture, Library Methods, Primary Handwork, County Schools, etc.

THE EXPENSE

Your board, \$3.50 to \$5.00 a week.

Your room, \$6 to \$10 per month.

(Housekeeping rooms, about \$10.)

Your fees, Full quarter, \$30.00; one-half, \$15.00.

(Non-residents of Colorado, \$5 in addition to 10-weeks' fees.)

Approximate Expenses for 10 Weeks

Board	\$35.00 to	\$ 50.00
Room	15.00 to	25.00
Fees	30.00 to	30.00
	<hr/>	<hr/>
	\$80.00	\$105.00

Five weeks, one-half of above.

Can you put time and money to better use?

Diplomas and Degrees: Graduation from the two-year course gives a Colorado Life Certificate; graduation from the four-year course,

the degree of Bachelor of Arts in Education, and the Life Diploma. The degree of Master of Arts is granted for a year of specialization beyond the A. B. Degree.

THE DAILY PROGRAM

Summer Quarter

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 new Gymnasium-Auditorium.

RECREATION

Diversion and Recreation are a legitimate part of a successful summer school. Colorado Teachers College has not neglected these features. Entertainments, musical and dramatic, railway excursions to the mountains, "hikes" on foot, tennis and other outdoor games, story-telling, and low-priced week-end trips to Estes Park (the Rocky Mountain National Park) have been provided, and will make your stay pleasant as well as profitable.

The College this year has made a special arrangement whereby students can leave the college Friday at noon and return Sunday evening after having spent two days and a half in the Rocky Mountain National Park in a camp arranged by the College and with competent chaperones and guides, all for about ten dollars.

COLORADO CLIMATE

As this bulletin goes to several thousand teachers and students who have never visited Colorado, a few words may fittingly be said here regarding Teachers College and Greeley as to location and climate.

Greeley is one of the most beautiful small cities to be found anywhere. Situated 52 miles north of Denver, within plain view of the Rocky Mountains, in the heart of the richest farming country in the world. Its homes shelter an intelligent population of over 12,000 persons, overwhelmingly American. Its streets are broad and shady, its lawns well-kept; its water supply is piped 38 miles from a mountain canon, and is pure and soft. It is pre-eminently a city of homes, schools and churches.

The altitude, 4,567 feet above sea level, insures clear, dry air, sunny days and cool nights. Seldom does the night temperature go above 70 degrees, even in the hottest part of the summer; 60 or 65 degrees at night is usual. Because of the low percentage of humidity, even the hottest midday is seldom oppressive, and sunstroke is unknown.

One may accomplish a given amount of brainwork here with the minimum of energy and fatigue, while recuperation comes quickly. This statement is true of the entire year. Hence students of Colorado schools make greater relative progress with the same effort than those of any other state in the union.

It will pay you to consider well these advantages when deciding upon a place to attend school, either for the summer quarter or all the year.

The New Rocky Mountain National Park—For forty years "Estes Park," at the base of Long's Peak, has been widely known thruout the nation as one of the grandest and most beautiful mountain resorts in North America. Thousands of tourists have visited it annually, and it has come to be known among traveling people as superior to Yellowstone in all except the geysers. But the park has not been widely advertised; no direct line of railroad goes to the park; the state has been slow to recognize its scenery as its most profitable commercial asset, and the nation has hardly been aware that there is anything west of the Alleghany mountains worth seeing except California. Notwithstanding the local and national indifference, thousands have learned to come annually to the "Rocky Mountain Wonderland," to live for a month or more under the blue sky and in the clear air of the high mountains. A series of great hotels and of less pretentious, but comfortable, rustic inns have grown up in the Park.

Finally, the grandeur of this ideal mountain section was made known to the English-speaking world thru the writings of the mountain guide and naturalist, Enos Mills, who turned lecturer and essayist just to publish his enthusiasm for this spot. The result of the publicity which he has given to the place thru his books, magazine articles and lectures, is that the United States has at last made this wonderful stretch of snowy mountains "The Rocky Mountain National Park." Every student from the East or South or the plains country should arrange to spend at least a week-end from Friday afternoon to Sunday evening in the Park. Commercial automobiles run to and from the Park daily, charging a reasonable fare for small parties.

One goes from Greeley across the plains and low hills to Loveland, 22 miles. It is eight miles from Loveland to the opening of the Loveland Canon, where the Big Thompson River breaks thru the first range of hills. The walls of this canon are clean cut, nearly 2,000 feet high and beautifully colored. Altho almost unknown, this canon is as imposing as the much-advertised "Royal Gorge." From this point the road follows alongside the Thompson thru groves of pine and under the shadows of wonderful geologic formations for twenty-five miles. Suddenly your car emerges from the confines of the rock walls and glides into the beautiful meadows of the Park—an ideal scene of quiet and peace. But "lift your eyes unto the hills!" They take your breath for a moment, for there they stand all about you, the eternal snow-covered hills, 14,000 feet high—Long's Peak, Meeker, Flat Top, Ypsilon, and a dozen others. It's a big place threaded by sixty miles or more of perfect roads, and with the meadows running up to the hills. Pines, spruces, rocks, bewildering grandeur, are everywhere. Cottages for summer dwellers are tucked in everywhere. Every sort of dwelling, from a tent sheet anchored to the side of an automobile to mansions and elegant hotels are to be seen. And up at Long's Peak Inn you may be fortunate enough to catch a glimpse of, or get a word with, the young man who is the John Muir of these mountains, the native naturalist, Enos Mills.

Other Excursions—From Greeley there is an excellent opportunity on Saturdays and Sundays to take in a number of other very interesting places, such as the canons of the Poudre River; Eldora, the splendid Summer Resort; the Moffat Road experiences; the great heronries on the Poudre and the Platte; the great irrigated center of the West; fishing within two hours' travel; and above all, the great Rocky Mountain Range—250 miles of snowy range in full view from the College Campus. Once during the term a railway excursion at popular rates is arranged to take all who wish to go, into the heart of the high mountains. One excursion took the students up the "Moffat Road" to the summit of the Continental Divide, Corona, 10,600 feet. Another was over the "Switzerland Trail" to Eldora. Still another was to the summit of Pike's

Peak. The students in each summer session choose the destination for their own excursion. Small parties make shorter trips to points of interest, for study or pleasure, nearer Greeley. While there are many opportunities for recreation, the School is not offering its Summer quarter as a holiday outing. The work is serious and effective, the entertainments and excursions being arranged at the end of the school week.

Equipment—The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museum, and a school garden. The library has 45,000 volumes bearing on the work of Teachers College. There is ample opportunity to work out subjects requiring library research. There is a handicraft department 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.

Buildings—The buildings which are completed at the present time consist of the administration building, the library building, the residence of the President, the training school and the industrial arts building. The main, or administration building, is 240 feet long and 80 feet wide. It has in it the executive offices, class-rooms, and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art which make them very pleasing.

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

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.

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 ex-senator Simon Guggenheim.

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

The Gymnasium-Auditorium—A temporary wooden structure has just been 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 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, which give it the appearance of a natural forest. During the summer, birds, rabbits, squirrels and other small animals make the campus their home, thus increasing its value as a place of rest, recreation, or study.

During the summer and fall quarters the faculty gives its evening reception to the students on the campus. At this time it presents a most pleasing appearance, being lighted, as it then is, by electric lights and Japanese lanterns.

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 grounds adjacent to the building there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

During the summer, courses on the organization of playgrounds will be given, and demonstration of how to carry out these courses in the public schools will be made on the campus.

Community Co-operation Plan—In March, 1915, the Council of Deans approved a plan in which provision was made for allowing students to go out to various organizations in the community to assist them in their undertakings. This plan was 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 Aliens, Story Telling Groups, and similar organizations.

Bible Study—"The Greeley Plan"—Unusual opportunities for Bible Study are offered to students through a system of co-operation between the churches of Greeley and the Teachers College. Perhaps Colorado 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 a book has been published, by the World Book Company, "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 to 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.

Girls' Camp Fire Movement—Something new, something big, something destined to grow! The Camp Fire Girls' Movement is new, having been given definitely to the public, March 17, 1912. It is already an organization large in numbers, having at the last Annual Report 5,848 Camp Fires in good standing with a total membership of 85,988, an increase of 20,022 in one year. Emphasis is placed on the home, the out-of-doors, and the spirit of service. That the movement is destined to grow, is shown by the recognition given it, not only in summer camps, but also in universities and colleges where the Camp Fire Girls' work is beginning to be introduced into the curriculum. During the summer of 1916 the University of California provided such a course with marked success, and now Colorado State Teachers College is offering a similar opportunity.

History of the College—The State Normal School of Colorado was established by an Act of the Legislature in 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 makes the institution a professional school in the strictest sense.

The Legislature of 1910-11 passed a law which became effective August 4, 1911, giving the name "The State Teachers College of Colorado" to the school. Hereafter it will be known by that name.

SPECIAL LECTURERS AND INSTRUCTORS FOR 1919

Colorado State Teachers College is instituting an important change in its use of the special summer faculty this year. Heretofore, these lecturers and educators of national reputation have been used merely for the general lectures, one each day, at the assembly hour. We are going to continue this policy during the summer of 1919, but in addition we have engaged these great teachers to give regular instruction in two courses each during the day. Instead of being here the one week in which they are lecturing, most of them will be here two weeks or three weeks, and a few for a half quarter.

Most frequently these teachers will go into classes already organized by the regular college faculty and give their lectures in that way. A few courses, however, will be organized to run through a half quarter in charge of these special faculty members for the full time.

The list is now almost complete and includes to date the following:

DR. GEORGE D. STRAYER will give to the entire College a series of five general lectures in the evenings of the first week. Dr. Strayer is one of the most widely known of American educators today. He is at this time president of the N. E. A. and a member of all the great organizations for the promotion of education and advancement of teaching in this country. Dr. Strayer is a graduate of Johns Hopkins University and a Doctor of Philosophy of Columbia. He is at present Professor of Educational Administration in Columbia University. The better known of his books are: *The Teaching Process*, 1911; *Educational Administration*, 1913; and *How to Teach*, 1917. While Dr. Strayer is in Greeley he will give regular lectures in two courses in the Department of Education. These are indicated in the program of courses.

DR. EDWARD HOWARD GRIGGS of New York is already well known to our Summer Quarter students. He was formerly a professor in Indiana University and Stanford University, but for a number of years he has given his whole time to writing and public lecturing on philosophic, literary, and state problems. In the two years he has been a member of our summer faculty he has spoken on literary themes. His general topic this year is *The War and the Reconstruction of Democracy*. This will be set forth in five evening lectures under the following titles:

1. The Conflict of Ideas and Social Systems in the War.
2. Democracy in International Relations.
3. The Socialization of Democracy.
4. Woman and Democracy.
5. The Future of Democracy: The Program of Reconstruction.

This course will study the philosophy of the world conflict and the various phases of reconstruction democracy must achieve to be worthy of leadership in the new world that is being born through struggle and pain.

With an outline of Prussian history and an interpretation of the significance of those ideas for which the Prussian regime stood and which it had

stamped upon the people of Germany, the values of English, French and American democracy will be studied in relation to the future of civilization.

Reviewing the application of democracy to international relations, with the hope of a world court of justice, the course will consider the fulfillment of democracy within the nation, in such phases as the development of social thinking and collective action to balance the rampant individualism of American life, the significance of democracy in commerce and industry, in the home and in relation to the position and advancement of women.

The course will close with a criticism of the existing political forms of democracy, an estimate of the effect of the war upon literature, education and life, and a brief outline of the program of reconstruction.

Dr. Griggs's latest book, *The Soul of Democracy*, The Macmillan Company, 1918, furnishes a program and extended handbook for the course.

HON. SIMEON D. FESS has been a member of the National Congress since 1913. Previous to this he was in educational work, being an A.B. graduate of Ohio Northern University in 1889. He later took the degrees of Master of Arts, Bachelor of Laws, and Doctor of Laws. For some years Dr. Fess was president of Antioch College. He is the author of several books on public policy, among which are: *Outlines of U. S. History*, 1897; *American Political Theory*, 1907; and *World Events*, 1906. Congressman Fess is nationally known as a public lecturer upon educational and political topics. During his stay in Colorado Teachers College he will give five evening lectures upon *World Affairs* and will teach two hours daily in the Department of History and Political Science. The courses in which he will instruct are listed in the Program of Courses.

DR. OSCAR T. CORSON returns for the third summer to Teachers College. His previous lectures have always been most heartily received by the summer students. Dr. Corson is personally popular and very helpful in his way of treating sensibly the problems of teaching which confront every teacher. While Dr. Corson is well known in Colorado, it is worth while again to call attention to the fact that he was formerly State Superintendent of Ohio schools and President of the N. E. A. For many years he has been editor of *The Ohio Educational Monthly*, and a well known lecturer on schools and education. Dr. Corson will give regular instruction in two courses in the Department of Education in addition to his five evening lectures.

MAJOR LEWIS M. TERMAN is at present in the Surgeon General's Office in Washington in the Division of Psychology. As Professor of Educational Psychology in Stanford University Dr. Terman is well known through his work on mental tests. He is an A.M. of Indiana University and a Doctor of Philosophy of Clark University and the author of *The Teacher's Health*, 1913; *Health Work in the Schools*, 1914; *Hygiene of the School Child*, 1914; *The Measurement of Intelligence*, 1916; the *Standard Revision of the Binet-Simon Scale*, 1907; and *The Intelligence of School Children*, 1919. Dr. Terman has been actively directing the army intelligence tests which have been so useful in placing our soldiers where they were best fitted to work. He will be a member of Teachers College faculty for five weeks and will have two regular courses in the Department of Educational Psychology. The courses will deal with School Hygiene and Mental Tests.

DR. WILLIAM ALBERT WIRT will give five general lectures and will instruct in two regular courses in the Education Department. Dr. Wirt is the originator of the Gary system of school administration which has made him the most widely known school superintendent in the United States. He has studied school systems in this country and in Belgium, France, and Germany. Dr. Wirt had the distinction of being the highest paid school administrator in the world, when he was paid \$10,000 a year for thirteen weeks as advisor to the Board of Education of New York City. Last year Dr. Wirt was prevented by illness from filling his engagement with Teachers College. This summer he will give

five of the evening lectures and instruct in two courses dealing with school supervision and administration.

DR. LINCOLN HULLEY is President of John B. Stetson University at Deland, Florida. He is a well known popular lecturer upon English and American literature. In Colorado Teachers College he will give five of the evening lectures and will also give regular lectures during his stay in one course in the Department of Literature and English. These lectures will be a treat to all who read literature for its inspiration as well as its intellectual appeal.

DR. LEON VINCENT of Boston, Massachusetts, is, like Dr. Griggs, well-known the country over but more especially in the East as an interpreter of literature and philosophic thought. He is a polished speaker and a literary man of first rate abilities. As a writer of essays and short stories he is well known. His best-known books are: "*The Bibliotaph and Other People*", "*The French Academy*", "*American Literary Masters*" and "*Dandies and Men of Letters.*" Dr. Vincent's evening lectures this summer will be given under the general heading *Literature and the War* and will include:

1. Napoleon and England, and Napoleonic Episodes in Modern Literature.
2. The Romance of Napoleon III.
3. The Franco-Prussian War in Fiction. (Daudet, Maupassant, Zola, Marguerite.)
4. The Present Struggle. (Pan-Germanic Literature: Manifesto of the Ninety-three Intellectuals: S. H. Church's Reply.)
5. Some Literature of the Present War. (Germany's Ambition for World Control: Mr. Britling: Hugh Gibson's Journal and other Narratives.)

This is a series of lectures which Dr. Vincent gave during the Spring in Columbia University.

DR. H. W. FOUGHT, of the U. S. Department of Education (Rural Specialist) will give regular instruction in three courses in the County Schools Department. The following is a brief statement concerning his preparation for his work and his achievement in the field of rural education:

He was a student of the University of Nebraska, Iowa College, and Augustana College, Illinois, Royal Frederick University, Copenhagen, and American University, Washington. Degrees, A.B., B.S., A.M. and Ph.D. Teacher in rural and village schools four years. Professor of History and Sociology in colleges and normal schools ten years; Professor of Education in colleges and normal schools, six years. Head Rural School Department, State Normal School, Kirksville, Missouri, six years. Specialist in Rural Education, U. S. Bureau of Education, 1912. Specialist in Rural School Practice, same, 1914. Chief Rural School Division, 1916. General Chairman of the three educational committees of the National Country Life Association, President Division of Agricultural and Rural Education Association, Chairman The Educational Committee of the National Survey Association; member Country Church and Country Life Committee of the Federal Council of Churches, author of *The American Rural School*, *Rural Denmark and Schools*, *The Rural Teacher and His Work*, and many government publications. Director of the Educational Surveys of South Dakota and Alabama, and Saskatchewan, Canada, as well as member of state surveys in Delaware, Washington and Arizona; also director of the proposed Educational Survey of the Hawaiian Islands. Lecturer before State and National Teacher Associations, Summer Schools, etc., among which may be mentioned: Summer School Teachers College, Columbia University, the Universities of Wisconsin, Nebraska, Texas, Georgia, and normal schools and teachers colleges in a majority of the states.

DR. THOMAS H. BRIGGS of Teachers College, Columbia, will be attached to the Department of Education as a special lecturer in the regular courses dealing with the Junior High School and the Administration of Secondary Schools. The following is a brief account of his attainments and educational service: A.B., Wake Forest (N. C.) College; graduate student in English, University of Chicago (2 years); Ph.D., Columbia University.

Teacher in several public and private schools; Professor of English, John B. Stetson University; teacher of English, Eastern Illinois State Normal School; Instructor in English and Associate Professor of Education, Teachers College, Columbia University.

Author of *Formal English Grammar as a Discipline, Reading in Public Schools* (with L. D. Coffman), *A First Book of Composition* and *A Second Book of Composition* (with Isabel McKinney), *A Laboratory Manual of Letters, Chapters on Secondary Education in the 1914, 1915, 1916, 1918 Reports of the United States Commissioner of Education*, of various articles in *Education, Teachers College Record, New England Leaflet, English Journal, Illinois Bulletin, Atlantic Educational Journal, Old Penn Weekly, Columbia Quarterly*, etc.

At present he is completing for the General Education Board a study of the Junior High School Movement. For this he spent a half-year in visiting such schools. Another whole year was spent visiting high schools in thirty states.

Dr. Briggs is a member of the Reviewing Committee of the N. E. A. Commission on the Reorganization of Secondary Education.

DR. EDWARD A. ROSS, head of the Department of Sociology of the University of Wisconsin, is the best known sociologist in the United States. His books are widely read, and he is quoted extensively in college circles as a world authority on his subject. He is one of a small coterie of able men who have created the national reputation and prestige of the University of Wisconsin. He is not only recognized among university men as an authority on general sociology, but is considered one of the ablest modern writers on China, Russia, South America, and on the subject of immigration.

Dr. Ross is a member of the Institut International de Sociologie, former president of the American Sociological Society, and was sent to Russia at the instance of the American Institute of Social Service to report on what might be done in aid of Russian social progress.

He left early in June and returned in the beginning of February after travelling altogether 37,000 miles; 20,000 miles in Russia. He crossed Siberia in midsummer and again in midwinter. After a month in Petrograd and a few weeks in Moscow, he went down the Volga, Russia's Mississippi, stopping at all the important places and interviewing employers, labor leaders, heads of the councils of workmen's deputies, mayors, land committees, food committees, editors, educators and clergymen.

From Astrakhan, he crossed the Caspian to Baku, looked into labor and capital in the oil industry, and went on to Tiflis. After crossing the Caucasus by the famous Georgian military road (134 miles) and back, he passed a fortnight interviewing Georgian and Armenian leaders concerning their national aspirations and their hopes in respect to Russia.

As the Government was just beginning to be more liberal in permitting foreigners to visit Turkestan, he secured permission to visit the Trans-caspian provinces. Crossing the Caspian, he followed the Central Asian Railway to its terminus, 1,200 miles away at Andijan, stopping en route at Ashkabad, Merv, Bairam Ali, Bokhara, Samarqand and Kokand. Unable to visit Tashkent, owing to the interruption of trains by the fighting between the Bolsheviki and the Junkers, he returned by the Central Asian Railway across the Caspian, went to Rostev, and after a week there, revisited Moscow and Petrograd.

Professor Ross brings an amazing story of how it happened that the working class made itself the master of Russia to the entire exclusion of the property holding or bourgeois classes. In an interview, he obtained from Trotsky a statement of the economic program of the Bolsheviki. Not in the world today, or in fact since the French Revolution, is there a more engrossing tale than the course of the Russian Revolution in its first nine months.

Professor Ross will give an account of his experiences and the conclusions he formed in five evening lectures. He will also give regular instruction during his stay in Greeley in two Courses in Sociology.

DR. E. C. HAYES, head of the Department of Sociology of the University of Illinois, is one of the most progressive thinkers and writers in America on the subject of Sociology. He is a well known and frequent contributor to the pages of the leading American journals of Sociology, Economics and Political Science; and is the author of probably the best known American college textbook in Sociology. Dr. Hayes has for several years been a prominent figure in the American Sociological Society, and in which he now holds high office. He is a constructive thinker, and is known in our larger universities as an able lecturer. He is an interesting speaker, scientific in viewpoint, and purposive in thought and action.

FRANKLIN B. DYER comes to us for five weeks, June 30 to August 1. He will conduct courses in Educational Administration and Supervision. Dr. Dyer has had wide and successful experience in supervisory positions. For many years he was Superintendent of Schools in Cincinnati. During this time he brought that city into prominence educationally. From this position he was called to Boston where for several years he was Superintendent of Schools, giving up this work last year. He is a man of big ideas, broad education and successful practice.

HARVEY S. GRUVER is a Harvard man at present Superintendent of the Schools of Worcester, Massachusetts. Before going to Worcester he was Assistant Superintendent in Indianapolis where his time was given largely to the elementary schools and to the work of the Junior High School. Mr. Gruver is a man of excellent training and wide experience. He will be with us during the summer Quarter for eight weeks, June 30 to August 22, and will be in charge of regular class work.

In each case where these special members of the faculty are to give regular instruction in addition to their general evening lectures, this fact will be shown in the regular program of courses.

The College is attempting this year to make its Summer Quarter the most attractive and profitable ever offered to teachers of Colorado and the West. The employment of such a large number of outside men of the standing of these lecturers and teachers is, in a measure, an experiment. If it meets with the approval of Colorado teachers, the intention of the College is to retain a larger number of them each year for a half Quarter as regular instructors.

COLORADO STATE TEACHERS COLLEGE

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. For the convenience of administration, the College maintains three divisions: 1. **The Junior College**, for students pursuing the two-year courses; 2. **The Senior College**, for students doing work of an advanced character corresponding to the third and fourth years of the usual colleges or universities; and 3. **The Graduate College**, for students doing work beyond the bachelor's degree.

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 school departments, and high schools. The College also accepts the responsibility of training supervisors for rural schools, principals, superintendents, teachers of home economics, practical 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 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, and 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—Admission to the College is granted to those who present a certificate of graduation showing the completion of fifteen or more units in an acceptable high school. This certificate must be presented at the time of matriculation in the College.

Mature students, not high school graduates, may be assigned to the Ungraded School for Adults. As soon as they have completed the equivalent of fifteen high school units, or shown the learning power which such completion usually gives, they may be granted a certificate of high school graduation and admitted to the College.

Experienced teachers, not high school graduates, who have attained marked success in their profession may be admitted as **Special Students** upon the recommendation of the Committee on Entrance. Special students will be admitted regularly to the College only after having met all the requirements set by the committee. Special students who fail to meet the College requirements and to do work of College grade will be assigned to the Ungraded School for Adults.

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 Junior College subjects have been studied in a fifth year in a high school, such credit as these subjects deserve will be allowed.

Credit may be granted for private lessons in music, art, language, business courses, penmanship, etc., etc., or for courses in such subjects in private or special schools not of collegiate rank only upon a recommendation, after careful examination, by the heads of departments giving such work in the college. Whenever thus recommended the work must be certified as similar to, and as a substitute for, certain specified courses which such departments offer or recognize as a part of the training of a teacher in that particular field.

Recognition of what is usually termed "life experience," such as travel, housekeeping, experience in a profession or trade, private reading, club work, etc., etc., is given only in connection with the usual credit granted for teaching.

The total amount of credit granted for teaching experience in the Junior, Senior, or Graduate College course shall never exceed twelve

hours, but additional credit for extended and successful supervision of teaching up to a maximum of eight hours may be granted.

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 thru 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. In addition to a regular program of sixteen hours any student may add one or two of the following one-hour courses to his program without special permission: Bible Study, Community-Cooperation, or Conservatory Music Lessons.

A student who wishes to take a larger program than sixteen hours made up of any other additions than those mentioned above must have been in residence at least one quarter and have shown ability to do work of "A" or "AA" quality. Applications for permission to take more than sixteen hours are made in writing to the Committee on Students' 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.

In case a student makes more than two grades below "B" during a given quarter he will be limited to fourteen hours the following quarter.

It shall be 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.

Exceptions to Rules—Rules are made to meet the needs of the greatest number, and not to stand in the way of progress. If a rule is found to impede the progress of genius it will be waived or modified.

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:

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 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 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.

4C 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 three-hour course. The mark should be 2AA, and not 3C. Each mark would give 2.4 hours, but the first mark would indicate the quality of the work as well as the amount of credit.

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 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 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 thru the school year while teaching, it is possible to reduce the time still further.

ADMINISTRATIVE REGULATIONS

Student Advisors—Each student, at the time of enrollment, will be assigned to a member of the faculty, who will act as Student Advisor to him. It will be the duty of the advisor to direct the student in selecting studies, in using time to the best advantage, and in all matters upon which the student asks or needs the advice of an older person who has had a wider educational and life experience than the student.

Physical Education—Each student is required to take Physical Education (exercise courses) at least two-thirds of the number of quarters he is in residence.

Practice Teaching—Teachers who have had less than two years of College training take their practice 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 practice teaching before being granted the diploma of graduation from the Junior College. Experienced public school teachers may be excused from one quarter of this practice teaching, subject to the following condition: No one will be excused from any of the required teaching unless he has had at least three years of successful experience.

The Junior College

FRANCES TOBEY, A.B., Dean

The scope of the Junior College is the work of the first two years of the College proper. The student completing this course, having earned credit for ninety-six quarter hours, is granted a diploma which is a life certificate authorizing him to teach in the public schools of Colorado.

Requirements for Graduation—A student must do full work in residence during at least three quarters before being granted a certificate of graduation from the Junior College. Thus, at least forty-eight of his ninety-six required hours must represent resident work; the remaining forty-eight 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—Students entering the College October 1, 1917 or after are required to select one of the following group courses and to complete it according to its particular requirements: The General Course, The Supervisor's Course, The Kindergarten Course, The Primary Grades Course, The Intermediate and Grammar Grades Course, The County Schools Course, The Industrial Arts Course, The Music Course, The Household Arts Course, The Household Science Course, The Fine and Applied Arts Course, The Agricultural Course, The Physical Education Course, or the Commercial Arts Course. These courses are all two years in length with about one-half of the subjects required and one-half elective. The work of the third and fourth years is elective for the most part. The student selects the department in which he wishes to major and then takes from 48 to 60 hours in that department, distributing the remainder of the 96 hours required in the senior college for the A.B. degree among the other departments.

The details of these courses may be seen in the annual catalog, published May 1, 1919.

The Senior College

GURDON RANSOM MILLER, A.M., Ph.D., Dean

The Senior College includes the third and fourth years of the work of the State Teachers College. It furnishes special advanced preparation for normal school critics and teachers. It offers superior opportunities for the training of supervisors of all elementary school work. High School teachers will find here superior professional and scholastic courses adapted to their professional aims. Principals and superintendents will find in the program of the Senior College an unusual opportunity for mature students of wide professional interests.

Admission to the Senior College—Graduates from our Junior College, and graduates from standard normal schools are admitted without examination to the Senior College. Students who have completed two full years of work or more in standard colleges will be received without examination, but may be conditioned on such professional subjects as the Advanced Standing Committee may determine.

Minimum Residence and Minimum Hours—No diploma of the Teachers College is granted unless the student has done at least three quarters of resident work with the College. No diploma is granted to any student who has earned less than forty-eight hours in this institution or one year of credit.

No person who has already received one diploma or certificate from this institution will be permitted to receive another diploma or certificate until such person shall have earned the full number of hours required for such recognition, and completed not less than one additional quarter of resident work in this institution.

Requirements for Graduation—Ninety-six hours in addition to those required for graduation from the Junior College are required for the A.B. degree. The total required credit for this degree is 192 hours, or four years of work.

A certificate which is a life license to teach in Colorado, and which is accepted by most states of the West, is granted upon completion of the third year, if applied for by the student.

Diploma and Degree—At the end of the fourth year of study, 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 Senior College.

Applications for graduation must be filed at least 30 days before the close of the quarter in which the diploma is to be granted.

Applications for exemption from practice teaching in the Elementary School should be sent to the Director of the Elementary School. Testimonials concerning the teaching experience should accompany the application.

Practice Teaching in the Industrial High School—The practice teaching in the high school consists of three items: 1. The Demonstration Class. The student-teachers observe the teaching of a class thru one quarter. 2. The Class in Methodology. The student-teacher enrolls for H. S. 105 with the principal of the high school for one quarter. 3. Practice Teaching. Teachers who have observed a term and have taken the required course in Methodology are given entire charge of a class. The training teacher is present in the capacity of Critic Teacher.

Exemption—(1) No person who desires to become a high school teacher will be excused from all the high school requirements. (2) Students who have had three years of successful experience in a high school of acceptable grade, together with those who have attained marked success in the elementary field, may be excused from a part of the requirements. (3) Application for exemption from the high school teaching should be made to the Principal of the High School Department. Testimonials should accompany each request for exemption.

Minimum Time in Residence—The present requirement of three terms as the minimum residence requirement is to be continued for all students enrolled and in residence previous to July 1, 1917, until they have received their first diploma, if they so elect.

Students matriculated and in residence previous to July 1, 1917, will be allowed to complete their work for a degree under the regulations which were in effect at the time of their first residence, provided that this resolution shall not bind the college to grant a diploma for three six-weeks terms in residence at any time after the summer quarter of 1919.

The Graduate College

THOMAS C. McCracken, Ph.D., Dean

The Graduate College 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 the Colorado State Teachers College upon 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 their approval before the opening of the quarter. Such blanks may be secured by addressing the 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 work are required in residence at the College in advance of 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 of 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 College 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 College, 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 College. 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.

*For additional general information see annual Catalog for 1919-20.

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.

The Courses of Study

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 thru the medium of a single course of study or a scattered elective course.

To meet the requirements for teachers of all the kinds of schools the college provides the following courses of study, and asks each student entering in June, 1919, or after, to select a course definitely and to consult the head of the department directing that course of study as a permanent adviser. Students who registered previous to that date may continue with the old course of study and complete that course if they can do so within reasonable limits of time; 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 of Arts in Education will be granted. The diploma is a Colorado life certificate. Each course is so arranged that it may be divided into Junior College (two years) and Senior College (two additional years). The Junior College course may be completed in six quarters. The student who chooses to be graduated at the end of the Junior College 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. Choose the department in which you wish to specialize:

- | | |
|---|--|
| 1. Agriculture (2 yrs. only) | 14. Intermediate Grades. |
| 2. Biological. | 15. Industrial Arts. |
| 3. Chemistry. | 16. Kindergarten. |
| 4. Commercial Arts. | 17. Latin and Mythology. |
| 5. County Schools. | 18. Literature and English. |
| 6. Education. | 19. Mathematics. |
| 7. Educational Psychology. | 20. Modern Foreign Language. |
| 8. Fine and Applied Arts. | 21. Music. |
| 9. Geology, Physiography and Geography. | 22. Oral English. |
| 10. Grammar Grades. | 23. Physical Education and Playground Supervision. |
| 11. History and Political Science. | 24. Physics. |
| 12. Household Art. | 25. Primary Grades. |
| 13. Household Science. | 26. Social Sciences. |

Each of the courses differs somewhat from the others in the subjects required by the department, but each course contains the following subjects. See the Year Book for 1919 for the details of the various courses.

JUNIOR COLLEGE

First Year

1. The Professional Core:	Hours.
Biol. 2.—Educational Biology (Bionomics).....	3
Ed. 8.—Educational Values.....	3
Soc. 3.—Educational Sociology.....	3

- 2. Other Required Subjects:**
 Eng. 4.—Speaking and Writing (Students may be excused by proving proficiency)..... 3
 Hyg. 1.—Personal Hygiene (required only of women students)..... 1
 Phys. Ed.—Physical Exercise (required of all students at least two-thirds of the quarters they are in residence).
- 3. Subjects Required by the Department, and Elective Subjects** 35

Second Year.

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|----------------------------------|---|--------|
| 1. The Professional Core: | | Hours. |
| | Psych. 2a.—Educational Psychology..... | 3 |
| | Psych. 2b.—Ed. Psychology (continued)..... | 3 |
| | Ed. 10.—The Elementary School Curriculum..... | 3 |
| | Pol. Sc. 30.—Political Adjustment..... | 3 |
- 2. Other Required Subjects:**
 Phys. Ed.—Physical Exercise Courses (at least two-thirds of the number of quarters in residence.
 The following work is required of all students who expect to take the Junior College diploma:
 Observation and Practice Teaching..... 8
- 3. Subjects Required by the Department, and Elective Subjects**..... 28
 Students may graduate and receive the Colorado Life State Certificate at the end of the two-year course.

SENIOR COLLEGE

Third Year.

- 1. The Professional Core:**
 Psych. 104.—Psychology of the Elementary School Subjects, or Psych. 105.—Psychology of the High School Subjects..... 4
 Soc. 105.—Social Maladjustments..... 4
- 2. Other Required Subjects:**
 Phys. Ed.—Physical Exercise Courses (at least two-thirds of the number of quarters in residence).
- 3. Courses Required by the Department, and Elective Courses**..... 40
- 4. In the Third or Fourth Year**
 The following courses are required of those who expect to teach in high schools:
 H. S. 105.—Principles of High School Teaching..... 4
 H. S. 103.—Practice Teaching in the High School..... 4

Fourth Year.

- | | | |
|----------------------------------|---|--------|
| 1. The Professional Core: | | Hours. |
| | Ed. 111.—Principles of Education..... | 4 |
| | Ed. 116.—The High School Curriculum..... | 4 |
| | Psych. 108.—Educational Tests and Measurements..... | 3 |
| | (Ed. 116 and Psych. 105 may be omitted by students who do not expect to become High School teachers). | |
- 2. Other Required Courses:**
 Phys. Ed.—Physical Exercise Courses (at least two-thirds of number of quarters in residence).
- 3. Courses Required by the Department, and Elective Courses**..... 37

Junior College.

- Summary:**
 The Professional Core..... 21
 Observation and Teaching..... 8
 English and Hygiene..... 4
 Major Subject and Electives..... 63

Senior College.

- | | | |
|--|----------------------------------|------------|
| | The Professional Core..... | 19 |
| | Observation and Teaching..... | 8 |
| | Major Subject and Electives..... | 69 |
| | Total | 192 |

BIOLOGICAL SCIENCES

LEVERETT ALLEN ADAMS, Ph.D.

LLOYD ACKERMAN, A.B.

The department of Biological Sciences occupies a lecture room and two laboratories on the third floor of the main building. It is equipped with microscopes, lantern slide collection, and type specimens for the work of zoology and botany. A museum for the use of nature work is located on the first floor of the Library Building.

Biology**2. Bionomics**—Required in Junior College. Four hours.

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. Dr. Adams and Dr. Hill.

Zoology**5. Bird Study**—Four hours, M., T., W., Th. Dr. Adams.

A study of the Colorado birds. Consists of work in the field, combined with the laboratory and museum. The course is not a scientific study of birds, but rather, as the name implies, a study of the histories, habits, habitat and economic importance. Students are expected to use three hours Saturday morning for field trips. Bring outing clothes, shoes, and field glasses if you have them. To be taken one or both half-quarters.

Botany**2. General Botany**—Four hours. 7 o'clock, M., T., W., T., F. Mr. Ackerman.

A course dealing with the essential and foundational points of botany. Emphasis is placed upon the flowering plants. Designed for those who have had little or no training in botany. Field, laboratory and lecture work.

3. Systematic Botany—3 hours credit. 8 o'clock, M., T., W., T., F. Mr. Ackerman.

A Laboratory and Field course in which the summer flowers of this region are studied and classified. Prerequisite: Some course in botany.

Biotics**101. History of Man**—Two hours. First half-quarter. Eight o'clock, M., T. Dr. Adams.

History of man and his body from the standpoint of evolution. Derivation of the skeleton, organs and different systems. Study of the remains of the prehistoric men, their form and evolutionary significance.

102. Heredity—Two hours. Second half-quarter. Eight o'clock, M., T.

This course takes up heredity and its significance. Study of the laws governing it and their importance to the future of the races. Relation of biological laws and education. Dr. Adams and Dr. Hill.

Nature Study**Nature Study 1**—Four hours. Full quarter or half-quarter. Nine o'clock, M., T., W., T. Dr. Adams.

Aims and principles of nature study, teaching nature study in the grades, making of nature study programs, topics of the different seasons. The practical work consists of a study of fifty topics with outlines for their presentation in the lower grades. Students are supplied with their outlines. This work is from both the animal and plant field. Much of the work is carried on out of doors and for this reason students should bring outing suits and shoes.

Bacteriology**1. Bacteria, Yeasts and Moulds**—Required of Household Science Majors. Four hours. Eleven o'clock, M., T., W., T., F.

Lectures and laboratory work on injurious and beneficial bacteria, yeasts, and molds, likely to be found in the home or in the domestic science laboratory.

Courses 101 and 102 are suggested for graduate and senior college students.

CHEMISTRY

LOUIS A. BELL, B.S., A.M.

The rapid development of courses of instruction in Home Economics in the High Schools has created the necessity and demand for better trained teachers of Chemistry and Home Economics. More comprehensive and practical courses in Chemistry are being given in the High Schools than heretofore, and, likewise, teachers of Home Economics with some knowledge of Chemistry are being demanded.

In the course program offered by the Chemistry Department the teacher of Chemistry will find an opportunity to augment his or her knowledge of this subject; those seeking chemistry as a part of a liberal education will find the courses suited to their needs; prospective students of chemistry will find the program especially suited to their needs; and Home Economic students of the regular school year will be enabled to pursue one or more of the required chemistry courses.

The increasing importance of the applications of chemistry to household affairs, and the woeful lack of preparation of the United States in the chemical industries during the European War, has led to intensified interest and application in this subject during the past few years. It is the duty of every teacher to know something of the source, preparation, and properties of foods, dyes, poisons, etc., and of the spoilage of edibles in the home.

Following is a list and description of the course offered:

4. General Chemistry—Four hours, full quarter.

A study of the principles of chemistry and of the non-metals. Two lectures and two laboratory periods.

5. General Chemistry—Four hours, full quarter.

A continuation of course 4 with an introduction to Organic Chemistry. This course leads up to a study of the metals. Two lectures, two laboratory periods.

Students having completed course 4 or its equivalent will be permitted to take course 5.

113. Food Chemistry—Four hours, full quarter.

A study of foods, detection of adulterants, metabolism, and dietary list. Two lectures and two laboratory periods. Prerequisites 4, 5, 110.

114. Quantitative Analysis—Four hours, half or full quarter.

Gravimetric and Volumetric analysis. A consultation and laboratory course. Eight hours attendance. Prerequisites, courses 4, 5, 7.

7. Qualitative Analysis—Four hours, half or full quarter.

A laboratory and consultation course on the separation and identification of the common elements. Eight hours attendance.

Note: Attendance of two hours required for each laboratory period.

COUNTY SCHOOLS

JOSEPH H. SHRIBER, A.B., Director

MABEL COCHRAN, Summer, 1919

H. W. FOGHT, Ph.D., Summer, 1919

Function—The function of the County Schools Department is to train teachers for county schools so that the numerous characteristic difficulties of management, administration and teaching may be met effectively; to adapt the subject-matter to the experience of country children; to have expert knowledge of the sociological conditions pre-

vailing in country life; to assist country folks to hold their own against the artificial attractions of town and city by supplying factors for making country life adequately satisfying; and finally to help enrich and increase the sources of food by conserving the life blood of the nation.

26. The Rural School Curriculum and the Community—Three hours, first half-quarter. Mr. Shriber.

Open to Senior College students. This course will treat of the problems of the teacher who desires to instruct country children in terms of their own environment. Methods and materials for such instruction will be outlined and discussed. Ways and means whereby stereotyped courses of study, in the various grade subjects, may be vitalized and made more significant to country children will be sought.

106. Rural Sociology—Three hours, first half-quarter.

A study of rural social conditions, a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a positive force in rural progress.

6. County School Methods—Three hours, either half-quarter.

Mr. Shriber.

The application of methods to a rural school, the organization of material, class-room management, and effective presentation will be discussed. This course will aim to discover points of difference between the graded and the ungraded school in respect to the utility of pertinent methods used in teaching the various subjects in a rural and village school. (See School of Reviews.)

107. Rural Seminar—Two hours, second half-quarter.

Mr. Shriber.

The problem of the rural school in its relation to the teacher, the child, the school board and the community will be discussed. The daily program will be considered in its application to a school of eight grades.

25. Administration of Rural Schools—Three hours, full quarter.

Mr. Shriber.

See description in the department of education.

130. Rural Education—Three hours. For full description of this course, see Education Department. Second half-quarter.

Mr. Shriber.

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. 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.

Demonstration School

1. Observation—For teachers who desire special preparation for County Schools, the West-side school, two miles west of the campus and belonging to the Greeley system of schools, will be used as a Rural Demonstration School for the summer quarter. This is a one-teacher school of two rooms and basement. Its favorable location in a country environment, with a five-acre tract for agricultural projects, make it especially desirable for the demonstration of the possibilities of this type of school. Miss Mabel Cochran, a skillful teacher, who has had successful experience in one-teacher schools, will be the instructor. The work in the school for students is almost wholly an observation course. Students will be conveyed, at least once each week, to the school in groups, for the purpose of study and observation.

2. Observation—This is a part of the course mentioned above. One part cannot be taken without the other. Preparation for Observation 1 is based upon observation made in the Demonstration School.

relative to correct methods used, organization, management, utility of subject matter, program, and the community in its relation to the school. **The course is intended primarily for students who are unable to register for the school year following the summer quarter.** Observation in the Demonstration School and Observation 1 will receive four hours credit. Classes formed for this course will meet at 2:30-3:20 Mondays. Observations in the Rural Demonstration School will be made in the afternoons of Tuesdays, Wednesdays and Thursdays and on other days if thought desirable. This arrangement will not conflict with the regular class work at the college.

Note—Students having met the College entrance requirements will receive credit for work done in the Demonstration School, in the College. Others will be given credit in the State Industrial High School.

Public School Subjects

Students taking these courses will select subjects desired, from the Public School subjects, and credit will be given in the State Industrial High School to those who have not completed their high school course.

Summer Conference—The regular summer conference of County Superintendents will be held during the week beginning July 14th.

Harold W. Foght, Specialist in Rural School Practice of the United States Bureau of Education and author of the "American Rural School," "The Rural Teacher and His Work," "Rural Denmark and Its Schools," etc., has been secured for the **last two weeks of the first half of the Summer Quarter.** He will deliver class room lectures to students, electing any of the Rural-Teacher-Training courses and will also be the principal speaker at the Conference of County Superintendents. All students interested in rural school problems are invited to hear the conference lectures and general program.

Dr. Foght has had rare opportunity in the Government Service to study at first hand school conditions in every state in the Union. He is one of the great leaders in the movement to provide equal educational opportunities for all children, whether they live in the country or city.

EDUCATION

THOMAS C. MCCracken, Ph.D.	
FRANK L. WRIGHT, A.M.	
SAMUEL MILO HADDEN, A.M.	
JOSEPH H. SHRIBER, A.B.	
HELEN GILPIN-BROWN, A.B.	
THOMAS H. BRIGGS, Ph.D.	(Summer, 1919)
GEORGE D. STRAYER, Ph.D.	(Summer, 1919)
HARVEY S. GRUVER, A.M.	(Summer, 1919)
FRANKLIN B. DYER, Litt.D.	(Summer, 1919)
OSCAR T. CORSON, A.M., LL.D.	(Summer, 1919)
WILLIAM A. WIRT, Ph.D.	(Summer, 1919)
ELMER A. HOTCHKISS, A.M.	(Summer, 1919)

8. Educational Values—Four hours. Required of all students, first year. Mr. Wright.

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 to developing the attitude of looking for the material which is of greatest educational value to the child.

10. The Elementary School Curriculum—Four hours. Required of all students, second year. Mr. Gruver.

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.

15. Vocational Guidance—Two hours. Four days a week
Second half-quarter. Dr. McCracken.

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.

25. Administration of Rural and Village Schools—Three hours. Mr. Shriber.

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, teachers, 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.

27. General Education—One hour each half-quarter. Required of all undergraduate students.

This course will consist of a series of daily lectures by men eminent in the field of education. Lecturers: Dr. G. D. Strayer, Dr. T. H. Briggs, Hon. S. D. Fess, Dr. Leon Vincent, Dr. W. A. Wirt, Dr. Lincoln Hulley, Dr. H. W. Hill, Dr. O. T. Corson, Dr. Edward H. Griggs, Dr. E. A. Ross.

37. Ethical Culture—Two hours. Either half-quarter. Four days a week. Mrs. Gilpin-Brown.

A course designed for instruction in the etiquette of everyday life, and a general appreciation of culture, and its necessity in the training of a teacher. The Dean of Women hopes to get in touch with the personal side of each student. Questions will be requested from the members of the class, and there will be a friendly exchange of ideas with reference to conduct. Lectures, book and magazine reviews and reports.

108. Educational Supervision—Two hours each half-quarter. Four days a week.

Dr. Strayer, Mr. Hotchkiss, Dr. Dyer, Dr. Wirt and Dr. Corson.

This course is intended for advanced students who are preparing to be supervisors. It will deal with various problems of supervision.

109. Education and the War—One hour. Two days a week, first half quarter. Dr. McCracken.

This course will deal with educational readjustments.

111. Principles of Education—Four hours. Senior College Required. Mr. Wright.

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.

113. Organization and Administration of the Junior High School—Three hours, either half-quarter. Required of Grammar Grade Majors and in the Supervisor's Course. Five days a week.

Dr. Briggs and Mr. Gruver.

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 stand-points, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.

116. The High School Curriculum—Four hours. Required fourth year. Dr. Briggs and Dr. Dyer.

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. Dr. Briggs and Dr. Dyer.

142. Educational Administration—Two hours each half-quarter. Four days a week.

Dr. Strayer, Dr. Dyer, Mr. Hotchkiss, Dr. Wirt and Dr. Corson.

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—Two hours. Four days a week, first half-quarter. Dr. McCracken.

This course treats of the efforts of the Federal Government to aid the states in education.

Courses Primarily Graduate College

217. Vocational Education—Three hours. One and one-half hours credit for each half-quarter. Three days a week.

Mr. Hadden.

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 and solve 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. Open only to students enrolled for the entire quarter.

Mr. Wright and Dr. McCracken.

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. Conference course at hours convenient to instructor and student.

229. Current Educational Thought—Two hours. Four days a week, second half-quarter. Dr. McCracken.

This course will consist of reviews and discussions of recent books in the various fields of education.

241. Master's Thesis Course—Hours dependent upon the amount of work done. Dr. McCracken.

The student who expects to work on his Master's thesis will register for this course no matter for which department the thesis is being prepared.

246. Educational Problems—Graduate seminar. Required of all graduate students. Students other than graduates may be admitted upon permission of instructor. One hour credit each half-quarter.

This course will consist of discussions of educational problems. Dr. McCracken and others, including those giving the general lectures and other Summer instructors.

EDUCATIONAL PSYCHOLOGY

JACOB D. HEILMAN, Ph.D.
MARVIN F. BEESON, Ph.D.

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 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 individual 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 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 feebleminded children. Students who elect either of these curricula are advised to take at least six courses of the curriculum of some other department. See year Book for outline of curricula.

1. Child Hygiene—First year. Four hours, full quarter. Required of students who specialize in any of the curricula of the Training School or of the County Schools.

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—Second year. Eight hours, full quarter required.

The purposes of this course are: (a) to make the student familiar with the child's capacities and native responses and show him how they, and the nature and order of their development, are involved in the process of educating the child; (b) to acquaint the student with the various modes of learning and the conditions which facilitate learning; (c) to discuss those conditions of the schoolroom and school activities which avoid fatigue and promote work; (d) to point out the significance of individual differences for instruction and the arrangement of school work.

The following topics will be treated in two courses:

- (a) The child's native equipment, and mental work and fatigue.
- (b) The psychology of learning and individual differences.

103. Child Development—Second year. Four hours, full quarter.

The purposes of the 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 sense-perception; instruction in observation; the development of memory, imagination and thinking; the psychology of lying; the growth of feelings and ideals; volition, suggestion and interest.

104. Psychology of Elementary School Subjects—Third year.
Four hours, full quarter required.

The purposes of the 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 the individual differences in children; (d) to criticise methods of instruction in the light of individual requirements, the results of experimental studies, and the mental processes involved in a given subject. Topics treated: the elementary school subjects.

107. Mental Tests—Four hours, full quarter.

Dr. Heilman and Dr. Terman.

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, vocational and psychological significance of tests. Topics treated: various forms of individual tests such as the Binet series and their modifications; various forms of group tests such as the Otis and Pressy tests; tests of perception, memory, imagination, thinking, attention, psycho-motor control and various combinations of mental processes.

108. Educational Tests and Measurements—Four hours, full quarter required.

Dr. Beeson.

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 of the other elementary school subjects.

111. Speech Defects—Two hours, either half-quarter.

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

213. Conference, Seminar and Laboratory Courses—Two or more hours.

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.

ELEMENTARY AGRICULTURE

W. H. HARGROVE, Pd.B., B.S. in Agr., B.S. in Ag. Ed.

The work in agriculture treats of the underlying principles of plant and animal culture and their improvement. It is designed to interest students in and put them in touch with the things of rural life. Practical work in gardening, visits to adjoining ranch and dairy, and laboratory work in soil examination and seed testing, help the student to a practical understanding of the subject.

1a. General Agriculture. Farm Crops—Four hours, full quarter, or two hours either half-quarter. Fee, 50 cents.

This course will include the study of corn, wheat, oats, rye, barley, and the pasture and forage crops. The adaptation and cultural methods will be noted and judging of the grains from standpoint of seed selection will be made.

1b. General Agriculture. Farm Animals—Four hours, four days, full quarter or two hours either half-quarter. Fee, 50 cents.

Horses, beef cattle, dairy cattle, swine, sheep and poultry will be studied from the standpoint of market and breed types. Practice in judging

of all the different animals, also testing of milk for butter fat and the study of cream separators. By taking courses 1a and 1b the student can cover the field of general agriculture in one summer quarter.

3. Agricultural Nature Study—Two hours, four days. Will be offered each half-quarter.

This is a brief course for those who are interested in primary and grade work. It deals with the agricultural side of nature study. Farm crops, domestic animals, and soils are considered briefly. Some attention is given to school gardens.

6. Methods in School Gardening and Truck Crops—Four hours. Four days, full quarter. Two hours either half-quarter.

A discussion of the general principles of gardening. The adaptability of the different garden crops for home use and commercial production. Methods of conducting **garden clubs**. Garden making.

120. Soils and Soil Fertility—Four hours, four days, full quarter, or two hours either half-quarter. Fee, 50 cents.

A study of the origin, classification, structure, and texture of soils, conservation of the fertility, crop requirements, stable and green manures. Management of soils under irrigated and dry land farming. Field and laboratory practice.

130. Methods of Teaching Agriculture—Two hours, four days, will be offered each half-quarter.

In this course a selection and adaptation of materials and subject matter to the work in Agriculture is made. The methods of teaching the different subjects are fully discussed. The organizing and carrying on of home projects and club work is emphasized. The opportunity is offered in this course for individual research along the line of courses of study in agriculture for either the grades or the high school.

ELEMENTARY EDUCATION

E. A. HOTCHKISS, Professor of Elementary Education and Director of the Training School

MILDRED DEERING JULIAN, Kindergarten and Kindergarten Methods
LELA AULTMAN, First Grade and Primary Methods
BELLA B. SIBLEY, Second Grade and Primary Methods
CLARA WHEELER, Third Grade and Primary Methods
HULDA A. DILLING, Fourth Grade and Primary Methods
ANNA BEISWENGER, Fifth Grade and Intermediate Methods
ELIZABETH HAYS KENDEL, Junior High and Junior Methods
BERNICE ORNDORFF, Junior High and Junior Methods
EMMA T. HEMLEPP, Junior High and Junior Methods
LILA MAY ROSE, Elementary School Music
ELIZABETH CLASBY, Home Economics
GRACE BAKER, Applied Arts.

This department offers to Summer School students a complete Elementary training and demonstration school, including kindergarten. Here will be demonstrated methods of teaching the children of each grade; there will be an outdoor school on the campus where the children do regular school work as well as take recreation; the "project" method of teaching will be on trial in some of the grades; opportunity for studying Junior High problems will be offered in the upper grammar grades; vocational work in wood, mechanics, sewing, cooking, commercial branches, etc., will be demonstrated as to value and practicability in the elementary school; and an adjustment of the day's work and programs in a manner that seems best for summer work in Colorado will be given.

Opportunity for practice teaching will be given a limited number. Only those who graduate this summer may teach.

The following courses in methods will be offered:

1. Elementary School Supervision and Principles of Teaching—Daily. Either half-quarter. Three hours credit. Substitute for Training School I. E. A. Hotchkiss.

This course will consist of readings, lectures, discussions, and observations of class room work in the Training School. It will deal with such topics as Class Room Organization; Standards for Judging both the Curriculum and Class Room Instruction; Teaching Children to Study; and Principles for Criticisms on the part of Supervisors and Superintendents. Students who have served their period of apprenticeship in the elementary school and who have done work of an exceptionally high character may be allowed to assist in the supervision of teaching in the training department. They will still work under the direction of the training teachers, but will have greater responsibilities and a larger share in the administrative work of the school. This training is intended for those seeking the more responsible positions in elementary school work and also for those who are planning to become training teachers for normal schools.

3. Primary Methods—Daily. First half-quarter. Three hours credit. This course will be offered for students who are planning to be in school the first half-quarter only. Aultman.

3. Primary Methods—Four hours per week. Entire summer quarter. Four hours credit. This course is intended for students who are planning to be in school the entire summer quarter. Sibley.

4. Primary Methods—Daily. First half-quarter. Three hours credit. This course will be offered for students who are planning to be in school the first half-quarter only. Wheeler.

4. Primary Methods—Four hours per week. Entire Summer quarter. Four hours credit. This course is planned for students who are planning to be in school the entire summer quarter. Dilling.

5. Intermediate Methods—Four hours per week. Entire Summer quarter. Two hours credit each half-quarter. Beiswenger.

6. Junior High School Methods—Four hours per week. Entire summer quarter. Two hours credit each half-quarter. Kendel, Orndorff, Hemlepp.

31. Literature and Story-telling in the Kindergarten and Primary Grades—Daily. First half-quarter. Three hours credit. Julian.

A study and classification of the different types of stories according to their fitness for various ages and purposes; a study of the educational values of stories for children and of the possibilities of creative work by children; adaptation and selection of a graded list of stories.

39. The Relation of the Kindergarten and the Primary Grades—Daily. Second half-quarter. Three hours credit. Julian.

A comparison of the aims, principles, methods and materials of the Kindergarten and primary grades; a study of the adaptation of the materials and subject-matter to meet the needs of the child.

SECONDARY EDUCATION

JOHN R. BELL, A.M., D.Litt., Prin.
 JEAN CROSBY, A.B., Preceptress, History
 W. HECTOR DODDS, A.B., Oral English
 CHARLOTTE HANNO, A.B., Modern Languages
 LUCILLE HILDEBRAND, A.B., Mathematics
 GLADYS KNOTT, M.S., Science
 LUCY McLANE, A.B., English
 JENNIE TRESSEL, A.B., Normal Courses
 R. J. WORLEY, Typewriting, Shorthand
 ESTHER GUNNISON, A.B., Dramatic Interpretation

Courses Open to High School Students

Courses will be offered in science, mathematics, English literature, history, modern languages, and those vocational subjects which best fit into a well-rounded high school education.

The State High School of Industrial Arts makes it possible, by means of its summer courses, for aspiring young men and women to save time, and thus shorten the period of preparation for life. The teaching force is excellent. The work is done on a campus which is conceded to be one of the most beautiful in the entire country and under circumstances that are peculiarly conducive to study.

Why not begin a high school course this summer, or make progress on one already begun? No fees will be charged regular high school students for the summer term. Full credit will be given for the work done.

The Ungraded School for Adults (High School Credit)

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 this school is to open the door of opportunity to just such students. The work will be evaluated according to the strength shown and the individual will be classified, after sufficient time has elapsed, in accordance with the power demonstrated without the necessity of completing each omitted step.

The experiences of life have a very high educational value. The various types of schools of America have been slow to recognize the real significance of the fact that life is itself a school in which character can be developed and mental growth attained. By doing any kind of work, and doing it well, the mind is made stronger and the character more dependable. The individual of twenty years or more who has taught, worked on a farm, or in a factory, during the years that other boys and girls are going to school, usually manifests, upon returning to school, far more mental power than the pupils, fourteen or fifteen years of age, with whom he has been compelled to associate in the work of the classroom.

The Ungraded School for Adults provides a special school for adult 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. And, most significant of all, it substitutes the power-unit for the time-unit. No one can enter the Ungraded School for Adults who has not reached the age of eighteen years.

Practice Teaching

The High School Department of The State Teachers College is intended as a training school for such students as desire to become high school teachers.

The demonstration classes give to those who expect to enter the field of secondary education an opportunity to see experts teach. The program will be arranged so that every important phase of the high school curriculum will be presented.

There will be frequent conferences between the educator in charge of a given class and the student teachers who are observing the work. At these conferences both the methods of instruction and the lesson content will be freely discussed and the reason for each step taken will be clearly demonstrated.

Courses Open to Senior College and Graduate Students

103. Student-Teaching in the High School—Four hours. Every Quarter.

In this course the student-teacher is permitted to observe an expert teach the particular subject in which she desires to specialize. During this period of observation she is expected to prepare two model lesson plans each week, one of which is to be presented before the training teacher in the form of a model lesson. She is expected, also, to know thoroly each lesson that is assigned to the class by the teacher in charge and to be ready to answer questions and discuss topics at any time. The amount of student teaching is gradually increased.

105. Principles of High School Teaching—Four hours.

This is a course in methodology as the subject relates itself to the curriculum of secondary schools. It is taught by the Principal of the High School Department but each Department Head assists in the courses and every phase of work that is being done in the high school is discussed in the light of the more recent experiments and developments in secondary education.

The course in methodology is an integral part of the plan for training high school teachers and, therefore, is required of all who expect to enter this field. Course 105 is a continuation of 103 and takes the place of a term of practice teaching.

107. Advanced Course in High School Student Teaching—Four hours.

Persons who have completed in a satisfactory manner courses 103 and course 105 may be selected by the Principal of the High School and given entire charge of a class (the training teacher being present in the capacity of a critic teacher).

This course is intended for individuals who have shown exceptional talent in practice teaching and in mastering the "Principals of High School Teaching" and who want the opportunity to demonstrate their fitness for the better positions in the field of secondary education.

109. High School Supervision—Hours to be arranged.

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.

FINE AND APPLIED ARTS

GRACE M. BAKER
EDWARD KAMINSKI

The department of Fine and Applied Arts aims to prepare students to meet the demands upon regular teachers in elementary and high schools and to train special students to act as departmental teachers and supervisors of Fine and Applied Arts.

The method courses for grade teachers are designed to emphasize practice in class room problems.

2. Primary Grade Methods—Four hours.

Freehand drawing, elementary perspective adapted to lower grade illustrations, color, elementary design, animal drawing, nature, blackboard drawing.

13. Applied Art for Primary Grades—Four hours.

Weaving, folding, cutting, stick printing, problems for special days, clay modeling, sand table projects.

3. Freehand Drawing—Four hours.

Perspective, drawing from objects and casts, nature drawing. Mediums, charcoal, pencil, colored chalk.

101. Drawing from Life.

Sketching from costumed model.

5. Water Color Painting—Three hours.

Studies from still life, nature and landscape.

1. Grammar Grade Methods.

Elementary perspective, object drawing, elementary design, coloration of art with the other subjects of the curriculum.

7. Constructive Design.

Design and its application to problems in wood, block print, leather, toys and basketry.

8. Pottery.

Decorative tiles, bowls, vases, etc., are made. The department is equipped with a modern kiln, and the work of students is fired and glazed.

102. Commercial Art.

Lettering, posters and pictorial advertising, design and color.

103. Antique.

Charcoal drawing from casts in light and shade and in outline.

GEOLOGY, PHYSIOGRAPHY AND GEOGRAPHY

GEORGE A. BARKER, M.S.

103. Climatology—Four hours, full quarter. Two hours, either half-quarter.

This course is an attempt to treat climate from the standpoint of the distinctive American climatic provinces and the similar provinces abroad. This comparison of the Californian, Oregonian and other similar belts will be followed the second term by the study of the temporary phase of climate, the weather. Required in grammar grade courses.

12. Geography Method—Two hours, completing course first half-quarter. Course repeated second half-quarter.

This is the course required of students in the county school course.

2. Physical Geography—Four hours, full quarter. Two hours either half-quarter.

A general course in physical geography. During the first term the atmosphere and the ocean will be taken up, during the second term land forms. Each half-quarter may be taken without reference to the other.

8. Human Geography—Four hours, full quarter. Two hours, either quarter.

The relation of man to his environmental realms as for instance, deserts, tropical forests, mountains, etc. Required in Intermediate, Sociology and History Courses.

HISTORY AND POLITICAL SCIENCE

EDWIN B. SMITH, B.S., A.M.

HON. SIMEON D. FESS, Congressman, Ohio (Summer, 1919)

This department offers courses in the two fields, that of history and political science, of such nature that they meet the needs of teachers in the elementary and the high schools. The courses are arranged to cover the materials and the methods which are most helpful in presenting the subjects of history and civics in the schools.

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. History furnishes the background for an appreciation of the varied interests of the school; it is the basis of much of our thinking; and more and more it is assuming a prominent place in our daily experiences.

The increasing interest in civics or citizenship is a marked result of the war conditions. All phases of governmental activity are grow-

ing in importance. These features of our experience are reflected in the school programs. The courses offered in this field are of practical value to public school teachers.

10. Social and Industrial History of the United States—Four hours. Smith.

The current social and industrial conditions in the United States will be traced from their beginnings, and the European conditions which furnish traceable influences will be considered. Some topics are suggested: the natural resources; the influence of cheap land; the effect of invention, machinery, and science; the development of agriculture and manufacture; and the rise of great industries, capitalism, business combination, and labor organization.

13. The Teaching of History in the Elementary School—Two hours. Smith.

The history of history instruction in elementary schools; the aims and values of history teaching; the courses of study, past, present and projected for the future, covering both elementary and high schools; methods and materials for the elementary grades; testing results; and school problems related to history; such as, the place of history in the curriculum, and relation of history to other subjects.

26. The Teaching of Civics in the Elementary School—Two hours. Smith.

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; and methods and materials for the various grades of instruction.

30. Political Adjustment—Four hours. Fess and Smith.

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 the autocratic, to the opportunities and obligations connected with citizenship, to the place which public opinion holds in a republican government, and to the creating of American spirit. A definite effort is made to show relations between the individual, education, and the forms and processes of government.

123. International Relations—Four hours. Fess and Smith.

A study of the basic principles of international relations, traced historically; the development and application of these principles in recent European relations; American international ideals, including the Monroe Doctrine, Pan-Americanism, and the League of Nations.

215. Research in History and Political Science.

Students doing graduate work in history and political science may register in this course. By conference desired work will be arranged.

HOME ECONOMICS

HELEN PAYNE, B.S., Director
GLADYS SCHARFENSTEIN, Ph.B.
WILKIE LEGGETT, B.S.
MARGARET M. ROUDEBUSH, A.B.

The course in Home Economics is planned to meet the need of those wishing to teach these subjects in elementary or high schools and for regular students to substitute in the yearly schedule.

The teachers in the department will be glad to help in working out special problems that are brought to their attention.

H. A. 4. Dressmaking—Four hours, full quarter. Double period. Miss Roudebush.

Development of method of procedure, accuracy, speed and manipulation in handling dressmaking problems.

H. A. 5. Millinery—Four hours, full quarter. Double period.
Miss Roudebush.

Study of basic design principles applied to the hat and silhouette; practical shop methods of construction with new materials, remodeling and copying designs in fabrics.

H. A. 7. Dressmaking Practice—Four hours, full quarter.
Double period. Miss Scharfenstein.

Practice in correct method of work and technic in construction of cotton or linen tailor fabrics; commercial patterns.

H. A. 103. Advanced Arts Crafts—Four hours, full quarter.
Double period. Miss Scharfenstein.

Application of color and form to articles for the home; emphasis on design, also on comparative costs of fabrics used in construction work of course.

H. A. 112. Costume Design—Four hours, full quarter. Double period.
Miss Roudebush.

Study of the lay figure in the construction of designs for costumes and modeling of original designs for type figures.

H. A. 117. Interior Decoration—Four hours, full quarter.
Miss Scharfenstein.

Application of principles of design to specific problems of the individual rooms of a house. Demonstrations in practice cottage.

H. S. 3. Cooking and Serving—Four hours, full quarter. Double period.
Miss Leggett.

Planning, preparation and serving of meals. Special attention is given to care of dining room and table service.

H. S. 6. Catering—Four hours, full quarter. Double period.
Miss Leggett.

Practice in quantity buying and serving is especially emphasized. Menus are planned and served for either private or college functions.

H. S. 7. Housewifery and Sanitation—Four hours, full quarter.
Miss Leggett.

Study of methods of cleaning, sanitation and health, house furnishings and appliances.

H. S. 8. Food Production—Four hours, full quarter.
Miss Payne.

Study of production, storage, transportation, composition and use of foods. Special work on current food problems.

H. S. 9. Household Management—Four hours, full quarter.
Miss Payne.

Management and care of practice cottage for one month; study of evolution of family life, family budgets, women's work and relation of home to community.

H. S. 113. Dietetics—Four hours, full quarter. Double period.
Miss Payne.

Study of food values, costs and adaptation of food to children and adults in kind and amounts.

HYGIENE AND ETHICS

HELEN GILPIN-BROWN, A.B., Dean of Women

In the courses given below, it is hoped that two great essentials in the training of a teacher—health and personality—may be fostered

and improved. The young woman who starts out upon her teaching career with a good physical foundation, and the advantage of a character developed through right ideas of conduct, has two assets which are invaluable.

Hygiene 1. One hour. Four days a week, each half-quarter.

This course has been organized to answer a need in College for instruction along the line of every-day healthful living. The course will cover the fundamental facts relating to personal health and efficiency. Food and feeding habits, clothing, housing and ventilation, baths and bathing, muscular activity, work, rest, recreation, and avoidance of communicable disease as a health problem, etc., will form the subject matter of the Course. Lectures and discussions.

Ed. 37. Ethical Culture—See description in the Department of Education.

LATIN AND MYTHOLOGY

JAMES HARVEY HAYES, A.M.

For the Summer Quarter of 1919, the Department of Latin and Mythology will offer four courses, each running through the quarter.

LATIN

1. Elementary Course—Four hours. This course is well adapted to all students who have pursued the study of Latin a year or less.

2. Advanced Course—Four hours. This course is adapted to students who have had the ordinary high school course of three or four years of Latin. Selected texts will be used.

110. Teachers' Training Course—Four hours, full quarter. Discussions of method. Reviews of syntax and translations.

MYTHOLOGY

110. Greek and Roman Myths—Four hours. Full quarter. A study of classical myths of Greece and Rome with comparisons with the myths of other peoples. Also the influence of myths upon modern life, literature and art.

LITERATURE AND ENGLISH

ALLEN CROSS, A.M.

ADDISON LEROY PHILLIPS, A.M.

JOSEPHINE HAWES, A.M.

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.

Required English Course—The College wishes to assure itself that all students who go out as graduates to teach children and all who teach in its training school will not misuse the English language in the presence of school children. It realizes that students, who have all their lives spoken incorrect English, cannot altogether change their habits in three or six months. The best thing it can do, then, seems to be to require all students to take a course in grammar and oral and

written composition. The head of the English department may excuse from taking this course any student who speaks and writes English exceptionally well. But those whose speech habits are unusually bad may be required to take a second practice course. The College will positively refuse to graduate a student who cannot write and speak the English language with a fair degree of accuracy and ease. It will also qualify its recommendation of a student to a superintendent or school board if the student's English is only passable.

Co-operation of Other Departments with the English Department—All the departments in the College are invited to co-operate with the English department to secure a reasonable degree of correctness in spoken and written English. Teachers are invited to call the attention of the English department to any student whose English is poor.

Any instructor may require any student in his department who shows a deficiency in oral or written English to report to the English department for further instruction, even tho the student has already met the catalog requirement in English.

1. Oral Literature and Composition for the Lower Grades—Three hours. First half-quarter. Daily.

Oral Literature and Composition, including the arrangement of story-sequences, the principles of story-structure, and the treatment of myths and the folk-epoch for children.

2. Materials and Methods in Literature and English for Grades Four, Five and Six—Second half-quarter.

As the title indicates, this course deals with the materials appropriate for the intermediate grades in literature and oral composition.

3. Materials and Methods in Literature and English for the Junior High School—Grades Seven, Eight and Nine—Three hours. First half-quarter.

Mr. Phillips.

Similar to Course 2, but dealing with the literature, and oral and written composition suited to the Junior high school. The teaching of grammar is only touched upon in this course. Course 12 covers the subject of teaching grammar in detail.

4. Functional English—Required of all Junior College students. Daily, three hours. Full quarter.

Mr. Cross, Mr. Phillips and Miss Hawes.

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 means of correcting them; and practice in both oral and written composition.

5. Speaking and Writing English, continued—Daily, three hours. Full quarter.

Miss Hawes.

Oral and written composition. A course planned 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. Appreciation of Literature—A general literary course. Recommended to all students. Two hours. Daily. Either half-quarter.

Mr. Cross and Miss Tobey.

An elective cultural course intended to "expose" students to the influence of some of the best literature of the world in the form of story, novel, essay, drama, and lyric and narrative poetry. The hope of the instructors is that students so exposed may find great literature mildly "taking." The course is mainly the hearing of good literature read effectively and with appreciation of its value in the class. Enough work is assigned for outside reading to give the student an active participation in the course and to make the study worthy of the two hours credit assigned to it.

8. The History of English Literature—Four hours. Full quarter. Two hours credit may be earned in either half-quarter.

Miss Hawes.

Junior College or Senior College. A reading course following the chronological development of our literature from 1660 to 1900.

Beginning Courses for English Majors—Every student who expects finally to major in English should take in the first year, if possible, three foundation courses in English and American Literature. Such students should register for English 8, and then follow that course up with English 9, and English 10. All students, whether special students in English or not, who wish to study the background courses in English are, of course, welcome in these classes.

10. American Literature—Four hours.

Mr. Phillips and Dr. Hulley.

Junior College or Senior College. A course in American literature following the plan of Courses 8 and 9 in English literature.

106. The Teaching of English in the High School—Three hours. Daily. Second half-quarter.

Miss Hawes.

Principles for the selection of literature for Junior and Senior high school pupils considered critically; illustrative studies in the treatment of selected pieces; study of types of composition work for Junior and Senior High School, with illustrative practice in writing.

129. Shakespeare's Plays—Four hours. Full quarter, or two hours either half-quarter.

Mr. Phillips.

Ten plays of Shakespeare. Three courses in Shakespeare, 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 have all three.

132. The Development of the Novel—Four hours. Full quarter.

Mr. Cross and Dr. Vincent.

The development, technic and significance of the novel.

GRADUATE COURSES IN ENGLISH

Graduate students may take any course in the Department of Literature and English numbered above 99.

230. Conference Course—This course number 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.

MATHEMATICS

G. W. FINLEY, B.S.

2. Plane Trigonometry—Full quarter, four hours.

Mr. Finley.

The work in this course is planned to meet the needs of those who expect to prepare for the teaching of mathematics as well as those who need this subject because of its close connection with other lines of work. The possession of surveying instruments by the department makes it possible for the class to get many of its problems from measurements made in field work.

6. College Algebra—Full quarter, four hours. Mr. Finley.

The course begins with a review of the principles of elementary algebra so that even those students who have not worked in this subject recently will find the work reasonably simple. Special attention is given to the needs of teachers of high school algebra.

- 8. The Teaching of Arithmetic**—Two hours, first half-quarter.
Mr. Finley.

This course deals with modern movements and methods in the teaching of arithmetic. The actual problems of the class room are considered and ways and means of solving these problems presented and discussed. The aim is to give those who take the course something they will find of real help in teaching when they get into the school room.

- 100. The Teaching of Secondary Mathematics**—Two hours, second half-quarter.
Mr. Finley.

In this day of unrest and progress the teacher who stands still is soon far behind her 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.

- 7. Analytic Geometry**—Full quarter, four hours. Mr. Finley.

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.

- 1. Solid Geometry**—Full quarter, four hours.

This course is offered for those who have finished their plane geometry in high school. It covers the ordinary theorems and exercises of the subject and lays stress upon the many applications which are to be found in every day life.

MODERN FOREIGN LANGUAGES

EDWIN STANTON DU PONCET, Ph.D.

- 1. Beginning French**—First half-quarter. Meras' *Le Premier Livre et La Grammaire* par Labiche.

- 2. Beginning Spanish**—Bushee Spanish Grammar and the reading of *El Pajaro Verde* por Valera.

- 5. Intermediate Spanish**—Valera' *Pepita Jimenez* and *Valdes La Alegria del Capitan Ribot*. Prose composition. Conducted mostly in Spanish.

- 5. Intermediate French**—Maurey's *Le Chauffeur*, *Rosalie*, *Depuis Six Mois* et *M. Lambert*, *Marchand de Tableaux*.

- 101. Advanced French-Spanish**—A course in French fiction conducted in Spanish. All work in translation will be done into Spanish. For students who have two or more years in both languages. A five-hour course, allowing students three hours credit in each language.

Second Half-quarter

- 2. Beginning French**—A continuation of French 1. Selected texts.

- 2. Beginning Spanish**—A continuation of Spanish 1. Graded texts.

- 6. Intermediate French**—A continuation of French 5. Selected texts.

- 6. Intermediate Spanish**—A continuation of Spanish 5. Graded texts.

- 102. Advanced French-Spanish**—A continuation of Course 101. Devoted to three short comedies by Halevy and Labiche.

MUSIC

JOHN CLARK KENDEL, A.B., Director
 M. EVA WRIGHT, Piano, Pipe Organ
 JOSEPHINE KNOWLES KENDEL, Voice
 LILA MAY ROSE, Pd.M., Public School Methods
 NELLIE B. LAYTON, A.B., Piano
 LUCY B. DELBRIDGE, Pd.M., Violin
 RAYMOND H. HUNT, Clarinet

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, literary and esthetic side of music, or for those who wish to become supervisors or professional teachers of vocal and instrumental music.

Courses for grade teacher and general student: Music 1, 2 and 3.

Courses for supervisors and professional teachers of music: Music 2, 105, 8, 9, 12, 13, 14 and 119.

Courses which are cultural in their nature and meant for the general or special student: Music 12, 13, 14, 17 and 119.

Private Instruction

The Conservatory will be in full operation during the entire Summer Quarter. Students wishing to begin vocal or instrumental study or to continue their study while attending the Summer School will find an ideal opportunity to study with unusually accomplished teachers at very attractive rates.

The fixed policy of the Conservatory is to provide individual instruction of the highest possible artistic type at a considerably lower cost than is usually charged for the same grade of instruction. This is made possible because the state assumes all actual expense of salaries of teachers, and other overhead expenses, as it does in all other College subjects.

Especially attractive rates will be made to professional students or serious students who may wish to take two or more lessons per week. A flat reduction of ten per cent will be made to students wishing to take advantage of this opportunity. Rates will be furnished upon application. Practice rooms may be secured at the College.

Recitals by the Musical Faculty and by students will be given during the Summer Session.

The Chorus will present a program of worth-while numbers during the quarter. Those interested in choral singing should register for Music 6 the first week of school. Frequent recitals will be presented by the Philharmonic Orchestra to which all students will be invited.

The courses offered are of such a nature that some courses designated as Senior College may be elected by advanced students in the Junior College. Some courses ostensibly Junior College may be elected by Senior College students whose preparation has not been sufficient to enable them to elect Senior College classes.

1. Sight Reading—Required of Majors in Music. Open to Senior College students. Three hours.

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

2. Methods for the First Eight Grades—Required of Majors in Music. Open to Senior College. Four hours.

A very practical course for teachers, in which the material used in the public schools is studied and sung, with suggestions as to the best ways to present all phases of the work. Prerequisite for this class, Music 1 or its equivalent.

3. Kindergarten and Primary Music—Open to Senior College. Two hours.

Designed especially for kindergarten and primary teachers. Songs and music adapted to children of these departments will be studied and sung. The care and development of the child voice; the teacher's voice; methods of instruction; practice singing and rhythm exercises will be presented.

6. Chorus Singing—Open to Senior College. One hour.

Worth-while music and standard choruses are studied and prepared to present in concert.

8b. Harmony—Required of Majors in Music. Open to Senior College. Two hours.

Beginning harmony. The work consists of written exercises on basses (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.

8c. Harmony—Required of Majors in Music. Open to Senior College. Two hours.

Harmonization of all discords. The circle of chords completed, modulation, etc. The harmony courses continue thruout the year, and the work is planned to meet the individual needs of the class.

9. Advanced Harmony—Open to Senior College. Four hours.

A continuation of Courses 8a, 8b, and 8c.

12. Individual Vocal Lessons—Required of Majors in Music. Open to Senior College.

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—Required of Majors in Music. Open to Senior College.

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—Open to Senior College.

The work will be outlined according to the ability of the student. To arrange work, consult the director.

105. Supervisors' Course—Four hours.

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 standard nature will be offered those interested in this course.

119. Interpretation and Study of Standard Operas—Two hours.

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.

15. Individual Pipe Organ Lessons—Open to Senior College.

Organ work is arranged to fit the needs and ability of the individual. From beginning work to artistic solo performance. Some knowledge of piano is presupposed. To arrange work consult the director.

ORAL ENGLISH

FRANCES TOBEY, A.B.

8. Dramatic Art—Four hours, full quarter. Two hours either half-quarter. Miss Tobey.

The consideration of comedy as a type of drama with the intensive and comparative study of a Shakespearean comedy. The group presentation of Shakespearean comedy and other types of standard drama on the campus.

9. The Teaching of Reading—Four hours, full quarter. Two hours either half-quarter. Miss Tobey.

The selection, organization and adaptation of reading material in the grades. Method of teaching, based upon progressive defined principles. An estimate of the relative values of oral and silent reading. A study of motivation in the field of reading.

3. The Appreciation of Literature—Two hours, first half-quarter. Miss Tobey.

This course alternates with Course 6 in the Department of Literature and English, offered the second half-quarter by Mr. Cross. The object of the course is to subject students to the contagion of beauty and power in literature thru the luminous oral reading of various type models. Definite reactions are invited from the class; but since much of the work is done during the class period, five actual hours of recitation command two credit hours per half-quarter.

101. The Reading of Lyric Verse—Two hours, full quarter. One hour either half-quarter. Miss Tobey.

The content of this course during the Summer Quarter will be modern lyric poetry. The dominant tendencies in contemporary English and American verse will be studied. Attention will be paid to insightful oral interpretation of selected poems.

2. Voice Culture—Four hours, full quarter. Two hours either half-quarter. Miss Tobey.

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 practice is mechanical; even the technical exercise is controlled by a variety of concepts embodying the qualities sought.

PHYSICS

FRANCIS LORENZO ABBOTT, B.S., A.M.

It is the purpose of this department to make the work in physics as valuable as possible to ALL students who are to teach in the public schools. The importance of knowing the fundamental principles of physics, and the application of these principles to those things which make for our comfort and well-being is becoming more manifest and urgent every year; but the importance of knowing the fundamental principles of physics when one is going to teach geography, physiology, agriculture, and the like is seldom appreciated by the public school teacher. Every course here offered has been carefully planned so that it may be of the greatest helpfulness in illuminating and vitalizing public school work, especially the work of the elementary school. Much pains has been taken to work out interesting methods, whereby essential but difficult subjects may be presented to young people in the light of their many common and relevant experiences so as to make the difficult subjects understandable.

4. Elementary School Science—Five days. Three hours, either half-quarter.

An elementary course planned to give teachers of the elementary schools and superintendents a better understanding of the fundamental

principles of many of the common school subjects, such as geography, physiology, hygiene, agriculture, etc. The course seeks to explain many of the ordinary happenings of every day life. Fully illustrated with simple apparatus easily obtained in any community.

6. Theory and Practice of the Automobile—Four days. Two hours. Either half-quarter.

Lack of knowledge as to the proper care, construction and operation of a car is responsible for much of the trouble, expense and short life of a car.

The purpose of the course is at least two-fold (1) To give such instruction in the theory of the construction and operation of a car that the repair expenses may be materially reduced, the life of the car much lengthened and the driving more of a pleasure.

(2) That teachers taking the course may be well enough informed in the subject to disseminate a correct knowledge of the automobile, thereby increasing a scientific education in the community.

Connected with the department is a large garage and repair shop which is well equipped with tools, parts of cars and a demonstrating car.

104. The New Physics—Four days. Two hours, either half-quarter.

This course is devoted to the study of electrons, cathode rays, X-rays, alpha rays, beta rays, gamma rays, and radium and its disintegration products. We are well equipped to illustrate this course.

PHYSICAL EDUCATION

RALPH GLAZE, A.B.
MARGARET KEYES, A.B.

14. First Aid—Required of Physical Education Majors. One hour.

Lectures, demonstrations and recitations. The Red Cross handbook used as text, with reference to other books on the subject. Men and women.

21. Playground and Group Games.

This course aims to meet the needs of school and playground. A practical list of group and team games.

9. Outdoor Athletics for Women—One hour.

A recreation course, of advanced team-play games. Hockey, indoor-ball, basketball, track, etc.

23. Athletic Coaching Course—Men. Five hours.

To supply the demand for teacher coaches. Lectures, field practice and competition, managing teams, training men, discipline. Football, baseball, basketball, track and gymnasium.

5. Outdoor Plays and Games—Four periods, two hours each half-quarter. Required of Majors in Physical Education. Miss Keyes.

Plays and games progressively arranged from simple circle to highly organized group and team games. This course aims to meet the needs of school and play ground for the lower age periods.

6. Singing Games and Elementary Folk Dancing—A course for those desiring play material for the lower grades. Junior and Senior College. Four periods, two hours credit. Miss Keyes.

7. Folk Dancing—Folk and national dances selected and arranged to meet the needs of schools and playgrounds. Junior and Senior College. Four periods, two hours credit. Miss Keyes.

108. Esthetic Dancing—Technic of the dance. Plastic exercises; the development of bodily co-ordination and rythmical responsiveness. Junior and Senior Colleges. Four periods. Two hours credit. Miss Keyes.

109. Classical Dancing—Advanced technic of classical dances. Prerequisite, Course 8. Junior or Senior College. Four periods, two hours credit. Miss Keyes.

PRACTICAL ARTS

SAMUEL MILO HADDEN, A.M., Dean

The Practical Arts Division includes industrial arts, fine and applied arts, commercial arts, and occupies the entire Guggenheim Hall of Industrial Arts, also parts of the Training School and Library buildings. 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 Guggenheim Hall of Industrial Arts is a beautiful white brick building, built especially to house practical arts work. The equipment is modern; and the museum, housed in the building and covering the various phases of practical arts education is the most complete in the Middle West.

INDUSTRIAL ARTS

S. M. HADDEN, A.M.

RALPH T. BISHOP

CHARLES M. FOULK, Pd.M.

OTTO W. SCHAEFER

Woodworking, Drafting, Printing and Bookbinding

The Woodworking, Drafting, Printing and Bookbinding Departments of the State Teachers College are the most modern departments to be found in the Middle West. The departments occupy almost all of the first and half of the second floor 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 first class working condition. It is the aim of the departments to employ methods in wood-working and drafting as thoro and practical as are to be found in the regular commercial shops.

5. Methods in Practical Arts—Required of all Majors in Industrial Arts, Commercial Arts and Applied Arts. Four hours.

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

1. Elementary Woodwork—Required of Industrial Arts Majors. Four hours. Fee \$1.00.

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—Required of Industrial Arts Majors. Four hours. Fee \$1.00.

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.

19. Wood Turning—Required of all Industrial Arts Majors. Four hours. Fee \$1.00.

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.

10. Elementary Mechanical Drawing—Required of Industrial Arts Majors. Four hours.

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

12. Elementary Architectural Drawing—Required of all Industrial Arts Majors. Four hours.

This course includes the making of complete designs of simple one-story cottages, together with details and specifications of same.

109. Advanced Art Metal—Four hours.

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.

117. Elementary Machine Design—Four hours.

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.

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.

201. Seminar—Four hours. On demand.

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.

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.

PRINTING

1. Elementary Printing—Four hours.

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.

2. Intermediate Printing—Four hours.

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 letter-heads, tickets, programs, etc. Color study in selection of papers and inks.

3. Advanced Printing—Four hours.

A continuation of the study of typographic design in the laying out and composition of menus, title and cover-pages, advertisements, etc. Imposition 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.

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

BOOKBINDING**1. Elementary Bookbinding—Four hours.**

This course includes the following: Tools, machines, materials and their uses, collating and preparing the sheets for sewing, sewing on tape and cord, preparing of end sheets, trimming, glueing, rounding, backing, headbanding and lettering of backs. Cover materials, planning and making of covers, finishing and lettering of titles, and labeling; all the steps necessary for the binding of full cloth-bound books.

2. Intermediate Bookbinding—Four hours.

This course includes the binding of books in half morocco and full leather, including such processes as tooling in gold and blank, edge gilding and marbling, and the making and finishing of cardboard boxes and leather cases.

THE SOCIAL SCIENCES

GURDON RANSOM MILLER, Ph.D.

EDGAR DUNNINGTON RANDOLPH, A.M.

This department offers opportunity for a liberal study of social needs and adjustments by means of class-room, library, and research work, and by Seminar and lectures. The department deals with the subject-matter of Anthropology, Sociology, and Social Economics as Analytic studies of Social Evolution, and constructive efforts to direct Social Progress. We seek always to show the relation of these Social Sciences to the Science of Education, but any of our courses will prove of large value to any students desiring to specialize in either Sociology or Economics. University or college students or graduates interested in special phases of pure Sociology, Applied Sociology, Welfare, Social Reform, or Social Settlement work should consult the head of this department for advice in electing courses.

150. Social Reconstruction—Four hours, full Quarter; two hours either half Quarter. Dr. Miller.

A study of social reconstruction from the standpoint of probable necessary changes in social institutions; with special emphasis on capital, labor, and the state, their changing relationship and growing interdependency.

109. The Development of Social Institutions—Four hours, full Quarter; two hours either half Quarter. Dr. Miller.

A study of institutions, their classification, the psychology of their development, the social necessity of rational change, the need for institutionalizing education, institutionalism as a growing principle of social progress.

3. Educational Sociology—Four hours, every Quarter. Required in first year. Professors Miller, Randolph, Hayes and Ross.

A course giving (1) background of information concerning origins and inter-relations of present social problems; (2) a brief formulation of the methods of social progress; and making (3) a definite attempt to show the relation of education to the problems of control and progress.

12. Rural Sociology—Four hours, full Quarter. Two hours half Quarter. Miss Whitman, Dr. Foght and Mr. Hargrove.

A study of rural social conditions; a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a power in rural progress.

123. Immigration and American Problems—First half, two and a half hours. (Primarily Senior College and Graduate, but open to qualified Juniors.) Mr. Raldolph.

This short 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, tho 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 in the character of our 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 weaknesses in our institutions. It is felt that the course is timely now in view of the recent recognition by the government of the peril implicit in our unassimilated aliens.

132. The Modern Family and Its Problems—Second half, two and a half hours. Mr. Randolph.

A brief popular course (i. e., untechnical) dealing with the family as the basic institution. It covers such topics as the general nature and functions of institutions; the institutional features of the family; the social functions of the family; the general conditions of normal family life; the social changes that have effected the family most powerfully; the tendencies of present thought in regard to the future of the family, etc.

239. Social Theory of Education and Its Implications for Educational Reconstructions—Five hours, four days, either half or full Quarter. Mr. Randolph.

This course is planned to give full and free opportunity for ambitious students to do, under direction and with the stimulus of class discussion, a considerable amount of intensive study upon the educational problems involved in the teaching of the subjects in which they are particularly interested. The course is introduced by a general statement and discussion of the social point of view, in which the problems of determining **proper objectives**, and of **securing an effective organization** of instruction are central. Such generalizations as can be formulated at the beginning of the course are brought forward, and the students are then turned to the critical study of the literature available for the several fields of their choice. They will sift out and arrange such guiding principles and generalizations as they can discover—and finally apply them tentatively in a brief illustrative outline.

The class work is organized upon the project plan. So far as possible the students will be grouped on the basis of their common interests and may work together if they choose. So far as feasible the initiative in class-discussions will be left to the students.

COMMERCIAL ARTS

AMBROSE OWEN COLVIN, B.C.S.

FLORA ELDER, A.B.

The Commercial Department will give a complete list of courses during the Summer Quarter. These courses will include: Shorthand, Typewriting, Bookkeeping, Accounting, and all other branches of commercial work, including the teaching of the subjects which are usually given in commercial colleges.

This department is organized for the training of commercial teachers for high schools as well as for instruction in the commercial arts.

Courses

The courses offered for the summer of 1919 are listed in the Program of Courses, under the names of Mr. Colvin and Miss Elder.

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Colorado State Teachers College

Greeley, Colorado

SUMMER QUARTER, 1919

The Calendar

THE FIRST HALF QUARTER

June 16, Monday—Registration Day for the Summer Quarter.

June 17, Tuesday—Classes begin.

A fee of one dollar is collected for late registration after Monday, June 16.

July 4, Friday—Independence Day.

July 18, Friday—The first half of the Summer Quarter closes.

Students may enroll for either half-quarter independent of the other. Many courses run thru the first half-quarter only. Some run thru the second half-quarter only. A number of the courses, especially the required courses, must be taken thruout the whole quarter before any credit will be given.

Normal hours of credit: Either half-quarter, 8 hours; full quarter, 16 hours.

THE SECOND HALF-QUARTER

July 21, Monday—New enrollments. Classes begin.

August 22, Friday—The Summer Quarter closes. Graduation Day.

ATTENTION

Every student should read pages 5 to 18 in order to understand the details of College Administration.

FALL QUARTER

The Fall Quarter begins Monday, September 29, 1919. Ask for the Annual Catalog. Address State Teachers College, Greeley, Colorado, J. G. Crabbe, President.

SUPPLEMENT TO
Colorado State Teachers
College Bulletin

Series XVIII

FEBRUARY, 1919

Number 11 *a*

Program of Courses
FOR THE
Summer Quarter
1919

The Quarter—June 16 to August 22
First Half Quarter—June 16 to July 18
Second Half Quarter—July 21 to August 22

Published Monthly by State Teachers College, Greeley, Colorado
Entered as Second Class Matter at the Postoffice at Greeley
Colorado, under the Act of August 24, 1912

Your Major Course. Every regular student entering the college for the first time on or after October 1, 1918, must select one of the new courses of study. Earlier matriculants may complete the courses they began, but are advised to select one of the new courses, if it is convenient to do so. Indicate on your program card the course you are pursuing.

Your Adviser. The Director of your course is your adviser. Before completing your program for the Summer Quarter, consult him or her about what subjects you purpose to take.

Order of Registration. Get your registration material. Fill out the cards with care, noting the following regulations:

a. Exercises Courses in Physical Education are required at least two-thirds of the time you are in residence, and it is recommended that a course be taken each Quarter. These may be taken with or without credit.

b. Students who have already established a record in this college for doing superior work of A or AA quality may before registering ask permission of the Student Program Committee (Dean McCracken, Chairman), to take more work. Eighteen hours is the maximum which this committee will allow.

c. When you fill in your Temporary Program Card and the smaller class cards, use only the Designation of the course as it appears in the first column of this program.

Do not at any time write out the Description which appears in the second column. These cards must be made out as indicated, or made over.

d. Having filled out all your cards, go to the Registrar's Office, and there pay your incidental fees. Program changes after registration are authorized by Dean Cross.

Fees: Full Quarter. \$30.00; Half Quarter. \$15.00.

Citizens of other states than Colorado \$5.00 per quarter additional; \$2.50 the half quarter.

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
7:00-7:50					
Bot. 2	General Botany (Full quarter)	M. T. W. Th. F.	Ackerman	5	301
Zool. 5	Bird Study (Full quarter)	M. T. W. Th. F.	Adams	4	303
Tr. Sch. 3	Primary Methods (First half)	Daily	Aultman	3	T 200
Art 2	Primary Grade Methods (Full quarter)		Baker	4	G 203
Psy. 108	Educational Tests	M. T. W. Th. F.	Beeson	4	101b
Tr. Sch. 5	Intermediate Methods (Either half or full quarter)	M. T. Th. F.	Beiswenger	4	
Chem. 1	General Chemistry (Full quarter)	M. T. W. Th. F.	Bell	3	300
Chem. 4	General Chemistry (Full quarter)	M. T. W. Th. F.	Bell	4	300
Tr. Sch. 4	Primary Methods (Full quarter)	M. W. Th. F.	Dilling	4	103
Fr.-Sp. 101	Advanced French-Spanish (Full quarter)	M. T. W. Th. F.	Du Poncet	4	100a
Com. Arts 3	Shorthand Review and Dictation	T. W. Th. F.	Elder	4	G 200
Math. 5	College Algebra (Either half or full quarter)	M. T. Th. F.	Finley	4	304
Co. Sch. 6	Rural Sociology	Daily	Foght	3	101a
Ind. Arts. 1	Elementary Woodworking Two Periods (Either half or full quarter)	M. T. W. Th. F.	Foulk	4	G 1
Eng. 9	English Literature 1660-1900 (Full quarter)	M. T. W. F.	Hawes	4	108
Agric. Ia	General Agriculture Farm Crops (Either half)	M. T. W. Th. F.	Hargrove	4	L 13
Latin I	Teaching of Latin	M. T. W. Th. F.	Hays	4	102
Art 1	Grammar Grade Methods (Full quarter)	M. T. Th. F.	Kaminski	4	G 202
Tr. Sch. 6	Junior High School Methods (Either half or full quarter)	M. T. Th. F.	Kendel Hemlepp Orndorff	4	T 201
Music 8c	Harmony (Either half or full quarter)	M. T. W. Th. F.	Kendel	2	203
Music 8b	Harmony (Either half or full quarter)	M. T. W. Th. F.	Kendel	2	203
Phys. Ed 108	Esthetic Dancing (Either half)	M. T. W. Th. F.	Keyes	2	Club
Ed. 241	Master's Thesis Course (Full quarter)	Conference	McCracken	varies	114
Hs. Sc. 113	Dietetics (Full quarter) 2 periods	M. T. W. F.	Payne	4	5
Music 1	Sight Reading (Full quarter)	Daily	Rose	3	203
Hs. Arts 112	Costume design (Full quarter) 2 periods	T. W. Th. F.	Roudebush	4	T 2
Bkdg. 1	Elementary Bookbinding 2 periods (Either half or full quarter)	M. T. W. Th. F.	Schaefer	4	G 105
Bkdg. 2	Intermediate Bookbinding, 2 periods (Either half or full quarter)	M. T. W. Th. F.	Schaefer	4	G 105
Tr. Sch. 3	Primary Methods (Full quarter)	M. T. Th. F.	Sibley	4	T 200
Hist. 10	Social & Industrial History of the U. S. (Either half or full quarter)	M. T. W. Th. F.	Smith	4	104
Oral Eng. 9	Teaching of Reading (Full quarter)	M. T. W. Th. F.	Tobey	4	202
Eng. 1	Materials & Methods for Lower Grade English (First half)	Daily	Wheeler	3	101
Ed 111	Philosophy of Education (Full quarter)	T. W. Th. F.	Wright	4	100
8:00-8:50					
Phys. 4	Elementary School Science (Either half)	Daily	Abbott	3	3
Bot. 3	Systematic Botany (Either half or full quarter)	Daily	Ackerman	3	301

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
Biot. 101	History of Man (First half)	M. T.	Adams	2	301
Biot. 102	Heredity and Eugenics (Second half)	M. T.	Adams	2	301
Art| 13	Applied Art for Primary Grades (Full quarter)	M. T. Th. F.	Baker	4	G 203
Geog. 12	Geography Methods (Either half)	M. T. Th. F.	Barker	4	L 1
Chem .110	Organic Chemistry (Full quarter)	M. T. W. Th.	Bell	4	300
Psy. 103	Child Development	M. T. W. Th.	Beeson	4	101b
Print. 1	Elementary Printing Two periods (Either half or full quarter)	M. T. Th. F.	Bishop	4	G 106
Print. 2	Intermediate Printing Two periods (Either half or full quarter)	M. T. Th. F.	Bishop	4	G 106
Com. Arts 50	Beginning Bookkeeping (Either half or full quarter)	M. T. W. Th.	Colvin	4	G 200
Com. Arts 51	Intermediate Bookkeeping (Either half or full quarter)	M. T. W. Th.	Colvin	4	G 200
Com. Arts 52	Advanced Bookkeeping (Either half or full quarter)	M. T. W. Th.	Colvin	4	G 200
Eng. 6	Appreciation of Literature (Second half)	Daily	Cross	2	108
Fr. 5	Intermediate French (Either half)	M. T. W. Th.	Du Poncet	4	100a
Com. Arts 11	Beginning Typewriting	M. T. W. Th.	Elder	4	G 100
Math. 8	Teaching of Arithmetic (First half)	M. T. Th. F.	Finley	2	304
Math. 100	Teaching of Secondary Math. Second half)	M. T. Th. F.	Finley	2	304
Hygiene 1	Personal Hygiene (Either half)	M. T. W. Th.	Gilpin-Brown	1	208
Ind. Arts 8	Elementary Art Metal (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 5
Art 11	Appreciation in Architecture (Either half or full quarter)	F.	Hadden	1	G 202
Ind. Arts 9	Advanced Art Metal (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 5
Agric. 1b	General Agriculture, Farm Animals (Either half)	M. T. W. Th.	Hargrove	4	L 13
Eng. 106	High School Materials and Methods in English (Second half)	Daily	Hawes	3	101
Latin	Elementary or advanced	M. T. W. Th.	Hays	4	102
Tr. Sch. 31	Literature and Story Telling in the Kin- dergarten and Primary Grades. (First half)	Daily	Julian	3	T 100
Tr. Sch. 39	The Relations of the Kindergarten and the Primary Grades (2nd half)	Daily	Julian	3	T 100
Art 7	Constructive Art (Full quarter)	M. T. Th. F.	Kaminski	4	G 204
Bsy. 111	Speech defects (Stuttering first half, lispng second half)	M. T. W. Th.	Kelley	2-4	T 103
Music 2	Methods for Upper Grades (Second half)	Daily	Kendel	2	203
Music 2	Methods for the first four grades (First half)	Daily	Kendel	2	203
Phys. Ed. 7	Folk Dancing (Either half)	M. T. W. Th.	Keyes	2	Club
Hs. Sc. 7	Housewifery (Either half or full quar- ter)	W. T. W. Th.	Leggett	3	7
Soc. 150	Social Reconstruction (Either half or full quarter)	M. T. W. Th.	Miller	4	208
Eng. 3	Junior High School Materials and Meth- ods in English (First half)	Daily	Phillips	3	108
Bkdg. 1	Elementary Bookbinding Two periods (Either half or full quarter)	M. T. W. Th.	Schaefer	4	G 105
Bkdg. 2	Intermediate Bookbinding Two periods (Either half or full quarter)	M. T. W. Th.	Schaefer	4	G 105
H. Arts 117	Interior Decoration (Full quarter)	T. W. Th. F.	Scharfenstein	4	5
Ed. 25	Administration of Rural and Village Schools (Full quarter)	M. W. F.	Shriber Foght	3	101a

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
Ed. 142	Educational Administration (Either half or full quarter)	M. T. W. Th.	Strayer Dyer Wirt Hotchkiss Corson	4	100
Hist. 13	The Teaching of History (First half)	M. T. W. Th.	Smith	2	104
Pol Sc. 26	The Teaching of Civics (Second half)	M. T. W. Th.	Smith	2	104
Oral Eng. 3	The Appreciation of Literature (First half)	Daily	Tobey	2	202
Oral Eng. 104	Interpretations from Browning (Second half)	M. T. W. Th.	Tobey	2	202
9:00-9:50					
Biol. 2	Bionomics (Full quarter or either half)	M. T. W. Th.	Adams	4	303
Art 3	Freehand Drawing (Full quarter)	M. T. Th. F.	Baker	4	G 203
Geog. 103	Climatology (First half)	M. T. Th. F.	Barker	2	L 1
Geog. 103	Climatology (Second half)	M. T. Th. F.	Barker	2	L 1
Psy. 1	Child Hygiene (Full quarter)	M. T. Th. F.	Beeson Terman	4	101b
Chem. 113	Food Chemistry (Full quarter)	M. T. W. Th.	Bell	4	300
Com. Arts 114	Office Practice (Either half or full quarter)	Daily	Colvin	5	
Eng. 4	Speaking and Writing (Full quarter)	Daily	Cross Phillips	3	108
Sp-Fr. 101	Adv. Spanish-French (Either half)	M. T. W. Th.	Duponcet	4	
Ind. Arts 2	Intermediate Woodworking (Either half or full quarter)	Two periods M. T. W. Th.	Foulk	4	G 1
Ed 10	Elementary School Curriculum (Full quarter)	M. T. W. Th.	Gruver	4	101
Ind. Arts 5	Methods. Substitute for Tr. Sch. I. for Practical Arts Students (Either half or full qt.)	M. T. W. Th.	Hadden	4	G 202
Eng. 4	Speaking and Writing	(Daily)	Hawes	3	108
Myth. 112	Greek and Roman Mythology	T. W. Th. F.	Hays	4	
Psych .104	Elementary School Subjects	M. T. W. Th.	Heilman	4	103
Art 8	Pottery (Either half or full quarter)	T. W. Th. F.	Kaminski	4	G 204
Soc. 3	Educational Sociology	M. T. W. Th.	Miller Randolph Hayes Ross	4	214
Ed. 109	Education and the War (First half)	T. Th.	McCracken	1	100a
Ed. 229	Current Educational Thought (Second half)	M. T. W. Th.	McCracken	2	100a
Hs. Sc. 8	Food Production (Either half or full quarter)	M. T. W. Th.	Payne	4	100a
Hs. Arts 4	Dressmaking (Full quarter)	T. W. Th. F.	Roudebush	4	T 2
Hs. Arts 7	Dressmaking Practice (Full quarter)	T. W. Th. F.	Scharfenstein	4	5
Co. Sch. 6	County School Methods (Either half)	Daily	Shriber	3	101a
Pol. Sc. 30	Political Adjustment (Either half or full quarter)	M. T. W. Th.	Smith Fess	4	104
Oral Eng. 101	The Reading of Lyric Verse (Full quarter)	T. W. Th. F.	Tobey	2	202
Ed. 8	Educational Values (Full quarter)	T. Th.	Wright	4	100

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
10:00-10:50					
Phys. 104	New Physics (Either half or full quarter)	T. Th.	Abbott	2	3
Nat. Study 1	Primary Nature Study (Either half or full quarter)	M. T. W. Th.	Abbott Ackerman Adams	4	303
Art 101	Drawing from Life (Either half or full quarter)	M. W. F.	Baker	3	G 203
Geog. 2	Physical Geography (First half)	M. T. Th. F.	Barker	2	L 1
Geog. 2	Physical Geography (Second half)	M. T. Th. F.	Barker	2	L 1
Psy. 1	Child Hygiene	M. T. W. Th.	Beeson	4	101b
Chem. 7	Qualitative Analysis (Either half or full quarter)	Two periods M. T. W. Th.	Bell	4	300
Chem. 114	Quantitative Analysis (Either half or full quarter)	Two periods M. T. W. Th.	Bell	4	300
Printing 3	Advanced Printing (Either half or full quarter)	Two periods M. T. Th. F.	Bishop	4	G 105
Printing 4	Newspaper Work (Either half or full quarter)	Two periods M. T. Th. F.	Bishop	4	G 105
Ed 116	High School Curriculum (Full quarter)	M. T. W. Th.	Briggs Gruber and others	4	100
Com. Arts 6	Methods of Teaching (First half)	T. W. Th. F.	Colvin	2	G 202
Com. Arts 41	Commercial Correspondence (Second half)	T. W. Th. F.	Colvin	2	G 202
Com. Arts 1	Beginning Shorthand (Full quarter)	T. W. Th. F.	Elder	4	G 200
Eng. 132	Development of the Novel	T. W. Th. F.	Cross	4	108
Spanish 5	Intermediate Spanish (Either half)	M. T. W. Th.	Du Poncet	4	
Math. 2	Trigonometry (Full quarter)	M. T. Th. F.	Finley	4	304
Ed. 37	Ethical Culture (Either half)	M. T. W. Th.	Gilpin-Brown	2	208
Phys. Ed. 14	First Aid	F.	Glaze	1	
Oral Eng. 4	Art of Story Telling (Second half)	M. T. W. Th.	Gunnison	2	202
Ind. Arts 10	El. Mech. Drawing (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 100
Ind. Arts 12	El. Architect. Drawing (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 100
Agric. 120	Soils and Soil Fertility (Either half)	M. T. W. Th.	Hargrove	4	L 13
Psy. 107	Mental Tests (Full quarter)	M. T. W. Th.	Heilman Terman	4	103
Art 102	Commercial Art (Full quarter)	M. T. Th. F.	Kaminski	4	G 206
Psy. 111	Speech Defects (Lisping, first half, Stuttering, second half quarter)	Daily	Kelly	2-4	T 103
Music 119	Interpretation and Study of Standard Operas (Second half)	Daily	Kendel	2	203
Music 105	Supervisors Course (First half)	Daily	Kendel	2	203
Phys. Ed. 6	Rhythmic Plays and Singing Games	M. T. W. Th.	Keyes	2	Club
Ed. 15	Vocational Guidance (Second half)	M. T. W. Th.	McCracken	2	100a
Soc. 105	Social Institution and Social Maladjustment (Either half or full quarter)	M. T. W. Th.	Miller Hayes Ross	4	208
Hs. Sc. 9	Household Management (Either half or full quarter)	T. Th.	Payne	4	
Eng. 10	American Literature (Full quarter)	M. T. Th. F.	Phillips	4	101
Soc. 132	The Modern Family and Its Problems (First half)		Randolph	2½	101
Co. Sch. 130	Rural Education (Second half)	Daily	Shriber	3	101a
Oral Eng. 2	Voice Culture (First half)	M. T. W. Th.	Tobey	2	202
Ed. 223	Research in Education (Full quarter)		Conference Wright	varies	100a

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
11:00-11:50					
Physics 6	Automobile (Either half or full quarter)	M. T. W. Th.	Abbott	2-4	Shop
Bact. 1	Bacteria, Yeasts and Molds (Full quarter)	Daily	Ackerman	4	300
Com. Arts 56	Penmanship (Either half or full quarter)	T. W. Th. F.	Allsworth	4	H. S. Chapel
Com. Arts 57	Penmanship (Either half or full quarter)	T. W. Th. F.	Allsworth	4	H. S. Chapel
Art 5	Water Color Painting (Either half or full quarter)	M. W. F.	Baker	3	G 203
Ed. 113	Junior High School (Either half or full quarter)	Daily	Briggs Gruver	3	100a
Com. Arts 150	Bank Accounting (Full quarter)	T. Th.	Colvin	4	G 200
Com. Arts 151	Cost Accounting (Full quarter)	M. W.	Colvin	4	G 200
French 1	Beginning French (Either half)	M. T. W. Th.	Du Poncet	4	102
Com. Arts 12	Advanced Typewriting (Either half or full quarter)	M. T. W. Th.	Elder	4	G 100
Com. Arts 13	Advanced Typewriting (Either half or full quarter)	M. T. W. Th.	Elder	4	G 100
Math. 7	Analytics (Full quarter)	M. T. Th. F.	Finley	4	304
Ind. Arts 19	Wood Turning Two periods (Either half or full quarter)	M. T. W. Th.	Foulk	4	G 5
Phys. Ed. 1	Anatomy	T. W. Th. F.	Glaze	5	
Oral Eng. 8	Dramatic Art (Full quarter)	M. T. W. Th.	Gunnison	4	202
Ind. Arts 118	Advanced Machine Design (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 100
Ind. Arts 117	El. Machine Design (Either half or full quarter)	M. T. W. Th.	Hadden	4	G 100
Eng. 5	Speaking and Writing (Continued) (Full quarter)	Daily	Hawes	3	101
Myth. 122	Norse Mythology	T. W. Th. F.	Hays	4	100a
Psy. 2a	Educational Psychology	M. T. W. Th.	Heilman	4	303
Tr. Sch. 1	Elementary School Supervision, Principles of Teaching (First half)	Daily	Hotchkiss	3	T 200
Art 103	Antique (Either half or full quarter)	T. W. Th. F.	Kaminski	4	G 204
Phys. Ed. 109	Classical Dancing (Either half)	M. T. W. Th.	Keyes	2	Club
Hs. Sc. 3	Cooking and Sewing (Full quarter)	M. T. W. Th.	Leggett	4	5
Ed. 223	Research in Education (Full quarter)	Conference	McCracken	varies	114
Eng. 128	Selected Plays of Shakespeare (Full quarter)	M. T. Th. F.	Phillips	4	108
Soc. 123	Immigration and American Social Problems (First half)	T. W. Th. F.	Randolph	2½	101
Music 3	Primary and Kindergarten Methods (Second half)	Daily	Rose	2	YWCA
Hs. Arts 5	Millinery Two periods (Full quarter)	T. W. Th. F.	Roudebush	4	T 2
Bkdg. 1	El Bookbinding 2 periods (Either half or full quarter)	M. T. W. Th.	Schaefer	4	G 105
Bkdg. 2	Intermediate Bookbinding (Either half or full quarter)	M. T. W. Th.	Schaefer	4	G 105
Hs. Arts 103	Advanced Arts Crafts Two periods (Either half or full quarter)	T. W. Th. F.	Scharfenstein	4	5
Co. Sch. 26	Rural School Curriculum and Community (First half)	Daily	Shriber	3	101a
Co. Sch. 107	Rural Seminar (Second half)	M. W. F.	Shriber	2	101a
Pol. Sc. 123	International Relations (Either half or full quarter)	M. T. W. Th.	Smith Fess	4	104
Ed. 108	Educational Supervision (Either half or full quarter)	M. T. W. Th.	Strayer Dyer Wirt Hotchkiss Corson	4	100

Time Designation	Description	Days	Teacher	Credit Hrs.	Room
12-12:50					
Biol. 2	Bionomics	M. T. W. Th.	Adams Hill	4	303
Geog. 150	Geography of Colorado (First half)	M. T. Th. F.	Barker	2 L	1
Geog. 120	Geography of Polar Lands (Second half)	M. T. Th. F.	Barker	2 L	1
Spanish 1	Spanish-Beginning (Either half)	M. T. W. Th.	Du Poncet	4	102
Ed. 10	Elementary School Curriculum (Full quarter)	M. T. W. Th.	Gruver	4	100
Psych. 2b	Educational Psychology	M. T. W. Th.	Heilman	4	103
Ed. 143	Federal Government in Education (First half)	M. T. W. Th.	McCracken	2	100a
Eng. 4	Speaking and Writing	Daily	Phillips	3	108
Ed. 8	Educational Values (Full quarter)	T. W. Th. F.	Wright	4	101

1:30-2:20					
Co. Sch. 1	Observation in Rural Demonstration School (1st half) Two days weekly 1:30 to 5:00 o'clock		Shriber	3	West Side School

2:30-3:20					
Phy. Ed. 21	Play Ground Games (For Women)	M. W.	Glaze	2	
H. S. 6	Catering (Either half or full quarter)	M. W.	Leggett	4	5
Co. Sch. 2	Report on Observation in Rural Demonstration Schools (1st half)	M.	Shriber	1	101a

3:30-4:20					
Phy. Ed. 9	Outdoor Athletics for Women	T. Th.	Glaze	2	

3:30-5:20					
Ed. 246	Educational Problems (Either half or full quarter) (Required of Graduate Students)	T. Th.	McCracken Strayer Briggs Wirt Dyer and others	2	Hill Hayes Ross Fess Terman 100

4:30-5:20					
Phy. Ed. 23	Athletic Coaching Course (men)	Daily	Glaze	5	

8:00 P. M.					
Music 6	Chorus (Full quarter)	Th.	Kendel	½	203

COURSES IN WHICH THE SUMMER LECTURERS AND SPECIAL TEACHERS GIVE ALL OR A PART OF THE INSTRUCTION

10:00 Ed. 116	High School Curriculum	M. T. W. Th.		4	100
11:00 Ed. 113	Junior High School	Daily		3	100a
Dr. Oscar T. Corson					
7:00 Ed. 142	Educational Administration	M. T. W. Th.		4	100
11:00 Ed 108	Educational Supervision	M. T. W. Th.		4	100
Dr. Franklin M. Dyer					
8:00 Ed. 142	Educational Administration	M. T. W. Th.		4	100
11:00 Ed 108	High School Curriculum	M. T. W. Th.		4	100
Dr. Simeon D. Fess					
9:00 Pol. Sc. 30	International Relations	M. T. W. Th.		4	100
11:00 Pol. Sc. 123	Political Adjustment	M. T. W. Th.		4	104

7:00	Ed. 142	Dr. Harold W. Foght	Educational Administration	M. T. W. Th.	4	104
8:00	Ed. 25		Rural Sociology (First half)	Daily	3	101a
9:00	Ed. 10		Administration of Rural and Village Schools	Daily	3	101a
Supt. Harvey S. Gruver						
10:00	Ed. 116		El. School Curriculum	M. T. W. Th.	4	101
11:00	Ed. 113		Junior High School	Daily	3	100a
12:00	Ed. 10		El. School Curriculum	M. T. W. Th.	4	100
Dr. Edward C. Hayes						
9:00	Soc. 3		Educational Sociology	M. T. W. Th.	4	214
10:00	Soc. 105		Social Maladjustment	M. T. W. Th.	4	208
Dr. H. W. Hill						
9:00	Biol. 2		Bionomics	M. T. W. Th.	4	303
12:00	Biol. 2		Bionomics	M. T. W. Th.	4	303
Dr. Lincoln Hulley						
10:00	Eng. 10		American Literature	M. T. Th. F.	4	101
Dr. Edward Allsworth Ross						
9:00	Soc. 3		Educational Sociology	M. T. W. Th.	4	214
10:00	Soc. 105		Social Maladjustment	M. T. W. Th.	4	208
Dr. George D. Strayer						
8:00	Ed. 142		Educational Administration	M. T. W. Th.	4	100
11:00	Ed. 108		Educational Supervision	M. T. W. Th.	4	100
Dr. Lewis M. Terman						
9:00	Psych. 1		Child Hygiene	M. T. Th. F.	4	101b
10:00	Psych. 107		Mental Tests	M. T. W. Th.	4	103
Dr. Leon Vincent						
10:00	Eng. 132		Development of the Novel	T. W. Th. F.	4	108
Dr. William Wirt						
8:00	Ed 142		Educational Administration	M. T. W. Th.	4	100
11:00	Ed. 108		Educational Supervision	M. T. W. Th.	4	100

Courses for which a Laboratory Fee is Charged.

7:00-7:50	Description	Days		
Art. 2	Primary Methods	(Full Quarter)	Baker	.50
Agric. 1a	General Agriculture Farm	Crops	Hargrove	.50
	Either ½			
Chem. I	General Chemistry	(Full Qr.)	Bell	2.00
Chem. 4	General Chemistry	(Full Qr.)	Bell	2.00
Ind. Arts I	Elementary Woodworking		Foulk	1.00
	(Either ½ or full Qr.)			
8:00-8:50				
Agric. 1b	General Agriculture (Farm Animals)		Hargrove	.50
	(Either ½)			
Chem. 110	Organic Chemistry	(Full Qr.)	Bell	2.00
Ind. Arts 8	Elementary Art Metal	(Full Qr.)	Hadden	.50
Ind. Arts 9	Advanced Art Metal		Hadden	.50
	(Either ½ or full Qr.)			
9:00-9:50				
Chem. 113	Food Chemistry	(Full Qr.)	Bell	2.00
Ind. Arts 2	Intermediate Woodworking		Foulk	1.00
	(Either ½ or Full Qr.)			
Art. 8	Pottery	(Either ½ or full ¼)	Kaminski	.50
10:00-10:50				
Chem. 7	Qualitative Analysis (Either ½ or full ¼)		Bell	2.00
Chem. 114	Quantitative Analysis (Either ½ or full ¼)		Bell	2.00
11:00-11:50				
Ind. Arts 19	Wood turning (Either ½ or full ¼)		Foulk	1.00
Hs. Sc. 3	Cooking & Serving (Full Qr.)		Leggett	2.00
Music 12-13-14	Individual lessons—for fees see Director			
Mus 112-113-114	of Conservatory.			

Colorado State Teachers College Bulletin

Series XVIII

MARCH 1, 1919

Number 116

SUPPLEMENT TO SUMMER SCHOOL BULLETIN

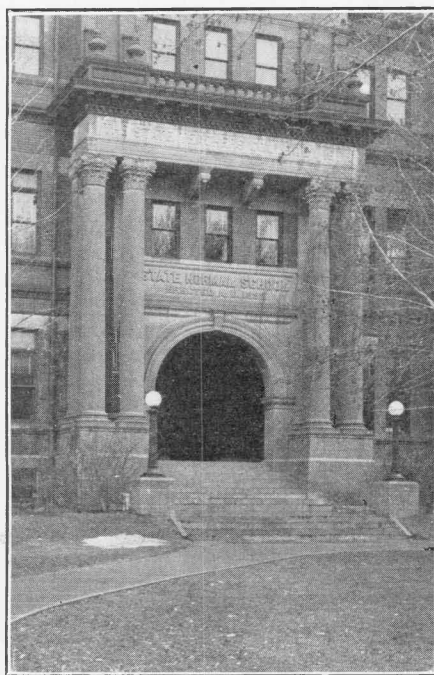
SUMMER SCHOOL SNAPSHOTS

THE SUMMER QUARTER 1919
TEN WEEKS

FIRST
HALF
QUARTER

—
*Five
Weeks*
—

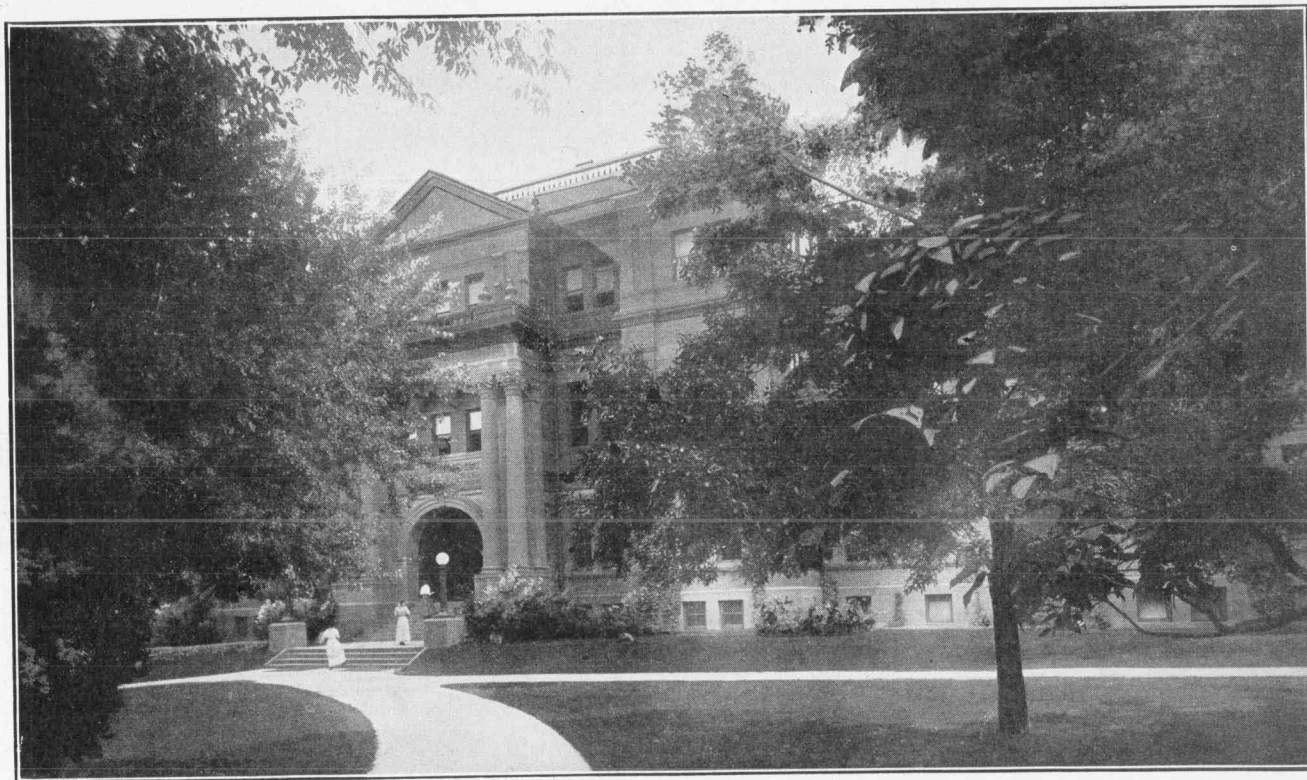
JUNE 16
TO
JULY 18
1919



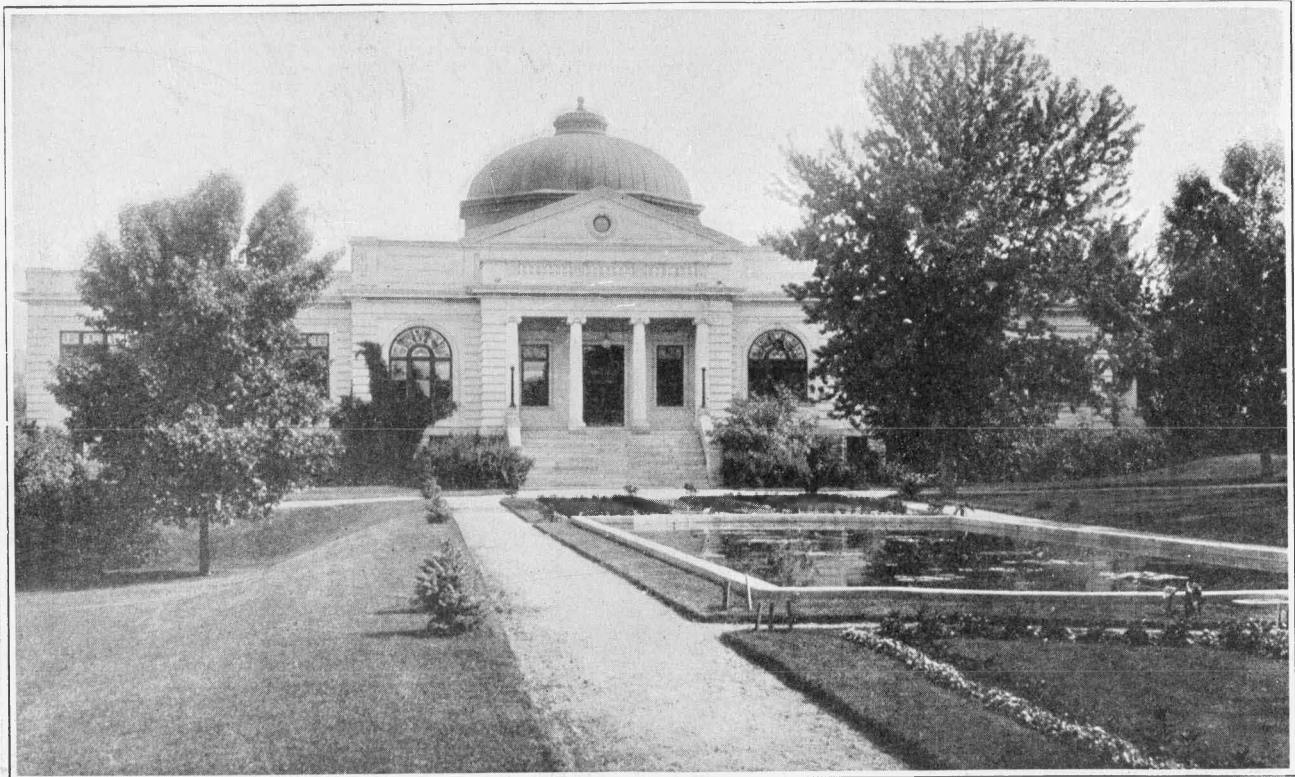
SECOND
HALF
QUARTER

—
*Five
Weeks*
—

JULY 21
TO
AUG. 22
1919



APPROACH TO THE ADMINISTRATION BUILDING



THE LIBRARY

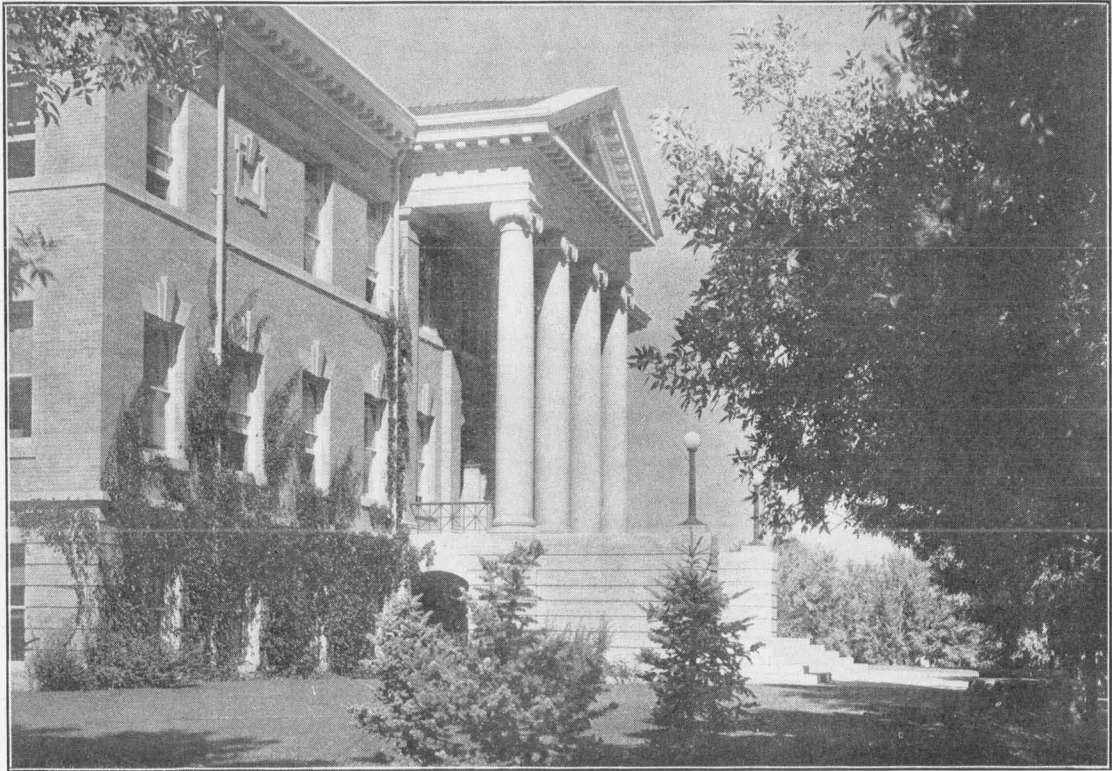


THE INTERIOR OF THE SPACIOUS COLLEGE LIBRARY

RILEY
GREEN



WOMEN'S CLUB BUILDING
Attractive Within and Without



THE SIMON GUGGENHEIM HALL OF INDUSTRIAL ARTS
Wood and Metal Work, Fine Arts, Printing, Book Binding, Mechanical Drawing, Etc.

**Edward Howard Griggs, A. M.,
L. H. D.**

Author and lecturer on Philosophy and Literature, New York City. Formerly professor in Indiana University and Leland Stanford University.

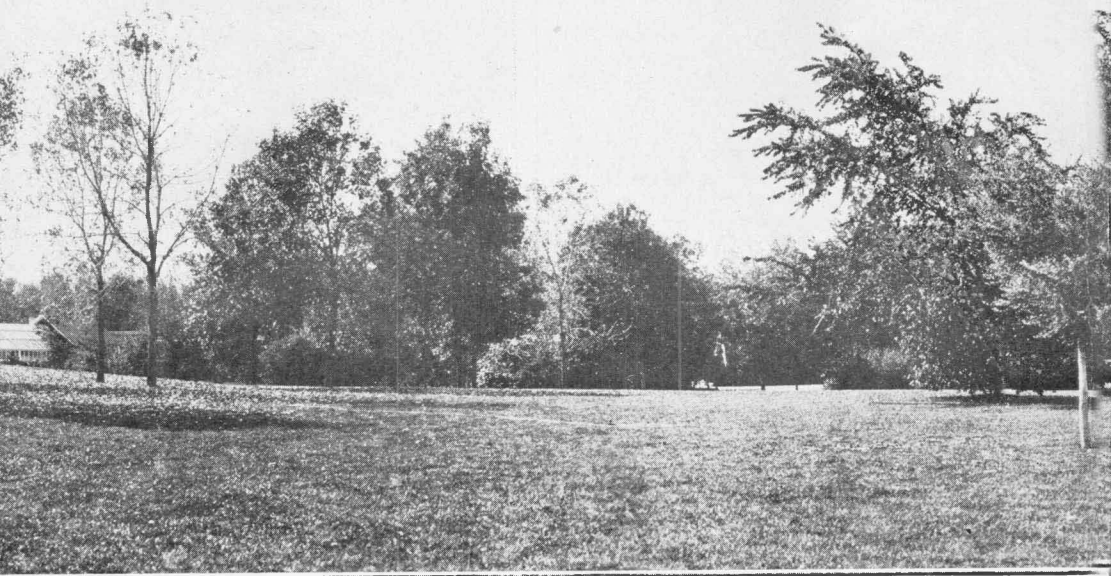
Dr. Griggs lectures for the summer of 1919 (his third series in Colorado Teachers College) will have as a general topic: The War and the Reconstruction of Democracy.



George Drayton Strayer, Ph. D.

Professor of Educational Administration, Teachers College, Columbia University, author of *The Teaching Process*, *How to Teach* and other well known books on school administration. Dr. Strayer comes to Colorado Teachers College for the first time in 1919. He will lecture on School Administration, and teach in two regular courses.

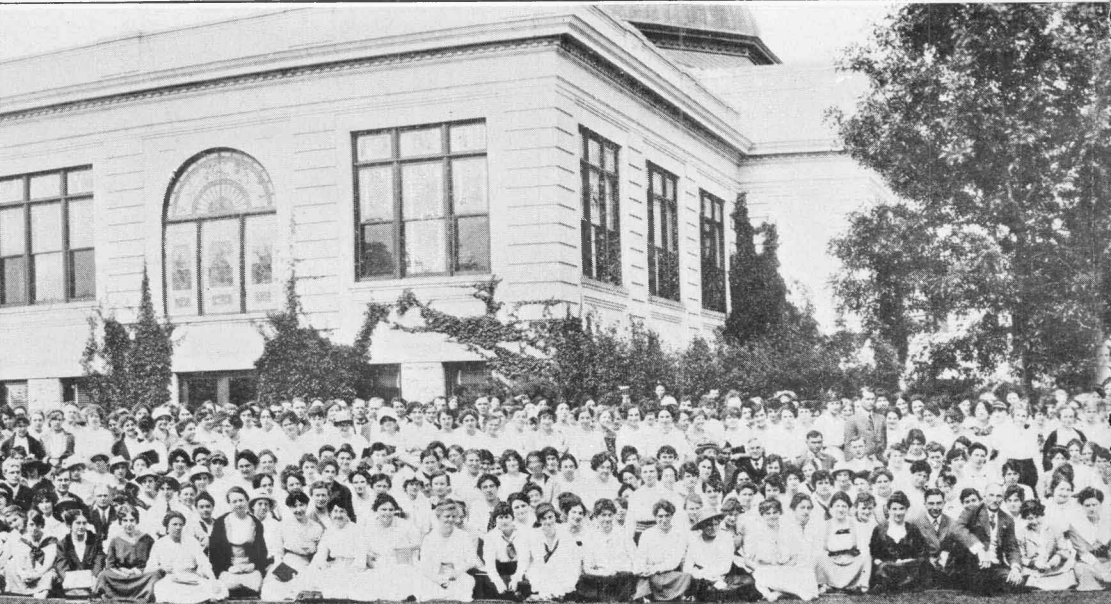
THE
STATE TEACHERS
COLLEGE OF COLORADO
Greeley, Colo.



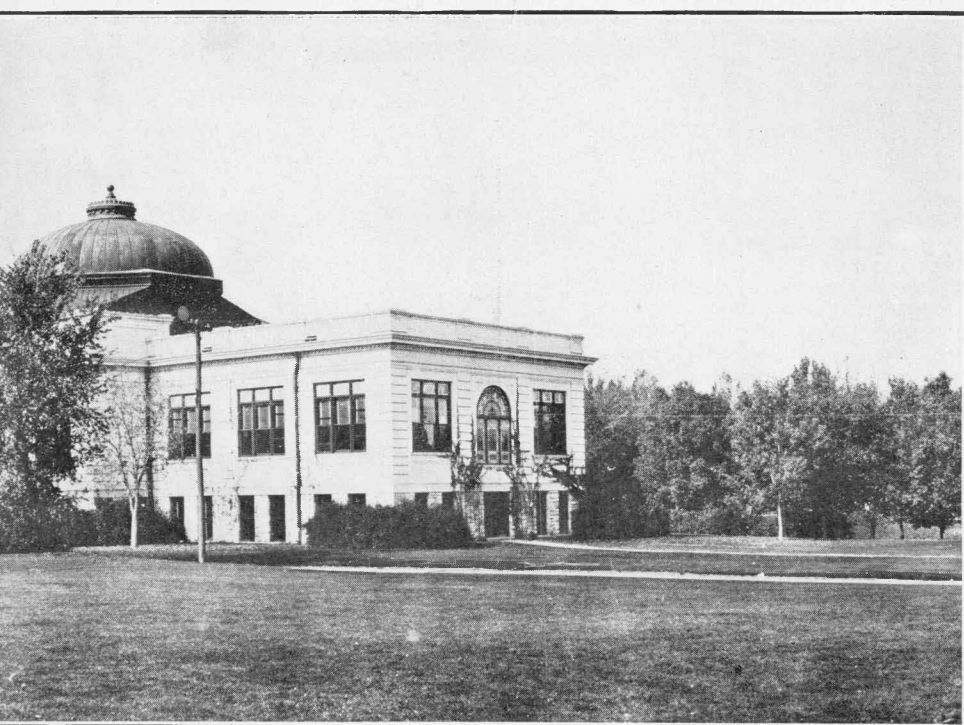
use

A Shaded Lawn

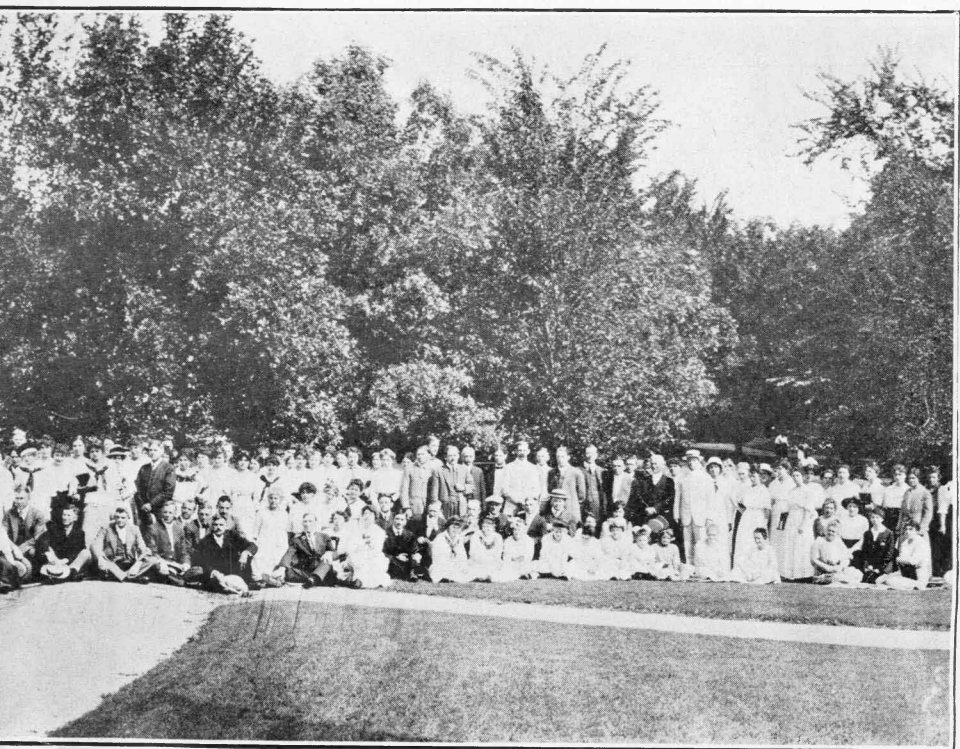
A PANORAMIC VIEW OF A PORTION OF T



Summ

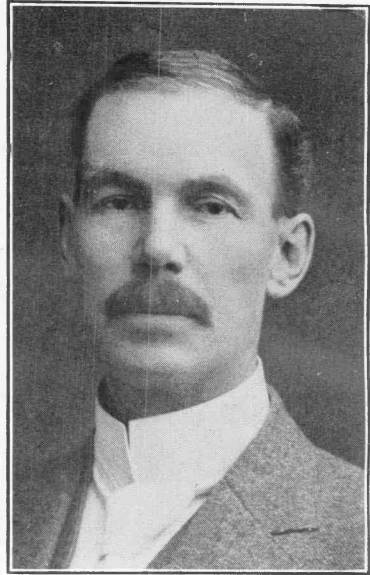


The Library



**Edward Allsworth Ross, Ph. D.,
LL. D.**

Professor of Sociology in the University of Wisconsin, formerly professor of sociology in Stanford University and the University of Nebraska, author of *Sin and Society*, *Social Control* and a dozen other books, including his recent work on the Russian Revolution. He has just returned from a long journey through Russia. His lectures will be upon World Affairs. He will also teach in two courses in Sociology.



**William Albert Wirt, Ph. B.,
Pd. D.**

Originator of the "Gary System" of School Administration, and Superintendent of Schools at Gary, Indiana. Dr. Wirt will give regular instruction in courses in school administration and will also give a series of general lectures on his principal subject: Administration.



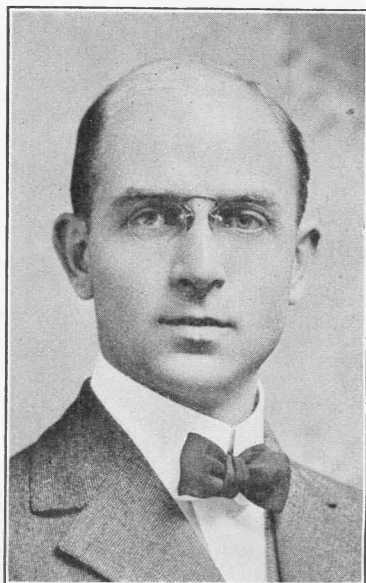
Lincoln Hulley, Ph. D.

President of John B. Stetson University, Deland, Florida. President Hulley is well known as a popular and successful lecturer on literary subjects. In Colorado Teachers College he will give a series of evening lectures on literature and will also teach in the Department of Literature and English.

Thomas H. Briggs, Ph. D.

Professor of Secondary Education, Teachers College, Columbia University, formerly head of the English Department, Eastern Illinois Normal School.

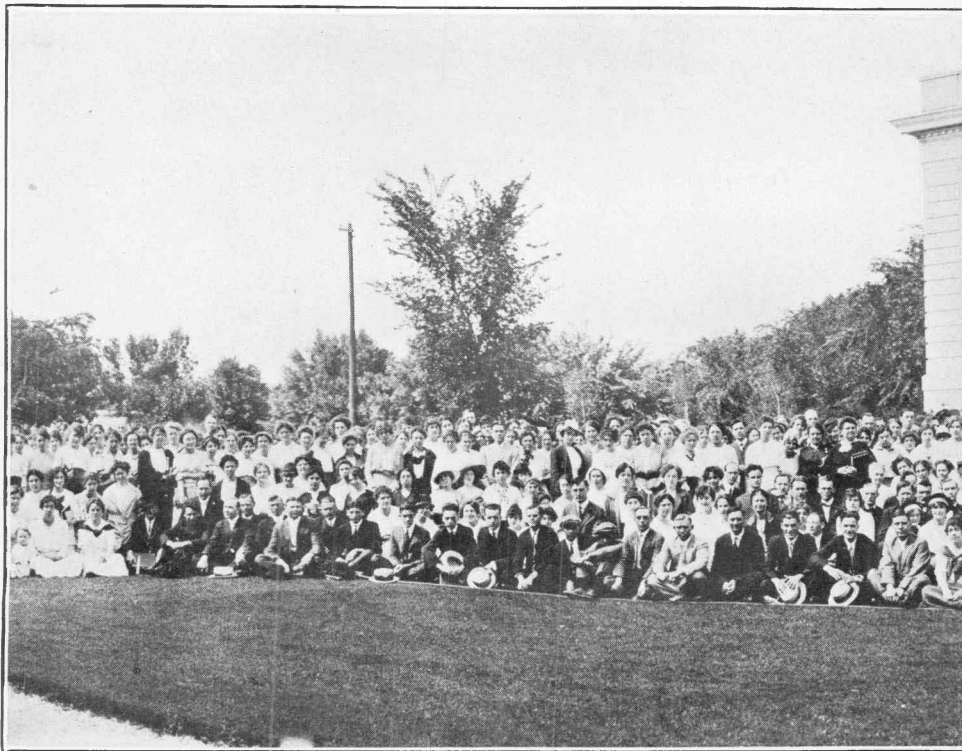
Dr. Briggs will give a series of evening lectures on educational topics. He will also conduct regular courses in the field of secondary education, especially the Junior High School. Dr. Briggs is joint author of the Briggs and McKinney text book in English Composition and the Briggs and Coffman volume on the Teaching of Reading.

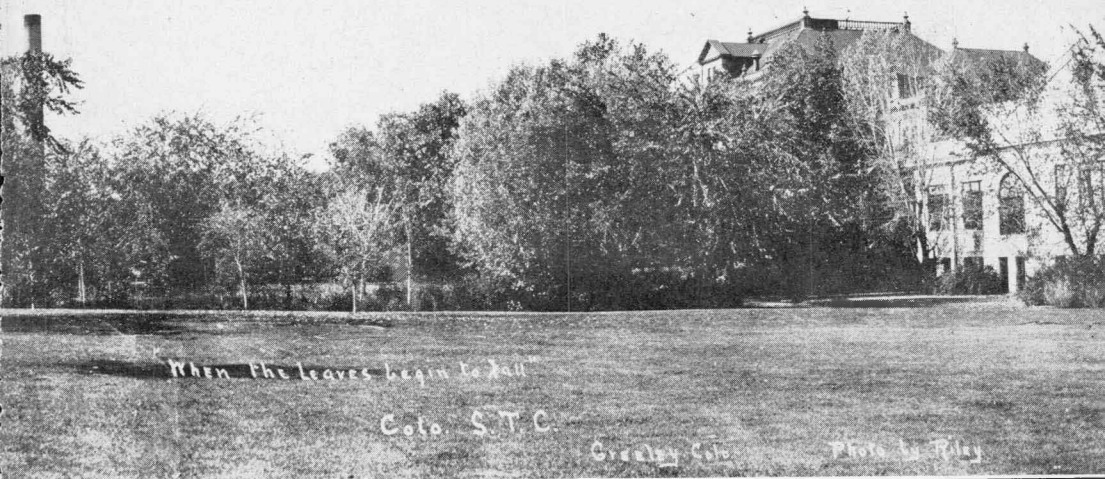




The Women's Club House

The Green





When the leaves begin to fall

Colo. S.T.C.

Greely, Colo.

Photo by Riley

Heating Plant

The Administration Building

GROUNDS AND SOME OF THE BUILDINGS



Term 1915

Colo. State Teachers College Greely, Colo.

Photo by Riley



H. W. Hill, M. D.

Head of the Minnesota Department of Public Health, author of books and articles on Medicine and Health, and known the world over as an authority on Health and Sanitation.

Dr. Hill will give a series of evening lectures and will also give two periods daily to instruction in regular classes in the Department of Biology.



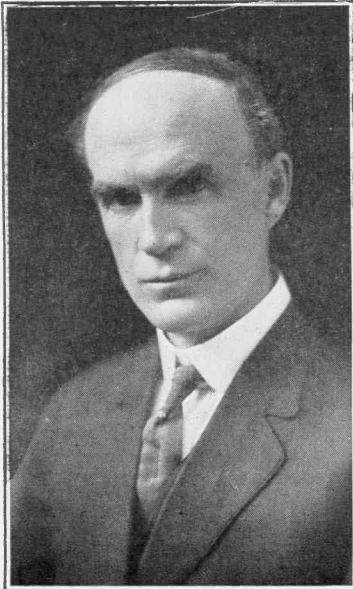
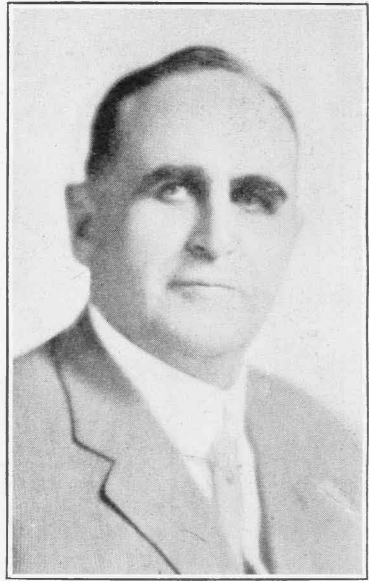
Harold W. Foght, A. M.

Mr. Foght is the rural school specialist in the Department of Education at Washington. He has had ample training in rural work and has been a teacher in all types of schools. During his stay in Teachers College Mr. Foght will be a regular instructor in the Department of County Schools.



Oscar T. Corson, LL. D.

Formerly State Superintendent of Schools in Ohio, and for many years editor of Ohio Educational Monthly. Dr. Corson comes this summer for the third time. He will give another series of his popular general lectures and will also give regular instruction in two courses in the Department of Education.



Hon. Simeon D. Fess, LL. D.

Member of Congress Sixth District of Ohio. Dr. Fess was a teacher of History and Government and a college president before he entered Congress. He is chairman of one of the most important committees in Congress. In Teachers College he will give a series of public lectures on World Affairs. He will also teach in the department of History and Political Science.



SUMMER THEATER



TRAINING SCHOOL

GENERAL LECTURERS FOR SUMMER 1919



SCATTERED thro the pages of this booklet will be found portraits and sketches of several members of the staff of nationally known General Lecturers and Educators who will be a part of the Summer School Faculty of Colorado State Teachers College during the Summer Quarter. Sketches of other members, fully as well known, but whose portraits were not available, are given below. All will lecture and give class instruction during some portion of the Summer Quarter.

Harvey Gruver

Superintendent of Schools, Worcester, Massachusetts, formerly assistant superintendent of schools Indianapolis, Indiana.

Dr. Gruver will give regular instruction in two courses in the Department of Education, his subjects being School Administration, and the Junior High School.

Edward Cary Hayes, Ph. D.

Professor of Sociology in the University of Illinois, author of *Introduction to the Study of Sociology*, and other books and magazine articles.

Dr. Hayes gives a series of evening lectures on *Social Problems of Today*. He will also give instruction in two regular courses daily during his stay in Colorado Teachers College.

Franklin B. Dyer, Litt.D., LL.D.

Dr. Dyer is one of the best known school superintendents in the United States. His reputation was made as city superintendent of schools in Cin-

cinnati and Boston. Dr. Dyer will instruct in two courses in the Department of Education.

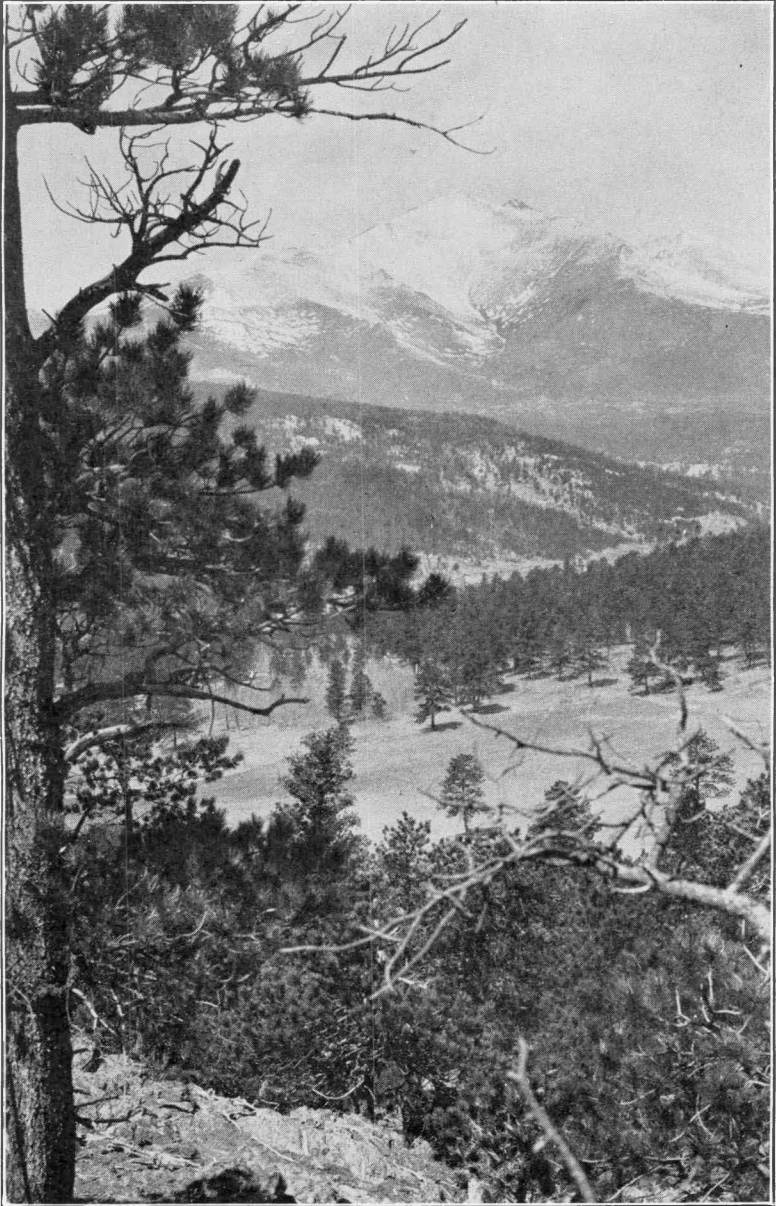
Maj. Lewis M. Terman, Ph. D.

Dr. Terman, who is Professor of Educational Psychology in Stanford University, is in charge of the mental tests for soldiers in the Surgeon General's Office. Major Terman will spend five weeks in Greeley and will teach two regular classes in the Department of Educational Psychology, one in tests and measurements and the other in sanitation and the health of school children. Dr. Terman will give the general lectures for one week.

Leon Henry Vincent, Litt. D.

Author of *American Literary Masters*, *Dandies and Men of Letters*, *The Bibliotaph*, and other books, essays, short stories, etc.

Nationally known as a popular and scholarly lecturer on Literary Subjects. His Colorado Teachers College lectures will be under the general head: *The War in Literature*, a series just given during the spring in Columbia University. Dr. Vincent will also instruct in the English Department.



VIEW OF LONGS PEAK

"What Teachers College, Columbia, is to the East,
Colorado Teachers College is to the West."

ANNOUNCEMENTS



READY at all times to better where betterment is possible, the President and Trustees of Colorado State Teachers College announce an increase in the number of General Lecturers for the Summer Quarter to sixteen, nearly all men of national reputation in the educational and literary world, and each an expert in his chosen field. These men will not only give the usual evening lectures, but will give class instruction during their stay at the College, not less than two courses per day.

The inauguration of a first-class cafeteria, conducted by the college in the building, insures good, palatable food at a cost of \$3 to \$3.50 per week. Good comfortable rooms may be had for \$6.00 to \$10.00 per month.

Students may attend either Half-Quarter and receive credit accordingly if they cannot attend the full Quarter.

Attractive week-end trips to the Rocky Mountain National Park (Estes Park), will be provided under college supervision, including board, lodging and transportation, at cost—about \$10.00.

Complete Summer School Bulletin and National Park folders will be sent free upon request.

Address

J. G. CRABBE, President,
State Teachers College,
Greeley, Colorado

COLORADO STATE TEACHERS COLLEGE BULLETIN

Series XVIII

MARCH, 1919

Number 12

A STUDY IN THE MECHANICS OF READING

J. D. HEILMAN

Professor of Educational Psychology

RESEARCH BULLETIN
No. 4

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.

A Study in the Mechanics of Reading

THIS study was undertaken with the purpose of finding out what factors in the mechanical phase of the reading act are most likely to arrest the child's progress in learning how to read. The general plan of procedure may be divided into four principal parts. In the first part an attempt was made to derive by means of a theoretical analysis the main mental processes involved in the mechanical aspect of reading. In the second the efficiency of these mental processes was tested for every child who served as a subject for the experiments. In the third part the reading ability of every child was either determined by means of a test or obtained from the teacher of the children. The fourth part consisted in calculating the coefficients of correlation for the children's reading ability and their efficiency in every one of the mental processes tested. Those efficiencies which gave the highest degrees of correlation with reading ability were assumed to be the most important in learning how to read.

The analysis of the mechanical phase of the reading act yielded the following principal factors: the visual perception span; the recognition of unfamiliar visual words; speed in the recognition of familiar visual words or their elements; speed in the recognition of familiar visual words and the reproduction of their oral equivalents combined; the association of familiar and unfamiliar oral words with unfamiliar visual words; the phonetic analysis and synthesis of words. It was also thought to be worth while to test visual and auditory reproduction, because the recognition of an impression is dependent upon its power to reproduce its former associates, especially those of visual and auditory nature in the case of reading. On the fifth of these items, that pertaining to the association of familiar oral words with unfamiliar visual words, no experiments were made because the necessary materials could not be prepared and the experiments be performed before the close of the school year.

The data of the study were obtained from two sets of experiments, the first of which was carried on in the winter of 1915 and the second in the spring of 1918. The subjects of the first set were sixteen school children of the sixth grade. There were eight boys and eight girls. Their age-differences were very small. Taking their ages at the nearest birthday, twelve were twelve years old, three were eleven, and one was fifteen. For the second set of experiments the subjects were fifteen sixth grade children of the

B division, six girls and nine boys. All of these children were beyond twelve years of age but only two were beyond fourteen.

In reading ability the sixth grade children of the B division were ranked by their teacher, who had worked with most of them for several years and who therefore knew their relative abilities very well. With but a few exceptions the differences in reading ability were so marked that the ranking could be easily made. The reading abilities of the sixth grade children were determined upon the basis of the time required to read a passage of thirty-five lines from a fourth reader. Five seconds were added to the reading time for every error. The amount of time added for every error was chosen somewhat arbitrarily but this addition had practically no effect upon the reading rank of this group of children, because those who read the most fluently also made the fewest errors, the coefficient of correlation for speed and errors being .87. Only mispronunciations and the inability to give a pronunciation were recognized as errors. For all of the children but one, who required ten minutes to read the passage, the reading time ranged from one minute and a half to five minutes. The errors ranged from two to forty-two.

As almost all of the sixth grade children had the same chronological age and as all but four of them did not vary more than a year in mental age, they were thought to constitute a good group for calculating the amount of correlation between their reading abilities and their grades of intelligence. If those children who have the highest mental ages are assumed to be the most intelligent, then the coefficient for reading ability and intelligence is .06; but if those children whose mental ages exceeded their chronological ages the most be considered the most intelligent, then the coefficient is .56. However, if the group of children had been larger these coefficients might have been very different.

In calculating the above coefficients Pearson's method adapted to rank differences was used, the formula being: $r = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$ Unless otherwise specified this formula was used for working out all of the other coefficients given in this study. For those who are not familiar with methods of correlation I am making a brief general statement of the meaning of the coefficient of correlation. For this purpose I shall use reading ability and general intelligence as the factors to be correlated. If the child who is the best reader also has the best intelligence, the one who is next best reader has the next best intelligence and so on for the whole group, then the correlation for reading ability and intelligence will be expressed by the coefficient 1. If, however, the best reader has the poorest intelligence, the next best reader the next lowest intelligence and so on, then the coefficient of correlation will be

—1. Again, if there is no connection between reading ability and intelligence beyond a chance relationship, then the coefficient will be 0.

For the experiments on the relation between the visual perception span and reading ability the sixth grade children of the B division served as subjects. The words which were used to vary the demands upon the span are given in the following list of five groups:

1	2	3	4	5
play	there	pretty	pennies	football
come	happy	coming	bonnets	straight
like	going	garden	grandma	overalls
rain	stand	crying	morning	leapfrog
have	thing	babies	strings	marching

The words of these groups, which vary in length from four letters in the first group to eight letters in the eighth, were cut from the Sun Bonnet Primer and pasted on a white card of the size required by the tachistoscope, but the type deficiencies of these words were such as to make it impossible to use them. They had to be exposed very often before the children could recognize them and the number of expositions varied considerably from word to word. The letters of the words were too small and the ink was too pale for ready recognition. While considerable improvement has been made within recent years in the size and nature of the type used for primers, it is still very deficient. The type face is too small, the width of the stroke is insufficient or the whites and blacks are poorly balanced and the long serifs obscure the forms of the letters and words.

On account of type deficiencies and the shortness of the printed words, the words were finally printed on white cards with a stub pen and heavy black ink. While this resulted in considerable variation in the size of the letters and the lengths of the words, it gave us words which could easily be recognized. No capitals were used because the object was to make words in their general form look as nearly as possible like words of ordinary text. The length of each word in millimeters is given in Table II and the approximate size and spacing of the letters is given in the following table:

TABLE I
Approximate size and spacing of the letters.

	<u>mm</u>		<u>mm</u>
Height of tall letters.....	13	Width of stroke.....	1.25
Height of small letters.....	7	Spacing of letters.....	2 to 3
Width of small letters.....	6		

The words were exposed by means of Whipple's portable tachistoscope. This is a very convenient form of tachistoscope.

By its use the exposition time can be varied from one-thousandth to one-tenth of a second. Its most serious short-comings appear to be a lack of accuracy in the exposition times and the absence of a fixation point. The former, however, did not interfere with the attainment of our purposes. The tachistoscope was placed squarely in front of the child at a distance of eighteen inches from the eyes. It was tilted at such an angle that the line of sight made angles with the plane of the card containing the word.

The words were exposed in the order in which they appear in the above list, every exposition being preceded by the preparatory signal *now*. If the child recognized a word correctly on its first exposition, the next word was shown; but if he failed, the same word was shown repeatedly until the child succeeded or the word had been shown twelve times. The exposition times for the first four trials were one-three hundred and fiftieth, one-one hundred and tenth, one-fortieth, and one-tenth of a second respectively. For additional expositions these times were repeated in the same order until either recognition occurred or twelve expositions had been made. As there were fifteen children and twenty-five words, three hundred and seventy-five expositions would have been required had every child succeeded on the first trial. Out of these three hundred and seventy-five cases there were only thirteen for which twelve expositions were insufficient. Moreover, out of the three hundred and seventy-five cases only one hundred and ten required more than a single exposition for correct recognition. Most of the repeated expositions occurred on the word groups, four and five.

Those children who averaged the smallest number of expositions were assumed to have the widest perception span. This assumption may seem to be unwarranted because word recognition depends upon the degree of familiarity as well as upon the perception span. As all of the words were taken from a primer it was thought that there certainly could be no large differences in the degree of familiarity. Ease of recognition may also vary somewhat with the form of the word, but as a variety of forms appeared in the groups with the shorter as well as in those with the longer words, this factor was kept fairly constant and does therefore not enter into the problem. At any rate whether some word forms are recognized more easily than others has not been very satisfactorily determined. More work has been done on the recognizability of letter-forms, but even here there is poor agreement.

How the number of expositions increased with the length of the word is shown in the following table in which are given the length of each word in millimeters, the number of expositions per word and other results which will be referred to later:

TABLE II

Showing the words exposed, their lengths in millimeters, the number of exposures required for recognition, the total response times on each word and the response times for all but the poorest subject.

Words	Length in mm.	Total Num- ber of Ex- posures	Total Response Times in Fifths of a Second	Response Times with one Case Omitted
play	27	24	88	78
come	34	23	72	67
like	25	17	86	79
rain	26	41	119	94
have	30	15	82	71
—	—	—	—	—
Averages	28	24	89	78
there	34	15	84	68
happy	41	17	121	76
going	36	16	90	75
stand	36	16	96	80
thing	32	17	99	84
—	—	—	—	—
Averages	36	16	98	77
pretty	43	21	97	91
coming	45	16	82	72
garden	48	21	123	80
crying	42	19	140	104
babies	41	28	136	105
—	—	—	—	—
Averages	44	21	116	90
pennies	52	76	125	100
bonnets	54	86	149	124
grandma	62	87	155	147
morning	55	23	114	80
strings	49	31	139	119
—	—	—	—	—
Averages	54	61	136	114
football	45	37	144	104
straight	45	25	130	105
overalls	47	35	135	100
leapfrog	50	41	155	130
marching	57	22	126	116
—	—	—	—	—
Averages	49	32	138	111

The words of the first and second groups appear to have fallen well within the limits of the children's perception spans. The whole number of children required, for the correct recognition of every word in the second group, only six more than the smallest possible number of expositions. On the first group they required, for correct recognition, forty-five more than the smallest number of expositions, but this was probably not due to the narrowness of the perception span. Twenty of the forty-five extra expositions were made by two children on the word *rain*, which was poorly printed, the letters *i* and *n* having been very poorly spaced. This resulted in such readings as *ram* and *ran*. Seventeen of the extra expositions were made on the first and second words. This may be ascribed to a lack of sufficient preliminary practice, only two words having been exposed for this purpose.

Even for the third group only twenty extra expositions were required for the correct recognition of every word. As thirteen of these were made on the word *babies*, which was the shortest word, the perception span was undoubtedly wide enough to recognize the words of this group. Twelve of the extra repetitions on *babies* were required by two children. It is perhaps worthy of note that the words ending in *ing*, *coming* and *crying* in this group, required the smallest number of expositions. *Morning* in the fourth group and *marching* in the fifth group also required the smallest number of expositions in their respective groups, even though they were the second and third longest words of the whole list. If this is due to the fact that the syllable *ing* is so frequently repeated as the final syllable of words, then it appears that the possibility of improving the recognition of words by means of practice is almost without a limit.

The words of group five required only about one-half as many expositions as those of group four. This fact may be attributed to differences in word familiarity, the number of letters in each word, word form and word length. If there is any difference between the groups in word familiarity it is probably in favor of group four. The words of group four also have the smallest number of letters. Which group of words contains the forms most favorable to easy recognition it is probably impossible to say. There are two plural endings in group four and only one in group five, but the children did not make any errors on these phases of the words. Moreover, *grandma* is not a plural form, and yet required the most expositions.

The only remaining difference is that of length, and this is very much greater for the words of group four than for those of group five, the average difference in length being five millimeters. If the individual words of group four and five, excepting *morning* and *marching*, be compared, it will be found that the words of

fifty millimeters and above required without exception a larger number of expositions than the shorter words. Again, if we disregard the first group and compare the remaining groups with respect to length and number of expositions, it appears that the number of expositions increases quite regularly with the length of the word. These facts appear to justify the statement that those children who required the smallest number of expositions for correct recognition have the largest perception span. If it can also be shown that these children are the best readers, then there must be some connection between the ability to read and the visual perception span. Either the ability to read depends upon the perception span or both depend upon the same ability. There is, however, the possibility that the best readers increased their perception spans by doing much more reading than the poorer readers. On this point there is no evidence for a decision, and if there were it would not interfere with what we are trying to show: i. e., that the best readers have the widest perception spans.

In the preceding paragraph I attempted to show that under the conditions of our experiments, the ranking of the children based upon the widths of the perception spans was the same as the ranking based upon the number of expositions required for correct recognition. Now, as the coefficient of correlation for reading ability and the number of expositions is .68, this is also the coefficient for reading ability and the visual perception span. I also calculated the coefficient of correlation for reading ability and the number of expositions on each of the last two groups of words in the above list. In each case the coefficient was found to be .69. For the remaining word-groups no coefficients could be calculated, because very many children had the same number of expositions for every one of these groups.

Having shown that reading ability and width of perception spans have a high coefficient, I shall venture to make a few practical suggestions in regard to the perception span in the teaching of reading. The high coefficient shows that it is one of the important factors involved in the act of reading. This fact, in connection with the further fact that the young child's perception span is narrow but increases considerably with age, constitutes a strong argument against the early teaching of reading. If the learning of reading were postponed until a later age, the child would, on account of a wider perception span and greater maturity in other capacities involved in reading, learn reading far more easily and very probably more perfectly. The width of the visual perception span increases not only with age but also with training. The conditions under which the child learns how to read should therefore be such as to impel him to make an effort to increase his perception span and to build up larger and larger perception units. I believe that the development of large perception units

should receive the careful attention of the teacher and should not be permitted to develop incidentally in connection with ordinary reading. Of course, this and most of the other practical deductions made in this study should be taken as suggestive only until tried out by carefully conducted experiments in the teaching of reading.

The time required for the recognition of familiar visual words and the reproduction of their oral equivalents combined, is another factor involved in reading which I attempted to measure. This was done in connection with the experiments on the perception span by measuring the time which elapsed between the exposition of a word and its pronunciation by the child. As soon as the word appeared in the tachistoscope, the experimenter started a stop-watch and when the child gave the name of the word the experimenter stopped the watch. This would be a very crude method for getting the absolute response time of a child but as interest here was only in the relative response times the method was thought to be sufficiently reliable.

Only the response times for correct recognition were recorded, because the times for incorrect recognitions varied so much as to be valueless—from three-fifths of a second to fifteen seconds. Moreover, in some cases there was no response until a correct one could be given. As stated before, in thirteen cases no responses occurred by the twelfth exposition. For these cases a time value was assigned. This was the child's average time on all words which required more than one exposition. Correct recognition occurred on the first exposition for two hundred and sixty-five of the three hundred and seventy-five cases.

The response times on every word for the whole number of children is given in Table II in fifths of a second. If the results of the poorest subject are omitted the increase in response times from group to group is very slight. The average time for the last group of words is less than one and one-half times that for the first group. The difference in the response times between the first and last groups can be diminished to one-half this amount by omitting the response times for the words which required more than a single exposition for recognition.

Our main interest in the response time however is in the relation which it bears to reading ability. Are the children with the shortest response times the best readers and those with the longest response times the poorest readers? A number of different bases were used for the purpose of ranking the children in the speed of their responses. The first of these was the child's average response time for all the words which required only one exposition. Upon this basis the coefficient of correlation for speed of response and reading ability is .81. The second basis was the

child's average response time for all of the words regardless of the number of expositions required for recognition; the third was the average response time for all the words of group three; the fourth, for all the words of group four; and the fifth, for all the words of group five. The coefficients for reading ability and the speed of response, with the rankings made upon the bases just described, are .80, .85, .80 and .80, respectively.

These high coefficients indicate that the ability to make a quick oral response to the printed word is an essential factor in the mechanical aspect of reading. But this response is a complex. It involves a number of factors, every one of which requires some time. For example, there is the time for pronouncing the word after it has appeared in consciousness; the time for reproducing and recognizing the auditory and speech-motor images which precede the pronunciation; and the time involved in the arousal and recognition of the visual impression. Every one of these factors might still be further analyzed. Recognition in itself is a complex process. I have, however, gone far enough in the analysis for my purpose. The mere pronunciation of a word after its auditory motor forms have already appeared in consciousness does not appear to be a serious cause of delay in the act of reading, for children have no difficulty with repeating a familiar word after having heard it. The rate of recognizing familiar words may undoubtedly be a serious cause of delay. Experiments on the speed of recognizing familiar verbal elements and on the recognition of strange words will be described in the following pages.

The arousal in consciousness of the auditory-motor forms of the word by the visual impression after this has been recognized, I believe to be an important factor in lengthening the total response time. The time for the reproduction of the auditory-motor forms of the word is dependent upon the intimacy of the connections between these forms on the one hand and the visual form on the other. If the connections are very intimate then the auditory-motor forms are reproduced easily and quickly, but if the connections are imperfectly and loosely formed reproduction is apt to be delayed. It is probable that for practiced readers an imperfect connection between the visual and auditory-motor phases of the word is a more serious cause of poor reading than faulty visual recognition, especially as the latter may depend partly upon the former. It is more difficult for the child to recall the name of a word after he has seen and recognized it than it is for him to recognize a word, just as adults find it more difficult to recall the names than to recognize the faces of people.

If this opinion is correct then the formation of intimate connections between the visual and auditory-motor phases of the word should be stressed most in developing the mechanical side of reading. How this may be done most effectively it may be impossible

to say, but I shall nevertheless venture to discuss the problem. I believe that the most intimate connection between one complex and another is made by analyzing each complex into its elements and associating the corresponding parts, the size or nature of the elements to be determined by the degree of their familiarity. As these associations are being formed they should be connected with other similar associations until the associated parts become intimately united with one another. Thus, in reading, the visual word should be analyzed into letters or syllables and the oral word should be analyzed into sounds or syllables, the parts of the one being meanwhile associated with the corresponding parts of the other. These associated parts should then be connected with other associated parts. In this way the visual word becomes better known, the auditory-motor word becomes better known, and the two are unified by many intimate associative connections so that when the one is in consciousness the other can be readily reproduced. Care however must be taken to avoid the continuance of this procedure beyond the limits of necessity. The goal of this procedure is to develop the ability to recognize the visual word as a whole quickly and accurately and to supplement the visual word quickly and accurately with its total oral equivalent. The teacher of reading is apt to either over-do the analytic-synthetic work or neglect it altogether. One teacher relies mainly upon teaching the elements of the word, another upon deriving these elements through word-analysis, a third upon combining the elements into word wholes, a fourth upon the recognition of words and phrases as a whole, a fifth upon thought anticipation and so on. Every one of these factors has its place in reading; none of them should be neglected, but none of them should be over-emphasized. The kind and amount of emphasis required will vary with the individual and the stage of development in reading ability.

Another series of experiments was undertaken with the B division of the sixth grade in order to determine to what extent their reading ability correlated with the ability to learn the recognition of strange forms. These forms consisted of Greek words. The children under controlled conditions attempted to learn the recognition of ten of these words. Sixteen more of these words were used in connection with the ten to test the success of the children's efforts. The whole list follows:

ἡρζάμην	εὐτυχέω	βελτίων	μάχαιρα	ἀγοράζω
δεχόμεαι	ἀδελφός	ισάζω	λοχᾶγιά	κτάομαι
δυνάτος	αθροίζω	ἵππυκός	πρέσβυς	κεφαλῆν
ἡγάσθην	ἀριθμός	θέμενος	οἰχομαι	λανθάνω
ἐκκλίνω	βάλανος	θόρυβος	πολέμιος	μελανία
				ὄρυκτός

Every one of the foregoing words was printed in Greek letters on a separate card about the size of a visiting card. The first ten words in the list were shown to the children in a constant order at the rate of one in two seconds. The time was controlled by means of a metronome. The child was asked to look at the words carefully so that he would be able to find them when mixed with Greek words which he had not seen. After the child had been told what he was expected to do, the experimenter placed the first card directly before him and after two seconds placed the second card on top of the first so as to cover up the first word. This procedure was continued until all of the ten words had been placed before the child. The ten cards were then shuffled with the remaining sixteen, about twenty seconds being required for this purpose. The whole pack of cards was now placed before the child and he was asked to separate them into two piles, the one containing those words which he had seen before and the other those words which he had not seen. The whole procedure of learning and testing was repeated four times, making five trials in all. In separating the cards the child was allowed as much time as he desired.

For the pile containing the words which the child thought he had seen before, the wrongs and rights of the five trials were averaged and the accuracy of recognition was calculated as indicated by the following formula: $r = \frac{R - 5/8 W}{C}$. In this formula r represents the accuracy of recognition; R the number of cards placed correctly; W the number of cards wrongly placed; and C the number of cards, in this case ten, which the child might have placed correctly. As the ten words which the child had seen were mixed with sixteen which he had not seen, he got by chance more wrong than right in making the separation. To equalize the chances for placing words rightly and wrongly, W is multiplied by $5/8$. The percentage of accuracy as found by this formula varied from 7 to 63, the fourth poorest reader making the best score.

The ability to learn the recognition of strange forms as represented by our subjects was now correlated with their reading ability. The coefficient for these abilities is $-.11$, an amount which is much more than covered by the probable error (see Table IV). According to this coefficient learning to recognize forms is none of the factors which is responsible for the prevalent poor reading among the children of the upper grades. Learning to recognize strange word-forms may be a difficult task for the beginner in reading but it does not appear to be so difficult as to interfere seriously with the development of his subsequent reading ability. The ability to learn the recognition of strange forms should be kept distinct from that of recognizing familiar forms

quickly, a problem which will be considered presently. Perhaps these two abilities are intimately related but at present no evidence of this appears to be at hand.

In connection with these experiments an interesting fact on the method of recognizing strange words was brought out. The children were asked whether they depended upon the appearance of the word as a whole or on parts of the word for recognition. The following represent the variety of replies to this question: "Some of the funny letters"; "The different marks over the letters"; "The first two or three letters"; "The first and last letters". All of the children relied upon the appearance of letters for word recognition and only three said that they also tried to remember the appearance of the word as a whole. The percentage of accuracy for one of these three was the lowest of the whole group and for another it was a fair average. The best subject depended upon the first two or three letters. The child who had the second best record said that he depended upon two letters somewhere within the word. The child with the second poorest record depended upon the appearance of the word as a whole, together with the appearance of some of the letters within the word.

I think we may fairly assume that beginners in reading use similar methods in attempting to recognize words. On this assumption the question arises whether the children should be allowed to use their own methods or whether they should be encouraged to depend upon total word form for recognition. I shall try to answer this question by examining the probable consequences of allowing the child to use his own methods, those of recognizing words upon the basis of one or a few of their letters. If the child recognizes words upon the basis of such simple signs as one or two of their letters, then as his visual vocabulary increases these signs of recognition will appear in many other words with the result that the new and the old can no longer be distinguished without considerable confusion. To avoid this the child must develop a recognition which is based upon the total appearance of the word. In this connection the further question arises whether the child should be permitted to develop this kind of recognition by his own methods or whether the teacher should direct and help him. Undoubtedly the end will be attained more quickly if the teacher will give the child some intelligent assistance. The whole task of the recognition of complex word-forms would become very much easier for the child if reading were postponed until a later age.

There are some teachers of reading who assert that the child will learn to recognize the long word just as quickly as or often more quickly than the short one. When this is the case it must not be assumed that the child had become just as familiar with the long as with the short word, for he recognizes the long word upon

the basis of only one or more of its ear-marks such as its greater length or an odd first letter. This is his method of recognizing the short word also but, as the short word has fewer characteristics than the long one, it is more completely known when only a few of its characteristics are recognized.

The next series of experiments represents an attempt to determine whether good readers have a higher speed in visual recognition than poor readers. The children of the sixth grade served as the subjects. For the materials of these experiments I intended to use short sentences composed of familiar words, the sentences to be exposed for such periods of time as would permit of eye-movements yet tax the child's fluency in reading. But as no apparatus for making such expositions was available, I used the following one-syllabled German words in place of the sentences:

Gruss	Stein	Turm	Berg	Kunst	Krug
Raum	Kreuz	Werk	Hand	Strauch	Welt
Uhr	Fass	Schiff	Stern	Frucht	Jahr
Zeit	Blatt	Glas	Hof	Schrift	Feld
Netz	Weg	Baum	Korb	Wald	Bild

These words were exposed in the above order and form by means of a Wirth memory apparatus. The exposition time, which was controlled by means of a metronome with electrical connections, was three-quarters of a second. As the time was long enough to permit eye-movements and as the words were short, this was not a test of the visual perception span but of the speed in recognizing a series of well-known letters, letters whose forms were well known and whose names were well possessed.

Preliminary practice consisted of only one exposition. The children were placed in a comfortable position directly in front of the apparatus and at an easy reading distance. At their right side was a table with pencil and paper. The children were instructed to get the spelling of a word and then write it on the paper prepared for the purpose. Every word was written by the child directly after its exposition, as much time being allowed for this as the child required. Letter errors were counted. They consisted of additions, omissions, inversions and transportations. The number of errors made on every word by all of the children is given in the following table:

TABLE III

Words Exposed	Total No. of Errors	Whole Word Missed	Words Exposed	Total No. of Errors	Whole Word Missed
Uhr	5	1	Gruss	10	0
Weg	1	0	Stein	6	0
Hof	0	0	Kreuz	32	1
			Blatt	8	0
Average	2		Stern	3	0
			Kunst	16	0
Raum	11	1		—	
Zeit	7	0	Average	12.5	
Netz	8	1	Schiff	14	0
Fass	6	1	Frucht	34	1
Turm	8	0		—	
Werk	1	0	Average	24	
Glas	5	0			
Baum	6	0	Strauch	31	0
Berg	0	0	Schrift	36	0
Hand	0	0		—	
Korb	6	0	Average	33.5	
Wald	0	0			
Krug	8	0			
Welt	2	0			
Jahr	7	0			
Feld	2	0			
Bild	0	0			
Average	4.5				

The above word-groups are composed of words of different lengths, the shortest having only three letters and the longest seven. The number of errors varies considerably with the group, the groups with three, four, five, six and seven-letter words averaging 2, 4.5, 12.5, 24 and 33.5 errors per word respectively. If the number of errors per word be taken as a measure of the task of recognition, it appears that this task under the conditions of our experiments increases far more rapidly than the number of letters in the successive groups. Thus twice as many errors are made on the four-letter group as on the three-letter group and three times as many errors on the five as on the four-letter group.

Most of the errors were made on letters composing the middle part of the word. There were 249 errors excluding those due to missing whole words. Of these 153 were made on middle-letters and only 96 on end-letters. Only the first and last letters were taken as end letters, excepting the last group in which the first two and the last two were taken as end-letters. For the second word-group in which there are just as many letters in the middle of the word as at the ends, there are 42 middle-letter errors and

23 end-letter errors. The letters at the ends had the advantage of both position and form, the first letters being capitals and many of the last letters being tall.

There were large individual differences in the number of errors. The best subject made only one error while the poorest made twenty-three. It was assumed that those children who made the most errors had in general the slowest rate of recognition, an assumption which is perhaps unwarranted. If it be accepted, however, then the coefficient of correlation for speed of recognition and reading ability is .87. The speed of recognizing very familiar visual materials may depend largely upon the excitability of the retina. In some children the retina may be so inert as to make it difficult for them to become fluent readers. While native excitability of the retina can evidently not be improved, there is no reason to doubt that its excitability can be improved for the same stimulus by much and intense practice.

With the sixth grade children acting as subjects, another series of experiments was performed to determine whether the ability to reproduce series of visual and auditory impressions would show any correlation with reading ability. For the visual series the materials consisted of the following nonsense syllables: xon, ger, lah, bir, tex, lur, sen, bef, zif. These materials were presented six times in succession and in the same order at the rate of one in three-quarters of a second by means of a Wirth memory apparatus. The time was regulated by a metronome with electrical connections. Directly after the materials had been presented for the sixth time the child wrote what he remembered. Credit was given for all of the syllables which were reproduced correctly, regardless of the order. The ability to reproduce such visual material does not appear to be any better for the good than for the poor readers. The coefficient of correlation is $-.03$; this is more than covered by the probable error.

The following nonsense syllables were used to test the child's ability to reproduce a series of auditory impressions: gur, tus, ner, lab, daw, tac, sot, rix, nas. These also were presented six times in succession. The experimenter pronounced them at the rate of one in three-quarters of a second, the time being controlled by means of a metronome. Directly after the sixth presentation the child was asked to reproduce the syllables orally. In both this and the preceding experiment no letter errors were counted. The poor readers succeeded just as well in the reproduction of these syllables as the good readers. The coefficient is $-.05$. An effort was made to have a recall after twenty-four hours but some special work in the training school interfered with this.

The form of this experiment can be much improved. In its present form it does not test the kind of reproduction involved in learning how to read. The ability to be tested is the repro-

duction of a familiar oral word in response to a strange visual word. This can be tested by exposing Greek words on the Wirth memory apparatus and telling the child at the same time the names of their English equivalents. After the list of words has been repeated a number of times in this way, the child's ability to reproduce the English names of the Greek words may be tested by showing the Greek words once more on the memory apparatus and asking the child to name them. The speed of naming them would test the intimacy of the connections between the strange visual and familiar oral words, while the accuracy of the reproductions would test the retention of the connections.

The results of these experiments were also tabulated for the purpose of showing whether the children learned nonsense syllables best when presented to the eye or to the ear. In this connection it must be remembered that the child's response to visual presentation was in writing and to auditory presentation oral. No difference in the two methods of learning was discovered from the standpoint of group ability. The total number of correct reproductions for auditory presentation was 103 and for visual presentation 101. However, a comparison of individual results shows that those who excelled by the visual method did not also excel by the auditory method. The coefficient of correlation for the two series of results is $-.39$. Pearson's product-moments method was also used for calculating the coefficient. By this method the coefficient is $-.35$. These negative correlations show that those children who learned the materials best when presented to the eye were the ones who learned them poorest when presented to the ear, and vice versa. There appears to be a tendency toward specialization in using the senses for learning verbal material.

In the last series of experiments an effort was made to measure the children's relative ability in making phonetic analyses and syntheses of strange words with the visual word to serve as an aid to the analytic-synthetic activity. The sixth grade children of the B division served as subjects. The materials consisted of the following nonsense words:

ëmliskūtās
plāōñēxterif

dēvishquāgō
hāpōlifrōn

thrēlimōtízō

These words were typewritten and appeared on separate cards in the above form.

The experiments were preceded by some preliminary work. The children were reviewed on the long and short sounds of all the vowels. Any deficiencies in this work were eliminated by means of training. Only two of the children required training on one or more of the sounds. The children were also given some preliminary practice in the pronunciation of strange words. For

this purpose five Greek words, somewhat shorter than those of the above list, were used. They were asked to pronounce these words and if they failed they were asked to pronounce the syllables, which were pointed out for them. Then they were asked to pronounce the syllables in rapid succession until they succeeded in pronouncing the words as wholes. They were also given instruction in the correct pronunciation of syllables and in placing the accent.

It was a difficult matter to conduct the experiment in such a way as to keep the conditions uniform for all of the children, but in spite of this handicap I feel that their relative ability for this task was fairly well determined. The first word of the list was placed before the child with the direction to pronounce it. If he failed to get started or if his attempts were futile by the close of a one-minute period, the experimenter pointed to the first syllable and asked him to pronounce it. Usually the child succeeded in doing this, but if he failed the experimenter assisted him. The remaining syllables of the word were gone over in a similar manner. The child was then asked to pronounce all of the syllables in succession. If he failed he was again assisted in the manner just described. In this way the syllables were gone over until the child could pronounce them in rapid succession and finally succeed in pronouncing the word as a whole with a high degree of accuracy. The children had very little difficulty in giving the sounds of letters and naming the syllables, but many children were very deficient in breaking the word into syllables and in re-combining them. After the experimenter began to assist the child he gave in each case the best assistance he could offer within the limits described, but as the less capable children required so much more help than the more capable ones, it took them much longer to give a correct pronunciation.

The average amount of time which the child with the aid of the experimenter required to give a correct pronunciation of the five words was taken as a measure of his ability to pronounce strange words by means of analysis and synthesis. To work out the pronunciations of the whole list of words the best child required an average of forty-five seconds per word and the poorest child required seven hundred and nineteen seconds. The ability for this kind of work gave a high correlation with reading ability, the coefficient being .85. Almost all of the best readers therefore surpass the poorest in the ability to break up words into smaller units and to re-combine them. This is precisely the way in which adults get at the pronunciation of words which are strange or not entirely familiar. Moreover, in reading a text with very familiar words it is not improbable that the reader who has the ability to see out parts of words and to re-combine them readily can increase the extent of his average reading range and select

the fixation points at more regular intervals, factors which very much enhance the reading act. I believe therefore that some of our instruction in reading should be devoted to making the children familiar with the parts of words and to the development of the ability to re-combine these parts into larger or word units.

A similar series of experiments on analysis and synthesis was made with the sixth grade children acting as subjects. In these experiments the children's ability to divide words into syllables was tested by asking them to name the parts of familiar English words and their synthetic ability was tested by having them pronounce syllabized Greek words. Although these tests were not very well controlled and the children did not show such marked differences in reading ability as the sixth grade children of the B division, the coefficient of correlation for this work and reading ability was .65.

I finally calculated the coefficient for a combination rank and the rank in reading ability. For making the combination rank I selected the rankings of the sixth grade children of the B division in the perception span, in the speed of making an oral response to the visual word and in analytic and synthetic ability. These ranks were combined by finding the averages for every child. Upon the basis of these averages a new ranking was made. The coefficient for this rank and the rank in reading ability is .88. This coefficient is .03 higher than the highest coefficient of the individual ranks and .20 higher than the lowest coefficient of the individual ranks.

I thought it might also be worth while to point out some of the marked sex differences even though the sex groups were very small and at least in the sixth grade, B division, very uneven in general intelligence, the girls testing much higher than the boys. In the sixth grade, B division, the girls, as was to be expected, surpassed the boys by large amounts in the width of the perception span, in the speed of their responses and in analysis and synthesis, but the boys, in spite of their intellectual inferiority, surpassed the girls slightly in form recognition. In the sixth grade the girls made only about one-half as many errors as the boys in recognizing the letters of the German words. In this grade the sexes were well balanced in general intelligence. The girls therefore appear to surpass the boys very considerably in the speed of recognizing familiar visual materials, but are far surpassed by the boys in learning to recognize strange visual forms of verbal character.

For the sake of making convenient a comparison of the various coefficients I have brought out all of them together in Table IV. This table gives the number of children or subjects for every experiment; the grade to which the children belonged; the nature

of the abilities correlated; the coefficients of correlation and the probable error for every coefficient.

TABLE IV
Coefficients of Correlation

No. of Children	School Grade	First Series of Rankings	Second Series of Rankings	Co-efficients	Probable Errors
15	6B	Perception span	Reading ability..	0.68	.0938
15	6B	Response time	“ “	.. 0.81	.0601
15	6B	Analysis and synthesis	“ “	.. 0.85	.0545
		Combined ranks	“ “	.. 0.88	.0394
15	6B	Form recognition	“ “	..-0.11	.1725
16	6	Speed in recognition	“ “	.. 0.87	.0410
16	6	Analysis and synthesis	“ “	.. 0.65	.0974
16	6	Intelligence	“ “	.. 0.56	.1157
16	6	Visual learning	“ “	..-0.03	.1685
16	6	Auditory learning	“ “	..-0.05	.1684
16	6	Auditory learning	Visual learning..	-0.39	.1430
16	6	Speed in reading	Errors in reading	0.87	.0410

The phases of mental activity which give high coefficients with reading ability are the perception span, the speed of the oral response, analytic and synthetic ability, the speed of visual recognition and general intelligence. Probably no serious effort should be made to teach reading to those children who have a very low degree of intelligence. Even though they succeed fairly well with the mechanical aspect of reading, they are said to get very little meaning from the printed page. In regard to the other factors I may say that none of them should be neglected in the teaching of reading. The most helpful and intelligent instruction in reading cannot be given without knowing which of these factors in general require the most attention and which of them in a particular case are very poorly developed. This is the only way in which trial and error methods in the teaching of reading can be eliminated and instruction in the subject raised to a professional rank.



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