

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1928, No. 22

BIBLIOGRAPHY OF RESEARCH
STUDIES IN EDUCATION
1926-1927

PREPARED IN THE LIBRARY DIVISION
BUREAU OF EDUCATION

JOHN D. WOLCOTT, *Chief*



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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., July 30, 1928.

SIR: Modern education steadily advances in basing its policies and practices upon approved findings of fact, which are the products of scientific studies made by various persons and agencies. The volume and value of research in educational subjects in the United States are constantly increasing. There is evident need of a central agency to coordinate the various research undertakings scattered throughout the country, so as to promote cooperation and to eliminate wasteful reduplication of effort on identical or overlapping topics, and this service has been frequently requested from the Bureau of Education. Judging this to be a legitimate function of the bureau, I have accordingly taken action to meet this need.

On September 1, 1927, I appointed a Committee on Research Information Service, consisting of six chiefs of division of the bureau, to formulate a policy and plans for rendering this service. In accordance with the policy and plans thus formulated, and approved by me, the library division of the bureau has collected data regarding research studies in education, both those under way and those recently completed throughout the country, and has organized and edited the material collected. Two mimeographed lists of research studies in progress during 1927-28 have already been prepared and distributed. The accompanying bibliography comprises studies in education completed during the year ended June 30, 1927, and I recommend its publication as a bulletin of the Bureau of Education, for the information and guidance of the large and growing number who are interested in educational research and its products.

Respectfully submitted.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

FOREWORD

The following pages contain a classified and annotated list of research studies in education, so far as reported to the Bureau of Education, which were completed in the United States during the year ended June 30, 1927. The compilers have endeavored to make the list as comprehensive as possible for the period named. Letters requesting information and publications for this list, accompanied by form cards for reporting the publications, were mailed to all institutions and agencies in the United States known to engage in educational research, comprising the following classes: State superintendents of education; school superintendents of cities of 10,000 population and more; presidents of universities and colleges and heads of departments of education; heads of graduate schools; presidents of junior colleges; presidents of teachers colleges; principals of public and private normal and training schools; educational boards and foundations; National, State, and city educational associations; and bureaus, departments, and divisions of educational research, in various organizations. In reply to these requests, a large number of reports and of copies of research studies were received.

To supplement the material collected by means of the questionnaire, a number of the educational periodicals giving the most space to educational research were examined in the Bureau of Education for noteworthy research contributions, and selections made from them were incorporated in this list. A similar selection of studies was also made from the proceedings of various educational associations. Brief abstracts of most of these selected studies were made for this bulletin by specialists of the Bureau of Education. Abstracts of many of the studies reported to the bureau on form cards were supplied by the authors of these studies, or by the institutions or agencies reporting them, and annotations for some of the publications sent in were composed by members of the Bureau of Education. The entire material has been classified, and edited into its final form, by the library division of the Bureau of Education.

Both published and unpublished studies are included in the present list, so far as the Bureau of Education has information regarding them. In the case of studies in typewritten or mimeographed form, the number of pages when known is given, with the abbreviation "ms." following it. Complete bibliographic data are given for each study whenever the information is available, but some descriptions lack certain details which were not supplied in the reports of the studies concerned.

Probably some institutions and some research studies which deserve to be included in this bibliography will be found to be missing, but any such omission is due to the fact that the necessary information was not available to the compilers of the bulletin, who have tried to make the list as complete as possible.

BIBLIOGRAPHY OF RESEARCH STUDIES IN EDUCATION

EDUCATIONAL HISTORY

1. **Anderson, Corrine Corinsa.** History of the certification of teachers in Iowa. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. v, 146 p. ms.
Traces the history of certification of teachers in Iowa from 1832 to 1926, as revealed by an analysis of the laws enacted relative to certification, and by a study of the rules and regulations provided by the various certifying authorities.
2. **Baird, Frank W.** Territorial history of education in Idaho. Master's thesis, 1927. University of Washington, Seattle.
3. **Balyeat, Frank A.** Education in Indian Territory. Doctor's thesis, 1927. Stanford university, Stanford University, Calif.
History of education in the Indian Territory, covering education of the Five Civilized Tribes, and difficulties of securing education for noncitizens.
4. **Boyette, Edgar T.** Growth and development of public education in Johnston county. Master's thesis, 1927. University of North Carolina, Chapel Hill.
5. **Brown, Arthur Meade.** History of the art of writing. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.
6. **Brown, Harold N.** The evolution of school discipline. Master's thesis, 1927. Stanford university, Stanford University, Calif.
7. **Brubacher, John S.** The judicial power of the New York state commissioner of education: growth and present status. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.
The chief sources of data for this study have been the decisions of the one-time superintendent of common schools, the former superintendent of public instruction, and the commissioner of education.
8. **Buck, Christine C.** A study of the development and interest of education in Colorado on a statistical basis. Master's thesis, 1927. University of Denver, Denver, Colo.
9. **Buis, Almon Ray.** The history and work of the Extension division of Indiana university. Master's thesis, 1927. Department of education, Indiana university, Bloomington. 153 p. ms.
10. **Buller, Francis Paul.** A history of ministerial education in the Baptist churches of the United States to 1845. Doctor's thesis, 1927. Yale university, New Haven, Conn.
11. **Burris, Jesse Stallings.** The history of education in Concordia Parish, La. Master's thesis, 1927. Louisiana State university, Baton Rouge.
12. **Bush, Ernest Forrest.** A history of school legislation and administration in Missouri from 1860 to 1925. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iii, 101 p. ms.
Traces the development of public-school legislation in Missouri from 1860 to 1925 as it relates to elementary schools, secondary schools, and higher institutions.
13. **Chapman, Frank Willard.** A history of common-school support in Indiana from 1785 to 1865. Master's thesis, October, 1927. Indiana university, Bloomington. 80 p. ms.

14. **Conmy, Peter T.** History of the entrance requirements of the University of California, 1860-1927. Master's thesis, 1927. University of California, Berkeley.

15. **Cowles, LeRoy Eugene.** The Utah educational program of 1919 and factors conditioning its operation. Doctor's thesis, 1927. University of California, Berkeley. 270 p. ms.

The extent to which the Utah educational program of 1919 was carried into practice and factors that conditioned its operation.

16. **Cralle, Robert Elza.** The history of legislative prescriptions regarding elementary school subjects in California. Master's thesis, 1926. University of California, Berkeley.

17. **Cunningham, Theola.** Origin and growth of the normal school idea. Master's thesis, 1927. College of Mount Saint Vincent, New York, N. Y.

18. **Davis, Henry Grady.** The development of education in Marion county, South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

19. **Dean, Charles B.** The history of the development of the public high school in Indiana. Master's thesis, 1927. University of Chicago, Chicago, Ill.

20. **De Boer, John J.** The influence of reconstruction on education in Alabama. Master's thesis, 1927. University of Chicago, Chicago, Ill.

21. **Dougherty, Earl Joseph.** An historical consideration of economics in secondary schools, 1821 to 1924. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iv, 133 p. ms.

Analyses elementary textbooks in economics which appeared between 1821 and 1924, and traces historically the changes that have taken place in content, organization, method of treatment, and relative emphasis given to various phases.

22. **Dukes, Thomas E.** Special legislation pertaining to special school districts established in South Carolina between 1868-1892. Master's thesis, 1927. University of South Carolina, Columbia.

23. **Duvall, Sylvanus Milne.** The Methodist Episcopal church and education up to 1869. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

Undertakes to determine the extensiveness of the movement for the founding of Methodist schools and colleges up to 1869. Findings. The Methodist denomination did not strive primarily for its own educational progress but for that of the whole country.

24. **Eckelberry, Roscoe H.** The origin and development of the municipal university in the United States. Doctor's thesis, 1927. Ohio State university, Columbus. 300 p. ms.

25. **Edwards, Mrs. Eva L.** An historical account and a description of English tests and scales. Master's thesis, 1927. Colorado State teachers college, Greeley.

26. **Edwards, George W.** The origin and development of science. Master's thesis, 1927. University of Washington, Seattle.

27. **Galt, Howard S.** The historical development of the theory of education in China to the close of the Han dynasty, 220 A. D. Doctor's thesis, 1927. Harvard university, Cambridge, Mass.

28. **Gebert, Herbert George.** The development of free schools in Pennsylvania before 1861. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill., iv, 82 p. ms.

Traces the evolution of the free-school system in Pennsylvania before the Civil War. The early development of a free-school system in Pennsylvania was greatly retarded by the attitude of the aristocratic ruling class and the general conception that free education was for the poor. The idea of free schools was sponsored by certain governors and by a group of progressive individuals who carried on a state-wide program of educational propaganda. The result was the law of 1834. This law, though optional with the districts, was the first general provision for a free-school system throughout the State.

29. **Gorman, Gladys.** History of the development of physical education for women in Wisconsin. Master's thesis, 1927. University of Wisconsin, Madison.

30. **Griffin, Orwin B.** The emergence of the high school in Connecticut. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

The author finds that (1) the process of the emergence of the high school in Connecticut has been quite indigenous; (2) the high school grew out of the common district schools by the gradual addition of the "higher branches" wherever the need was felt.

31. **Griffiths, Nellie Lucy.** A history of the organization of the laboratory school of the University of Chicago. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. iv, 199 p. ms.

Summarizes the educational principles and practices of Colonel Parker and John Dewey, and traces the events that led to the consolidation of their schools to form the Elementary school of the University of Chicago.

32. **Gunn, Chester Earl.** A history of public-school administration in Indiana. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. iii, 101 p. ms.

Traces the development of the administrative offices of the public-school system of Indiana, and shows the placement of the various administrative functions as they are distributed throughout the system at the present time.

33. **Gunn, Virgil Roy.** A history of higher education in New Mexico. Master's thesis, March, 1927. School of education, University of Chicago, Chicago, Ill. vi, 165 p. ms.

Traces the gradual evolution of higher education in New Mexico from the days of its first beginnings down to the present time (1926).

34. **Gustafson, David.** The origin and establishment of the University high school of the University of Chicago. Master's thesis, June, 1927. School of education, University of Chicago, Chicago, Ill. vi, 134 p. ms.

Traces historically the development of the Chicago manual training school and the South Side academy, and the events which led to the merger of these two schools to form the University high school of the University of Chicago.

35. **Hansen, Allen Oscar.** Liberalism and American education in the eighteenth century. With an introduction by Edward H. Reiser. New York, The Macmillan company, 1926. xxv, 318 p. 12°.

Submitted in partial fulfillment of the requirements for the degree of doctor of philosophy, Columbia university.

This study gives a comprehensive and systematic account of the extent to which eighteenth century French and English liberalism affected the educational thought of the Revolutionary and post-Revolutionary generation of American intellectuals.

36. **Harris, Pickens E.** The historical development of moral control in elementary education. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

Aims to establish a basis for interpreting the present situation relative to the discipline or moral control of pupils in elementary education.

37. **Hertler, Silas.** The rise of the public high school in Connecticut. Doctor's thesis, 1927. Yale university, New Haven, Conn.

38. **Hobbs, Lucy E.** History of the teachers' annuity movement in Iowa. Master's thesis, 1926. College of education, State university of Iowa, Iowa City. 62 p.

Traces the history of the repeated attempts in Iowa to secure a teachers' pension and annuity law.

39. **Howland, L. B.** Developments in grading and subjects, and steps in adoption of free textbooks in the public schools of Maryland outside Baltimore City, from 1865 to the present time. Master's thesis, 1926-27. University of Maryland, College Park.

40. **Kerr, James W.** A history of the Stanford university curriculum. Master's thesis, 1927. Stanford university, Stanford University, Calif.

41. **Kraft, Detlef August.** The history of the certification of teachers in the state of Oklahoma. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill., iii, 109 p. ms.
Traces historically the provisions and tendencies with respect to the certification of teachers in Oklahoma.
42. **Leutheuser, Rosamond J.** The evolution of the St. Louis public evening schools. Master's thesis, 1927. Washington university, St. Louis, Mo.
43. **Lewis, James O.** A history of the Kentucky educational association. Master's thesis, 1927. University of Chicago, Chicago, Ill.
44. **McCants, Mary Blake.** The development of education in Colleton county, S. C. Master's thesis, 1927. University of South Carolina, Columbia.
45. **McGucken, William Joseph.** Jesuit secondary education in the United States. Doctor's thesis, 1927. School of education, University of Chicago, Chicago, Ill. ix, 493 p. ms.
Traces the history of Jesuit secondary education in America from its beginnings to the present day, as to its characteristics, its objectives, and its curricular development.
46. **McMillan, Robert E.** A history of the establishment of public secondary schools in Providence. Master's thesis, 1927. Brown university, Providence, R. I.
47. **Maiden, Marven.** History of the professional training of teachers in Virginia. Doctor's thesis, 1927. University of Virginia, University.
This study is a connected account of professional training of teachers in Virginia gathered from historical records and fragmentary notes. Limited to white elementary and secondary teachers.
48. **Margulis, Herman.** A history of the evening elementary schools of New York city. Master's thesis, 1927. College of the City of New York, New York, N. Y.
49. **Mileham, Hazel Belle.** History of higher education of the Methodist church in the United States from 1820 to 1844. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. iii, 171 p. ms.
Traces the development of higher education under the patronage or control of the Methodist church in the United States from 1820 to 1844.
50. **Mitchell, Walter Glen.** A history of the Sunday-school movement in the Presbyterian Church in the United States of America, 1872-1925. Master's thesis, 1927. Northwestern university, Evanston, Ill.
51. **Moore, Elif Albertson.** The history of Clifton college. Master's thesis, 1927. University of Texas, Austin.
Detailed account of the origin and history of this Norwegian college of junior college rank.
52. **Morosco, Albert Harold.** The trends of civic teaching in the United States in the upper division of the secondary school from 1800 to 1925. Master's thesis, 1927. University of Southern California, Los Angeles.
53. **Nankivell, James E.** The history of education in Jessamine county. Master's thesis, 1927. University of Kentucky, Lexington.
54. **Norris, Alice G.** The development of scholarship in the United States. Master's thesis, 1927. Willamette university, Salem, Oreg.
55. **Ostdiet, Joseph H.** History of the parish schools in the city of Omaha from their origin to the year 1900. Master's thesis, 1927. Creighton university, Omaha, Nebr.
56. **Parr, James Harvey.** The history of the Central normal college. Master's thesis, 1927. Indiana university, Bloomington.
57. **Reeves, Homer L.** The history of high schools in Colorado. Master's thesis, 1927. University of Chicago, Chicago, Ill.
58. **Richey, Herman Glenn.** The occupations of the authors of school textbooks, 1876-1926. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. v, 120 p. ms.

Reports the results of an investigation to discover the occupations of the authors of school textbooks of certain selected subjects, and to determine whether or not any well-defined trends exist. The 1,696 authors included in this study wrote 2,334 textbooks, or an average of 1.38 books each. The arithmetic texts numbered 475, and were more numerous than those of any other subject. Textbooks in American history, algebra, physics, geometry, spelling, reading, trigonometry, and combined mathematics contributed to the total in the order listed. When an author was tabulated once for each decade in which he appeared, the results showed that "35 per cent of those whose occupations were found were connected with universities and colleges; 11 per cent with normal schools; 25 per cent with elementary and secondary schools; 11 per cent were superintendents; 11 per cent were connected with staffs of publishing companies or were men of no occupation; and 7 per cent were men holding various positions."

59. **Rohrer, Perry Laurence.** A history of religious education in the Church of the Brethren. Master's thesis, 1927. Northwestern university, Evanston, Ill.

60. **Rucker, Nelle Kathleen Willis.** Education in San Antonio to 1860. Master's thesis, 1927. University of Texas, Austin.

Largely documentary; traces in detail the schools from their beginning to the Civil War.

61. **Santee, J. F.** University of Oregon; admission standards, 1876 to 1927. Master's thesis, July, 1927. University of Oregon, Eugene.

62. **Schaff, Walter R.** The growth and development of public education in Caldwell county. Master's thesis, 1927. University of North Carolina, Chapel Hill.

63. **Schlegel, Albert G. W.** Moravian education in Pennsylvania. Master's thesis, 1927. Pennsylvania state college, State College, Pa.

64. **Seymour, John S.** The development of education in Martin county, N. C. Master's thesis, 1927. University of South Carolina, Columbia.

65. **Shirey, Raymond W.** The history of the survey movement. Master's thesis, 1927. Stanford university, Stanford University, Calif.

66. **Shores, Louis.** The history of the municipal universities. Master's thesis, 1927. College of the City of New York, New York, N. Y.

67. **Slay, Ronald J.** The development of the teaching of agriculture in Mississippi, with special emphasis on agriculture as a part of school curricula. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

This study traces the development of agricultural teaching in Mississippi from the beginning to the present time; makes an analysis of present-day practices to discover deficiencies and suggests recommendations.

68. **Sutton, Traver O.** A brief history of the teaching of physics in the secondary schools of the United States. Master's thesis, 1927. Battle Creek college, Battle Creek, Mich.

69. **Thomas, Lavens Mathewson, jr.** A history of the religious education of children in the Methodist Episcopal church, South, to 1870. Doctor's thesis, 1927. Yale university, New Haven, Conn.

A study of the church's theory of religious education, of conditions that modified that theory or hampered its fruition in the development of an adequate program of religious education in the local church and of certain movements that helped to partially remedy matters.

70. **Totah, Khalil A.** The contribution of the Arabs to education. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1926. 105 p. (Teachers college, Columbia university. Contributions to education, no. 231.)

A study of the work of prominent Arabs from the seventh to the fifteenth centuries. The author points out that the Arabs contributed a great deal to the content of education during the Middle Ages.

71. **Van Zyl, Henry, jr.** The history of pensioning of the elementary teachers in the Netherlands. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iv, 107 p. ms.

Traces the development of the state pension system for teachers in the elementary schools of the Netherlands during the period from 1857 to 1922.

72. **Walker, Helen Mary.** Historical survey of certain topics relating to educational statistics. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

This study presents the modern use of statistics against a background of the work of DeMoivre, Bernoulli, Gauss, Laplace, Quetelet, Galton, Ebbinghaus, Fechner, and many others.

73. **Wallace, Clara M.** A study of the origin, development, and functions of normal training in Iowa. Master's thesis, 1927. University of Chicago, Chicago, Ill.

Primary sources include legislative acts of Iowa and reports of state officers from territorial days down to present time.

74. **Winn, Evelyn B.** A history of Columbia college, Columbia, S. C. Master's thesis, 1927. University of South Carolina, Columbia.

75. **Woody, Thomas.** History of education of women in the United States. In two volumes. Philadelphia, Pa., University of Pennsylvania. 1,400 p. ms. Deals with the United States from colonial days to the present.

See also items 132, 427, 501, 578, 616, 659, 678, 680, 683, 802, 858, 1091, 1260, 1271, 1417, 1426.

EDUCATIONAL BIOGRAPHY

76. **Baker, Raymond E.** The educational theory and practice of William Torrey Harris. Doctor's thesis, 1927. University of Oregon, Eugene.

77. **Booth, Bates Walter.** The education and educational views of Walt Whitman. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

78. **Braisted, Paul J.** Alexander Duff as an educator. Master's thesis, 1927. New York university, New York, N. Y.

79. **Calhoun, Lawrence Gibson.** Robert L. Dabney's defence of the old Virginia educational system. Master's thesis, 1927. Yale university, New Haven, Conn.

80. **Chase, Wayland J.** The Ars Minor of Donatus. Madison, Wis., University of Wisconsin, 1927. 55 p. (University of Wisconsin studies in the social sciences and history.)

An account and translation of the grammar textbook which led all others for a thousand years during the middle ages.

81. **Crofton, Walter M.** The influence of John Knox on formal education in Scotland. Master's thesis, 1927. University of South Carolina, Columbia.

82. **Howard J. Gordon.** Martin Luther as an educator. Master's thesis, 1927. New York university, New York, N. Y.

83. **McDonald, Margaret Bruce.** Contribution of Samuel Lander to the education of women of South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

84. **Meyer, Henry H.** The religious-educational theory and practice of Count Ludwig Nicholas von Zinzendorf. Doctor's thesis. Yale university, New Haven, Conn.

Findings: (1) Zinzendorf had ample basis in personal equipment and experience for an independent theory of religious education; (2) he anticipated many of the principles of present-day religious educational theory; (3) he held that all children begin life as members of the Kingdom of Heaven; (4) in practice, he acted upon these principles, with reasonable consistency, in the organization and conduct of religious education. By means of his choir system he introduced and consistently employed graded instruction and worship in his educational program for the religious community.

85. **Rogers, Clara L.** Charles William Eliot's contributions to education. Master's thesis, 1927. University of Wisconsin, Madison.

86. **Willingham, Dora Ann.** John Henry Pestalossi—his educational principles and methods. Master's thesis, 1927. University of Texas, Austin.

An analysis of Pestalossi's principles of teaching.

CURRENT EDUCATIONAL CONDITIONS

GENERAL AND UNITED STATES

87. **Blankinship, Herman.** A survey of the elementary schools of the city of Clifton Forge, Va. Master's thesis, 1927. University of Virginia, University.

88. **Boardman, Thomas Densel.** A comparative study of success grades of certain counties in Indiana. Master's thesis, 1927. Indiana university, Bloomington.

89. **Bond, Jesse Albert.** The results of school surveys. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

90. **Boyd, Allie.** Philanthropy in the form of gifts and endowments for elementary and secondary education, with special reference to the Rocky Mountain and Pacific Coast States. Master's thesis, 1927. University of Chicago, Chicago, Ill. 93 p. ms.

The investigations here recorded covered 10 western states—Arizona, California, Colorado, New Mexico, Oregon, Washington, Wyoming, Idaho, Montana, and Utah. The writer has also dealt to some extent with the history of endowments.

91. **Burton, A. C.** A study of rural and urban states in education. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn. 54 p. ms. Gives ranking of all states on 12 points—six on finance, and six on results.

92. **Combs, M. L. and others.** Accomac county, Va., educational survey. Richmond, Virginia State department of education, 1927. 47 p. ms.

A general survey of population, assessments, valuation of property, cost of education, organization, and administration. Findings: Board of education of Accomac should adopt the county unit policy with respect to provision for education and the financing of the same. The number of high schools should be reduced from 13 to five. This will not only result in efficiency but economy as well. The elementary schools should be strengthened. Better trained teachers should be employed, more adequate equipment provided, and an adequate number of rural supervisors employed.

93. ———. Educational survey, Lancaster county, Va. Richmond, Virginia State department of education, 1927. 26 p. ms.

A survey of school population, enrollment, attendance, general facilities, quality of instruction, preparation of teachers, organization, administration, etc. Finds that the number of high schools should be reduced from six to two. First consideration of the Board of education should be proper provision for children in elementary grades.

94. ———. Survey of the high-school situation in Charlotte county, Va. Richmond, Virginia State department of education, 1927. 38 p. ms.

A study of the school population, sources of school revenue, assessments, assessed valuation of property, real valuation of property, the topography of the county, chief industries, distribution and status of high schools, etc. Findings: The number of high schools should be reduced from six to three, and more attention given to vocational subjects. Children enrolled in elementary schools are greatly handicapped in an effort to operate more high schools than the county can afford or actually needs. More adequate facilities should be provided for negro education. The county school board should consider the county as a unit of administration rather than a district.

95. **Dauner, Sister M. Thomas.** A survey of the schools taught by the Sisters of Mercy in Grand Rapids diocese. Milwaukee, Wis., Marquette university, 1926. 43 p. ms.

96. **Douglass, Clarence Olney.** A survey of the white rural elementary schools of McGinn county, Tenn. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. vi, 112 p. ms.

Presents the results of a survey of the white rural elementary schools of McGinn county, Tenn., to determine the needs of the schools in regard to organization and administration, the school plant, and the teaching staff.

97. **Eash, Cornelius E.** A survey of the school system of Warren township—a semirural school unit under the six-six plan. Master's thesis, 1927. Indiana university, Bloomington. 181 p. ms.

98. **Edwards, Elva Dawn.** A study of continuation school pupils to ascertain factors accompanying school elimination in Berkeley. Master's thesis, 1927. University of California, Berkeley.
99. **Engelhardt, Fred.** Survey report, Albert Lea public schools, Minnesota. Albert Lea, Minn., city schools, 1927. 61 p. (University of Minnesota, Educational monograph, 30, June 25, 1927.)
100. **Evans, R. M.** An educational survey of Gadsden county, Fla. Master's thesis, October, 1926. Emory university, Emory University, Ga. Tallahassee, Fla., T. J. Appleyard, 1926. 104 p.
A survey of the number, location, and kinds of schools; number and qualifications of teachers; enrollment, age-grade distribution, and mental ages of children; results of instruction measured; ability and accomplishment compared; buildings, grounds, and equipment scored; school finances shown, and costs for a reorganization estimated; a plan for consolidation proposed.
101. **Foote, John M.** An administrative and financial study of the Washington parish school system. Baton Rouge, Louisiana State department of education, 1927. 100 p. (Bulletin, No. 112, August, 1927.)
Study of problems of finance, organization, etc. Tables, maps.
102. ——— and **Robertson, M. S.** The public schools of East Feliciana parish. Baton Rouge, La., State department of education, 1926. 50 p. (Bulletin, no. 15, December 15, 1926.)
A study of financial program, equipment, consolidation, etc., with recommendations.
103. **Gatton, Roy Harper.** An investigation of the elimination and selection of pupils in the Madisonville (Ky.) high school. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. vii, 88 p. ms.
Presents the results of a survey of the Madisonville (Ky.) high school with respect to the factors influencing elimination and selection of pupils. Includes a report of a corrective campaign launched to improve unsatisfactory conditions. Findings: During the period included in this study 43 per cent of the pupils who entered the high school graduated. Of the pupils who dropped out before graduation, almost all were falling in one-half their subjects. Forty-four per cent dropped out because of lack of interest alone. The lower occupational groups were scarcely represented in the upper grades. A large number of the students did outside work. Elimination and retardation were not due primarily to the school organization and faculty, but to various factors. Elimination was decreased to an appreciable extent through a corrective campaign.
104. **Gift, Elmer Birdwell.** The financial condition of the Manhattan, Kans., school district, 1926-27. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. vii, 102 p. ms.
Reports the results of a financial study of the Manhattan school district, Manhattan, Kans., from the standpoints of expenditures, commitments, and resources for the school year 1926-27. Findings: The study reveals that the financial condition of Manhattan school district may be improved by better financial management. The failure to meet annual depreciation and extension costs has added to the annual commitments without adding to the service the school renders. "Except in the high school where the saturation point has not been reached the annual increase in attendance must parallel the growth of the city." If the upward trend of per-pupil cost continues, the tax levy under the present system of taxation will cause a decline in the economic value of property taxed.
105. **Helter, H. H.** Are the pupils of the Mansfield public schools taught to study scientifically? Mansfield, Ohio, Schoolmasters' club, Mansfield public schools, 1927. (Would make about 150 pages if printed.)
This investigation runs through elementary and high school. Finds that there is no established method of teaching children how to study. The methods in vogue are purely individual and personal.
106. **Holland, O. W., jr., Holland, N. L., and Taylor, W. W.** An economic and social survey of Northampton county, Va. 1927. Charlottesville, Va., Extension division, University of Virginia, 1927. 146 p.
To determine how Northampton county ranks socially and economically with other counties in Virginia.
107. **Hornaday, Otis Preston.** The status of public-school administration in Kansas. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. v, 78 p. ms.
Presents the results of a study of the status of public-school administrators in Kansas with respect to age, sex, experience, professional training, salaries received, extent of administrative duties, and tenure in present

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The most important studies were those on (1) defective vision; (2) books and magazines in the homes of the pupils; (3) the height and weight of school children; (4) living conditions of secondary students; (5) spelling difficulties; (6) arithmetical combinations; (7) mid-year promotions; (8) School news review tests; (9) Haggerty reading test.

117. **Rhode Island. Commissioner of education, Providence.** Survey of South Kingston schools. Providence, Commissioner of education, 1926. 15 p.

118. ———. Survey of Exeter schools. Providence, Commissioner of education, 1927. 11 p.

119. **Siders, Walter R.** Report of the Committee on the situation of public education in Omaha. Omaha school forum (Omaha, Nebr.), August, 1927. 50 p.

Twenty-four cities were selected for comparison with Omaha. The cities compared spend from 71.97 per cent to 86.18 per cent of their moneys for instruction; Omaha spends 76.03 per cent. The ratio of total school expenditures for Omaha to total city and school expenditures was 51.6 per cent in 1924. Several cities of Omaha's class rank higher than this. The per capita costs for current expenses based on average daily attendance for 27 large cities, ranking from 57.83 in Birmingham to 139.48 in Buffalo, place Omaha at 102.54 in the table, with a rank of sixteenth from the highest. The same comparison of the 24 cities of this study gives Omaha a per capita cost of 106.97, next to the highest in per capita costs; Des Moines being higher with a per capita cost of 114.66. The discrepancy between 102.54 and 106.97 comes from average daily attendance being reported as 36,020 instead of 34,527.

120. **Skiles, J. R. and Olsen, M. C.** A summary of the educational activities in District 75, Evanston, Ill., for 1926-27. Evanston, Ill., Board of education, District 75, 1927. 57 p. ms.

121. **Strayer, George D.** Report of school survey—Beaumont, Texas. New York, Teachers college, Columbia university, 1927. 337 p.

122. ———. Report of school survey—Ft. Lee, N. J. New York, Teachers college, Columbia university, 1927. 136 p.

123. ———. Report of survey of Jacksonville, Florida. New York, Teachers college, Columbia university, 1927. 433 p.

124. ———. Report of survey—Lynn, Mass. New York, Teachers college, Columbia university, 1927. 368 p.

125. **Tirey, Robert Milton.** A school survey of La Junta, Colo. Master's thesis, October, 1927. Indiana university, Bloomington. 139 p. ms.

126. **Williams, Robert Hill.** A study of McKinney's school with reference to the plant, educational staff, and financial ability. Master's thesis, 1927. University of Texas, Austin.

A partial survey of the public-school system of McKinney, Texas.

127. **Wilmington, Del. Public schools.** Public education in Wilmington and in 14 other cities nearest its size. 1926. 16 p. ms.

Comparison on 76 counts; one-half financial, the rest strictly school matter.

See also items 715, 1484, 1490, 1496, 1498, 1517, 1520, 1521, 1532, 1534, 1537-1538.

FOREIGN COUNTRIES

128. **Alexander, Mary Charlotte.** Education in China during the first quarter of the twentieth century. Master's thesis, 1927. University of Texas, Austin.

Outlines the revolution in Chinese education and the conditions of the public schools today.

129. **Arent, Emma.** The relation of the state to private education in Norway. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1926. 94 p. (Teachers college, Columbia university. Contributions to education, no. 235).

A study of the historical development of state regulations governing the various types of private education in Norway.

130. **Aucamp, Anna J.** Bilingual education and nationalism with special reference to South Africa. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. Pretoria, South Africa, J. L. Van Schaik, Ltd.

131. **Auh, Paul.** A suggested plan for industrial education in the schools of Korea. Master's thesis, 1927. Northwestern university, Evanston, Ill.

132. **Benjamin, Harold Raymond Wayne.** An inquiry into the origin and administration of the 1918 education act in England. Doctor's thesis, 1927. Stanford university, Stanford University, Calif.

133. **Borgeson, Frithiof Carl.** The administration of elementary and secondary education in Sweden. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university.

This study presents the facts regarding current educational procedure in Sweden and an analysis of certain administrative practices. The study centers about matters pertaining to elementary and secondary education.

134. **Davis, David Gray.** Reorganization of secondary education in Nova Scotia. Doctor's thesis, 1927. Harvard university, Cambridge, Mass.

135. **Demiashevich, Michael John.** The activity school: new tendencies in educational method in Western Europe. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. Published privately by the author.

The purpose of this study is to offer constructive criticism of the theory of the *Arbeitschule* or the *École active* taken in the interpretation advanced in recent years by certain groups of educationists in Germany, France, and England.

136. **Eide, Mary.** The development of secondary education in China. Master's thesis, 1927. Drake university, Des Moines, Iowa.

137. **Fisher, J. Earnest.** Some meanings of democracy for mission education in Korea. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

This study aims to discover more adequate bases for the reconstruction of mission education in Korea.

138. **Jensen, Arne Sigvard.** The rural schools of Norway. Doctor's thesis, 1927. University of Washington, Seattle.

Historical sketch of the development of rural elementary schools in Norway, with emphasis on present problems and status.

139. **Kandel, I. L., and Alexander, T.** Reorganization of education in Prussia. July, 1927. International institute, Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927. xxvi, 647 p.

140. **Phillips, Eugenia Alice.** Development of modern education in Guatemala. Master's thesis, 1927. University of Southern California, Los Angeles.

141. **Bunkel, Violet Marie.** The teaching of history in the secondary schools of England, France, and Germany. Master's thesis, 1927. University of Wisconsin, Madison.

142. **Seto, Yan S.** The problem of missionary education in China. Doctor's thesis, 1927. New York university, New York, N. Y.

143. **Tong, Shik Fan.** Recommended educational provisions for the constitutions of China. Master's thesis, 1927. University of Southern California, Los Angeles.

144. **Watts, Annabelle.** A critical study of the curriculum of elementary schools of England. Master's thesis, 1927. Ohio state university, Columbus.

See also items 71, 81, 184, 878, 883, 1154, 1209, 1210, 1301, 1431, 1479-1480, 1515.

INTERNATIONAL ASPECTS OF EDUCATION

145. **Fischer, Martha Lewis.** A method of investigating the influence of history teaching on attitudes toward peace. Master's thesis, 1927. Yale university, New Haven, Conn.

146. **Frederick, Robert.** An investigation into some social attitudes of high-school pupils. *School and society*, 25: 410-12, April 2, 1927.

Testing of more than 1,100 pupils in seven high schools to determine their attitudes and knowledge with regard to international and interracial affairs. The conclusions of the study are that the patriotism of the majority of high-school pupils studied is not broad, generous, and intelligent; many racial prejudices exist, reading and information on international affairs are negligible, and in general there is great need of broadening the social consciousness of our coming generation.

147. **Knapp, Forrest Lamar.** An experimental measurement of the value of certain instructional material for peace education. Doctor's thesis, 1927. Yale university, New Haven, Conn.

A study (1) to determine the attitudes, favorable and unfavorable, to world peace and friendship, which children have as a result of the usual influences of birth and training; (2) to determine whether the Old Testament war stories used in church schools may be detrimental to peace; (3) to measure, by experiment the value of instruction designed specifically to develop attitudes favorable to world peace and friendship. Findings: A comparison of scores on a test of attitudes submitted to all pupils, before and after the special instruction, showed that the attitudes of the pupils in the training groups were somewhat improved. It was concluded, however, that because the improvement was not greater, the usual instruction in the church school is not sufficient to develop strong peace and friendship attitudes.

148. **Neumann, George Bradford.** A study of international attitudes of high-school students, with special reference to those nearing completion of their high-school courses. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927. 120 p. (Teachers college, Columbia university. Contributions to education, no. 239.)

The author tries to discover and examine the attitudes of a selected number of high-school students who are nearing graduation, as far as these attitudes are concerned with other peoples and nations. Findings: The students had definite international attitudes. The study makes evident certain attitudes which appear to be based upon prejudice rather than facts and therefore call for correction through educational means.

EDUCATIONAL THEORY AND PRACTICE

149. **Edelson, Benjamin.** Study of the causes of failure. Master's thesis, 1927. University of Pennsylvania, Philadelphia.

150. **Hendershot, Vernon Edwards.** A comparative study of the educational philosophies of Plato and Dewey. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

151. **Keyworth, M. R., Moehlman, Arthur B., and others.** Public-school code of Hamtramck, Mich. Hamtramck, Mich., Board of education, 1927. 260 p.

The code is "a statement of educational policies and of the means of carrying them out."

152. **Knudsen, Charles William.** The relation between learning exercises and immediate objectives. Doctor's thesis, 1927. University of Illinois, Urbana.

153. **McCrory, John C.** A study of the relation between ability and achievement. *Educational administration and supervision*, 12: 481-90, October, 1926.

The study concerns 357 first-year students of State teachers college, St. Cloud, Minn. It tries to determine which students applying for admission to the college are apt to make an unsatisfactory record. The writer concludes that this study, like most studies that have been made on prediction of success in college, is in agreement with the principle that no one criterion alone is reliable. Intelligence test scores and high-school records offer at present the most dependable data. There is evidence in this study that early performance in college is not in itself a reliable index of ultimate achievement. The contention that normal training graduates are on the whole superior to the unselected high-school graduates seems in part to be warranted. This superiority, however, is due apparently to other traits than those of intellect.

154. **Massé, Gildo.** Education in utopias. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 200 p. (Teachers college, Columbia university. Contributions to education, no. 257.)

Undertakes to synthesize and collate the views of the authors of utopias on educational matters. The utopians base their hope for social progress on education.

155. **Sharpe, Edith Florence.** Methods of performing certain routine school activities. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

See also items 27, 31, 76, 86, 644.

EDUCATIONAL PSYCHOLOGY

156. **Baker, Harry J.** Characteristic differences in bright and dull pupils. An interpretation of mental differences, with special reference to teaching procedures. Bloomington, Ill., Public school publishing company [1927] viii, 118 p. 8°

The author, who is clinical psychologist of the Detroit public schools, undertakes to go behind the scenes of testing and to interpret differences in general intelligence in terms of the psychology of learning.

157. **Book, William F.** How to develop an interest in one's tasks and work. Journal of educational psychology, 18: 1-10, January, 1927.

147 students taking required course in educational psychology were asked to state their purpose in pursuing the course. Sixty-six per cent said they took the course because it was compulsory. Only 22 per cent of students were interested in the course when the work began. Students attitude changed completely after being shown effects of maintaining a proper attitude towards their success and advancement.

158. **Boston, Mass. Public schools. Council of teachers.** The educability of the emotions. Boston, Mass., Printing department, 1927. 51 p.

Deals with the attitude of the council toward the problem. A study of 28 instances of pupil behavior, each instance with some emotional basis, and a summary table giving sex, age, school grade, child's typical conduct, history of child at home and at school, interpretations of conduct, treatment, and results.

159. **Chassell, Joseph Olin.** The experience variables: A study of the variable factors in experience contributing to the formation of personality. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

This study is centered on the problem of finding an objective approach to the complex determinants in personality formation.

160. **Crow, Lester D.** The comparative value of extra classroom study in the learning of educational psychology. Doctor's thesis, 1927. New York university, New York, N. Y.

161. **Denworth, Katherine M.** The effect of length of school attendance upon mental and educational ages. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. Berkeley, Calif., University of California press, 1927.

This study tries to determine the effect of length of school attendance upon mental capacity and educational acquirement and of mental capacity in turn upon educational acquirement. The subjects (700) were pupils of ages 9 to 12, inclusive, in whatever grade enrolled. Findings: The most variable group in length of attendance is the least variable in mental and educational ages. The least variable group in attendance is the most variable mentally and next to the most variable educationally. Apparently differences in the amount of schooling of pupils of a single age do not account for differences in their mental and their educational development.

162. **Douglass, Harl Roy.** The experimental determination of the relative effectiveness of two sequences in supervised study. Doctor's thesis, 1927. Stanford university, Stanford University, Calif.

163. **Gorham, Donald R.** Interest as a factor in education. Master's thesis, 1927. Colgate university, Hamilton, N. Y. 28 p. ms.

A study of the effect of interest on choice of subject and on quality of work of 1,124 students in three men's colleges, one women's college and one normal school.

164. **Hendricks, Hazel Agnes.** Some underlying causes of lack of attention. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

165. **Jensen, Milton B.** Trait differences between three groups in education (teachers, research workers, and administrators). Doctor's thesis, 1927. Stanford university, Stanford University, Calif.

166. **Orata, Pedro Tamesis.** A reinterpretation of the problem of transfer of training in the light of Thorndike's theory of identical elements. Doctor's thesis, 1927. Ohio state university, Columbus.

167. **Fyle, C. B.** Types of behaviorism and their metaphysical implications. Doctor's thesis, 1927. Boston university, Boston, Mass. 246 p. ms.

168. **Smith, Meredith.** An interpretation of behavior based on physiological foundations and applied to education. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927. 93 p.

This thesis is an attempt to utilize the physiological data now available to build up, in more detail and in a more concretely verified way, conclusions which have previously been reached from the side of the philosophy of education.

169. **Tripp, M. Grace.** Perceptual learning at different grade levels. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. vi, 87 p. ms.

Reports the results of an experiment in perceptual learning in which figures composed of straight and curved lines were reproduced by 12 children, four each from grades, three, five, and seven. Analyzes the drawings and observed reactions of the children. Findings: The third-grade children were less efficient in perceptual learning than those of the fifth or seventh grades. Differences in efficiency of learning were mainly due to differences in retentive power. In the perception of objects, conscious attention was directed exclusively to form, and such factors as shape, number, and proportion were neglected.

170. **Wallin, J. E. W.** Clinical and abnormal psychology. Bureau of special education and psycho-educational clinic, Miami university, Columbus, Ohio. Boston, Houghton Mifflin company, 1927. xxi, 649 p.

A textbook for educators, psychologists, and mental hygiene workers.

See also items 347, 815, 820.

CHILD STUDY

171. **Cunningham, Kenneth S.** The measurement of early levels of intelligence. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 74 p.

Investigation of applicability of test devised for adults to measure abilities of young children: 347 English-speaking children, 2½-5½ years of age, attending public and private schools and day nurseries tested by means of levels A to E of the CAVD (Thorndike) scale supplemented in 119 cases by Stanford Binet test scores. Findings: Within certain limits the CAVD test may be used as an alternative for the Binet: youngest age groups are really measured only by Levels A, B, C, of the CAVD test; Level A is considerably easier for children than for adults; more data are required for interpretation of curves of children obtained by reference to a scale of adult intelligence; data are given to compare normal and inferior intelligence, normal children and imbeciles, and performances on individual items of the test, but no conclusive interpretations follow.

172. **Olesen, Florence.** A study of dramatic play in groups of children from 2 to 5 years of age. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 115 p. ms.

173. **Pavey, Gertrude Austin.** A study of the physical and mental development of children under 2 years of age. Master's thesis. Ohio state university, Columbus. 78 p. ms.

A study of 25 children of superior parentage compared with a control group of average children, for the purpose of determining whether the children of superior parentage develop earlier or later or at the same age, either physically or mentally, or both, than the average child. Findings: The superior group were taller and heavier, and larger in stature than the average child. The development of teeth and ossification of bones may progress at the usual rate. In mentality they were also superior.

174. **Boy, Vincent A.** Children's ability to estimate and record their responses to expressive lines. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

175. **Sangren, Paul V.** Manual of instructions—information tests for young children. Western state teachers college, Kalamazoo, Mich., 1927. Kalamazoo, Mich., Western state teachers college, Extension department, 1927. 27 p.

176. **Shaw, Katherine.** A study of learning in young children. 1927. University of Cincinnati, Cincinnati, Ohio. 80 p. ms.

177. **Sparks, Robert Burdette.** A study of physically accelerated children. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iv. 51 p. ms.

The study comprises a comparison of three groups of children—the first (72 pupils) above normal in weight; the second (71 pupils) normal in height and weight; and the third (93 pupils) below normal in height and normal or below normal in weight—with respect to age-grade placement, school marks, mental ability, habits, attitudes, and traits. Findings: The results show that there was a larger per cent of acceleration among the large children and a greater per cent of retardation among the small children. When the school marks of the three groups were compared with their respective grade averages, the results seemed to indicate that the small children were doing a slightly better quality of work than the other two groups. A study of the I. Q.'s revealed that the children of normal weight and height were on the average a little stronger in mental ability than were the large children, and that the small children were weaker in mental ability than any of the other groups. As to traits, the children who were 7 per cent above the height normus led by a slight margin in initiative, leadership, reliability, self-confidence, and ease of learning. The small children rated slightly higher in industry, accuracy, and respect for authority.

178. **Walton, Cora M.** A study of 6-year-old children with the Merrill-Palmer tests. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio.

179. **Waring, Mrs. Ethel Bushnell.** The relation between early language habits and early habits of conduct control. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927.

Two experiments were organized to discover any dependable tendencies of language as a factor in the control of conduct. Language approval was found to facilitate, to expedite, to insure, and to extend conduct control. Language approval facilitates the development of a working concept of right in children from 2 to 4 years of age.

See also items 158, 289, 291, 1249, 1251, 1461.

EDUCATIONAL SOCIOLOGY

180. **Day, James Frank.** The economic aims in education. Doctor's thesis, 1927. University of California, Berkeley. 225 p. ms.

181. **Hockett, John A.** A determination of the major social problems of American life. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 101 p. (Teachers college, Columbia university. Contributions to education, no. 281.)

The study aims to discover and report some of the more significant problems and issues of political, economic, and social life in America to-day. Shows how the curriculum maker should use the results and how findings are used by the Lincoln school group.

182. **Landis, Benson Y.** Professional codes. A sociological analysis to determine applications to the educational profession. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 108 p. (Teachers college, Columbia university. Contributions to education, no. 267.)

Deals with the functions of code making in the development of ethical standards in the various professions. How the experiences of these professional groups may be applied by educators in the development of professional ethics. An analysis of 12 professional organizations. Codes have grown out of social conditions. There are four types of professional codes. There are three types of organizations with respect to the mechanism of social control. The most effective control has been attained in the integrated organization.

183. **Mullins, Marian.** An annotated bibliography of educational sociology. Master's thesis, 1927. Texas Christian university, Fort Worth.

184. **Roe, Chungil Yhan.** The free function of education in social adjustment. Doctor's thesis, 1927. Teachers college, University of Nebraska, Lincoln. 60 p.

A comparative estimate and criticism of the educational teachings of Confucius and the philosophy of John Dewey. Sets up an educational program to meet the needs of Korea.

185. **Vaughan, Lilah M.** Some sociological aspects of American industrial leadership. Doctor's thesis, 1927. School of education, Boston university, Boston, Mass. 300 p. ms.

All available recent literature was studied for the purpose of proving the usefulness of social psychology in aiding our industrial leaders with their problems. This study, including as it did the opinions of practical men of affairs, as well as those of social scientists, provided convincing proof of the need of industrial leaders trained in the art of handling human beings intelligently.

PSYCHOLOGICAL TESTS

186. **Abelson, Harold Herbert.** The improvement of intelligence testing. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 71 p. (Teachers college, Columbia university. Contributions to education, no. 273.)

This study evaluates certain relatively objective methods of choosing test items and of scoring item responses. Findings: The study indicates the need for objective item selection and response scoring. It has paved the way for effective item analysis by clarifying many of the issues involved, by ascertaining the use and value of the new scoring methods and the item coefficient and by indicating original methods of procedure which serve to reduce the labor involved in item analysis to a considerable extent.

187. **Adams, Mary Elizabeth.** Differential diagnosis of borderline feeble-mindedness. Master's thesis. Ohio state university, Columbus. 116 p. ms.

An attempt to differentiate by means of mental tests between people of moron mentality and those of the same mental level who do not prove to be morons, or as the author words it, between inferior normal persons and high-grade defectives. Finds that these data indicate that the border line zone is enclosed by a very irregular jagged boundary, the exact outline of which our present technique does not clearly and satisfactorily determine.

188. **Albert, Roberta Faythe.** A study of certain sections of the Thorndike intelligence examination and their predictive value. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

189. **Atkinson, W. B.** Limits of learning as related to intelligence and to mechanical speed. Doctor's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

Studies the behavior of learners as they proceed toward their limit of ability in several learning tests. Finds that (1) learning ability and intelligence, as measured by the tests used in this study, are not the same thing; (2) an intelligence test is likely to exceed a mechanical speed test in predicting how well subjects start out on a new task; (3) an intelligence test will predict achievement very poorly or not at all after the subject is set to his task; (4) an intelligence test will not predict limits of learning ability in processes similar to those used in this study; (5) quickly and easily secured measurements of mechanical speeds (the fundamental part-activities) in the particular tasks to be learned, are reliable instruments for predicting the final or even the intermediate achievement in learning; they seem to be the real factors in fixing the subjects' limits of learning ability; (6) subjects to become more alike with continued practice.

190. **Barnes, J. C.** Intelligence of freshmen. Maryville, Tenn., Maryville college, 1927.

Presents results of intelligence tests given to freshmen of Maryville college.

191. **Berman, Abraham B.** A statistical study of the Otis intelligence quotient and the subjects passed at the end of the first year of high school. Master's thesis, 1927. School of education, College of the City of New York, New York, N. Y. 43 p. ms.

Intelligence quotients and school progress studied for 425 pupils in grade nine of the Waverly annex of the Brooklyn boys high school. Results of the study tend to throw doubt upon the intelligence test score as a correct indicator of success in high school.

192. **Brooks, Fowler D.** The accuracy of intelligence quotients from pairs of group tests in the junior high school. *Journal of educational psychology*, 18: 173-86, March, 1927.

A study to determine how much more accurate are the combined results from two tests than results from one. Stanford-Binet and nine group tests were given to 106 junior high-school pupils. It was found that two tests measure an individual's I Q approximately 21 per cent more accurately than one test.

193. **Cleaton, Glen U.** Optimum difficulty of group test items. *Journal of applied psychology*, 10: 327-40, September, 1926.

General practice in the construction of group tests for the purpose of measuring capacity and attainment seems to favor an inclusion of test items ranging from very easy to very difficult. Certain statistical reasons for this practice may be offered. Published studies on test construction offer little or no empirical data.

194. **Edwards, Lillian Shera.** A study of word association in college students. Master's thesis. Ohio state university, Columbus. 148 p. ms.

A comparison of verbal responses to the Kent-Rosanoff association test of 1916, with verbal responses to a modified and modernized word association test, with reference to college students only. The new list was administered to 500 college students.

195. **Guller, Walter Scribner.** The predictive value of group intelligence tests. Miami university, Oxford, Ohio. Reprinted from *Journal of educational research*, December, 1927. 10 p.

The study comprises the subject marks and intelligence scores of 80 college freshmen. The marks cover an entire year's work. The intelligence scores were derived from three group tests.

196. **Hildreth, Gertrude.** Functions of the department of psychological measurement. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 31 p.

A study of the methods and procedures of the department of psychological measurement at the Lincoln school. This is an expository discussion showing that the psychologist, who is employed in this school to act as an expert in child study, employs specialized techniques for discovering facts about individual children that may be used by the school in effecting better adjustments between the child and his environment. It is the report of an experiment.

197. **Jones, Harold Ellis.** A comparison of the intelligence of extension and college undergraduate students. *School and society*, 26: 469-70, October 8, 1927.

A study of comparative intelligence tests on 452 college and 418 extension students in comparable classes. The median score for the college students was 171.2; for the extension students, 148.7.

198. **Kavanaugh, Robert Vincent.** A critical examination of the work of Burt, Spearman, Thorndike, and Tilton with regard to the concept of and testing of the higher mental processes. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

199. **Kuhlmann, F.** A median mental age method of weighting and scaling mental tests. St. Paul, Minn., Division of research, Department of public instruction. 17 p. Reprinted from *Journal of applied psychology*, June, 1927.

Describes group tests mentioned in item 200 by Kuhlmann and Anderson.

200. ——— and **Anderson, Ross.** Intelligence tests for ages 6 to maturity. 1927. Division of research, Department of public instruction, St. Paul, Minn. Minneapolis, Minn., Educational test bureau, 1927. 35 p.

The study includes "Instruction manual" and eight test material booklets, one booklet each for grades 1-12.

201. **Lowe, Mary Louise.** A study of the relative value of first impressions and second thought in answering true-false tests. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

202. **McClusky, Howard Y., and Curtis, Francis D.** A modified form of the true-false test. *Journal of educational research*, 14: 213-24, October, 1926.

An experiment in science (7-10) grades to determine the relative value of a modified form of true-false test. The modified form called for a correction of false statement. This modified form of the true-false test is more difficult than the conventional true-false. It is inferior in that it requires more time to administer and correct than the old form; but it is superior to the true-false in the following respects: (1) It is to a much greater extent a power test; (2) it possesses greater value for diagnosis of individual and class diff-

culties; (3) it gives a better basis for homogeneous grouping over subject-matter units; (4) it is more reliable since, in so far as elementary science is concerned, it has a reliability comparable with the best of the other "new-type" tests; (5) it is more popular with the abler pupils because of their belief in its superior merits; (6) to all intents and purposes it eliminates the element of chance.

203. **Miller, Lillian E. Steele.** An analysis of the types and interests of students found in the Polytechnic evening high school of Los Angeles. Master's thesis, 1927. University of Southern California, Los Angeles.

204. **Pollock, Martha.** An analysis of personality. Master's thesis. Ohio state university, Columbus. 133 p. ms.

A reconciliation of psychometric and clinical psychology for a more fundamental analysis of individual factors in social adaptation.

205. **Shellow, Sadie Myers.** An intelligence test for stenographers. *Journal of personnel research*, 5: 306-308, December, 1926.

The author describes an intelligence test which was devised for the purpose of supplementing a trade test for the selection of stenographers. The criterion was a ranking by an examiner who knew their work at first hand and who took into account salary earned, difficulty of work handled, and opinions of department heads. Correlations obtained were: Intelligence test, with ranking 0.73; trade test, with ranking 0.48; intelligence test, with trade test, 0.12; and both tests combined, with ranking 0.59.

206. **Snedden, Donald Scott.** The interview as a measure of general intelligence. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

This is a study in method. 113 high-school students picked on the basis of previous recent intelligence scores were given test interviews. The correlation of the test-interview score, with an equally weighted composite of the three criterion test, is 0.8250.

207. **Snyder, Carol Henrietta.** An experimental trial of a series of motor tests. Master's thesis, December, 1926. School of education, University of Chicago, Chicago, Ill. iv, 90 p. ms.

Analyzes the motor responses made by 48 pupils to a series of seven tests of motor ability, as a means of determining whether the tests measure same or different motor elements, and whether they measure the motor functions which they purport to measure. Correlates the pupils' scores in major tests with their scores in shop, handwriting, and mechanical drawing in an effort to determine the validity of the tests.

208. **Taylor, John F.** A study in correlation, multimental scale, Stanford revision Binet scale, and Stanford achievement test. Master's thesis, 1927. University of Kansas, Lawrence.

209. **Uhrbrock, Richard Stephen.** Analysis of the Downey will-temperament tests. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

One hundred and fifty-one junior high-school boys served as subjects to determine the reliability and validity of the will-temperament tests. A complete review of the literature and experiments in the field of will-temperament testing has been presented. A coordinated survey of the work is obtained. The relationships between will-temperament tests, ratings, intelligence scores, and grades are reinvestigated, and previous findings confirmed.

210. **Ulrich, Oscar Alvin.** An experimental study of the effect on learning of sectioning college classes on the basis of ability. Doctor's thesis, 1926. Graduate school, University of Texas, Austin. 55 p.

The purpose of the experiment was to determine the effect on learning of sectioning college classes in the psychology of education into homogeneous sections according to a psychological test when all other conditions are held uniform. Findings: Sectioning classes in psychology of education when taught by the lecture method, and treating all sections alike, yields no beneficial results.

211. **Walters, Fred G.** A statistical study of certain aspects of the time factor in intelligence. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 82 p. (Teachers college, Columbia university. Contributions to education, no. 248.)

This study tries to show the extent to which an extension of time improves the predictive value of scores on certain group intelligence tests; second, to estimate the amount that rate of work in general and rate of reading contributes to the size of scores on five group intelligence tests; and, third, to help solve the problem of the correlation of rate of work in general to intelligence. Findings: When Stanford Binet mental age is used as the criterion, extension of time shows no improvement in size of correlations over standard

time. This is true for all five tests studied. The contribution of rate of work to the size of standard time scores on the National, Otis, and Mantimeter tests is estimated in amount to be equal to about three-tenths of the variability of standard time scores on these tests. The evidence shows that many children may be relatively slow in their rate of performance without necessarily being dull.

212. **Whipple, Guy M.** Sex differences in intelligence test scores in the elementary school. *Journal of educational research*, 15: 111-17, 269-75, February, April, 1927.

Average scores of girls exceeded the average scores of boys in tests of intelligence applied in the elementary school. The reverse was true in secondary schools. Men were superior also in normal schools and colleges.

213. **Wilbur, Flora.** Group intelligence tests for the purpose of homogeneous grouping. 1926-27. Fort Wayne, Ind., Public schools. 9 p. ms.

A study of subnormal and bright children.

See also items 153, 171, 288, 617, 645, 921, 1344, 1386.

EDUCATIONAL TESTS AND MEASUREMENTS

214. **Adams, Carl L.** A study in variability and grade progress. Doctor's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

Undertakes to determine whether or not children become more alike in certain school functions as they progress from grade to grade. Finds that (1) the subjects of the study show rather strong tendencies toward dispersion from the fifth grade through the seventh grade; (2) from the seventh grade through the eighth grade they show marked tendencies toward concentration; (3) from the fifth grade through the eighth grade they show slight tendencies toward dispersion; (4) there appears to be less stability among the higher achievement scores than among the lower scores. The sixth grade is the grade of greatest variation for the boys, the seventh for the girls.

215. **Albright, Beatrice Flos.** Typical reading disabilities of college entrants. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

216. **Allen, R. D.** Providence inventory test results. Providence, R. I., Public schools, Department of research and guidance. 8 p. (Public school bulletin, November, 1927.)

All pupils of grades 5 to 8 (12,000) were tested in arithmetic fundamentals, arithmetic reasoning, reading comprehension, and language usage.

217. **Anderson, Paul Nesbit.** Scholastic ability of athletic and nonathletic groups. Master's thesis, 1926. College of education, State university of Iowa, Iowa City. 41 p. ms.

This study indicates that no significant differences exist, either as to mental ability or scholastic achievement. The athletic group does not show inferior scholarship.

218. **Armstrong, Caroline.** Los Angeles diagnostic tests: Language. 1927. Los Angeles, Calif., City schools, Research service company, 1927. 8 p.

A standardized diagnostic test on which may be based a program of remedial and constructive procedure and activities.

219. ——— Los Angeles diagnostic tests: Reasoning in arithmetic. 1926. Los Angeles, Calif., City schools, Research service company, 1926. 8 p.

A standardized diagnostic test on which may be based a program of remedial and constructive procedure and activities.

220. **Bergman, W. G.** Scores on various standard tests transmuted into Michigan grade levels. Ann Arbor, Mich., Bureau of educational reference and research, University of Michigan, 1927. 15 p. (Michigan. University. Bureau of educational reference and research. Bulletin, no. 98, February 15, 1927.)

Preparation of norms on five tests, based upon results from the state of Michigan in years of 1922-1926. Based on about 100,000 scores in each test. Norms given by months by interpolation. Grades III to VIII covered. Brief explanation of the principal merits and defects of the grade-level procedure.

221. **Boren, Jewell Foster.** The effect of objectivity of scoring upon the reliability of the essay type examination. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

222. **Boyer, Philip A.** Report of Division of educational research and results. Philadelphia, Pa., Board of public education, 1926. 96 p.

Full survey of Philadelphia public schools; reports of tests and measurements, promotions, etc.

223. **Cornell, Ethel L.** Sex differences underlying the fact of greater retardation among boys and girls. Albany, Educational measurements bureau, New York state department of education, 1927. 20 p. ms.

Data for study taken from individual examinations.

224. ——— **Coxe, W. W., and Orleans, J. B.** Rating scale of school habits. Educational measurements bureau, New York state department of education, Albany. Yonkers-on-Hudson, N. Y., World book company, 1927. 1 p. and manual.

Test was experimented upon as aid in psychological examinations and in prognosing school success.

225. **Coxe, Warren W.** Adaptation of methods and materials of instruction to ability groups. Albany, Educational measurements bureau, New York state department of education, 1927. 18 p. ms.

Findings: There can be adaptation of subject matter and methods. The development of adequate technique is essential before this type of organization can reach the greatest efficiency.

226. **Cuff, Noel Buford.** The relation of overlearning to retention. Nashville, Tenn., George Peabody college for teachers, 1927. 34 p. (George Peabody college for teachers, Contributions to education, no. 43.)

The study indicates that the brighter subjects profit less from the additional readings than do the duller ones. More practice after a series is learned may do good, may be wasted, or may be detrimental.

227. **Cushman, Charles Leslie.** A study of proposed techniques for the construction of diagnostic tests. Doctor's thesis, 1927. State university of Iowa, Iowa City.

228. **Darale, Marvin L.** A method of determining composite educational scores. Journal of educational psychology, 14: 270-74, November, 1926.

229. **Davis, D. M.** A study to determine the reliability of objective tests in high schools. Master's thesis. University of South Dakota, Vermillion.

230. **Devine, Verna C., and Hulton, C. E.** Pretesting and spelling ability. Public schools, Marinette, Wis. Reprinted from Elementary English review, April, 1927. 5 p.

To determine whether or not pretesting is more or less efficient when child attempts all words in pretest. It is more efficient to have a child draw a line instead of attempting to spell words he is not sure about.

231. **Doll, Edgar A., and Adams, Mary A.** Borderline diagnosis. Vineland, N. J., Training school, 1927. 15 p.

A study of 40 high-grade borderline cases, as a crucial test of the methods of clinical psychology for differentiating high-grade feeble-minded from low-grade morons. The results suggest that at least for this group of (nonpathological) cases feeble-mindedness is more or less of a psychological entity and represents a deviation from the normal in degree rather than in kind. The study as a whole shows the importance of supplementing the social criterion of feeble-mindedness with the measurement of general ability.

232. **Dugdale, Kathleen.** A study of the Indiana trial test, scale B, test 1. Master's thesis, October, 1927. Indiana university, Bloomington. 36 p. ms.

233. **Dyess, Benjamin Cicero.** A comparison of the achievement of third-grade pupils who have been taught by training-school teachers with the achievement of those who have been taught by regular teachers. Master's thesis, August, 1927. University of Colorado, Boulder.

Presentation of the author's experiment to determine the influence of observation and apprentice teaching by students on progress of third-grade pupils in elementary training school of Stillwater, Okla. Results show training-school pupils made relatively less progress in terms of intelligence level than those of two nontraining school control groups. Tables.

234. **Everly, L. L.** Result of the St. Paul achievement tests. St. Paul, Minn., Public schools, 1927. 28 p. ms.

A study in better grading of pupils in order that each pupil may be given his proper grade placement. The writer concludes that (1) the problem of grade placement is still far from solution; (2) the special promotion of the more competent and the withdrawal of subnormals into special classes raises the educational age above the chronological age.

235. **Fitzgerald, James A., and Ludeman, W. W.** Sex differences in history ability. Springfield, S. Dak., Southern state normal school, 1927. 12 p. ms. This study of over 300 grade pupils in rural and city schools found boys slightly better in history ability, both in facts and reasoning.

236. **Gabriel, Sister.** The construction and evaluation of a series of test units for a reading scale. Master's thesis, June, 1927. Catholic sisters college, Washington, D. C.

The second stage in the construction of several reading scales, each designed to measure depth of comprehension in different types of reading.

237. **Gambrill, Bessie Lee.** An analytical list of kindergarten-primary tests of intelligence and achievement. 1927. Yale university, New Haven, Conn. New Haven, Conn., Whitlock's book store, 1927. 36 p.

238. **Gary, Ind. Public schools.** Age-progress report, 1925-26. 1926. 60 p. ms.

A study of the relative distribution of children according to their rates of progress and their chronological ages, during a single semester.

239. **Haddock, Nellie P.** The use of the Stanford achievement test to indicate high-school success. *School and society*, 25: 114-16, January 22, 1927.

Finds as follows: According to the educational ages and quotients from the Stanford achievement test, the freshman students in Louisville high schools are a normally selected group. The distribution of marks received by the freshmen is skewed toward the lower end. Students with the higher E. Q. on the whole receive the higher marks. Seventy per cent of the failures are made by students with E. Q. below 103.

240. **Hadley, H. H., and Whitney, F. L.** The relative educational efficiency of the public schools in first and in third-class districts in Colorado. Master's thesis, 1927. State teachers college, Greeley, Colo. 46 p. ms.

Attempts to compare the relative efficiency of the schools in large and in small school districts.

241. **Harlan, Charles L.** A study of the mental, social, and educational status of the eighth-grade pupils of Idaho schools. December, 1926. Lewiston, Idaho. Idaho educational research association, Lewiston state normal school, 1926. 35 p.

Presents data on entrance age, years in school, present age, number of children in family, number of times pupils failed, days absent, change of schools, marks on different subjects, etc. Findings: (1) These eighth grade pupils are very different in their accomplishments at the end of their elementary school career; (2) they show unusually high mental ability; (3) graduation from the eighth grade is not a guarantee of proficiency in the school subjects; (4) the personal qualities of these pupils seem to indicate that such qualities as cooperation, manners and interest in work are being developed quite satisfactorily, but initiative, originality, and qualities of leadership are not so well developed.

242. **Head, John Howard.** Some administrative uses of tests and measurements. Master's thesis, 1927. University of Texas, Austin.

243. **Henderson, Ruby.** The comparative reliability of seven matching tests of varying length given to sixth grade children. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

By statistical measure of scores obtained from seven types of matching tests varying in length from 5 to 20 items, given to 130 sixth-grade history pupils of San Marcos, Texas, the author found: (1) That matching tests lend themselves to historical material; (2) increasing length of test tends to increase reliability; (3) weighting score is not justifiable in this study.

244. **Hollingshead, Arthur Dack.** An evaluation of the use of certain mental and educational measurements for purposes of classification. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. (To be published).

This study purposed to evaluate from an administrative standpoint, the relative effectiveness of the following measures as bases in securing homogeneity in classification: (a) In grade placement—(1) mental age of the national intelligence test, (2) educational age of the Stanford achievement test; (b) in sectioning X, Y, and Z sections the groups as classified on the above measures—(1) intelligence quotient, (2) educational quotient, (3) "brightness average," representing an average of the intelligence and educational quotients, (4) accomplishment quotient, (5) arithmetic quotient in the evaluation of arithmetic age, (6) mental age, (2) educational age.

245. **Horning, Floy M.** A diagnostic study of difficulties in reading comprehension. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

246. **Johnson, George R.** Measuring the achievement of pupils. St. Louis Mo., Public schools. Public school messenger, 24: 3-12, November, 1926. Twenty-one tests were given in representative schools.

247. **Jones, T. J., and Nash, H. B.** A continued study of problem solving in grades V-VIII. West Allis, Wis., Department of educational measurement, October, 1927. 14 p. ms.

Analysis of results of West Allis reasoning tests, January, 1927 to May, 1927, to determine growth in ability in problem solving. Findings: Children are scarcely holding their own, no progress. Problem solving is not being taught.

248. **Kelley, Truman L.** Interpretation of educational measurements. Stanford university, Stanford University, Calif. Yonkers-on-Hudson, N. Y., World book company, 1927. 370 p.

249. **Kendall, Amy.** The average intelligence quotient of those groups of pupils who obtained the same rating in the same major subject of junior high school work. Master's thesis, 1927. University of Pennsylvania, Philadelphia. 72 p. ms.

250. **McCallie, J. M.** Grade progress study. September, 1927. Trenton, N. J., Public schools, Department of research. 5 p. ms.

A study of all of the pupils in all the public schools of Trenton.

251. ———. Age-grade study of pupils in the day schools of Trenton, N. J. 1927. Trenton, N. J., Public schools, Department of research. 15 p. ms.

252. **MacQuarrie, T. W.** A mechanical ability test. Journal of personnel research, 5: 329-37, January, 1927.

The author describes a paper and pencil performance test for mechanical ability. It was found that when test scores were compared with teacher ratings on mechanical ability, the correlation was in no case over 0.48. But different results were obtained when test scores were compared with ratings on mechanical work the students turned out. In two such studies in which most of the raters did not know who did the work they were rating, correlations of 0.81 were found, while in another study the correlation was 0.32.

253. **Madsen, I. N.** Standard tests and the improvement of teaching. Lewiston, Idaho, Lewiston state normal school. 31 p. (Lewiston state normal school quarterly bulletin, no. 4, February, 1927.)

Study of difficulties reported by superintendents in use of standard tests, and of the ability of the average teacher to assist in such use. At present teachers' incompetency along testing lines is a significant factor. Teachers should receive specific training in use of tests and in use of statistical methods and graphs in connection therewith.

254. **Malle, Robert Sherrill.** A study of the records of the graduates of Manual arts high school as college entrants during the academic year of 1926. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

255. **Meyer, Herbert Herr.** An analysis of objective tests and student results in B9 general science with teacher preparation. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

256. **Michael, William, and Crawford, C. C.** An experiment in judging intelligence by the voice. Journal of educational psychology, 18: 107-14, February, 1927.

A comparison of the intelligence and scholarship of 56 college students, with their inflection of voice in reading (change of pitch within a syllable, word, phrase, sentence, or paragraph in harmony with the idea conveyed). Results show the correlations between inflection and scholarship are approximately the same as those between intelligence tests and scholarship; inflection correlates with scholarship slightly better than it does with intelligence tests; inflection is the only one of the voice factors which has any important correlation with intelligence; the three factors, scholarship, intelligence, and inflection, are about equally intercorrelated, and any one of the three is about as safe a basis for predicting another as any two combined.

257. **Moore, Frank Stillwell.** A study of the academic and mental equipment of the high-school entrants in relation to first semester achievements. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

258. **Morton, Robert Lee.** Teaching arithmetic in the intermediate grades. New York [etc.] Silver, Burdett and company [1927] v, 354 p. diags. 12°

Modern research has produced so voluminous a mass of tested material on arithmetic teaching that it is no longer possible to discuss the entire subject in a single volume. The present manual covers the work of the intermediate grades, or grades 4, 5, and 6.

259. **Odell, Charles W.** The interpretation of the probable error and the coefficient of correlation. Urbana, College of education, University of Illinois, 1926. 49 p. (University of Illinois. Bulletin, no. 32, August 31, 1926.)

An explanation of the nature and the use of the probable error and the coefficient of correlation as a means of properly interpreting the results of educational measurements.

260. **Oliver, S. C.** A standard test in dairy husbandry. Master's thesis, 1926. Pennsylvania state college, State college. State College, Pa., Pennsylvania state college, 1926.

Besides the test, the thesis discusses the technique of test making.

261. **Pease, Glenn Richard.** The effect of cramming upon retention, immediate and delayed. Master's thesis, 1927. College of education, State university of Iowa, Iowa City. 4 p. ms.

Studies the results in student mental effort of giving warning concerning impending tests. Finds that from the standpoint of economy in learning, it pays to give warning for tests, for the intensive review not only raises the score decidedly for immediate recall, but about half of such gain is held for at least six weeks.

262. **Peters, Charles C.** A method for computing accomplishment quotients on the high-school and college levels. Journal of educational research, 14: 99-111, September, 1926.

One thousand three hundred students were tested. The point averages of all students, and also their intelligence scores, were translated into standard-deviation units, and T-scores; and the accomplishment quotient was obtained by dividing the former by the latter. The investigation showed a high negative correlation between brightness and accomplishment.

263. **Philippine Islands.** Bureau of education, Manila. Measurement and research staff. Cross-section testing program. For Director's annual report, 1926-27. 14 p. 11 p. ms.

Tests on arithmetic (computation and reasoning); reading (word, sentence, and paragraph); language; dictation; music, home economics; and composition administered to grades III-VII and to Years 1-4, June-September, 1926; 10,000 pupils in 10 divisions; October-December, 1926: 5,000 pupils in seven divisions; January-March, 1927: 2,500 pupils in six divisions. Home-economics tests were administered to 3,700 grade VII girls in 30 divisions.

264. **Pierce, Paul Revere.** An evaluation of the classification in the Gladstone school. Master's thesis, June, 1927. School of education, University of Chicago, Chicago, Ill. iv, 82 p. ms.

Comprises an evaluation, by means of standardized tests, of the grouping of pupils by grades and by classes for instructional purposes in the Gladstone school, Chicago. The results show that a wide variation exists both as to age and ability within the grades of this school. The average range of ability in rooms varies from 3 to 9 full grades. The average percentage of overlapping by one-half grade or more is 39.8 upward and 45.9 downward. The average percentage of pupils correctly placed is only 14.5. A definite relationship exists between the pupils' scores on intelligence tests and educational tests. There is need for a better grouping of pupils in grades according to ability and rate of progress.

265. **Popenoe, Herbert.** A report of certain significant deficiencies of the accomplishment quotient. Journal of educational research, 16: 40-47, June, 1927.

A survey of the use of the accomplishment quotient in the Los Angeles city schools over a period of several years. Results of survey showed that the administrative use of the accomplishment quotient was open to serious criticism and led to its discontinuance in Los Angeles schools.

266. **Pugh, David.** A comparison of the lecture-demonstration and individual laboratory methods. Pittsburgh, Pa., Public schools, Department of curriculum study and educational measurement and research, September, 1927. (Curriculum study and educational research bulletin, vol. II, no. 1, p. 15-21, September, 1927.) Findings point to superiority of lecture-demonstration method over the individual laboratory method.

267. **Reisner, G. L.** Relation between type of question and score made by urban and rural pupils. Master's thesis, 1927. Pennsylvania state college, State College, Pa. 39 p. ms.

Analysis made of test papers of 200 rural and 200 urban pupils.

268. **Bemmers, H. H.** A diagnostic and remedial study of potentially and actually failing students at Purdue university. Doctor's thesis, 1927. State university of Iowa, Iowa City 200 p. ms.

An intensive study of the lower quartile of freshman men on entrance tests plus a study of the effects of remedial techniques by means of a controlled experiment. The average performance of the experimental and control groups were not significantly different. Seventy per cent of the experimental group remained in the university throughout the year, as against 60 per cent for the control group.

269. **Rogers, Agnes L.** The classification of pupils in private schools. Philadelphia, Pa., Committee on intelligence tests, Private-school teachers' association, 1927. 24 p.

A report on the distribution of mental ages, chronological ages, educational ages, and intelligence quotients in schools affiliated with the Private school teachers' association of Philadelphia.

270. **St. Louis, Mo. Public schools. Division of tests and measurements.** Objective achievement tests constructed and used in St. Louis. Public school messenger, vol. 25, no. 4, November 30, 1927. 175 p. (Research and survey series, no. 3.)

During past years a number of tests were constructed by the Division of tests and measurements based on specific objectives of the curriculum. Most of these tests were given an experimental trial in the schools during the second half of last year. Upon the basis of the results obtained in this trial use, the tests have been revised.

271. **Schenectady, N. Y. Public schools.** Report of the results of the Stanford achievement test. 1927. 25 p. ms.

A random sampling of 91 of the pupils in 6A grade in May 1927 was made and the scores of these pupils were compared with their scores in May 1925, in reading, arithmetic, language usage, spelling and education (composite). The data show that these pupils made more than the expected gain of 21 months in all subjects except reading.

272. ————. **Division of research.** The result of the Otis self-administering test of mental ability. 1927. 6 p. ms.

Reports of results of Otis self-administering test of mental ability, higher examination, form B, given to all 9A and 10A pupils of Schenectady, May, 1927. Tables on chronological ages, mental ages, and intelligence quotients; forth problems encountered in making high-school work profitable to many of the pupils enrolled.

273. **Smith, Henry Lester, and Wright, Wendell, W.** Bibliography of educational measurements. 2d revision. Bloomington, Ind., School of education, Indiana university, 1927. 251 p.

A classified and descriptive bibliography including a chart of the tests and the grades in which they are to be used.

274. **Stalnaker, J. M.** A statistical study of some aspects of the Purdue orientation tests. Master's thesis, 1927. Purdue university, Lafayette, Ind. Lafayette, Ind., Purdue university, 1927. 74 p. ms.

Comparisons of test results by schools, distinguished students vs. "normals" vs. probationers, "normal" men vs. "normals," fraternity men vs. nonfraternity men, out-of-state students vs. students in the state, etc.

275. **Stone, G. W.** New reasoning tests in arithmetic and how to utilize them. 1927. School of education, State college of Washington, Pullman. New York city, Teachers college, Columbia university, 1927. 20 p.

Scaled test grades IV-IX, inclusive. Two equivalent forms. Manual shows (1) directions and conditions for giving; (2) directions for scoring—keys furnished; (3) T scores; (4) standards; (5) arithmetic ages; (6) use of diagnostic forms; (7) use of portrayal charts; (8) remedial measures.

276. **Wagner, Henry Joseph.** The use of tests and measurements as a basis for increasing the efficiency of a very small school system. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

(1) A scientific survey of classroom conditions in the Burlington, Colo., schools (1926-27), made by author, for purposes of reorganization; (2) reclassification of pupils on basis of intelligence quotients; (3) objective measure of results after a year's operation of new plan; (4) advantages of new plan over previous conditions. Tables.

277. **Wardell, William H.** Relation of number of schools attended to educational achievement. Master's thesis, 1927. Brigham Young university, Provo, Utah.

A study by means of standard tests of the pupils in the Tintic school district where the mining population has brought into school a large number of children who have been transient in their school attendance.

278. **Wenrick, Thomas K.** Some uses made of standard tests in a county school system. Master's thesis, 1927. Ohio state university, Columbus.

279. **Wilson, F. T.** Some achievements of pupils of the same mental ages but different intelligence quotients. *Journal of educational research*, 14:43-53, June, 1926.

A comparative study of the results of 2,000 pupils' grades 3A-8A in six public schools of Seattle. Pupils of the lower quartile do work more nearly up to their possible achievement than do those of the middle or higher quartiles. The higher quartile falls below its possible achievement more and more as mental age increases. The question as to what subjects to emphasize with these pupils must be answered by other criteria than mere success.

280. **Winch, W. H.** Can observation be trained in school children. *Journal of educational research*, 15:229-38, 314-26, April, May, 1927.

An experiment with equal parallel, highly correlated groups, to determine if observation can be trained—meaning by observation, "more or less unconsciously, sense impression, sensation, the perception or identification of sensations, the spatial relatedness of perceptions, the remembrance of them, and the expression of them in a verbal or graphic way. Findings: Girls in standard IV class in London were tested. The contention of teachers, that the perception or synthesis of functions which they call observation, can be trained is amply justified. It is very unlikely that much, if any, improvement in actual sensory acuity has resulted from tests and exercises of this experiment. It is clear, however, that perceptive ability has been improved, and possibly the power to remember perceptions and to state them verbally. It is extremely probable that it is in perceptual attention and ability itself, and possibly also in some advance in "short-period memory," that the gain has mostly been made.

281. **Woody, Clifford.** Results of May testing program in the elementary schools of Michigan. Ann Arbor, School of education, University of Michigan, 1926. 32 p. (University of Michigan. Bulletin, no. 95, October 30, 1926.)

Gives results of testing program carried on in the elementary schools of Michigan, May, 1926. Findings: (1) Achievement in spelling in Michigan falls appreciably below the Iowa standards for the spelling of the same words; (2) in reading, as measured by the Thorndike-McCall reading scale, Michigan's achievement is appreciably above the author's standard, particularly in the lower grades; (3) achievement in arithmetic, as measured by both the Woody-McCall and the Stevenson tests, is higher in Michigan than the standard for these tests; (4) Michigan's achievement in the Wilson language error test is considerably above the tentative standards given by Wilson. This is particularly marked in the lower grades; (5) the Michigan scores on the Detroit word recognition test are somewhat lower than scores obtained elsewhere. In grade II, this tendency is less marked than in grade I; (6) the gains made in spelling are slightly less than those made by the groups upon which the author obtained his standards; the gains in arithmetic and reading are slightly more.

282. **Zeigel, William H., jr.** Achievement and high-school honor students in the University of Missouri. *School and society*, 25: 82-84, January 15, 1927.

In general, the honor students seem superior to regular students in all phases of the questions studied, and they are really the leaders in a majority of school activities.

See also items 25, 147, 175, 178, 327, 341, 343, 353, 355, 867, 369, 370, 371, 377, 401, 428, 434, 437, 441, 449, 450, 453, 460, 467, 470, 487, 497, 521, 568, 570, 594, 602, 688, 730, 791, 815, 835, 893, 922, 924, 925, 945, 989, 1132, 1148, 1159, 1169, 1171, 1186, 1291, 1357, 1374, 1384, 1409, 1410, 1429, 1431, 1432, 1450, 1459.

EDUCATIONAL RESEARCH

283. **Chapman, H. B.** Organized research in education, with special reference to the bureau of educational research. Doctor's thesis, 1927. Ohio state university, Columbus. Columbus, Ohio state university, 1927. 221 p.

Discusses the status of organized research in education both in Europe and in America. Some attention is given to the work of professional systems, of teachers and research workers, but mainly centers about so-called bureaus of educational research. The study shows that research bureaus are the product of several different but related movements, each designed to further some form of school efficiency.

284. **Goodrich, T. V., and Lefler, M. C.** An improvement in school survey maps. *American school board journal*, 74:67, 148, March, 1927.

Shows the use of a square so drawn that lines are parallel to sheet lines instead of the usual circle to designate the boundaries of an area to be served by a school at the center.

285. **Myers, C. Everett.** The Pennsylvania state education association program for coordinated research in 1927-28. Harrisburg, Pa., Pennsylvania state education association, 1927. 18 p.

A plan to aid the profession at work on its problems.

286. **National education association.** *Research bulletin*, vol. 4, no. 6, nos. 1-3, November, 1926-May, 1927. Washington, D. C., National education association, 1926-1927.

Vol. 4, no. 6, and vol. 5, no. 1, deal with school finance; vol. 5, nos. 2 and 3, deal with teachers' salaries.

See also items 702, 714, 929, 1529.

INDIVIDUAL DIFFERENCES

287. **Chase, Sara Elizabeth.** Individual differences in the experience of children. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. vii, 131 p. ms.

Comprises a study of the out-of-school interests and activities of 245 children enrolled in the fourth, fifth, and sixth grades of the Kensington avenue school of Springfield, Mass. Finds that reading books, going to movies, reading funnies, and playing marbles and baseball were the play activities engaged in most frequently by boys. Reading books, reading funnies, going to movies, auto riding, and playing house were the activities engaged in most frequently by girls. On an average, the children who ranked high on intelligence tests ranked high in three out-of-door activities: Reading, seeing moving pictures, and doing errands at stores. Children who ranked low in tests ranked low in these three activities although they ranked higher than the first group in work activities.

288. **Cornell, Ethel L.** A study of personality traits revealed by comparison of Binet and performance records. Albany, N. Y., State department of education, 1927.

The investigation is based upon individual case studies.

289. **Lincoln, Edward Andrews.** Sex differences in the growth of American school children. Doctor's thesis, 1927. Harvard university, Cambridge, Mass. Baltimore, Md., Warwick & York, inc., 1927. xii, 189 p.

This study deals with sex differences in physical growth, mental development, school accomplishment and in variability in these traits. The problem of providing for sex differences becomes merged in the larger problem of making provision in the school for the much greater differences among individuals.

290. **Paterson, Donald G., and Langlie, T. A.** The influence of sex on scholarship ratings. *Educational administration and supervision*, 12: 458-68, October, 1926.

Findings: Sex differences are to a large extent pseudo-differences and will tend to disappear as teachers free themselves from the error of rewarding personality traits over and above the actual contribution of these traits to genuine achievement and as teachers adopt new type examinations as a means of objectively measuring scholastic performance.

291. **Wilson, Frank Thompson.** Learning of bright and dull children. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. (To be published.)

The purpose of the study is to make a comparison of the progress in learning varied mental tasks by four groups of children selected by I Q and chronological ages, 15 subjects comprising each group. Findings: The more novel the task the more variable is the performance. Individual variation in all performance is very great. There are no significant sex differences. Percentage measures of relative retention and improvement are of no value in comparing groups.

See also items 293, 303, 304, 403, 525, 631, 1500, 1518.

SPECIAL METHODS OF INSTRUCTION AND ORGANIZATION

GENERAL

292. **Bowdlear, Charles L.** An experiment in kinesthetic learning. Central high school, Oklahoma City, Okla. American physical education review, 32: 100-105, February, 1927.

An experiment to determine to what extent if any the perception of bodily movement in space can be developed. The experiment was conducted in a high school in Oklahoma City. Thirty-seven boys took part.

It is impossible to definitely conclude from the above experiment that the kinesthetic sense can be developed, but it shows that it is possible if enough time is allowed for individual practice and individual instruction on the part of the teacher is given. The lack of records of this type of experimentation would indicate a need for more experimentation in this field.

293. **Broening, Grace D.** An analysis of pupil growth through individualized instruction. Master's thesis, 1926-27. Johns Hopkins university, Baltimore, Md.

294. **Horner, Warren B.** The laboratory vs. the recitation method of teaching English. Master's thesis. University of Chicago, Chicago, Ill. 80 p. ms.

An experiment carried out with a control and an experimental group of pupils. The laboratory method accomplishes similar results in 54 per cent of the time used in the recitation group.

295. **Hurd, A. W.** A suggested technique for selecting high-school pupils who may be allowed to plan their own lesson assignments. School review, 34: 618-26, October, 1926.

A study conducted in author's physics classes with paired sections, one group being taught in the traditional way, and the other being allowed to organize its own work with no daily assignments and with promotion dependent only upon industry and initiative shown. The tests, given only for purposes of comparison, showed one-third of the experimental group excelling the mean for the controlled group. The experimental group test score correlations with earlier physics grades, I Q, mental age, and teachers' mark indicated that selection of pupils for independent work may reasonably be made on these bases.

296. **Knox, W. W.** The demonstration method versus the laboratory method of teaching high-school chemistry. School review, 35: 376-86, May, 1927.

A study of paired chemistry sections enrolling 85 pupils taught by two inspectors: Two experimental groups taught by demonstration method; two controlled groups taught by laboratory method. Tests to measure immediate retention, delayed (3-week) retention, and method of attack indicate superiority of demonstration method for the 10 experiments thus tested.

297. **Koos, Leonard V., and Traxel, Oliver L.** A comparison of teaching procedures in short and long class periods. School review, 35: 340-53, May, 1927.

Observation of 346 high-school classes for the purpose of comparing procedures in short-period and long-period classes. Tables and graphs presented on time emphasis given to recitation, assignment, supervised study, testing, and other activities in 167 short-period classes and in 179 long-period classes. Observers' evaluations of results achieved are given.

298. **Mayer-Oakes, G. H.** An experiment with the Dalton plan in a small high school. Master's thesis, 1927. University of North Dakota, Grand Forks. 125 p. ms.

The plan was found very satisfactory, results being distinctly superior.

299. **Meeker, Harold Llewellyn.** An experiment in teaching pupils how to answer questions. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. vi, 78 p.

Reports the results of an experiment in teaching pupils how to answer questions. Thirty high school sophomores were given specific training in answering certain type questions in American history for a period of 15 weeks, and their progress was compared with that of a control group taught by the traditional method. The study shows that specific training and practice in answering certain type questions results in a greater increase in ability to answer questions of those types than does undirected study of the same material. Some types of questions adapt themselves more easily to directed training than do others.

300. **Munro, George W.** Selected sections at double pace. November, 1926. Lafayette, Ind.; Purdue university, 1926. 20-p. (Purdue university studies in higher education, VII, November, 1926.)

The study relates to the sectioning of students in thermodynamics at Purdue university during the first 3 1/2 years of the experiment. The results as achieved failed to confirm many preconceived ideas. The

value of some of the results is still debatable. On the whole, the method of the double-pass section is considered successful and is being continued at Purdue. It provides distinct recognition of the superior student in a way he appreciates, saving time, and gives to high scholarship a very real value.

301. **O'Boyle, Lila.** A comparison of the achievement of pupils in platoon schools and traditional type of schools. Master's thesis, 1927. University of Denver, Denver, Colo.

302. **Powers, Margaret Helene.** Education via radio. Master's thesis, 1927. Brown university, Providence, R. I.

303. **Rhodes, Luke C.** Can individualized instruction be justified by the use of standard tests. American school board journal, 73: 55-56, November, 1926. Contains scores of individual instruction and other classes. Individual instruction classes are well worth while and their extension should be encouraged.

304. **Robinson, Maleska A. E.** Mattatuck plan: A history of an experiment in individualized instruction. Master's thesis, 1927. Brown university, Providence, R. I.

305. **Senour, A. C.** Some influences of multiple-track organization. School of education, Indiana university, Bloomington. In Indiana university school of education bulletin, vol. III, no. 5, May, 1927. p. 27-38.

Presents data indicating influences of multiple-track organization with its accompanying ability classification. Presents nine charts. Finds that a pupil may do less than standard work and yet be doing satisfactory work. Teachers substitute intelligent concern for worry when through use of appropriate tests and organization pupils have educational opportunity appropriate to abilities.

306. **Stauffer, Harry Willis.** An adjustment program for boys in a public-school system. Master's thesis, 1927. University of California, Berkeley.

307. **Stewart, Alfred W.** A comparison of departmental and grade teaching. Doctor's thesis, 1927. Ohio state university, Columbus. 102 p. ms.

The children in certain grades in one school of the Cleveland system were utilized. The children, who were divided into two groups of as nearly equal ability to learn as possible, were organized one on a departmental and the other on a nondepartmental basis. Experiment continued through three semesters. The group taught departmentally made less progress than the group taught by the grade method though the data for third semester indicate that the inferior gains may be due at least in part to a period of adjustment following the change of method.

308. **White, B. F.** The effect of supervised study in Kansas high schools on success in the University of Kansas. School review, 35: 55-58, January, 1927.

Study of grades of 270 freshmen students at the University of Kansas to ascertain effect of supervised study in high schools from which these students had been graduated. The advantage of this supervised study group over the group coming from high schools not having supervised study was found too small to be considered significant.

See also items 135, 266, 390, 545, 547, 625, 766, 934, 936, 942, 1065, 1398.

PROJECT METHOD

309. **Alberty, H. B.** A study of the project method in education. Columbus, Ohio state university press, 1927. 111 p.

Studies the logical and psychological treatment of subject matter; historical development of the project method; real life and natural setting applied to projects. The project method is considered as purposeful activity, as instrumental learning, as an aid to reflective thinking. Findings: The project method is a point of view in dealing with the child. It should never be the only method. Its exclusive use leads to the neglect of a phase of training, systematic organization of knowledge, and the tools for securing men knowledge.

310. **Bayne, Eleanor.** Four years of experimentation with the project method. Master's thesis, 1927. Tulane university, New Orleans, La. 150 p. ms.

Description of projects in geography, commercial subjects, etc., conducted over a period of four years in rural schools of St. Tammany Parish, La. The project method proved satisfactory.

See also items 399, 1365, 1486.

VISUAL INSTRUCTION

311. **Lewerenz, Alfred S.** Objective measurement of visual education methods. Los Angeles, Calif., City schools, 1927. *p. 2-5. (Educational research bulletin, December, 1927.)

Three groups of schools composing 30 schools and 3,000 pupils were tested to find value of three methods of presenting films. Finds high-pressure methods of showing films only warranted for very important topics due to expense.

312. ——— Tests in fundamental abilities of visual art. Three parts, nine tests, keys, manual and directions. Los Angeles, Calif., City schools. Los Angeles, Calif., Research service company, 1927. 30 p.

A series of nine standardized tests in visual art abilities for grades 3-12.

See also item 579.

SPECIAL SUBJECTS OF CURRICULUM

READING

313. **Allen, R. D.** Survey of reading in grades 1-4. Providence, R. I., Public schools, 1927. 10 p. (Providence public-school bulletin, November, 1927.)

Gives reading tests in grades 1 to 4, all pupils (about 15,000). Age and grade norms determined and compared with standards. Percentile rank and letter ratings provided.

314. **Andrew, J. Fred.** The vocabulary of the Indiana state adopted primary readers. Master's thesis, October, 1927. Indiana university, Bloomington. 119 p. ms.

315. **Arleigh, Mabel W.** Studies in beginning reading. South Pasadena, Calif., School research association, 1927. 22 p. ms.

An analysis and measurement of B1 reading difficulties arranged as a basis for creation of more suitable material. All primer material on the market is shown to be at least eight times too difficult for grade B1.

316. **Benson, J. B.** A campaign to improve reading. St. Louis, Mo., Public schools. Public-school messenger, 24:17-26, November, 1926.

On first test pupils fell below norms. In final test result was reversed. Pupils gained in comprehension also.

317. **Blackhurst, James Herbert.** Investigations in the hygiene of reading. 1927. Drake university, Des Moines, Iowa. Baltimore, Md., Warwick & York, Inc., 1927. 63 p.

Study for minimizing mechanical effort made in the process of reading by finding what size of type is most readable, what leading and length of line are most desirable and whether margins of print should be regular or irregular. Investigation confined to first four grades. Findings: Eighteen-point type (height of small letters 2.75 mm.) is more readable in all the first four grades than type which is smaller. Twenty-four point type offers about the same reading difficulty in the second grade as does 18-point type. In the first grade twenty-four-point type is more readable than that which is smaller or larger. The question of its use in this grade should be one of expense rather than desirability. The most desirable length of line for the first four grades lies around 100 millimeters.

318. **Branson, Ernest P.** Reports of Stanford reading and arithmetic tests. Long Beach, Calif., City schools, 1926-27. 14 p. ms.

319. **Brueckner, Leo J.** The technics and evaluation of a supervisory program in work reading in the Minneapolis public schools. Minneapolis, Minn., Public schools, 1927. 59 p. (Educational bulletin, no. 12, April, 1927.)

Problems faced by the teaching group, supervisory techniques used, types of training activities that followed, methods for measuring the effectiveness of this technique. Results showed that more stress should be placed upon development of certain vital study habits. The research department planned a period of teacher training to acquaint teachers with skills in teaching pupils how to study.

320. **Burks, Jesse D., and Stone, Clarence B.** Relative efficiency of two plans of training in silent reading. San Francisco, Calif., Department of service, Public schools, 1927. 20 p. ms.

321. **Carroll, Robert P.** An experimental study of comprehension in reading with special reference to the reading of directions. 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 72 p.

Three experiments given pupils to test their power to follow directions by reading them from the printed page. Findings: Pupils are typically very inefficient in reading directions. Skill in such reading may be acquired by dint of appropriate practice.

322. **Cram, Fred D.** Silent reading. (Rev. ed.) 1927. Cedar Falls, Iowa state teachers college, 1927. 164 p. (Bulletin of the Iowa state teachers college, vol. 28, no. 4, October, 1927.)

323. **Davis, Nell Holsay.** An experiment in the teaching of reading. Master's thesis, 1927. School of education, University of Southern California, Los Angeles, Calif.

324. **Duffy, Nona Keen.** Sixteen cases in reading diagnosed and treated in the fourth grade of a normal training school. Master's thesis, August, 1927. University of Colorado, Boulder.

This study includes (1) importance of diagnosis in the teaching of reading; (2) a detailed presentation of a scientific investigation conducted by the author in the fourth grade of the Cheney normal training school to determine causes and characteristics in reading retardation and to develop methods of remedial instruction. Case studies. Tables.

325. **Gamertafelder, Carl Christian.** An attempt to improve the reading ability of the lowest quartile of a ninth-grade class. Master's thesis, 1927. State university of Iowa, Iowa City.

326. **Gates, Arthur L.** Methods and theories of teaching reading tested by studies of deaf children. *Journal of educational research*, 14: 21-32, June, 1926.

As a result of experimental analysis the hypothesis was developed that the deaf acquire a type of visual-word perception which greatly facilitates spelling ability. This study involves a comparison of deaf and normal children as to the acquisition of reading ability.

327. ———. A series of tests for the measurement and diagnosis of reading ability in grades 3 to 8. *Teachers college record*, 28: 1-23, September, 1926.

328. **Good, Carter V.** The supplementary reading assignment. 1927. Teachers college, Miami university, Oxford, Ohio. Baltimore, Md., Warwick & York, inc., 1927. 227 p.

A study of extensive and intensive materials and methods in reading. This volume reports the results of certain investigations of supplementary reading materials and methods, and suggests practical applications to the problems of reading in concrete school situations.

329. **Halvorson, G. P. and Cutright, Prudence.** A study of one factor in grade placement of reading materials. Minneapolis, Minn., Instructional research department, Public schools, 1927. 14 p. ms. (This study will be published as a part of the Minneapolis recreational reading materials.)

A statistical study of children's ability to read sections of "Heidi" as compared with the ability of these same children on the Gates' reading tests. Fourth-grade children, with fourth-grade reading ability, have a comprehension score of 50 per cent in a comprehension test based on Heidi.

330. **Harper, Jean Maud.** A comparison of abilities in two types of reading. Master's thesis, 1927. University of Texas, Austin.

331. **Haskin, Lynn Gerald.** Predictive value of the Monroe reading rate score for high-school achievement. Master's thesis, 1927. University of Wisconsin, Madison.

332. **Hu, I.** A study of perception in reading the Chinese language. Master's thesis, December, 1926. School of education, University of Chicago, Chicago, Ill. iv, 51 p.

Employs the tachistoscope method in an attempt to determine the amount of reading matter perceived at a brief exposure by 51 Chinese students, with reference to different kinds of material in Chinese and English. Ascertains the extent of correlation in the different kinds of material between (1) the rate of reading and the size of the perception spans, and (2) the relative sizes of the spans.

333. **Jennings, Joe.** Reading survey in white elementary schools. Knoxville, Tenn., Research department, City schools, 1927.

Monroe's Standardized silent reading tests, revised, were used in testing 6,951 white children in grades 3 to 7, inclusive. The rate and comprehension of the pupils were measured. Conclusions: Pupils of Knoxville read very slowly as compared with pupils elsewhere. Largest gain in Knoxville (24 words) occurs between 3A and 4B grades.

334. **Jorgensen, A. N.** Iowa silent reading examinations. Doctor's thesis, 1927. State University of Iowa, Iowa City. University Iowa studies in education, vol. IV, no. 3, 1927. 76 p.

The tests were designed to aid teachers in diagnosing the abilities of pupils to work and study with books. Summation of test scores reveals a comparative profile of the pupil's ability to read silently in activities of the work type. The scores on the separate tests will reveal inability in particular skills necessary for efficient study and comprehension in silent reading.

335. **Keeler, Lewis.** A critical analysis of the Kansas school readers. (A summary) Master's thesis, April, 1927. University of Kansas, Lawrence. University of Kansas bulletin of education, 1: 5-9, April, 1927.

A study of the Kansas primer, first reader, and second reader for the purpose of discovering how well these readers fit the needs of children in the primary grades.

336. **Kennedy, J. Alexander, and Corrigan, Emmet.** Comparative study of the results in silent reading in the seventh and eighth grades in elementary and intermediate schools of Detroit. Department of research, Detroit, Mich., Public schools. Elementary school journal, 27: 444-46, February, 1927.

Silent reading scores of pupils in seventh and eighth grades of elementary schools compared with results for same grades in intermediate schools. The general subject of reading is given less time in the intermediate than in the elementary schools, but pupil achievement in this subject is about equal in the two types of schools.

337. **Lewis, William Earl.** The relationship between improvement in reading ability and rate of memorizing. Master's thesis, March, 1927. School of education, University of Chicago, Chicago, Ill. vii, 93 p. ms.

Reports the results of an experimental study to determine the relationship between improvement in rate and comprehension in reading and rate of memorizing. Compared by means of tests two groups of pupils—the one an experimental group which received intensive training in reading, and the other a control group which received the ordinary type of reading instruction. Memory was stressed as little as possible for both groups. Finds that the average improvement in the rate of memorizing was greater in the experimental group than in the control group; however, improvement in rate of reading may or may not affect the rate of memorizing in individual cases. Improvement in comprehension in reading had a positive effect upon improvement in rate of memorizing. It appears that improved methods of attacking problems and better habits of attention, which resulted from the special training in the experimental group, proved helpful in memorizing poetry. Improvement in interest, which accompanied improvement in comprehension in the experimental group, also had a positive effect upon the rate of memorizing.

338. **Montgomery, W. L.** An investigation of the uses of recreatory reading. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

339. **Nash, H. B.** A survey of reading in the elementary grades. West Allis, Wis., Department of educational measurements, Public schools, 1926. 14 p. ms.

Report based on Stanford reading test given in grades 2B-6A and in Detroit word recognition test given in 1B and 1A, June, 1926. The city considered as a whole shows all grades above norm, the 1A being the weakest. Some evidence that either the pupils are poorly graded or else the reading work is better adapted to the bright and average student than it is to the slower one.

340. **Newark, N. J.** Public schools. Department of reference and research. A survey of reading in the Newark public schools. 1926. 13 p. ms., 20 blue prints.

Comparison of surveys in reading for 1921 and 1926. Some of the findings are as follows: (1) Older pupils do not necessarily become better readers; (2) pupils residing in congested districts and of foreign parentage are poorer readers; (3) the greatest amount of scientific investigation, improvement in method, and purposeful objectives are found in the lower grades (materials for reading have greatly improved in these grades; comprehension and rate in these grades have made the greatest improvement); (4) differences in teachers in the school, in clearness of objectives, and in foreign pupils are responsible for the great diversity in the second grade; (5) more definite objectives should influence the teaching of reading in the upper grades.

341. **Power, Leonard.** First-grade word recognition. (Abstract.) Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. Texas state teachers association. Research bulletin. November, 1927. p. 49-60.

With the aid of eight teachers of the first grade the problem of determining minimum lists of words was attacked and individual tests of word-recognition ability were devised and applied.

342. **Baby, Miriam.** A study of reading errors made by sixth-grade children on the Stanford achievement test. Master's thesis, 1927. University of Texas, Austin.

343. **Bangren, Paul V.** The measurement of achievement in silent reading. Doctor's thesis, 1927. University of Michigan, Ann Arbor. 88 p.

344. **York, Pa. City schools.** Some important reading abilities. Types of procedure to give training in these. York, Pa., Board of education, 1927. 109 p.

To diagnose and remedy the reading difficulties in the elementary schools, York, Pa. Course in psychology and method of reading by teachers; general survey tests given at the beginning of the study and at the end of the semester. It was found that with one exception each half grade made a year or more of improvement in one semester of time.

345. **Yowell, Stella.** Are children reading? *Journal of educational research*, 15: 1-4, January, 1927.

664 high-school pupils scored a general average of 51.2 per cent on a test to identify characters in books widely read. Results indicate that the amount of children's reading is very low.

346. **Zirbes, Laura.** Comparative studies of current practice in reading with techniques for the improvement of teaching. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. (To be published.)

This study attempts to find out how current practice in reading shall be reconstructed if it is to apply progressive theory and incorporate the integrated findings of pertinent scientific studies. Findings: A summary index was prepared to facilitate the use of the study in the improvement of teaching.

See also items 215, 236, 245, 465, 640, 647, 652, 679, 704, 1447, 1531.

SPELLING

347. **Archer, Clifford Paul.** Transfer of training in spelling. Doctor's thesis, 1927. State university of Iowa, Iowa City.

348. **Barker, Vilda M.** The ability of children who have had six years of training to spell words that have not been studied. Master's thesis, 1927. State University of Iowa, Iowa City.

349. **Coast, Alice Mae.** The phonetic background in the first two grades, and its influence on spelling in the third grade. Master's thesis, 1927. State university of Iowa, Iowa City.

350. **Cooper, E. J.** The 1,035 words most commonly misspelled by Minneapolis pupils in grades 3-8. Master's thesis, 1927. University of Minnesota, Minneapolis. Instructional research department, Minneapolis, Minn. 26 p. ms.

351. **Davis, Burton Ellsworth.** Special spelling needs of individual states. Master's thesis, 1927. University of California, Berkeley.

352. **DeBusk, B. W., and staff.** A measure of spelling efficiency. Portland, Oreg., schools, 1927.

Words of known difficulty for each grade were used. The standard of 70 per cent efficiency was required. Portland children spell 91 per cent of the list.

353. **Evans, Anna I.** Validation of spelling scales. Master's thesis, 1927. State university of Iowa, Iowa City.

354. **Evans, Edith N.** The significance of initial errors in spelling. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

Study of misspellings of a list of words written five times in 33 days by 66 pupils of grades 3, 5, and 6. Findings: (1) Initial errors do not tend to persist; (2) final errors were not caused by initial errors but by the inherent difficulties of the words; (3) there is less need of additional attention to initial errors than there is to repeated tests on words which were spelled correctly the first time.

355. **Gates, O. Ray.** January, 1927, spelling test results. Grand Island, Nebr., Public schools, 1927. 4 p. ms.

Comparison of the results of the Ayres' spelling test, given January, 1927, with the results of the same test, given September, 1922 and 1926.

356. **Jennings, Joe.** Survey of spelling in elementary grades. Knoxville, Tenn., Research department, City schools, 1927.

Buckingham extension of Ayres spelling scale, list of 25 words, given to 6,383 white children in grades 3 to 7, inclusive. Results were compared with other cities as to number of words spelled correctly, gain from grade to grade, spelling ability of boys and girls, relation of age to spelling ability. Findings: Medians of different age groups in Knoxville are very much lower than the medians for other cities.

357. **Jones, T. J., and Nash, H. B.** Results of a spelling survey. West Allis, Wis., Public schools. Department of educational measurement, October, 1927. 5 p. ms.

A survey in spelling based upon the results of the Morrison-McCall and the West Allis spelling tests (the latter designed to test efficiency of class and teacher). Conclusions: There is no reliable evidence that any general spelling ability is built up in the grades that can be depended on to secure high performance on unstudied words; (2) it seems quite certain that the recent decision not to begin spelling until 2B is a wise step; (3) correlations between tests to be determined later; (4) West Allis tests B. C. useful to teachers to determine retained spelling knowledge and relative spelling ability of pupils both guides to classroom procedure.

358. **Kalamazoo, Mich., Public schools.** Department of research. June junior high-school spelling results. September, 1927. 6 p. ms.

Report of results of spelling tests given to 1,269 pupils in grades 7 and 8 of the Kalamazoo public schools. Ten tables presented February and June results. Summaries show every grade for city as a whole above standard and notable gains made during the time between February and June.

359. **Keiffer, Phebe Robertson.** A study of errors in context spelling among fourth-grade children. Master's thesis, 1927, Northwestern university, Evanston, Ill.

360. **Kilzer, L. B.** The test-study method versus the study-test method in teaching spelling. School review, 34; 521-25, September, 1926.

Investigation of results secured on both immediate and delayed recall tests following use of the two methods of spelling instruction mentioned in title. 1,000 pupils in 34 schools participated in immediate tests; 777 of the same pupils in 30 schools in the delayed recall tests. For immediate recall the test-study method was found far superior to the study-test method; this was especially true for the better spellers. For delayed recall (five months interval) there was no significant difference between results for the two methods.

361. **McKee, Paul.** Teaching spelling by column and context forms. Journal of educational research, 15: 246-55, 339-48, April, May, 1927.

An investigation, during the years 1923-24, to determine the relative efficiency of the common column form and certain context forms in the teaching and testing of spelling. It included three experiments: (A) The column-phrase form; (B) the column-sentence form; (C) the column-paragraph form. A sought to determine the relative efficiency of column and phrase methods of presenting the words; B attempted to compare the efficiency of the column and sentence forms; C provided a measurement of the difference in efficiency in column and paragraph forms. Conclusions: Experiment A—Pupils who used the column form secured results superior to those obtained by pupils who used the phrase form in the amount of spelling ability acquired during the learning period. Experiment B—Pupils who used the column form secured results superior to those obtained by pupils who used the sentence form. Experiment C—Pupils who used the column form secured results superior to those obtained by pupils who used the paragraph form.

362. **Masters, Harry Victor.** A study of spelling errors: a critical analysis of spelling errors occurring in words commonly used in writing and frequently misspelled. Doctor's thesis, 1927. State university of Iowa, Iowa City.

363. **Sudweeks, Joseph.** Practical helps in teaching spelling. Journal of educational research, 16: 106-18, September, 1927. (Reprinted.)

A critical analysis of 60 books and magazine articles on spelling to reach definite conclusions as to the principles and practices recommended or sanctioned by the best modern authorities. Brief statements of the best list on spelling, including materials, learning process, and teaching procedure.

364. **Tewinkel, Joseph Marshall.** A study of high-school spelling. Master's thesis, 1927. University of Washington, Seattle.

365. **Thorne, Maude Bowers.** Experimental comparison of values of different methods of teaching spelling. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

366. **Whipple, George Gordon.** Comparison of high-school spelling norms and the spelling ability of students in the colleges of liberal arts and sciences and, in the School of education of the University of Kansas. Master's thesis, 1927. University of Kansas, Lawrence.

See also items 230, 554, 829, 903.

ENGLISH AND COMPOSITION

367. **Allen, E. D.** Seven high-school tests in English. Providence, R. I., Department of research and guidance, School department, 1927. 6 p. (Public school bulletin, May, 1927.)

Entire high-school population tested in vocabulary, reading comprehension, reading speed, capitalization, punctuation, language usage, and spelling. Age and grade norms determined; scores translated into percentile rank and letter ratings.

368. **Ashbaugh, E. J.** Nonschool English of high-school students. *Journal of educational research*, 15: 307-13, May, 1927.

Examination of 300 personal and outside-of-school letters written by pupils of junior and senior high school grades. Tables presented of errors in paragraphing, sentence structure, punctuation, capitalization, and spelling.

369. **Boyer, Philip A.** Report on Briggs English form test. (September, December, 1927) Philadelphia, Pa., Public schools, Division of educational research and results, 1927. 4 p. ms.

370. ——— Report on Philadelphia English test. September, 1927. Philadelphia, Pa., Public schools, Division of educational research and results. 15 p. ms.

371. **Brandt, Rose K.** A summary of the state-wide test in eighth-grade English composition. *Montana education*, 3: 16-17, 22-28, November, December, 1926.

Pressey's diagnostic test in English composition, form I, given in 41 counties of Montana. Lowest median scores were made by one-room or rural school pupils. Pupils from village schools (two to four teachers) made higher medians but below national standard. City school pupils, were above standard.

372. **Brueckner, L. J., and Cutright, Prudence.** Dictation in teaching punctuation; a study to determine its effectiveness. *Elementary English review*, 4: 265-69, November, 1927.

373. **Burch, Mary Crowell.** Determination of a content of the course in literature of a suitable difficulty for junior and senior high school students. Doctor's thesis, 1927. Stanford university, Stanford University, Calif.

374. **Collier, Josephine.** The comparative success of teaching rhetoric and of teaching "How to study" as a means of developing skill in the use of English. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

375. **Cook, Margaret Boag.** A quantitative study of appreciation in high-school literature. Master's thesis, 1926. University of California, Berkeley.

376. **Coryell, Nancy Gillmore.** An evaluation of extensive and intensive teaching of literature. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. vii, 201 p.

The purpose of this experiment was to demonstrate whether the extensive or intensive teaching of literature was more effective for comprehension and appreciation on the part of high-school students. Nine classes (128 pupils) were used in the experiment. Conclusions: In six tests on the literature studied the extensive-reading classes did as well as the intensive-study classes.

377. **Coxe, W. W.** Bibliography of objective tests in English. Albany, New York state department of education, 1927. 31 p. ms.

For each test, the author, publisher, price, time allowance, and a brief description of test are given.

378. **DeBusk, B. W., and staff.** A speech survey of the school children of Portland, Oreg. Portland, Oreg., Bureau of research, 1927. 6 p. ms.
Speech defects of elementary school children.
379. **Dyer, Clara Aris.** The assignment of poems to the grades. Master's thesis, December, 1926. School of education, University of Chicago, Chicago, Ill. iii, 101 p.
Reports the results of an examination of courses of study, school readers, and books and reports on the teaching of English, to discover the poems now in use by children in the grades. Lists these poems according to frequency of occurrence and grade location. The 1,851 poems listed show a wide difference in the range of frequencies for each poem. This variation is from 1 to 164. Only a few of the poems listed are widely used as shown by the frequencies.
380. **Everett, Janie E.** The status of elementary school composition in certain cities. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.
381. **Fifer, Kate Lee.** A practical guide for measuring pupil progress in English composition. Master's thesis, 1927. University of Virginia, University.
382. **Fry, Mabel S.** An analysis of the vocabulary content of university students in written composition. Master's thesis, 1927. University of Kansas, Lawrence.
383. **Guller, Walter Scribner.** Diagnosing student shortcomings in English composition. Journal of educational research, 14: 112-19, September, 1926.
The purpose of this study is to show the value of diagnostic tests in discovering some learning difficulties which students encounter in the mechanics of English composition. The Pressey punctuation and capitalization tests and Charter's verb and pronoun tests were given to students in Teachers college, Miami university. Analysis of the tests shows that, all too often, college students are deficient in abilities which presumably had been developed in the elementary grades. Educational diagnosis and remedial instruction are urgently needed.
384. ———. Improving ability to capitalize. Oxford, Ohio, Miami university, 1927. 5 p. ms.
The study was made to discover the extent to which 21 failing students in English composition could be improved in ability to capitalize in a limited amount of class time.
385. ———. Improving ability to punctuate. Oxford, Ohio, Miami university, 1927. 2 p. ms.
Marked improvement can be made within the limits of a few class hours by means of a carefully planned program of diagnostic testing and individualized remedial instruction.
386. **Hickerson, Maggie Mareda.** A study of speech errors in the Austin ward schools. Master's thesis, 1927. University of Texas, Austin.
Discloses the kinds and frequency of speech errors made by 4,056 children in the elementary schools.
387. **Hilton, Edith.** Present tendencies in high-school English. Lincoln Nebr., University of Nebraska, 1927. p. 15-29. (Educational research bureau bulletin, no. 2, 1927.)
Study is based on 100 state and city courses of study in high-school English surveyed, and the subject matter most frequently found in the various English courses tabulated. Findings: (1) Technical grammar is still being overemphasized; (2) mechanical elements of written English could be taught more effectively if individual pupil error lists were made from time to time, and drill directed against the elimination of these errors; (3) literature selections are in many cases too difficult for high-school pupils, more contemporary literature should be studied, and wide reading is and should supplant the microscopic analysis as a method of studying literature; and (4) college-entrance requirements still dominate the requirements of the English curriculum.
388. **Huber, Miriam B.** Children's interests in poetry. Teachers college record, 28: 93-104, October, 1926.
Holds that if children are to be led to gain insight into appreciation of literature it must be through materials suited to their taste and understanding.
389. **Kincade, Alma.** Poems desirable for fourth-grade children and methods used in presenting them. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.
390. **Lindquist, Everett Franklin.** The laboratory method of freshman English. Doctor's thesis, 1927. State university of Iowa, Iowa City.

391. **Lowrey, Rosewell Graves.** The English sentence in literature and in freshman composition. Doctor's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

What sentence forms and constructions are used by literary craftsmen in their prose writings, and to what extent? In the use of which of these forms and constructions are college freshmen most likely to be deficient? Between the days of Elizabeth and the present time, the English prose sentence has decreased from 45 to 20 words in length. Freshman sentences average 19.4 words. Clauses decreased from four to two. Except for an excessive use of compound predicates, freshmen approximate the standards set by literary writers.

392. **Lyman, E. L., chairman, and others.** Report of subcommittee on English. North central association quarterly, 1: 445-66, March, 1927.

An attempt to define English instruction qualitatively with special reference to library or individual reading, in order to indicate the contribution which English can make to the attainment of the ultimate objectives of secondary education.

393. **McFarland, W. H.** English ability of town and rural pupils. Master's thesis, 1926. College of education, State university of Iowa, Iowa City.

One hundred and ninety-two pupils, eighth-grade graduates, from town schools and 176 from rural schools were measured the first month in high school to determine which group was better prepared to pursue high-school English. Tests used: Briggs's form test; Kirby's grammar test, form I; Willing composition scale. Findings: There is a greater difference between the upper and lower quartiles in the "town group" than between the medians of the town and rural groups. The author says: "This would seem to indicate that the presence of rural pupils in the ninth grade English classes does not make the classes less homogeneous so far as English ability is concerned."

394. **Mattison, Mrs. Mable Doll.** How to teach English composition. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

395. **Nash, H. B.** A survey of language. West Allis, Wis., Department of educational measurements, Public schools, 1926. 9 p. ms.

Some results of tests given in May, 1926. West Allis school children are significantly above standard on language. There is too much grade and school variation. The completion type of question for language error makes good drill device.

396. **Nesmith, Mary Ethel.** An objective determination of stories and poems for the primary grades. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 85 p. (Teachers college, Columbia university. Contributions to education, no. 255.)

A study of selection and grade placement of literature for first three grades. Determined by present practice in United States, England, and France (courses of study and readers); findings from other scientific studies; appraisals by authorities. Placement and list of titles by modern authors is suggested. Poetry makes up less than 49 per cent of the body of primary literature. Selections considered superior by judges constitute 71.5 per cent of literature in present practice. Of these 83.5 fall in grade placement of present practice. Experimentation, with suggested list of stories and poems by more modern writers, is suggested.

397. **Penney, Edith M., and Symonds, Percival M.** The increasing of English vocabulary in the English class. Journal of educational research, 15: 93-103, February, 1927.

398. **Perry, Anna B.** Experiments in methods of English composition. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

399. **Philippine Islands.** Bureau of education. The problem and the project in secondary English. September, 1927. Manila, P. I., Bureau of education, 1927. 11 p.

Case studies of problems and projects used in English instruction in Pampanga and Manila high schools. Listing of problems and projects suitable for English composition and literature instruction in secondary schools.

400. **Potter, Walter H., and Touton, Frank C.** Achievement in the elimination of errors in the mechanics of written expression throughout the junior-senior high school. California quarterly of secondary education, 2: 255-78, April, 1927. (Also published as University of Southern California studies, second series, no. 3, 24 p.)

Two forms of a new test covering 64 items of correct English usage administered to 6,000 pupils of grades 7-12. Grade norms prepared for the test. Frequencies of pupils scores in the various grades show amount of gain for each half year of high-school course.

401. **Prosser, Inez Beverly.** The comparative reliability of objective tests in English grammar. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

Presentation of experiment made by the author on reliability of four types of objective tests in English grammar, given to 303 pupils in grades 8 to 11 of an Austin, Texas, high school, with results showing that the tests (1) conformed nearly to normal distribution curve; (2) discriminated well; (3) were highly reliable. Tests. Tables.

402. **Sloan, Della Marion.** An experimental measurement of the value of formal grammar in improving English usage. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

403. **Stephens, Stephen DeWitt.** Individual instruction in English composition. Doctor's thesis, 1927. Harvard university, Cambridge, Mass.

404. **Stroh, Mary Margaret.** Literature for grades VII, VIII, and IX: A study of prevailing materials and methods with suggestions for their revision. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 110 p. (Teachers college, Columbia university. Contributions to education, no. 232.)

The study was undertaken to determine, if possible, the adequacy of the curriculum in literature for grades VII, VIII, and IX; to determine needed curricular revisions; and to set forth in a practicable manner means of accomplishing the needed revisions. Finds that a significant proportion of the schools are still using a comparatively small body of traditional material which forms the greater part of their curriculum in literature. There is still evident a noticeable tendency to analytic study and discussion of literary material, and an undue proportion of time devoted to such study. Small towns lack adequate school and library facilities.

405. **Thorndike, E. L., Evans, Annie L., and others.** An inventory of English constructions with measures of their importance. Teachers college record, 28: 580-610, February, 1927.

Four hundred and thirty-eight constructions are listed. The inventory, especially after it has been supplemented by expert ratings for difficulty irrespective of rarerness, and for general linguistic deleteriousness, will be of service in the grade placement of reading material for natives, and in the sequential arrangement of exercises and reading for foreigners.

406. **Vandersall, Bernice Stockton.** The cooperation of all departments in the teaching of English in the high school. Master's thesis, 1927. University of Texas, Austin.

An analysis of plans which have been devised for promoting good English in high school through correlation of English with other subjects, followed by suggestions for a correlation program in keeping with present tendencies in curriculum reconstruction.

407. **Walker, Edyth.** The development of methods and the courses of study in English in the American secondary schools. Master's thesis, 1926-27. Duke university, Durham, N. C.

408. **Washburne, Carleton W.** The commonest syllables. Journal of educational research, 14: 199-205, October, 1926.

A statistical investigation to determine the commonest syllables in the English language, based upon an analysis of Thorndike's word list undertaken by the Winnetka teachers' seminar. Suggests use of 200 syllables, determined by sum of the indexes of words in which found, and by the number of different words in which found (Thorndike's Word book), and first and second grade materials. No suggestions offered for use of these syllables.

409. **Weaver, Robert Bartow.** Contemporary trends in oral English instruction. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. v, 110 p.

Reports the results of a study of state courses of study, city surveys, textbooks, and practice in school systems to determine contemporary trends in oral English instruction. The general aims of oral expression appear to be given very little attention. Oral composition is taught, in the majority of cases, in a half-hearted way, and no well-organized plan of instruction is followed. Most of the time that is devoted to oral instruction is given to content and delivery. The materials of instruction in expression are largely taken from content subjects. The significant elements of oral reading are not taught to pupils.

410. **Willing, Matthew H.** Valid diagnosis in high-school composition. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1926. 64 p. (Teachers college, Columbia university. Contributions to education, no. 230.)

This study tries to determine the validities of two procedures for diagnosing the weaknesses of individual high-school pupils in the formal elements of written composition. The two procedures are: (1) The error analysis of performance in typical proof-reading and error-recognition tests; (2) the error analysis of typed schoolroom themes. Conclusions: The proof-reading and error-recognition tests known as Briggs form, Cross English, general correspondence of error, and Proseay combined are reasonably good instruments (average validity 0.68) for predicting the average number of formal errors that these pupils will make. Performance in any one of the formal aspects of composition (capitalization, punctuation, etc.) did not serve well to predict performance in any other aspect. The range of intercorrelations averaged 0.37.

See also items 25, 179, 218, 291, 614, 623, 673, 682, 884, 929, 935, 1250, 1377, 1412.

ANCIENT CLASSICS

411. **Anderson, James P.** Learning and retention of Latin words and phrases without attention to derivation. Master's thesis, 1927. University of North Carolina, Chapel Hill.

412. **Carroll, Ruth.** Devices for making the teaching of Latin more interesting. Master's thesis, 1927. University of South Carolina, Columbia.

413. **Edwards, Anne, and others.** Evaluation of first-year Latin books. Los Angeles, Calif., Department of psychology and educational research, City schools, 1927. About 30 p. ms.

Objective evaluation of available first-year Latin texts.

414. **Laing, Litas M.** A technique for preparing valid examinations in first-year Latin. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

415. **McVey, Mary.** The study of Latin in junior high school. Master's thesis, 1927. University of South Dakota, Vermillion. 76 p. ms.

416. **Olaton, Luella Eugenia.** Trends in the teaching of first-year Latin. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

417. **Orleans, Jacob S., and Solomon, Michael.** Orleans-Solomon Latin prognosis test. New York state department of education, Albany. Yonkers-on-Hudson, N. Y., World book company, 1927. 8 p.

A test to be given to prospective students of first-year Latin for the purpose of determining the probability of their success. Evaluated by means of comparison of the test scores with the average of teachers' marks and score on the New York Latin achievement test, the correlation is found to be between 75 and 83 (for 300 cases) in 10 schools in New York state.

418. **Pound, Olivia, and others.** Report of subcommittee on Latin. North central association quarterly, 1: 483-504, March, 1927.

This study attempts to find materials of instruction in the field of Latin, which will contribute to the immediate and ultimate objective of secondary education.

419. **Taber, Gertrude J.** The frequency and persistence of errors made by junior high school pupils in the Latin subjunctive and in indirect discourse. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

420. **Wycoff, B. Tyson.** Latin prognosis from the standpoint of special abilities. Doctor's thesis, October, 1927. Indiana university, Bloomington. 150 p. ms.

See also item 80.

MODERN LANGUAGES

421. **Breckheimer, Peter J.** The kind and frequency of typical errors in written French. Master's thesis, 1927. University of Southern California, Los Angeles.

422. **Broom, Eustace, and others.** A test of Spanish vocabulary. High-school teacher, 3: 216-17, 234, June, 1927.

In this study, 300 San Diego, Calif., high-school pupils were tested.

423. **Buchanan, M. A.** A graded Spanish word book. New York, The Macmillan company, 1927.

Made under the direction of the committee on study of modern foreign languages of the American council on education.

424. **Buswell, G. T.** A laboratory study of the reading of modern foreign languages. New York, The Macmillan company, 1927. 100 p. (Publications of the American and Canadian committee on modern languages. vol. 2.)

Comprises an investigation of eye-movements of 192 subjects to determine optimum time for beginning the study of a foreign language; the effects which different methods of teaching have upon progress in reading; and comparative progress made by students of the various foreign languages. Findings: (1) The best results are secured for foreign-language study begun in high school or in college; these two are approximately on a par. Elementary school results in reading are decisively inferior. (2) The direct method is superior to the indirect method in teaching reading of a foreign language. (3) Reading progress in French, German, and Spanish is about equal for equal amounts of time spent; reading progress in Latin is slower than in modern foreign languages. (4) Two years of foreign language study do not give reading maturity approximate to that of expert reading.

425. **Clement, J. A., and others.** Report of subcommittee on French. North central association quarterly, 1: 467-82, March, 1927.

In this report, immediate objectives of first and second-year high-school French are selected to support primarily the social and leisure time objectives proposed by the committee on standards for the reorganization of secondary school curriculum.

426. **Haynes, Charles D.** The administration of foreign-language teaching in Montana high schools. Master's thesis, 1927. State university of Montana, Missoula. 100 p. ms.

Discusses the preparation and training of the teachers of foreign languages, their teaching load, assignment by principal or superintendent, the quality of the work done, and the reasons for the wide variation in that quality.

427. **Huberich, May Bess.** Changes in the aims, methods, and materials used in teaching French to beginners from 1875 to 1925. Master's thesis, 1926. University of Texas, Austin.

428. **Kelley, Truman L., and Espinosa, Aurelia M.** Stanford Spanish tests. Stanford university, Calif., Stanford university press, 1927.

429. **Li, Chen Nan.** Factors conditioning achievement in modern foreign languages. Doctor's thesis, 1927. Yale university, New Haven, Conn.

Tries to ascertain statistically conditions of achievement and particularly factors that condition achievement in modern foreign languages with special reference to French and German. The following general features were found with regard to French: (1) Tremendous overlapping among semester groups; (2) wide variation among schools; (3) great difference between colleges and high schools. With regard to German: Correlations between teachers' marks and linguistic abilities computed. Effect of age studied but evidences are inconclusive. Intelligence is found to correlate higher with silent reading than with vocabulary and grammar. Girls superior to boys.

430. **Mellette, Mary L.** The teaching of French in the high schools of South Carolina. Master's thesis, 1926-27. University of South Carolina, Columbia.

431. **Reinhardt, Emma.** A study of standards for immediate or classroom objectives, materials of instruction, and pupil activities for two years of French, with special reference to the social and leisure-time objectives of the North central association. Doctor's thesis, 1927. University of Illinois, Urbana.

432. **Rice, George A.** A study of achievement in French and Spanish in junior and senior high school, with consideration of some of the factors that condition achievement. Berkeley, University of California, 1927. 70 p. ms.

Modern language tests were given to 6,432 junior and senior high-school pupils in 41 California high schools as part of the modern foreign language study. Tables are presented showing results of tests, time allotted by teachers to various types of classroom activities, and age-grade distributions. Correlations are given and conclusions drawn regarding relative importance of grammar, vocabulary, and comprehension. Discussion follows of relation of achievement, as shown by the tests, to size of school attended; to previous foreign language study; and to amount of home study.

433. Wood, Ben D. A comparative study of the vocabularies of 16 French textbooks. *Modern language journal*, 11: 263-89, February, 1927.

434. ———. New York experiments with the new-type modern language tests. New York, The Macmillan company, 1927. 339 p. Publications of the American and Canadian committees on modern languages, vol. 1.)

This volume contains a survey of modern-language achievement in the junior high schools of New York city; the Regents' experiment with new-type tests in French, Spanish, German, and physics, June, 1926. Tables, charts.

435. Wright, Carrie Elizabeth. An experiment with a Spanish reading test. Master's thesis, 1927. University of Texas, Austin.

See also items 332, 839.

MATHEMATICS

GENERAL

436. Baker, Earl W. A comparison of the content in algebra and general mathematics. Master's thesis, 1927. State university of Iowa, Iowa City.

Comparison of the content of three textbooks in general mathematics and four in algebra. Conclusions: (1) material found in algebra and general mathematics texts is very similar; the major differences are in the amount and the arrangement of such material; (2) the tendency in ninth-grade mathematics is toward emphasis on algebra, interspersed with relatively small amounts of arithmetic, geometry, and trigonometry; (3) the tendency of authors of textbooks in ninth-grade mathematics is toward a gradual transition from arithmetic to algebra from algebra to geometry, and from geometry to trigonometry; the tendency in higher mathematics is toward segregation of these branches of mathematics.

437. Boren, Stelle E. James. The practice effect and comparative reliability of new-type tests in high-school mathematics. Master's thesis, 1927. University of Colorado, Boulder.

438. Boston. School committee. Course of study in mathematics for the industrial curriculum in high schools. Boston, Mass., Printing department, 1927. 22 p. (School document no. 3, 1927.)

439. Breslich, Ernst Rudolph. A critical examination and experimental reconstruction of secondary school mathematics. Doctor's thesis, 1926. University of Chicago, Chicago, Ill. 251 p. ms.

Comprises an application of the methods developed in the science of education to the selection and organization of materials of instruction in secondary school mathematics. Develops a new course in unified mathematics and tries it out experimentally. Finds that the correlation of mathematical subjects facilitates the adaptation of mathematics to needs of learner; facilitates a psychological treatment of subject matter; aids understanding; satisfies the demand for concrete mathematics; helps to make the function concept a unifying principle; furnishes motives for improved methods and further study of mathematics; saves time; reduces failures; and increases mathematical power. Materials should be organized into pedagogical units.

440. Churchill, Bessie B. A comparison of the reliability of the new-type and the traditional examination in senior high-school mathematics. Master's thesis, 1927. University of Colorado, Boulder.

441. Coxe, W. W. Bibliography of objective tests in high-school mathematics. Albany, New York (State) Department of education, 1927. 6 p. ms.

The list includes algebra, geometry, and miscellaneous tests.

442. Davis, Vera May Brooks. A comparative study of textbooks in junior high-school mathematics. Master's thesis, 1926. University of Chicago, Chicago. 118 p. ms.

Reports the results of a comparative study of 30 textbooks in junior high school mathematics, which were published between 1918 and 1926. Observes the following general tendencies in all of the texts: Much use of material for motivating all phases of mathematical work; the presentation of work in a psychological rather than a logical manner; the presentation of practical rather than impractical mathematics; the training of the child for quantitative interpretation; making the texts attractive to adolescents; the laying of emphasis on the understanding of operations in a problem rather than working for the answer; and the omitting of answers in the text.

443. Emde, John M. Trend in mathematics in the United States. Master's thesis, 1927. University of Akron, Akron, Ohio.

444. **Graves, S. Monroe, and others.** A course of study in mathematics for the junior high school grades. Boston, Mass., State department of education, Committee on curriculum revision, 1926. 32 p. (Massachusetts. State department of education. Bulletin, 1926, no. 6.)

A committee report on the aims, materials, methods, and testing of mathematics in junior high school grades. The materials, the concepts, the information, and the abilities to be achieved from mathematics in the junior high school grades have been worked out and arranged in synoptic form so that a teacher using this course of study may have constantly before her the related outcomes of an educative experience. This is a promising new form of arranging a course of study.

445. **Hawthorne, Robert Leroy.** The vocabulary difficulty of junior high school mathematics textbooks. Master's thesis, 1927. University of Southern California, Los Angeles.

446. **Hughes, J. M.** Content of the course in high-school mathematics. *School science and mathematics*, 26: 619-23, June, 1926.

This is a critical study of content based on textbook analysis.

447. **Kelso, John S.** Overlapping attainments in junior high school mathematics. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

448. **Timbers, Howard Emerson.** A study of some of the factors determining the pupil's attitude toward mathematics in the secondary schools. Master's thesis, 1927. University of Washington, Seattle.

See also items 544, 755, 787, 935, 1306.

ARITHMETIC

449. **Boyer, Philip A.** Reports on use of diagnostic test in fundamentals of arithmetic, September and December, 1927. Philadelphia, Pa., Public schools, Division of educational research and results, 1927. 10 p. ms.

450. **Buck, Frederick H.** Standardizing a set of 11 fact-inventory tests in arithmetic. Master's thesis, 1927. Boston university, School of education, Boston, Mass.

This set of 11 fact-inventory tests are standardized as to errors and time.

451. **Clapp, Frank C., and Wilker, Marguerite E.** The relative effectiveness of two kinds of material for the teaching of percentage. Madison, Wis., University of Wisconsin, 1927. 100 p. ms.

In this experiment, 1,000 pupils were taught with two kinds of material. Finds that material of miscellaneous character is better than material of homogeneous character.

452. **Cook, Walter W.** The history of learning in arithmetic of four fifth-grade pupils. Master's thesis, 1926. State university of Iowa, Iowa City.

453. **Coxe, W. W.** Bibliography of objective tests in arithmetic. Albany, New York (State) Department of education, 1927. 11 p. ms.

For each test the following data are given: Name of test, author, publisher, address and date of publication, price, forms and grades for which the test is meant, the time allowed, and a short description.

454. **Drushel, Andrew J.** Arithmetical knowledges and skills of prospective teachers. Doctor's thesis, 1927. New York university, New York, N. Y.

455. **Fowlkes, John Guy.** A report of a controlled study of the learning of multiplication by third-grade children. *Journal of educational research*, 15: 181-89, March, 1927.

Text material that is organized in sufficient detail is more effective in developing new material than the usual oral presentation accompanied by inadequate text material.

456. **Fritch, C. Lorene.** The correlation between problem-solving ability and problem-solving experience in ability. Master's thesis, 1927. University of Southern California, Los Angeles.

457. **Geyer, Denton L.** Comparative results from two methods of teaching division of decimals. Chicago, Ill., Chicago normal college, Bureau of experimental education, 1927.

Involves the study of four experimental and four control rooms of about 48 children each.

458. ——— Comparative value of three types of practice exercises in arithmetic. Chicago, Ill., Chicago normal college, Bureau of experimental education, 1927.

Involves the study of three classrooms of about 45 pupils each, during two semesters. Distinctive differences between results were discovered and were confirmed by a repetition of the experiment.

459. **Geyer, Denton L.** Value of the Buswell-John teaching and practice exercises in arithmetic. Chicago, Ill., Chicago normal college, Bureau of experimental education, 1927.

Involves the study of four experimental and four control classrooms of about 45 pupils each.

460. **Greene, Charles E.** Report on curriculum tests in arithmetic. Denver, Colo., Public schools, 1927. 20 p. ms.

461. **Guler, Walter Scribner.** Improving ability in computational arithmetic. Oxford, Ohio, Miami university, 1927. 3 p. ms.

Finds that careful analysis of computational difficulties of college freshmen, followed by a program of individualized remedial study and practice, will, within a few class hours, result in marked improvement in computational ability.

462. **Hayes, Marion Cleveland.** An analysis of responses made in four narrow mental functions involved in the computation of fractions. Doctor's thesis, 1927. State university of Iowa, Iowa City.

An attempt to ascertain how accurately the first teaching of fractions has been done in all the fraction skills, and how much of an increase is made in acquiring these skills as the children progress through the grades.

463. **Hewett, Lola Gantt.** Certain correlations of arithmetical and other abilities. Master's thesis, 1927. University of Texas, Austin.

A series of correlations centering about arithmetical abilities is presented, based upon tests of 214 children in grade 6 B.

464. **Herbat, B. L.** Diagnosis in arithmetic. Lancaster, Pa., Lancaster city schools, 1927. 20 p. ms.

In a study of arithmetical disabilities in grades 2-3, 4,500 pupils were tested, and special emphasis placed on classification of errors in fractions.

465. **Hunt, Ava Farwell.** A comparison of the vocabularies of third-grade textbooks in arithmetic and reading. Master's thesis, 1926. University of Chicago, Chicago, Ill.

Presents results of an analysis of vocabularies of six arithmetic textbooks used in the third grade. Compares the resultant total arithmetic vocabulary with the total vocabulary of 10 third-grade reading textbooks determined by a previous study. Finds a total vocabulary of 2,993 different words in the six arithmetic textbooks examined. The average vocabulary for the six books was 1,262, while the common vocabulary was 350 words, or 11.7 per cent of the total vocabulary. An average of 32.3 per cent of the words occur once in the textbooks in which they are used. Of the total vocabulary of 2,993 words, 1,328 rank in the first 1,000 for importance in the Teachers' word book, while 2,467 words rank in the first 5,000 for importance in this book.

466. **Hyde, L. L., and Glapp, Frank L.** Elements of difficulty in the interpretation of concrete problems in arithmetic. Madison, University of Wisconsin, 1927. 84 p. (University of Wisconsin. Bureau of educational research bulletin no. 9.)

Eight elements were studied: (1) Objective setting; (2) size of numbers; (3) unfamiliar objects; (4) arrangement of problems within the series; (5) nonessential terms; (6) experience and visualization; (7) problem form of statement compared with project form; (8) symbolic terms.

467. **Immaculata, Sister.** A critical and experimental study of arithmetic reasoning tests. Master's thesis, 1927. Catholic sisters' college, Washington, D. C.

Gives a description of the tests used, the requirements to which tests must conform, and the results obtained. Finds the Buckingham test the most satisfactory.

468. **John, Lenore Susan.** A psychological analysis of problem-solving in arithmetic. Master's thesis, 1927. University of Chicago, Chicago, Ill. 102 p. ms.

Reports results of a psychological analysis of problem-solving in arithmetic. Compares various groups, including grade children and adults, as to types of errors made and methods of problem-solving used. Most of the errors made by children of grades 4, 5, and 6 may be classified as errors in reasoning, in performing the fundamental operations, and in reading. It appears that correct reasoning in solving arithmetic problems is dependent upon the ability to comprehend the situation and a thorough understanding of the meaning of each process as well as skill in performing the operations. "The problem of teaching a child to reason in arithmetical situations is, therefore, the problem of giving him an understanding of the processes in terms of the situation in which they are applicable, rather than of developing a special technique of problem-solving involving detailed analysis and formal procedure."

469. **Judd, Charles Hubbard.** Psychological analysis of the fundamentals of arithmetic. Chicago, Ill., The University of Chicago [1927] x, 121 p. illus., tables. 8°. (Supplementary educational monographs, pub. in conjunction with the School review and the Elementary school journal, no. 32, February, 1927.)

The investigations reported in this monograph deal with the mental processes of adults and children when they are counting or making the simpler number combinations.

470. **Knight, F. B.** The superiority of distributed practice in drill in arithmetic. Journal of educational research, 15: 157-65, March, 1927.

Holding the amount of time given to arithmetic constant, as well as drill and other factors which affect progress in arithmetic, the careful distribution of practice on the number combinations yields significantly better results than more easily constructed material. Improvement in arithmetic may confidently be expected from the use of improved materials.

471. **Lang, Ruth.** Causes of success and failure in a state-wide arithmetic test. Master's thesis, 1927. School of education, Boston university, Boston, Mass.

472. **Lazerte, Milton Ezra.** A diagnosis of difficulties encountered in solving problems in arithmetic. Doctor's thesis, 1927. University of Chicago, Chicago, Ill. 268 p. ms.

Comprises a laboratory diagnosis of errors and deficiencies revealed by 58 subjects in their attempts to solve a selected list of arithmetic problems. The deficiencies are classified and discussed, and the data gathered are made the basis for a partial diagnosis of problem-solving ability. Finds that experience and training are very important factors in determining success in problem solving, when the factor of intelligence is held constant. Problem-solving ability may be analyzable into several definite component abilities.

473. **Masselink, Géorge.** A validated inventory of arithmetical skills useful to mid-western farmers. Master's thesis, 1927. State university of Iowa, Iowa City.

474. **O'Brien, F. P.** Improvement of instruction in arithmetic. Lawrence, University of Kansas, 1927. 42 p. (University of Kansas. Bureau of school service and research. Kansas studies in education, vol. 1, no. 9. October, 1927.)

475. **Omaha, Nebr. Public schools.** Report of committee on arithmetic texts. Omaha, Nebr., Public schools, 1926. ms.

Detailed study of the Stone, Pilot, Everyday and Standard service arithmetics.

476. **Ramsey, R. T., Horrall, A. E., and Rhodes, D. H.** Course of study in arithmetic for elementary schools of San Jose. San Jose, Calif., San Jose public schools, 1927. 58 p. ms.

The course of study includes arithmetic outline, and suggestions for grades I to VI, inclusive.

477. **Roach, Cornelia Bell.** The development of arithmetic as a school subject. Master's thesis, 1927. Cornell university, Ithaca, N. Y.

478. **Seafle, Albert H.** Pupils' errors in common fractions. Master's thesis, 1927. State university of Iowa, Iowa City.

A study to determine by the case-study technique some of the causes for errors in common fractions. Presents type errors in fractions.

479. **Thomas, Jesse E.** The effect of drill on the four fundamentals as a factor in the solution of verbal problems in arithmetic. (Summary.) Iowa City, State university of Iowa, 1926. ms.

An experiment to determine the effect of drill, with standard practice material, on the ability to solve verbal problems in arithmetic. Finds (1) that problem-solving ability correlates highly with native intelligence; (2) that verbal problem-solving ability is not greatly affected by drill on the four fundamentals of the type used in this study; (3) although ability to handle the four fundamentals is required in problem solving, it would seem that such factors as silent reading, a proper vocabulary, and a desire to solve problems are more important factors.

480. **Upton, Clifford B.** Changing the curriculum in arithmetic, with provision for individual differences of pupils. Teachers college record, 28: 341-59, December, 1926.

Says that our greatest need to-day is a broadminded, intelligent, and keenly analytical evaluation of arithmetic as actually used in life.

481. **Washburne, Carleton W., chairman.** Comparison of two methods of teaching pupils to apply the mechanics of arithmetic to the solution of problems. Elementary school journal, 27: 758-67, June, 1927.

A study made in cooperation with superintendents and principals in 16 cities in northern Illinois; based upon trials of the two methods made by 41 teachers with parallel classes in second grades, fourth grades, and sixth or seventh grades; detailed tabulations and pupils' test papers turned over to committee for final tabulation and summary. Report the outlines, methods, and tests used in the experiment, and present results of tabulations. The committee of seven concludes that teaching the mechanics of arithmetic—facts and processes—by themselves first, and then applying them to the solution of practical problems, does not lead to difficulty in making practical application of the mechanics to the solution of problems. The mechanics of arithmetic may be taught thoroughly and then applied to practical problems, or the two types of teaching may be intimately related throughout the teaching process with equal efficacy.

482. ———. Social practices in arithmetic fundamentals. Elementary school journal, 28: 60-66, September, 1926.

An investigation bearing on the question, "Do the standards toward which our schools are working in the fundamental operations in arithmetic conform to social needs and practices?" Members of eight organizations, such as the rotary clubs, commercial clubs, and parent-teacher associations, were given the Cleveland survey arithmetic tests—tests in addition, subtraction, multiplication, division, and fractions—and median scores made compared with eighth-grade standard scores.

483. **Washburne, Carleton W., and Osborne, Raymond.** Solving arithmetic problems. Elementary school journal, 27: 219-26, 296-304, November-December 1926.

This is a two-year study through experiments and tests given to from 300 to more than a thousand children in the middle grades in schools of 15 Illinois towns and cities, in order to discover reasons for difficulties usually met in the training of children to solve arithmetic problems. Outlines the tests and experiments used during the two years with results of each. Seven conclusions are reached, with certain limitations, and the following general recommendation is made by the committee, as growing out of the investigation: Problems should be so constructed as to present real situations familiar to the child. Children should be given many such problems to solve without special training in any generalized, formal technique of analyzing problems. Concentration on practice in solving practical problems will yield gratifying results.

484. **West, G. A.** The skills involved in problem solving in elementary school arithmetic. Master's thesis, 1927. Graduate school, University of Colorado, Boulder.

This is an analysis of skills involved in problem solving for the purpose of better teaching—remedial work, course of study organization, etc.

485. **Wheeler, Florence.** Newspaper survey of the occurrence of number. Boston, Mass., School of education, Boston university, 1927.

For this study 20 newspapers were summarized after the manner of Bobbitt in the Elementary school journal, October, 1924.

486. **Wilker, Marguerite E.** Percentage study—an investigation of two kinds of teaching material. Doctor's thesis, 1927. University of Wisconsin, Madison.

See also items 219, 258, 275, 318, 1074, 1216.

ALGEBRA

487. **Bartlett, Marie Louise.** A prognostic test in first-year algebra. Master's thesis, 1927. University of Colorado, Boulder.

Contains: (1) A general study of the need for a prognostic test for guidance and classification purposes; (2) a detailed presentation of a scientific experiment made by the author in a Phoenix, Ariz., high school, as a basis for construction of a prognostic test; (3) the scientific measure of validity and reliability of test constructed; and (4) analysis of its predictive value.

488. **Barton, W. A., jr.** The effect of group activity and individual effort in developing ability to solve problems in first-year algebra. *Educational administration and supervision*, 12: 312-18, November, 1926.

The author concludes that the group-discussion method of teaching problem solving in first-year algebra to pupils normal, or above the average in intelligence, is superior to the individual-assignment method.

489. **Dow, Harry Earnest.** The distribution of abstract and verbal problems in algebra. Master's thesis, 1926. State university of Iowa, Iowa City. 50 p. ms.

A study of several algebra texts to determine relative emphasis placed upon abstract and verbal problems. The conclusions are: (1) In the texts examined, the ratio of abstract problems to verbal problems is approximately 4 to 1; (2) texts agree closely in per cent of abstract and verbal problems, except in treatment of equations, quadratics, and simultaneous equations; (3) greatest emphasis is placed on verbal problems in equations, quadratics, simultaneous equations, and fractions; (4) there is no perceptible tendency to incorporate verbal problems in addition, division, multiplication, subtraction, factoring, and radicals.

490. **Elder, Harry E.** Percentile rank in intelligence as a prognosis of success in algebra. *School review*, 34: 543-46, September, 1926.

Investigates the relation between success in algebra and intelligence test scores for 50 ninth-grade pupils. Finds that factors other than intelligence ratings influence marks of pupils in algebra, but thinks that predictions may be made with a high degree of accuracy on the basis of such intelligence ratings.

491. **Hoge, James Wilbur.** An analysis of the causes of type difficulties and errors occurring in the study of first-year algebra. Master's thesis, 1927. University of Chicago, Chicago, Ill. 111 p. ms.

Presents the results of an analysis of type difficulties and errors in first-year algebra, as revealed by specially constructed tests involving a limited number of fundamental processes, and attempts to discover the cause of error.

492. **Jones, Harry Vincent.** Measured results of supervised study in ninth-grade algebra. Master's thesis, 1927. College of education, University of Colorado, Boulder.

A presentation of experiment made by the author in a ninth-grade algebra class of a Nebraska high school, with results showing (1) supervised study produces greater efficiency in algebra than unsupervised study; (2) better pupils profit by it, but less than the poorer pupils do; (3) general and specific abilities in algebra are closely related; (4) supervised study contributes greater uniformity in algebra work. Includes tests and tables.

493. **Lancaster, Cyrus N.** The teaching of positive and negative number to pupils in ninth-year algebra. Master's thesis, 1927. Indiana university, Bloomington. 71 p. ms.

494. **Michalake, Elisabeth Caroline.** An analysis of algebra as a ninth-year subject. Master's thesis, 1927. University of California, Berkeley.

495. **Robertson, Georgia Day.** The technique of teaching first-year algebra to yield the highest vocational value to the pupil. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

496. **Sanford, Vera.** The history and significance of certain standard problems in algebra. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 102 p.

497. **Tune, N. O.** The Virginia standard diagnostic tests for the first-year algebra. Master's thesis, 1927. University of Virginia, University.

498. **White, Annabel Lee.** The value of certain factors in predicting success in the second course in algebra in high schools. Master's thesis, 1927. Johns Hopkins university, Baltimore, Md.

499. **Woodburn, Thelma Veretta.** A study of the vocabulary of Wells and Hart's algebra with a view to a determination of its difficulty for the average ninth grader. Master's thesis, June, 1927. Indiana university, Bloomington. 132 p. ms.

See also item 436.

GEOMETRY

500. **Burns, Thomas G.** Relative use of geometric theorems, corollaries, and axioms in the solution of exercises and propositions in plane geometry. Master's thesis, 1927. State university of Iowa, Iowa City.

The study lists and compares theorems, corollaries, exercises, and axioms found in two widely used plane geometry textbooks. Concludes that the propositions in plane geometry textbooks do not have equal use in the solution of other exercises and propositions. For this reason, some propositions should be more thoroughly mastered and more frequently reviewed than others. Inclusions of some propositions seldom used may be justified on account of their value in completing important sequences of mathematical theory.

501. **Kaplan, Harry G.** Historical reasons advanced for the teaching of geometry. Doctor's thesis, 1927. New York university, New York, N. Y.

502. **Macune, Katherine.** The comparative value of new-type examinations in plane geometry. Master's thesis, 1927. University of Colorado, College of education, Boulder.

503. **Biney, Norma Payne.** The reliability of objective types of examinations in plane geometry. Master's thesis, 1927. University of Colorado, College of education, Boulder.

504. **Webb, Paul E.** A study of geometric abilities among boys and girls of equal mental abilities. *Journal of educational research*, 15: 256-62, April 1927.

A study of sex differences in geometric ability, revealed by tests administered to 1,130 high-school pupils. At lower mental age levels, boys excel girls of equal Q in geometric ability; at upper mental age levels, the opposite is true; girls are more variable than boys in geometric ability.

See also items 703, 1395, 1439.

SCIENCE

GENERAL

505. **Bayles, E. E.** Fundamentals in high-school teaching of science. Warrensburg, Mo., State teachers college, 1927. 86 p. (*Bulletin of Central Missouri state teachers college*, vol. 28, no. 2, December, 1927.)

506. **Chappellear, Claude B.** Health subject matter in natural sciences. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, N. Y., Teachers college, Columbia university, 1927.

This study attempts (1) to determine quantitatively the percentage of health content in the subject matter of general science, biology, chemistry, and physics; (2) to determine the nature and scope of the health content found in the above natural sciences. Finds that the percentages of health content are sufficiently large to establish the fact that the natural sciences should contribute materially to the complete program of health education.

507. **Claxton, Calvin Porter.** Outline of a practical science course for the first year of high school. Master's thesis, 1927. University of Tennessee, College of education, Knoxville. 202 p. ms.

508. **Clement, J. A., and Webb, L. W.** Report of subcommittee on general introductory or elementary science. *North central association quarterly*, 1: 505-9, March, 1927.

509. **Craig, Gerald Spellman.** Certain techniques used in developing a course of study in science for the Horace Mann elementary school. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, N. Y., Teachers college, Columbia university, 1927.

The purpose of the study is to render assistance to curriculum workers, (1) by determining certain methods for evaluating objectives of science; (2) by selecting and evaluating objectives on the basis of certain criteria; (3) by determining a method for analyzing objectives into their constituent meanings.

510. **Her, Ernest.** An analysis and comparison of recent and earlier textbooks in general science. Master's thesis, 1927. University of Chicago, Chicago, Ill. 99 p. ms.

Reports the result of an analysis of 13 recent textbooks in general science published since 1920, with reference to the amount of space devoted to the various phases of this subject. Compares the results with a similar analysis of general science textbooks published prior to 1920. The findings of the study indicate that the distribution of space devoted to the four main divisions of science and to the 20 main topics is fairly well agreed upon by both earlier and later writers. "This is equally true of the major and the minor topics. The agreement on the distribution of space devoted to subtopics shows much variation. It appears that the problem for solution by future writers of general science textbooks is to determine the importance which should be given to these various subtopics."

511. **Meier, Lois.** Health material in science textbooks. New York, N. Y., Teachers college, Columbia university, 1927. 104 p.

A quantitative and qualitative analysis of health material in certain textbooks of general science, biology, chemistry, and physics. Finds about 50 per cent of the biology, 32 per cent of the general science, 11 per cent of the chemistry, and 2 per cent of the physics textbooks consist of health material. In biology and general science, there is a definite tendency to organize subject matter around health. In chemistry and physics, this is not the case.

512. **Petrich, Edw. G.** The tendency of general science to supplant special sciences in secondary schools. Master's thesis, 1927. University of Cincinnati Cincinnati, Ohio. 71 p. ms.

513. **Powers, S. E.** A vocabulary of scientific terms for high-school students. Teachers college record, 28: 220-45, October, 1926.

This list is useful to teachers because the fact that a term occurs in the list is objective evidence that the term is important. The list is useful as a source from which to obtain material to be used in tests.

514. **Smith, John Aaron.** A proposed special method course for prospective teachers of physical sciences. Master's thesis, 1927. University of Illinois, Urbana.

515. **Walker, Eugenia M.** A critical study of various types of examinations in general science for junior high schools. Master's thesis, 1927. University of Colorado, Boulder.

This study is an experiment by the author in eight grades of a Denver high school in which old and new type tests were given four groups of 65-80 pupils each; and pupil opinions from questionnaires, with results showing (1) that completion test had highest reliability; (2) multiple-choice next highest and best liked by pupils; (3) true-false test reliable; (4) essay-type least reliable and the least liked by pupils. Tests and tables are given.

See also items 26, 255, 747, 771, 773, 841, 1306.

BIOLOGY AND BOTANY

516. **Ames, Faber Kanouse.** Current practices in the teaching of biology. Master's thesis, 1927. University of Southern California, Los Angeles.

517. **Bennett, Mary Allison.** A comparative study of the experiments and demonstrations in laboratory manuals and textbooks of biology. Master's thesis, 1926. University of Chicago, Chicago, Ill. 73 p. ms.

Reports the results of a comparative study of 28 biology textbooks and manuals which contain laboratory experiments and demonstrations, to determine present practices and tendencies in the use of materials and procedures. Finds that biology textbooks and manuals vary widely as to content, comprehensiveness, and in methods of procedure used in experiments and demonstrations.

518. **Downing, E. E.** Report of subcommittee on biology. North central association quarterly, 1: 510-14, March, 1927.

519. **Downing, Virginia.** Biology in current magazines in relation to biological textbooks for secondary schools. Master's thesis, 1927. State teachers college, Greeley, Colo.

520. **Holleman, Marion Bert.** Course of study in biology for senior high schools and junior college. Master's thesis, 1927. University of Texas, Austin. Written for the unified four-year junior college with a unified course of study.

521. **King, Thomas S.** A school biology test. Master's thesis, 1927. University of Virginia, University.

The test evolved was obtained by taking 2,000 commonly found questions from the various recognized biology tests, and condensing and classifying these into a biology test of 300 questions to cover biology courses in Virginia schools.

522. **Sargent, Louisa.** Present practices in teaching introductory botany courses in colleges and universities. Master's thesis, 1927. University of Chicago, School of education, Chicago, Ill. 87 p.

This study reports the results of a survey of classroom and laboratory practices in the conduct of introductory botany courses in 231 colleges and universities, as revealed through a study of catalogues and the returns from questionnaires. Finds that botany is offered as an introductory course in science in somewhat less than half of the institutions studied. Where it is not offered, there is either a course in general biology or a course in botany and zoology combined. "A full year's introductory course in botany is more likely to be given in large rather than in small institutions, while general biology or combination biology is more frequently found in small colleges." The amount of credit which these introductory courses offer is 4, 3, or 5 semester hours, the 4-hour course being the most common. The number of hours of work per week varies considerably in different institutions. For 5 hours of credit, 3 class hours and 4 laboratory hours is usual.

See also item 929.

CHEMISTRY

523. **American chemical society. Committee of chemical education.** Correlation of high school and college chemistry. Washington, D. C., American chemical society, 1927. 17 p.

Develops a detailed outline of study for high-school chemistry and for first year college chemistry. It is a second revision of earlier courses prepared by the same agency.

524. **Bennett, J. C.** A study of pupil errors in chemistry. *Journal of educational research*, 14: 275-83, November, 1926.

A study of 1,470 pupils from 24 high schools who were given Powers' general chemistry test, Form B. The conclusions formed were that chemistry teachers have failed to impress the principles involved and to give the drill which might remedy the difficulty in formula writing. Good instruction and drill in formula writing will go far to help the pupil in writing equations. Organic chemistry as now taught is not functioning as well as it should.

525. **Hobb, Alexander William.** The individual method applied to teaching high school chemistry. Master's thesis, 1927. University of California, Berkeley.

526. **Hopkins, B. S.** A glimpse at the past and the future in chemical education. *Journal of chemical education*, 4: 561-64, May, 1927.

This article summarizes recent achievements in chemical education upon the basis of findings of a questionnaire sent to a large number of teachers of chemistry throughout the country.

527. **Launcelot, W. H.** Report of subcommittee on chemistry. *North central association quarterly*, 1: 527-31, March, 1927.

A study of chemistry in secondary schools as it relates to educational objectives.

528. **Miller, H. K.** A qualitative analysis of the abilities essential to accomplishment in high-school chemistry. Master's thesis, 1927. State university of Iowa, Iowa City.

A study of the rating of 300 pupils in the high schools of Ottumwa, Iowa, Burlington, Iowa, and Fergus Falls, Minn., to determine if student achievement in high-school chemistry could be predicted by means of standard tests. Concludes that the multiple coefficient of correlation of the Terman group test of mental ability, the Ruch-Popence general science test, and the Iowa chemistry aptitude test, with the chemistry training test, was 0.64; the P. E., 5.2. Coefficient obtained by comparing these test scores with the year's grades was 0.61; with P. E., 3.7.

529. **Nash, H. B., and Phillips, M. J. W.** A study of the relative value of three methods of teaching high-school chemistry. *Journal of educational research*, 15: 371-79, May, 1927.

A study of 45 high-school pupils taught in three equated groups for five months by the following methods: 1. Pupils did the work individually and received no help from the instructor unless they requested it. 2. The usual method of instruction was followed. 3. The instructor did the work, pupils observing and listening, but being required to do no work. The tests used showed average results, best for group "3," and poorest for group "1." Temperament of pupil is an important factor in success of individuals taught by methods 1 and 3.

530. **Newlon, Homer T.** The types of chemical knowledge which offer the greatest relative difficulty to students of general inorganic chemistry at the college level. Doctor's thesis, 1927. New York university, New York, N. Y.

531. **Stefana, Sister M.** Chemistry in the curriculum of the secondary school system. Master's thesis, 1927. Catholic sisters' college, Washington, D. C.

532. **Stoudemayer, Elmer L.** The teaching of chemistry in the high schools of South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

533. **Toby, Ethel L.** Curriculum revision: subject of chemistry: senior high school. Denver, Colo., Public schools, Department of curriculum revision, 1927. 125 p. ms.

See also items 266, 296, 545.

PHYSICS

534. **Ager, Robert B.** Application of psychology in high-school physics textbooks. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 76 p. ms.

535. **Allen, Myron Sheppard.** A student guide to the applications of the principles of physics within the several major divisions. Master's thesis, 1927. University of Southern California, Los Angeles.

536. **Burgess, Thomas Olen.** A psychological analysis of abilities in high-school physics. Iowa City, State university of Iowa, 1926. 24 p. (*University of Iowa studies in education*, vol. 3, no. 6, August, 1926.)

Reports the making and validation of an objective test in high-school physics, based on an examination of 353 students. Finds that the test showed the following factors contributory to success in physics: Interest in physics, knowledge of simple mathematics of physics, ability to solve number series, reading comprehension, and observation aptitude. The high school physics prognosis test showed a correlation of 0.41 when compared to teachers' marks. This was taken to show the unreliability of teachers' marks.

537. **Dyer, John H.** An analysis of certain outcomes in the teaching of physics in public high schools, with an investigation of the efficiency of a laboratory method in establishing such outcomes. Doctor's thesis, 1927. University of Pennsylvania, Philadelphia. 98 p.

The problems treated are: The selection of objectives; analysis of these objectives into their elements and control forms; efficacy of laboratory and demonstration methods in attaining the objectives. Seven objectives are listed as being most important. Detailed activities and situations are given for attainment of objectives. Controlled groups of students tested indicated superiority of demonstration method over laboratory method for immediate recall and approximate parity of the two systems for permanent (eight-month) recall.

538. **Franzen, Carl G. F.** An experiment in the content of high-school physics. Bloomington, Indiana university, Bureau of cooperative research, 1927. p. 42-57.

A test of 40 items in the fields of mechanics, heat, and sound was given to 300 high-school students and 86 college students. The object was to determine what practical application of life situations were made of principles in physics. It was found that (1) Girls make lower scores than do boys; (2) the studying of science courses other than physics does not affect the score; (3) immediacy greatly influences the scores; (4) pupils of large schools made better scores than those of small schools, especially the girls; and (5) much of our high-school science is "lip service," pupils being able to repeat the words of laws and principles but not recognizing these principles when applied to real situations.

539. **Greene, Garnette Earle.** The comparative reliability of blank forms used in completion tests in high-school physics. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Completion tests in physics devised by the author and given in equal, varying, and dots blank forms to three groups of 50 pupils each, selected from six Kansas high schools, with results showing no one of the three blank forms to be of outstandingly higher reliability than either of the other two forms, but that certain indications favor varying blanks.

540. **Hughes, J. M., and Hurd, A. W.** Report of subcommittee on physics. North central association quarterly, 1: 515-26, March, 1927.

541. **Mitchell, Charles W.** An experimental study in the teaching of physics based on a technique of unit planning. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

542. **Powers, Chester Raymond.** The relative achievements of second and third year high-school students in physics. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 91 p. ms.

Compares 17 second-year high-school students with 17 third-year students as to their relative achievement in tests involving specific types of knowledge within the realm of physics. The two groups were of approximately equal ability, as shown by scores on intelligence tests, but the third-year group was one year older chronologically.

543. **Richards, William Alfred.** A study of physics involved in a selected group of occupations. Master's thesis, 1926. University of Chicago, School of education, Chicago, Ill. 147 p. ms.

Attempts to determine what the curriculum in high-school physics should be for general training and for specific fields by a study of the principles of physics involved in the work of the electrician, the carpenter, the cement worker, the plumber, the mason, and the farmer. Analyzes handbooks, manuals, and guides in these various fields in order to determine how such principles of physics function in the everyday life of these tradesmen.

544. **Smith, John E.** Mathematical situations of high-school physics. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

A study of mathematical problems in five widely used physics textbooks. Results in the determination of 20 mathematical skills and abilities needed by the pupil who is to succeed in solving mathematical problems of the high-school physics course.

545. **Spitler, John Lloyd.** The relative effectiveness of single and double laboratory periods in physics and chemistry. Master's thesis, 1927. University of Kansas, Lawrence.

546. **Wagner, Clyde Earle.** Completion of two methods of procedure in teaching high-school physics. Master's thesis, 1927. College of education, West Virginia university, Morgantown.

547. **Walter, Charles Herbert.** A comparative study of the teacher demonstration and the individual laboratory methods in physics. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 74 p. ms.

Reports the results of a comparative study of the relative effectiveness of two methods of teaching laboratory physics. In the first method all students did individual laboratory work; in the second, all students watched demonstrations by the instructor, and the time saved in so doing was utilized in giving further drill on important points. The results of this experiment seemed to show that the demonstration-drill method was superior to the individual method in gaining a knowledge of the experiment performed. This advantage was more pronounced among dull pupils than bright. The greatest factor in bringing about this advantage appeared to be drill. The individual method was superior in teaching the actual manipulation of apparatus. The demonstration group was superior to the individual group in the use of principles learned and in the retention of the practical and cultural values.

548. **Watson, C. H.** The social value of high-school physics as judged by parents. (Summary.) Master's thesis, 1927. University of Kansas, Lawrence. University of Kansas bulletin of education, 1: 12-17, April, 1927.

Two investigations were undertaken: (1) Ranking of 174 common physics topics according to importance, by 659 parents. (2) Statistical data on physics courses enrolling 1,568 pupils in 51 schools was secured from questionnaire replies of 80 teachers. It was found that wide discrepancy exists between parents' judgments and textbook authors' judgments on the importance of various physics topics; that high correlation is found

between judgments expressed on this subject by parents engaged in different occupations; and enrolments, interest, teaching load, length of period, notebook records, etc., were studied for physics courses.

549. **Watson, Donald Read.** The relative values of types of examinations in high-school physics. Master's thesis, 1927. University of Southern California, Los Angeles.

550. **Wilkinson, George Henry.** An experimental study of four methods of laboratory procedure in high-school physics. Master's thesis, 1927. University of Southern California, Los Angeles.

See also item 68.

NATURE STUDY

551. **Kyger, Roy Jay.** The objectives and activities in nature study for the kindergarten and the first six grades as revealed. Master's thesis, 1927. Indiana university, Bloomington. 94 p. ms.

GEOGRAPHY

552. **Nash, H. B.** West Allis minimum essentials test in place geography. West Allis, Wis., Public schools, Department of educational measurements, 1927. 10 p. ms.

In January, 1925, a test in place geography was given in grades 4A-7A. In the semester following the test, five-minute drills were given on a minimum essentials list. At the close of the semester, the test was repeated to discover the gain made. It was found that the conscious use of the list has been of decided help. A semester drill for five minutes daily was very effective for one semester, but there was little to show that it comes over. There has been no loss in place geography through the introduction of the Rugg material, but there are evidences of substantial gain.

553. **Neville, Charles Edward.** A study of outcomes in education through geography teaching. Doctor's thesis, 1927. University of Pennsylvania, Philadelphia.

554. **New Hampshire. State board of education.** Results of standard tests in place geography, grade XII, and in spelling, grades IX-XII. Concord, N. H., State board of education, 1927. 8 p. ms.

A study of 2,152 pupils in 87 secondary schools who took the Buckingham-Stevenson place geography tests; 9,000 in 300 schools who took the Ayres spelling test.

555. **Packard, Russell Lowell.** The trend of geography in the secondary school curriculum. Master's thesis, 1927. University of Akron, Akron, Ohio.

556. **Parkins, A. E., chairman.** Geography in the junior high school. Nashville, Tenn., National council of geography teachers, Committee on high school geography, 1927. 13 p.

This is the report of the committee appointed in 1925 by the National council of geography teachers. Statement of the values and objectives of junior high school geography and recommendation that two years of geography be given in the junior high school, the first of these to be given to the resources and industries of the United States and their world relations; the second year to the interdependence of nations and regions. Suggested lists of topics given for work of both years.

557. **Pral, Charles Edward.** The construction of tests to determine whether the major objectives of fourth-grade geography have been attained. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 109 p. ms.

Constructs a series of tests to determine whether the fourth-grade pupils of Charles City, Iowa, have attained certain objectives of geography instruction, such as the acquiring of a world concept, the ability to interpret maps, and a functioning understanding of certain geographical relationships. The results show that these pupils attained the major objectives of geography set for a year's work. The tests constructed will doubtless have "a large value (1) in improving the quality of instruction by showing teachers who have been working for these objectives just where their teaching has been ineffective; and (2) in showing the attainment or lack of attainment of these objectives on the part of pupils who have been following courses of study for which the objectives are vague and indefinite."

558. **Wilcox, Lillian Alice.** An analysis of recent trends in geography in the elementary school. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

The following statement summarizes the conclusions drawn from this investigation: First, modern developments in geographic research are being incorporated in the new courses of study for the elementary school. Second, the most noticeable deficiencies are: (a) A lack of definite standards of attainment; (b) a brief mention of the value of the new tests; (c) mention of the new visual aids. Third, standards for attainment in place geography should be determined by scientific investigation wherever possible. Fourth, objective devices should be used to measure results. Fifth, the evidence concerning the value of visual aids in geography instruction is insufficient to determine unequivocally their teaching worth.

See also item 756.

SOCIAL STUDIES

GENERAL

559. Brown, Milton Wright. An analysis of state courses of study for the social studies. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill., 91 p. ms.

This study presents the results of an analysis of state courses of study for the social studies to determine (1) the place and importance of the various social studies in the curriculum; (2) the aims or objectives of social studies; and (3) the means or methods by which the aims are attained. As a rule, instruction in one or more of the social studies is recommended for each grade. However, there is considerable variation in the programs recommended for the various states.

560. Collins, Junior J. Development of the social sciences in the secondary schools of California. Master's thesis, 1927. Stanford university, Stanford University, Calif.

561. Gayler, G. W. Social science and the high school: A curriculum study. Macomb, Ill., Western Illinois state teachers college, 1926. 27 p. (Western Illinois state teachers college quarterly, vol. 6, no. 2, September, 1926.)

An attempt to make a selection of the important social problems of the day through examination of subjects treated in two magazines and three newspapers. Detailed summaries given of space in words and number of mentions made to politics and statesmanship, international relations, crime, education, economics and the like.

562. Greenleaf, Mary P. Social science course for junior high schools of San Jose. San Jose, Calif., San Jose public schools, 1927. 86 p.

Gives outline course and lesson sheets in geography, history, civics, for grades 7, 8, and 9.

563. Herriott, M. E. How to make courses of study in the social studies. Urbana, University of Illinois, 1926. 52 p. (University of Illinois bulletin, vol. xxiv, no. 15, October 5, 1926.)

A description of the technique of preparing courses of study in the social studies for both elementary and secondary grades, with suggestions as to their content and references to examples of courses in use. No attempt to present a course is made. The conclusions are that social studies courses of study should conform to the following principles: (1) Deal with the problems of education as objectively as possible; (2) fit individuals more effectively for participation in life activities; (3) adjust the educational content and experience of pupils to real influencing factors of conduct; (4) observe modern teaching methods.

564. Lee, Baldwin. Issues in the social studies. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, N. Y., Teachers college, Columbia university, 1927.

The procedures utilized were: (1) An analysis of high-school textbooks and of authoritative treatises for social issues; (2) a questionnaire survey of the status of the teaching of issues in the high schools. The conclusions were (1) that social issues as such are now given inadequate attention in the high schools of the four states studied; (2) the majority of social science teachers use the exercises supplied in their texts only irregularly, many of the issues now provided in texts being ignored.

565. Mathews, Ora Chester. The grade placement of curriculum materials in the social studies. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, N. Y., Teachers college, Columbia university, 1927. 152 p.

This study was undertaken to determine the extent to which pupils in the public schools, in grades 4-12, inclusive, comprehend various types of curriculum materials in the social studies.

566. Merwin, Bruce W. An experiment in developing an elementary social science course. (A summary.) Master's thesis, 1927. University of Kansas, Lawrence. University of Kansas bulletin of education, 1:22-24, April, 1927.

An elementary social science course developed from the interest of children in the American Indian. The study includes: Determination of immediate and ultimate aims; the subject matter to be used; methods of presentation to be employed; means for measuring results of the course as offered to a class of pupils in a Kansas high school.

567. **Shibley, Alma D.** A study of the range of information of college freshmen in 1925 and 1926 in social science at the University of Maryland. Master's thesis, 1927. University of Maryland, College Park.

See also items 853, 876.

HISTORY

568. **Adams, Charles E.** Value of short answer tests as a measure of progress in the teaching of history. Master's thesis, 1927. Johns Hopkins university, Baltimore, Md.

569. **Bassett, Sarah Janet.** Retention of history in the sixth, seventh, and eighth grades. Doctor's thesis, 1927. Johns Hopkins university, Baltimore, Md.

570. **Bond, Grace L.** The Virginia test in United States history. Master's thesis, 1927. University of Virginia, University.

571. **Braun, Elsie.** The history recitation and pupils' study habits in high school. (A summary.) Master's thesis, 1927. University of Kansas, Lawrence. University of Kansas bulletin of education, 1: 19-23, February, 1927.

The review of the above thesis appeared in the publication as given above, made by Edwin M. Belles and Elsie Braun. The study is an investigation of classroom practices through observing the work of seven different history teachers for a total of 4,100 minutes.

572. **Cattell, Anna A.** The use of collateral reading in United States history courses in secondary schools. Master's thesis, 1927. University of Southern California, Los Angeles.

573. **Helmreich, Agnes Johanna.** A study of the collateral reading recommended in high-school textbooks for the period of modern European history. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 179 p. ms.

Investigates the collateral reading recommended in 29 high-school textbooks for the period of modern European history extending from 1648 to the present time. The books considered are grouped under three headings: modern European, medieval and modern European, and world histories. Lists the frequency with which the books are recommended as a basis for recommending a short list of books for collateral reading in this field.

574. **Kiel, Will.** Organization of a curriculum in the teaching of Wisconsin history. Milwaukee, Wis., Marquette university, 1926.

575. **Lewis, Robert Hamilton.** Current practices in the teaching of modern history. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

576. **Link, Harriet Jane.** An experimental inquiry into the uses of suggesters in the teaching of American history. Doctor's thesis, 1927. Department of education, University of Pennsylvania, Philadelphia. 126 p.

Achievements in American history tested for controlled groups taught by conventional class methods and suggester method. Experiment conducted during three school terms with seventh and eighth-grade pupils in a junior high school. Finds: (1) Pupils must at all times be thoroughly familiar with the suggesters used. (2) In inferior groups retention was better among pupils taught by the suggester method than among those taught by conventional methods. (3) Increased skill in organization of subject matter resulted for all experimental groups over the control groups studies.

577. **Monroe, Walter S., and Herriott, M. E.** Objectives of United States history in grades 7 and 8. Urbana, University of Illinois, College of education, Bureau of educational research, 1926. 68 p. (University of Illinois bulletin, no. 33, September 21, 1926.)

Analysis of questionnaires filled out by public-school teachers to determine: (1) What is the judgment of a group of elementary teachers in regard to dates, persons, events, and other facts which pupils should know as the result of their study of United States history in the seventh and eighth grades? (2) What is the

Judgment of a group of elementary teachers in regard to the thought questions that pupils should be able to answer as the result of their study of United States history in the seventh and eighth grades? (3) How do judgments of these teachers in regard to these objectives agree with certain determinations of objectives for United States history?

578. **Nelson, Elving.** The history of history in the college curriculum. Master's thesis, 1927. State university of Iowa, Iowa City.

579. **Richards, Raymond Clarence.** The teaching of history through visual education and how it might be used in the city of Columbus, Ohio. Master's thesis, 1927. Ohio state university, Columbus.

580. **Smith, Hallie Lilburn.** The rating of the vocabulary of six American history textbooks for the seventh and eighth grades. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 76 p. ms.

Comprises an analytical study of samplings taken from the vocabularies of six American history textbooks which are used in the seventh and eighth grades. Demonstrates the possibility of objectively rating the vocabularies of history textbooks.

581. **Weld, Mildred Abbie.** A study of the ability of certain 7A Indianapolis pupils to comprehend the required history-reading material. Master's thesis, 1927. School of education, Indiana university, Bloomington. 60 p. ms.

582. **Willebrandt, Harry F.** Trends in the content and methods of instruction in ancient history in American secondary schools. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

See also items 141, 145, 235, 929, 1407.

OTHER SOCIAL STUDIES

583. **Bain, Read.** Sociology in Washington high schools. School review, 34: 534-42, September, 1926.

A questionnaire study on various aspects of sociology teaching in the state of Washington. Replies from 128 school administrators tabulated. Data presented on the following subjects: Values derived by pupils from study of sociology, number of courses and enrollment, qualifications attained and desirable for teachers.

584. **Woodruff, Hazel Marjorie.** Methods of teaching current events. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

See also items 21, 783, 1184.

MUSIC

585. **Hughes, Cecil L.** Music instruction in junior and senior high schools in 40 representative cities. School review, 35: 452-57, June, 1927.

A study of various types of music instruction offered in 40 cities having populations of 50,000 or more. Finds that music in the secondary school is rapidly gaining a status comparable to that of other subjects of the curriculum. Data presented regarding number of courses of various kinds, minutes of instruction each week, and credit granted.

586. **Kuhnes, Daisy M.** The trend of music in the public-school curriculum. Master's thesis, 1927. Teachers college, University of Akron, Akron, Ohio.

587. **McConathy, Osbourne.** Public-school music. Journal of educational research, 14: 284-93, November, 1926.

A report of an experiment in organizing a course of music study.

588. **Taylor, A. H., jr.** A tentative list of objectives in the teaching of music in the elementary school. Master's thesis, 1926. State teachers college, Greeley, Colo.

See also item 875.

ART EDUCATION

589. **Coz, Katherine Miller.** A study of art education in 11 rural districts of Westmoreland county, Pa. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 137 p. ms.

Comprises a critical study of art education in 11 elementary rural districts of Westmoreland county, Pa., in 1925-26, with a view to determining whether art instruction can function successfully in rural schools. Concludes that art education was successful in these rural schools, and the reactions of teachers, patrons, and supervising principals were favorable to the work. The teachers used art freely in connection with other subjects.

590. **Lewerenz, Alfred Speir.** A critical analysis of the elemental abilities required in art education, with a view to possible objective measurement. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

591. **Littlefield, Lena Experience.** Present status of public-school art. Master's thesis, 1927. University of Washington, Seattle.

A determination of the present status of public-school art in the secondary schools of the United States.

592. **Smith, Holmes.** Report of a committee on art instruction in colleges and universities. Boston, Mass., Federated council on art education, 1927. 69 p.

Discusses general problems, results of inquiry among the colleges and universities of the United States, special problems and credits, courses, degrees, and vocational opportunities.

DRAWING

593. **Boal, Ruth Eleanor.** Drawing as an index of intelligence. Master's thesis, 1927. Ohio state university, Columbus.

594. **Brittan, Charles Wilder.** A completion test to measure the specific talent necessary for success in mechanical drawing. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 77 p. ms.

Reports the results of an attempt to design a test to determine the ability of technical high school and first-year college preengineering students to do mechanical drawing. Correlates the test results with teachers' marks. Finds that a series of problems in orthographic projection can be used as a basis for tests to determine the possession of relative amounts of the special talent necessary for success in mechanical drawing. These problems should be arranged in the order of increasing difficulty.

595. **Wyatt, Edwin Mather.** Lettering scale and norms for high-school mechanical drawing. Master's thesis, 1927. University of Wisconsin, Madison.

DRAMATICS AND ELOCUTION

596. **Barnes, H. G.** Director's study of equipment for university theatre. Master's thesis, 1927. State university of Iowa, Iowa City.

597. **Duffey, William B.** An analysis of speech to establish an adequate method of training. Master's thesis, 1926. Marquette university, Milwaukee, Wis. 118 p. ms.

598. **Humphrey, Colette Rossée.** The value of actual participation in drama as a cultural factor in the education of children. Master's thesis, 1927. Boston university, Boston, Mass.

599. **Hunter, E. C., chairman.** Dramatic activities in the accredited high schools in the United States. Chicago, Ill., Drama league of America, 1927. 23 p.

This is a committee report based on a questionnaire study of dramatic activities in 386 high schools. It gives 24 tables and explanatory material dealing with eligibility and general interest, selection of plays, choosing the cast, direction, producing facilities, status of dramatic activities, results, and recommendations for improvement.

600. **Nelson, Maxine Garner.** An investigation of the methods of speech training used in the private schools of Chicago. Master's thesis, 1927. Northwestern university, Evanston, Ill.

See also item 172.

HANDWRITING

601. **Ayer, Fred C.** Course of study in handwriting, grades I to 6, vol. 3. Seattle, Wash., School district no. 1, 1926. 49 p.

602. **Boyer, Philip A.** Reports on handwriting tests, September and December, 1927. Philadelphia, Pa. Division of educational research and results, Public schools, 1927. 10 p. ms.

603. **Gulier, Walter Scribner.** Diagnostic and remedial instruction in handwriting. Oxford, Ohio, Miami university, 1927. 2 p. ms.

A careful analysis of handwriting faults followed by individualized study and practice will yield a large return in improved handwriting in proportion to the teaching time and learning energy expended.

604. **National association of penmanship teachers and supervisors.** Report of the Committee on research and investigation. Columbus, Ohio, The Association, 1927. In Report of the National association of penmanship teachers and supervisors, 1927. p. 66-71.

Of the 537 questionnaires sent to cities and towns with supervisors of penmanship, returns were received from 137 in 37 cities. The questionnaire contained 12 questions pertaining to the supervision and the problems of penmanship teachers in high schools. The findings were that the salary of the supervisors and assistant supervisors of penmanship range from \$800 to \$5,000, and from \$600 to \$4,400, respectively. The various phases of this report pertain to penmanship in junior high schools, standards of formal and functional penmanship, amount of time devoted to penmanship, special preparation of penmanship teachers, method of instruction, and supervision of penmanship classes.

605. **Philippine Islands. Bureau of education.** Measurement and research staff. Handwriting survey, 1926. Manila, P. I., The Bureau, 1927. 3 p.

In this survey there were tested 371,093 pupils with the Ayres scale for the measurement of handwriting (Gettysburg edition): Grade II, 100,446 pupils; Grade III, 87,587 pupils; Grade IV, 65,329 pupils; Grade V, 53,933 pupils; Grade VI, 31,375 pupils; Grade VII, 29,023 pupils. The results present a wide range of achievement, both in speed and quality in the 48 different provinces. However, on the whole, the median scores for speed and quality of Filipino children's writing, grade for grade, are equal to Ayres' standards.

606. **Taylor, Joseph S.** Supervision and teaching of handwriting. Doctor's thesis, 1926. New York university, New York, N. Y. Richmond, Va., Johnson publishing company, 1926. 192 p.

An experiment to determine the value of inspirational (nontechnical) supervision of handwriting. Concludes that such supervision is inadequate, and that technical supervision is necessary.

607. **West, Paul V.** Improving handwriting through diagnosis and remedial treatment. Journal of educational research, 14: 187-98, October, 1926.

A diagnostic plan of analyses and remedial treatment of handwriting put to a controlled experimental test in two fifth-grade classes for two years without supervision. Found that pupils made more rapid progress in quality rate and specific characteristics in which drill was advised. Teachers expressed themselves well pleased with the possibilities of the plan.

See also item 5.

THRIFT

608. **Grimshaw, Russell Curtis.** Is the school bank worth while? Educational review, 73: 161-67, March, 1927.

Statistics taken from the school savings banks during the school year of 1924-25, and published by the American bankers association, find that participants have shown a gain of 820 per cent, and that deposits have increased 506 per cent, and bank balances 518 per cent.

609. **Scott, Robert E.** The school savings bank. Elementary school journal, 27: 772-86, June, 1927.

A questionnaire was sent to parents of all children in the elementary schools of St. Louis Park, Minn.; 363 replies were received and tabulated; questions concern the means used for obtaining money for school savings banks, parents' attitudes toward school thrift, etc. The following conclusions were reached: That the parents are overwhelmingly in favor of the banks; that most parents do not believe in paying a child to be good; that only a few parents give their children allowances; that objections to the bank are usually due to misunderstandings; that too much emphasis is sometimes laid on the 100 per cent participation; that children are so much interested that they usually remember bank day; that the bank is considered by 99 per cent of the parents as of definite value in teaching thrift and fixing thrift habits.

610. **Vernon, Sarah Evelyn.** The present status of school banks in Indiana public schools. Master's thesis, June, 1927. School of education, Indiana university, Bloomington. 74 p. ms.

SAFETY

611. **Streitz, Ruth.** Safety education in the elementary school. A technique for developing subject matter. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, National bureau of casualty and surety underwriters, 1927. 142 p.

This study is an attempt to show how safety education materials may be developed for a specific situation by utilizing one school district as the unit for the investigation. The writer presents a course of study for the elementary grades, which is based upon the principle of social need.

KINDERGARTEN AND PRESCHOOL EDUCATION

612. **Forest, Mrs. Ise Greanelle.** Preschool education. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, The Macmillan company, 1927.

This study discusses certain of the issues involved in the newer community plans now proposed. The topics presented are: (1) Social attitudes influencing the character of early education; (2) the development of institutions for the education of young children; (3) the development of objective interest in children.

613. **Gesell, Arnold and Lord, Elizabeth E.** A psychological comparison of nursery-school children from homes of low and high status. Worcester, Mass., Clark university press, 1927. 17 p.

Eleven pairs of preschool children, both comparable and contrastive, were studied. The psychological estimates and measurements of ability were made when the children were of preschool age, before any of them had reached the stage of formal academic education. Two nursery schools studied differed widely with respect to parentage of children. The tables show that in virtually every field the advantage seems to be with the favored group.

614. **Horn, Madeline Darrough.** An investigation of the vocabulary of kindergarten children. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

A study of the conversations of kindergarten children recorded verbatim by kindergarten teachers in various parts of the country. Presents a list of 1,003 words most frequently used by kindergarten children, and finds that the vocabulary of kindergarten children varies little with different sections of the country.

615. **Lundberg, Lawrence D.** A study of the seating of the kindergarten and primary grades. Flint, Mich., Flint public schools. 13 p.

Makes comparison of fixed seats, movable chair-desks and tables and chairs, based on 22 standards. Recommends use of tables and chairs in kindergarten and first grade, but movable chair-desks for second and third grades.

616. **Munkres, Alberta.** The history, status, and the outlook of the nursery-school movement. Master's thesis, 1927. Boston university, Boston, Mass.

617. **Peterson, Alice.** Retests of kindergarten children with Binet test. Master's thesis, 1927. Clark university, Worcester, Mass. 100 p. ms.

A random sampling was taken of children tested by kindergarten teachers and the accuracy of teachers' examinations was studied. It was found that 10 demonstrations and practice periods in use of the Binet test plus practice in examining 12 children are not sufficient to train teachers in giving the Binet test for the kindergarten.

See also items 237, 551, 1258, 1494, 1530.

ELEMENTARY EDUCATION

618. **Branson, Ernest P.** Subject failures in elementary schools, each semester, 1926-27. Long Beach, Calif., City schools, 1927. 11 p. ms.

619. ——— Per cent of failures. Long Beach, Calif., City schools, 1927. 5 p. ms.

This study covers the elementary grades.

620. **Brooker, Pauline E.** Length of the school day for fifth grade, Columbia, S. C. Master's thesis, 1927. University of South Carolina, Columbia.

621. **Christian, Katherine.** Adapting the work of the fourth grade to the natural interests and activities of children. Master's thesis, 1926. University of California, Berkeley.

622. **Clark, Willis W.** Report on elementary vacation schools. Los Angeles, Calif., City schools, 1927.

Results of survey and resurvey of vacation schools in fundamentals and reasoning in arithmetic and reading comprehension. In one month between tests the following progress was made: Reading comprehension—3.0 mos.; Arithmetic fundamentals—2.8 mos.; Reasoning in arithmetic—1.7 mos.

623. **Dolch, Edward William.** Grade vocabularies. *Journal of educational research*, 16: 10-26, June, 1927.

A word study to determine what words children know as they progress from grades II through VIII by the free-association method. Data collected from the work of 16,206 children (in 15 minutes); a total of 2,312,000 words was obtained. A summary of grading of words, listing those of a frequency of two in each grade, gave a total of 9,583 for the eight grades. Comparison of other word lists is made in the study.

624. **Dyer, William Penn.** Activities of the elementary school principal for the improvement of instruction. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers College, Columbia university, Bureau of publications, 1927. 102 p.

Asks: 1. In what activities for the improvement of classroom instruction do principals of elementary schools in city school systems actually engage? 2. To what extent do training, experience, and school conditions of the principal affect the number and kind of activities reported? 3. To what activities (in the work of an elementary school principal) for the improvement of instruction do educational specialists give their approval? 4. What rating for importance do educational specialists give these activities? Sets up certain criteria for estimating the efficiency of elementary school principals.

625. **Elder, Harry E.** A study of rapid acceleration in the elementary school. *Journal of educational research*, 15: 5-9, January, 1927.

This study attempts to evaluate the results of the skip-grade or double promotion method. The data used as a basis were the teachers' marks of 22 pupils.

626. **Flowers, Ida V.** The duties of the elementary-school principal. *Elementary school journal*, 27: 414-22, February, 1927.

A study to determine how principals really spend their time, based upon daily records kept over a two-week period during 1925-26 by 42 principals outside of Baltimore and 25 in Baltimore. Tables indicate size of schools; duties which are administrative and those which are supervisory; percentage of time devoted to each; assistance, etc. Comparisons were made between a group outside of Baltimore and a group in Baltimore. Says that (1) the average principal finds it impossible to devote 50 or 60 per cent of his time to supervision, as Cubberley and other writers urge; (2) principals may well subject to careful analysis and scrutiny the way in which they spend their time, in order that they may increase their efficiency; (3) boards of education and superintendents should do all in their power to relieve principals of some of the minor duties now occupying much of their time, in order that their best efforts may be devoted to the improvement of instruction.

627. **Freden, Gustaf.** Age-grade and progress indices for the public elementary schools of Iowa. Iowa City, State university of Iowa, 1927. 52 p. (University of Iowa. Studies in education, vol. 4, no. 2, April 1, 1927.)

A study of the records of 38,000 pupils from 100 schools in Iowa. The findings are that the public elementary schools of Iowa need an adequate child-accounting system. Pupils on the average are too young when entering grade 1.

628. **Hamilton, Aymer Jay.** Influence of transfer upon age-grade status and achievement of elementary-school pupils. Doctor's thesis, 1927. University of California, Berkeley. 81 p. ms.

A study to determine whether differences exist in number of days required to arrive at a given grade level between groups of elementary children who had attended only one school and groups who had attended two or more. The conclusion was that differences in progress and achievement are insignificant.

629. **Irmia, Siefer M.** The effect of the summer vacation on the achievement of pupils in the elementary schools. Doctor's thesis, 1927. Catholic sisters' college, Washington, D. C.

The study includes the majority of school subjects from first to seventh grades; also a study of effects of initial instruction at the beginning of the school year. Factors associated with loss and gain are also considered.

630. **Jackson, Josiah B.** Home, school, and outside activities of first-grade children. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

631. **Jacobs, Richard Carroll T.** An educational diagnosis of 50 pupils. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 82 p. ms.

Comprises a study of the individual achievements and rankings of 50 seventh-grade elementary school pupils in a group of four standardized tests, which were given during the fall and spring of a school year. The median attainments of the class are high in all the tests. The data, however, reveal that a great deal of retardation exists. A large per cent of the group are from one to four years chronologically and mentally beyond the normal age for the grade, which indicates maladjustment. A reorganization of the group is recommended so as to make possible a better adaptation of the work to the capabilities of pupils.

632. **Johnston, James Franklin.** A study of retardation in an elementary school of California. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

633. **Kyte, George C.** The elementary school principal as a builder of teaching morals. Lansing, Mich.: Michigan education association, 1927. p. 44-52.

For this study, 700 teachers replied to a questionnaire indicating how their principals were most helpful to them.

634. **Long Beach, Calif. City schools.** Committee on supervision. Plans for supervision in the elementary schools. Long Beach, City schools, 1927. 22 p.

Undertakes to set up specific aims of supervision, and to determine the plans whereby these aims may be put into successful operation. This work entrusted to a committee was voted upon by 425 teachers, and thus adopted. Plans of supervision were systematized; duties respectively distributed among superintendent, general supervisors, principals, special supervisors, and director of research. Provision was made for experimental work and for harmonious working on the part of each of the foregoing and of the teachers.

635. **McDermott, Sister Mary Josephine.** A study of the biographical material recommended for the curriculum of the elementary school. Master's thesis, 1927. University of Chicago, School of education, Chicago, Ill.

Reports the results of an investigation of courses of study and book lists to ascertain the biographical material included in the curriculum of the elementary school. Analyzes the material to determine the relative emphasis given to the various classes of personages who are presented to the pupils by means of biography. This study shows that there is no general agreement among courses of study as to the biography cited for the elementary school, except in regard to the types of books which contain such material. "Each course of study as well as each book list examined mentioned books of three types: Individual, collective, and incidental biography."

636. **Manuel, H. T.** The seven-year elementary school in Texas. Austin, University of Texas, 1927. 97 p. (University of Texas, bulletin no. 2732, August 22, 1927.)

An examination of the seven-year elementary plan. Author points out that to increase from seven to eight years would add extra cost. A consideration of the 5-4-4 plan, which includes the junior college.

637. **Noel, Mable Elizabeth.** A study of third and fourth grades in Eastern South Dakota. Master's thesis, 1926. School of education, University of Chicago. Chicago, Ill. 141 p. ms.

Compares the third and fourth grades in Eastern South Dakota with respect to enrollment and retardation of pupils, and then training, experience, and professional reading of teachers. Finds that the third and fourth grades of Eastern South Dakota have practically the same enrollment as do the other grades, the average number of pupils per room varying from 25 to 30 according to size of school. The primary grades show the largest amount of retardation, with the third and fourth grades second. Teachers of the third and fourth grades have less education beyond high school than those of the other grades but average the highest in experience. - There is no significant difference in the amount of professional reading done by the grade teachers.

638. **Percival, Walter Pilling.** A study of the causes and subjects of school failure. Doctor's thesis, 1927. Teachers College, Columbia university, New York, N. Y. Berkeley, University of California printing office, 1927.

An analysis of the causes and subjects in which pupils fail in the first 8 grades in the public schools. The purpose of this study is to show (1) the specific causes, alone and in combination, that produce failure; (2) the subjects, alone and in combination, that produce failure; (3) an analysis of the courses of study in the critical subjects of failure; (4) the number of pupils failing in grades producing a high degree of failure where the courses of study diverge from the usual.

639. **Quance, Frank M.** Part-time types of elementary schools in New York city. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927. 49 p.

The two part-time types of schools selected for this study were the morning and afternoon session, or two-session type, and the duplicate session type. The regular session school was used as the control type. Tests indicate the greater efficiency of the pupils in the experimental types of schools.

640. **Hankin, Mary I.** The recurrence of words in certain primers. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

641. **Reed, Mary Maud.** An investigation of practice for the admission of children and the promotion of children from first grade. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927.

The findings are based on the replies of 90 public-school superintendents attending Teachers college, summer, 1926, and 129 supervisors, principals, and teacher-training directors.

642. **Schenectady, N. Y. Department of public instruction. Division of research.** Nonpromotion and classification study in elementary schools. Schenectady, N. Y., The Department, 1927. 22 p. ms.

This report summarizes the facts concerning promotion and classification in the elementary schools in June, 1927, as follows: 1. The percentage of pupils nonpromoted was lower in June than at any time during the year. 2. A remarkable drop in this percentage is shown in grade IB in June. 3. Teachers' judgments are more lenient than classification tests warrant.

643. **Shepard, Frederick C.** A study of the growth in mental and physical abilities of the Chapel Hill grammar-school children during a period of six months. Master's thesis, 1927. University of North Carolina, Chapel Hill.

644. **Stevenson, Dwight H.** Types of elementary teaching. Doctor's thesis, 1927. Ohio State university, Columbus. 278 p. ms.

Eight types of lessons, accompanied by annotated stenographic reports of classroom exercises, are described. Teachers on the average did more talking than all of the pupils combined. The brighter half of the pupils contributed about twice as much as the slower half of the class.

645. **Strachan, Lexie.** Distribution of intelligence quotients of 22,000 primary school children. Journal of educational research, 14: 169-77, October, 1926.

Stanford-Binet tests were used. I Q's of white and colored and of foreign children were compared with Terman's 905 unselected white children.

646. **Waite, Mary G.** A study of first-grade promotion and nonpromotion. Doctor's thesis, 1927. Yale university, New Haven, Conn.

An intensive analysis of first-grade pupils to find out in what way children who are not promoted from the first grade at the end of the year's work differ from those who are promoted and, if possible, which factors are most potent in determining promotion. Mental age and intelligence quotients are highly important factors in determining promotion. When combined, they probably constitute the most important factor. Using a foreign language in the home instead of English decreases a child's chances for promotion. Regular attendance is not an important factor.

647. **Wilson, Ella Mae.** The frequency of recurrence of phrases in certain primers. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

648. **Woody, Clifford.** The amount of time devoted to recitation and study in the elementary schools of Michigan. Ann Arbor, University of Michigan, 1927. 70 p. (Bureau of educational reference and research. Bulletin no. 100, March 1, 1927.)

Based upon returns from 247 rural teachers in two counties of Michigan (47 cities having population of less than 1,000; 18 cities, between 1,000 and 2,000; 12 cities, between 2,000 and 5,000; 11 cities, between 5,000 and 15,000; 7 cities, more than 15,000). Investigation was limited to grades I to VI. Considerable variation was found in the amount of time devoted to the different subjects.

See also items 16, 35, 87, 90, 96, 105, 133, 144, 281, 287, 318, 324, 327, 333, 336, 339, 341, 342, 344, 350, 356, 359, 380, 386, 389, 453, 455, 463, 469, 470, 475, 484, 509, 557, 558, 565, 569, 580, 581, 588, 601, 826, 850, 995, 1025, 1046, 1051, 1057, 1058, 1062, 1073, 1082, 1084, 1099, 1100, 1150, 1168, 1233, 1248, 1260, 1292, 1408, 1486.

SECONDARY EDUCATION

649. **Adams, Jesse E.** Reactions of high-school pupils to high-school subjects. School review, 35: 354-62, 417-27, May, June, 1927.

Vocational plans, subject failures, and attitudes toward subjects were studied for 4,739 pupils in 70 Kentucky high schools. Data were gathered on school failures with reasons as reported by pupils, immediate and ultimate plans for vocation, and attitudes toward various school subjects.

650. **Aldrich, Julien C.** Intelligence of high-school pupils. School review, 35: 699-706, November, 1927.

The purpose of the study was to determine the relation between the occupational group to which the child belongs and his intelligence. It was found that nonlabor groups (Counts's classification) have a higher intelligence rating, and show a higher scholastic achievement than labor groups in two schools.

651. **Allen, Clarence Bigler.** Factors contributing to the growth in public high-school enrollment. Doctor's thesis. University of California, Berkeley. 108 p. ms.

Undertakes to determine the relationships between the forces or factors, which have contributed to growth of high-school enrollment. First part presents an analysis of data on 52 factors, by states; second part deals with California. Wealth shows highest positive relationship with public high-school enrollment, by states, for 1924, and with the increase in public high-school enrollment during 1914-24. Educational leadership has also been a significant factor.

652. **Baker, James Edgar.** An analytical study of the reading habits and accomplishments of high-school pupils. Master's thesis, December, 1926. School of education, University of Chicago, Chicago, Ill. vi., 77 p. ms.

Reports the results of an analysis of the reading habits and accomplishments of 600 high-school pupils of University City, Mo., to determine the factors that contribute to improvement in rate and comprehension of reading and to school progress. There was a greater tendency for the pupils to gain in comprehension than in rate of reading, and the gain in comprehension was more uniform than the gain in rate. The data seem to show that progress in reading is due less to general intelligence than to training and application. The poor readers were more inclined to gain in both rate and comprehension than the good readers, and improvement in rate and comprehension was accompanied by a tendency to do better school work. Good readers averaged higher in intelligence and usually did better work in school than poor readers.

653. **Barnes, George Ivan.** A study of the small high schools in Kentucky with recommendations for improvement. Frankfort, Kentucky state board of education, 1927. 63 p.

Author deals with 407 rural high schools of the state, which were studied with respect to the educational conditions obtaining in them and specific improvements possible. The most important contributions of the study are (1) the statistical data showing the conditions in small schools as compared to very small schools, and (2) suggested curricula and daily schedules for small high schools grouped according to size.

654. **Branson, Ernest P.** Case studies. Long Beach, Calif., Public schools, 1926. 8 p. ms.

Gives case studies of nine high-school pupils.

655. **Burke, S. F.** The status of high-school athletics in South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

656. **Burkhart, Russell S.** An analysis of the high-school yearbook. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

657. **Bush, Ralph Hopkins.** The status of the summer schools in secondary schools in Illinois. 1927. Illinois state department of public instruction, Springfield. Springfield, Ill., Schnepf and Barnes, 1927. 69 p.

This study excludes Chicago. The author recommends that tuition fees for summer school be abolished; that summer school administrators take care to keep the same standards of work and time as are maintained in the regular year.

658. **Butterweck, Joseph Seibert.** The problem of teaching high-school pupils how to study. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 116 p. (Teachers college, Columbia university. Contributions to education, no. 237.)

The author tries to answer the question: "Is it possible to provide for study habit formation by giving controlled practice in the use of the elements involving the study habit and thereby making use of our psychology of habit formation and the laws of learning?" The study develops a suggestive instructional technique to be used with respect to division according to ability, and supervised study.

659. **Clark, Joseph L.** The development of public high schools in Louisiana from 1900 to 1925. Master's thesis, 1927. University of North Carolina, Chapel Hill.

660. **Cole, Robert D.** The present status of private secondary education for boys in the United States. Doctor's thesis, 1927. University of Pennsylvania, Philadelphia.

661. **Combs, M. L.** Efficiency in relation to size of high schools. Division of research and surveys, Virginia state department of education, Richmond. Richmond, Virginia-state board of education, 1927. 185 p. ms.

Treats the high schools of Virginia specifically and of the country in a general way. This study indicates that the large town and city high schools are the most efficient; that the small high schools, with an enrollment of less than 100, are the least efficient and the most expensive; that schools enrolling from 150 to 300 pupils can be made just as efficient as the large schools with a similar expenditure per capita, with the exception perhaps of the breadth of the program of studies; that, in general, three teachers and an enrollment of 50 pupils constitute the minimum below which efficiency can not be obtained except through an excessive per pupil expenditure.

662. **Counts, George S.** Current practices in curriculum making in public high schools. 1926. National society for the study of education. 28th Yearbook, part I. Bloomington, Ill., Public school publishing company, 1926. p. 135-62.

Gives reports from 111 cities for the senior high school, and from 73 cities for the junior, regarding their practices in curriculum making. Finds evidence to indicate that here and there, particularly in the larger cities and in the junior high schools, steps are being taken to provide for a more careful appraisal of the curriculum.

663. **Cox, Philip W. L.** What is the secondary school curriculum? High school teacher, 2: 260-261, 269, September, 1926.

664 **Crandall, C. W.** The educational requirements for public secondary education in Monroe, Mich., with a brief preliminary account of the school building program and educational policy. Monroe, Mich., Public school. 15 p. ms.

Report on policies adopted in Monroe, Mich. (a city of 4,000 inhabitants), to meet recommendations of survey committee regarding school building needs.

665. **Cuthbert, Edith Opal.** The maladjusted high-school girl. Master's thesis, Ohio state university, Columbus. 110 p. ms.

This is a study of maladjustment based upon a statistical study of cases in one high school. Preventive and remedial measures are suggested. A statistical study of the problem girl shows that the greatest number of maladjustments are found in the three grades of the sixth year school, while those problems discovered among older girls are generally more difficult of solution and are likely to result in more permanent damage. The possible causes of maladjustment among high-school girls may be classified roughly as scholastic, personal, or social.

666. **Davis, Walter H.** Programs of studies in Maryland high schools, 1921-1924. 1926-27. Baltimore, Md., Johns Hopkins university.

667. **Davis, William Martin.** A study of secondary education of Hawkins county. Master's thesis, August, 1927. College of education, University of Tennessee, Knoxville. 116 p. ms.

A survey of high schools of Hawkins county, Tenn., with recommendations for their general improvement.

668. **Delany, Francis Marion.** Reducing failures in the high schools of Dallas. Master's thesis, 1927. University of Texas, Austin.

A study of failures, by subject and school year, of pupils in the Dallas, Tex., high schools.

669. **Diefendorf, John W.** Vocational and trait analysis of high-school teaching. Columbia, University of Missouri. 1926. 46 p.

Discusses desirable teacher qualities and teacher activities, and makes suggestions for the teacher-training curriculum. Includes bibliography.

670. **Dolinger, Emma, and others.** Health trends in secondary education. New York city, American child health association, 1927. 147 p.

A résumé of what is done in a group of 17 representative secondary schools, with "forward-looking suggestions of what may be done in the future."

671. **Dreier, Albert A.** The relative efficiency of rural trained and urban trained pupils in York high school. Master's thesis, October, 1927. University of Kansas, Lawrence.

672. **Feelhaver, Carl T.** The duties of high-school principals in the state of Nebraska. Lincoln, University of Nebraska, 1927. In Educational research bureau bulletin, no. 2, 1927. p. 43-48. Also in School review, 35: 188-93, March, 1927.

This questionnaire study of training, experience, salary, and activities of 144 principals of accredited Nebraska high schools finds that principals of smaller schools spend most of their time in teaching, in control jobs, and in caring for extracurricular activities; as the schools increase in size clerical duties occupy more time, reaching the peak in schools enrolling 300-500 pupils; in large schools, the principal gives most of his time to administrative, supervisory, and professional activities. A table is presented showing preparation, experience, and salary.

673. **Fitzgerald, Catherine Frances.** Secondary school textbooks in English from 1900 to 1927. Master's thesis, 1927. Brown university, Providence R. I.

674. **Ford, Willard S.** Some administrative problems of the high-school cafeteria. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 147 p. (Teachers college, Columbia university. Contributions to education, no. 238.)

The present status of the cafeteria was investigated by a study of the high schools of Connecticut and Ohio. A personal investigation of 27 high-school cafeterias was made to determine present practices. The study includes the history and development of cafeterias, space and room requirements, equipment, control and management, accounting, and educational values.

675. **Gardner, C. A.** A study of the causes of high-school failure. School review, 35: 108-12, February, 1927.

Gives reasons for failure reported by pupils of one high school and compares the frequency of the various reasons for failure as reported by pupils and teachers.

676. **Garland, William Mason.** A study of possible factors related to pupil elimination in Tyler, Tex., high schools in 1925-26. Master's thesis, 1927. University of Texas, Austin.

Study based upon child accounting records of the Tyler high school and questionnaires submitted to pupils and parents.

677. **Gemmell, Ella Anna.** An analysis of causes for high-school failures. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

678. **Girlinghouse, Frank W.** The development of secondary education in Louisiana from 1727 to 1900. Master's thesis, 1927. University of North Carolina, Chapel Hill.

679. **Good, Carter V.** The effect of mental set or attitude on the reading performance of high-school pupils. Journal of educational research, 14: 178-86, October, 1926.

The purpose of this study was to determine the effect of the pupil's attitude on comprehension in reading as measured by a standardized reading test. There were five forms of the reading scale given. Encouragement, skimming, discouragement, and reproduction were the attitudes investigated. T-score averages were as follows: Preliminary 58.4, encouragement 58.7, skimming 60.8, discouragement 58, reproduction 62.

680. **Goodwin, Omer Korb.** The development of secondary education. Master's thesis, 1927. University of North Carolina, Chapel Hill.

681. **Gordy, Jay C.** Minimum state requirements in secondary school curricula as revealed by state codes and state regulations. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

682. **Gunn, Mary A.** Specific means of presentation of literature in different high-school grades. Master's thesis, 1927. State university of Iowa, Iowa City.

683. **Hawfield, Samuel G.** The development of public high schools in North Carolina. Master's thesis, 1927. University of North Carolina, Chapel Hill.

684. **Hawkes, Franklin Powers.** An investigation of a manual for teachers as a factor in high-school administration; or, a device for relieving the secondary-school principal of administrative detail. Doctor's thesis, 1927. Boston university, Boston, Mass. 26 p. ms.

Gives five possible means of attending to administrative detail: (1) Teachers' meetings; (2) student handbook; (3) daily bulletin and absence notice; (4) directions for teachers; (5) manual of directions for teachers which contains a calendar and an index.

685. **Hay, Homer W.** An analysis and evaluation of the high-school magazine. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

686. **Head masters association.** Provisional curricula for general high schools. 1927. Boston, Mass. Public schools, 1927. 28 p.

687. **Hendershot, Wilfred G.** A study of absences, tardiness, and withdrawals in the Spencer high school in relation to grades and mental ratings. Master's thesis, October, 1927. Indiana university, Bloomington. 41 p. ms.

688. **Hildreth, Gertrude.** Thorndike college entrance test results in a senior high school. Teachers college record, 28: 1035-44, June, 1927.

This test provides objective data from which a student's probable success in college work might be predicted.

689. **Hughes, William Hardin.** Some uses of a personal trait rating scale in the solution of certain high-school problems. Doctor's thesis, 1927. University of California, Berkeley.

Undertakes to apply some of the principles of trait rating to the solution of certain junior and senior high school problems. Two hundred teachers cooperated, and 2,000 students were studied.

690. **Johnson, Nels Albert.** A study of the teachers' load in the high schools of Oakland, Calif. Master's thesis, 1927. Stanford university, Stanford University, Calif.

691. **Jordan, Floyd.** A study of personal and social traits in relation to high-school teaching. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

692. **Kezer, C. L.** Subject combinations in high-school teacher's programs in Oklahoma. Master's thesis, 1927. College of education, State university of Iowa, Iowa City. 70 p. ms.

Five hundred and ten high schools representing 2,003 teachers were examined with reference to the subject combinations taught and the frequency with which the various combinations occurred.

693. **Kinsey, Wendell H.** Some comparisons of the graduates with the withdrawals of Huntington high school, Huntington, Ind., during the period 1917-25 inclusive. Master's thesis, June, 1927. Indiana university, Bloomington. 108 p. ms.

694. **Kirby, Thomas J.** Subject combinations in high-school teachers' programs. School review, 34: 494-505, September, 1926.

Teaching programs of 1,190 Iowa high-school teachers in schools of various sizes were analyzed for purposes of discovering subject combinations. Classification was made of teachers' programs to show how many do work in one department exclusively, how many predominantly, and, when combined, with which departments most frequently combined. Detailed data are given for subject specification within the departments of science and social studies.

695. **Koch, Harlan C.** Problems in high-school administration and supervision which have their origin in the classroom. Doctor's thesis, 1927. Ohio state university, Columbus. 250 p. ms.

Study is based on weekly reports of the problems submitted by 676 teachers during one semester, and problems submitted by the principals of these teachers. As indicated by a number of problems, pupil management, method of recitation, and motivation are most numerous. Of the problems referred to the principal, however, nearly two-thirds deal with extra curricular activities.

696. **Krieter, Sister M. Charitas.** The personal relation between the teacher and the individual student in the high school. Master's thesis, 1927. Marquette University, Milwaukee, Wis. 52 p. ms.

697. **LaPoe, James L.** The senior high school principal and his greatest problems. Columbus, College of education, Ohio state university, 1927. 185 p.

Senior high school principals throughout the country were asked to do four things, namely: (1) To give certain personal information, such as training, experience, etc.; (2) to enumerate their greatest administrative and supervisory problems (this is the main part of the study); (3) to state their practice with respect to certain designated phases of high-school administration; and (4) to evaluate, in terms of secondary education, the "seven main objectives of education." From this questionnaire 381 usable returns were received, which are the basis of this study.

698. **Laughlin, Anna Hawkes.** A social and educational study of a small-town high school. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

In this investigation, 81 boys and 150 girls graduating over a 42-year period from a small town high school in Illinois were studied with respect to the number graduating from college, number attending college but not graduating, number not attending college, and the social composition of these various groups.

699. **Lewis, Glenn Hadley.** The public high school in the public press of California. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

700. **Lundberg, L. D.** Proportion of men and women in the principalship and assistant principalship in the junior and senior high schools of 40 cities of 40,000 and over population. Flint, Mich., Public schools, 1927. 2-p. ms.

A preliminary report on the question of whether a man or woman is generally the best executive for the junior and senior high school.

701. **Lunde, Alert J.** A study of the high-school alumni association in Iowa. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

This is a questionnaire study of founders, organization, functions, value, and prevalence of the high-school alumni-association in Iowa. Of the 150 associations reported in Iowa, 76 supplied complete data.

702. **McKinney, Katherine M.** An analysis of the research in educational guidance in secondary schools. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

703. **Mayne, Grace Ketchum.** Public opinion and geometry in the secondary school. Master's thesis, 1927. University of Texas, Austin.

An analysis of the attitude of parents and pupils toward the study of plane geometry, with their effect on pupil's progress. Many devices for motivating the work in high-school plane geometry.

704. **Miles, Dudley H.** Can the high-school pupil improve his reading ability? *Journal of educational research*, 14: 88-98, September, 1926.

The study shows that bright pupils gained ability to comprehend the printed page by their daily reading practice. Slower pupils are likely to improve if the teacher is able to maintain their interest and effort. The extent of improvement depends largely on the teacher.

705. **Miller, Earl W.** A study of the Clifton Forge, Va., high school. Master's thesis, 1927. University of Virginia, University.

706. **Montgomery, G. M., chairman.** A study of pupil load in senior high schools. Los Angeles, Calif., Department of psychology and educational research, City schools, 1927. 50 p. ms.

A study of the practices of Los Angeles high schools in the several subjects.

707. **Morgan, Walter E.** Some statistics of California secondary schools. *California quarterly of secondary education*, 2: 14-20, October, 1926.

Data on number of institutions maintained, number of students enrolled, number of teachers employed, and amounts of money expended for secondary education in California during the biennium, 1924-1926.

708. **Muehler, Alfred D.** A vocational and socio-educational survey of graduates and nongraduates of small high schools of New England. Doctor's thesis, 1927. Yale university, New Haven, Conn. State normal school, Worcester, Mass. (In preparation for publication.)

709. **Myers, C. Everett.** High-school attendance in Pennsylvania. May, 1927. Pennsylvania state education association, Harrisburg, Pa. 2 p.

710. **Noble, Stuart G., and Roy, V. L.** The personnel, preparation, and programs of the high-school teaching staff of Louisiana. Baton Rouge, Louisiana state department of education, 1926. 58 p. (State department of education pamphlet, no. 14, December, 1926.)

711. **Nuding, Jeremiah Albert.** Geographical and occupational distribution of the graduates of Frankton, Ind., high school. Master's thesis, June, 1927. Indiana university, Bloomington, 67 p. ms.

712. **Ogden, Carroll R.** Materials and related education in high school. Master's thesis, 1927. College of education, West Virginia university, Morgantown.

713. **Palmer, Anthony R.** A comparative survey of the theory and practice of high-school discipline. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

714. **Perkins, Frances.** An analysis of research in secondary school learning. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

715. **Peterson, L. H.** California secondary-school housing needs and available resources. (A summary) California quarterly of secondary education, 2: 149-64, January, 1927.

Objective data and discussion are presented on following items: Secondary schools of California from the standpoint of growth, bonded debts, building values, State wealth, educational program, building needs, and taxable resources.

716. **Philippine Islands. Bureau of education.** Summarized results of the study of living conditions of secondary-school students. Manila, P. I., Bureau of education, November, 1927. 2 p.

Questionnaire study of living conditions of 23,276 pupils in 39 secondary schools. Data gathered and reported on: With whom living, light used, sanitation, financial support, and plans for life work.

717. **Pickell, Frank G.** College preparation in the Montclair high school. Montclair, N. J., Board of education, 1926. 24 p.

A study based on the records of 1,141 students who were graduated during the period from June, 1920 to June, 1925, inclusive.

718. **Pierce, John F.** A study of the disciplinary problems and the method of handling them as practiced in the senior high schools. Master's thesis, 1927. State teachers college, Greeley, Colo.

719. **Pierson, Selia D., and Nettels, C. H.** The scholarship of high-school pupils taking five solids versus those taking four solids. Los Angeles, Calif., City schools, 1927. p. 12-14. (Educational research bulletin, vol. VII, nos. 2, 3, October, November, 1927.)

720. **Poole, C. F.** A study of the practices, principles, and limitations of student participation in the government of secondary schools. Master's thesis, 1926. State teachers college, Greeley, Colo.

721. **Proctor, William M., and Hohenbaugh, Lawrence.** Relation of the subjects taken in high school to success in college. Journal of educational research, 15: 87-92, February, 1927.

Finds that not enough difference exists between the achievement of the academic-pattern group and the vocational-pattern group of the Stanford men, whose records were included in this investigation, to justify any discrimination against an applicant for college admission because he took from 15 to 50 per cent of his preparatory subjects in the vocational group of high-school subjects.

722. **Pugh, David, and others.** A study in secondary education. Pittsburgh, Pa., Department of curriculum study and educational measurement and research, Public schools, 1927. p. 35-56. (Curriculum study and educational research bulletin, vol. II, no. 2, June, 1927.)

Home study with its related fields of interest is the central element in the investigation reported. No conclusions are stated by the author, but the data are presented for the reader to draw his own conclusions.

723. **Pulliam, Roscoe.** Pupil participation in control in secondary schools. Master's thesis, 1927. University of Illinois, Urbana.

724. **Reyner, Floyd Audrain.** The diagnostic and remedial treatment of problem cases in a rural community high school. Master's thesis, June, 1927. School of education, University of Chicago, Chicago, Ill. iv, 130 p.

Reports the results of a study of 12 problem cases in a rural community high school. The general procedure followed includes: (1) Intelligence tests; (2) personality tests; (3) detailed case history of each pupil; (4) sustained application profile sheets; (5) conferences; (6) teachers' reports; (7) achievement tests; and (8) remedial work.

725. **Roberts, Lakin Flake.** The administrative effects of reorganization in small high schools of West Virginia. Doctor's thesis, 1927. State university of Iowa, Iowa City.

726. **Ruf, John.** The small high school. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 145 p.

An intensive study was made of five Pennsylvania high schools ranging in size from 12 to 54 pupils. It was found that these schools are in need of an extracurricular activities program other than the kind adapted to the needs of large high schools. Small high schools are comparatively expensive. The lack of attention to the individual needs of the pupils is shown.

727. **Sackett, C. H.** A study of students accelerated in junior high school. St. Louis, Mo., Public schools. Public-school messenger, 24: 27-34, November, 1926.

Academic records of senior high school students. Students accelerated in junior high school are generally successful in senior high school.

728. **St. Louis, Mo. Public schools.** Case studies in good teaching, intermediate and high-school grades. Public-school messenger, 25, September, 1927. 72 p.

Case studies of good teaching in English, social sciences, mathematics, manual training, drawing, household arts, music, physical education, foreign languages, commercial subjects, and physical and biological sciences.

729. **Skillman, Willis Rowland.** The study of high-school problems facing Cumberland county, Pa. Master's thesis, 1927. Cornell university, Ithaca, N. Y.

The study of the material collected in this high-school survey of Cumberland county indicated that six major problems must be faced in the further development of secondary education in the county, as follows: (1) Growth and distribution of high-school enrollment; (2) transportation problem; (3) out-of-school employment of high-school pupils; (4) size and educational status of families represented by boys and girls attending high school; (5) problems of vocational guidance; (6) relative enrollment of rural and town children in high school.

730. **Smithey, W. B., and others.** A high-school testing program. Charlottesville, University of Virginia, Extension division, 1927. 77 p. (Made under the direction of the Virginia committee on research in secondary education.)

Proceedings of the first annual meeting of the Virginia committee for research in secondary education. Included are discussions on the educational value of high-school tests, available high-school tests, objective examinations, school efficiency, tests for large and small high schools.

731. **Soto-Bravo, Rolendio.** A study of the meetings of the National association of secondary school principals. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

732. **Steinmets, Harry Charles.** A study of the improved beliefs of high-school students. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

733. **Stewart, Joseph S., and Pound, E. A.** The university accrediting systems. Athens, University of Georgia, 1927. 16 p.

Report of high-school supervisors for state of Georgia, containing statistics of Georgia high schools; recommendations regarding high-school administration, standards of accrediting, unit courses of study defined; list of accredited high schools.

734. **Stone, Eva Maud.** The psychological principles of group control in the secondary schools, with suggestions for embodying them in school procedure. Master's thesis, 1926. University of California, Berkeley.

735. **Taylor, Clyde P.** Scholastic success of ninth-grade pupils. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 38 p. ms.

736. **Taylor, John Elbert.** Routes to the high-school principalship. Master's thesis, 1927. State university of Iowa, Iowa City.

737. **Thompson, Clem O.** The curriculum of the small high school. Muncie, Ind., Indiana normal school, Eastern division, 1926. 36 p. (Bulletin of Indiana state normal school, Eastern division, vol. II, no. 2, November, 1926.) (Made under the direction of a committee of the State department of education.)

All high schools of Indiana which had an enrollment of 200 or less were studied with respect to curricular offerings, vocational character of these offerings, occupation of graduates, pupils' choice of subjects, causes of elimination, etc., with a view to determine to what extent small high schools were meeting the needs of the pupils attending them.

738. **Thompson, Leighton S.** Statistics which should be kept on file in the office of the high-school principal. School review, 35: 15-26, January, 1927.

Based on an examination of 53 high-school reports from Massachusetts cities and towns, and a questionnaire study of statistical information kept by 63 schools throughout the nation. Tables and lists are presented of statistical items which may advantageously be kept up to date in the high-school principal's office.

739. **Thompson, Mable.** Letter boys in Hughes high school in Cincinnati. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 45 p. ms.

740. **Touton, Frank C.** The rôle of objectives in secondary education. California quarterly of secondary education, 2: 168-80, 192-97, January, April, 1927.

Ten objectives are proposed for attainment in secondary education. The type is application of those objectives to civics, general sciences, first-year Spanish, bookkeeping, American history, and chemistry.

741. ———. Suggestions for effective study in secondary schools. California quarterly of secondary education, 2: 71-90, October, 1926.

Suggestions are offered on how to study prepared in the author's graduate classes and treated from general standpoints of study conditions, study procedure, and study goals. Special application of the general principle is made to English, Latin, modern languages, mathematics, natural sciences, social sciences, fine arts, commercial art, music, commercial subjects, home economics, and shop work.

742. ——— and others. Studies of secondary school graduates in their mastery of certain fundamental processes. Los Angeles, Calif., University of Southern California, 1927. 56 p. (University of Southern California studies. Secondary series, no. 1, 1927.)

Part I. Results are reported for 1,137 test papers (300 in reading comprehension, 300 in vocabulary achievement, and 417 in spelling ability) of high-school seniors in eight schools. Part II. Analysis of scores made by 504 college entrants in the mathematical sections of a college-entrance intelligence test. The study supports the contention that college entrants do not possess a real mastery of arithmetic and algebra.

743. **Turney, Austin H.** A study of achieving and nonachieving high-school pupils. School review, 35: 289-98, April, 1927.

A study of 45 pupils of University high school, University of Minnesota, whose achievements were decidedly above or below expectation, based on their I Q rating. Two or more teachers gave trait ratings to each of the pupils studied. The results indicate that the most important traits leading to achievement success in high school are industry, ambition, accuracy, and common sense.

744. **Voelker, Edgar W.** The organization and functioning of pupil opinion in high-school control. *School review*, 34: 654-67, November, 1926.

Based on a questionnaire study on participation of pupils in high-school control. Replies from 152 schools are tabulated. Summaries are presented on methods used in organizing student control, types of student control, activities in which such control is operative, success and values.

745. **Waples, Douglas.** The best-answer exercise as a teaching device. *Journal of educational research*, 15: 10-21, January, 1927.

The exercise helps to solve those problems of high-school teaching which are due to the difficulty of directing individual thinking.

746. **Welty, Howard Otis.** Some administrative problems in Oakland technical high school. Master's thesis, 1927. University of California, Berkeley.

747. **Wescott, Clyde M.** What high-school pupils think of the sciences they have studied. *California quarterly of secondary education*, 2: 248-50, April, 1927.

Questionnaires were given to twelfth-grade pupils to discover their reasons for enrolling in the various sciences and the values assigned to each. The principal reasons for taking the various sciences are found to be: Practical value, prescription in the course, and college entrance requirements. Physics was considered hardest and most valuable, with chemistry second.

748. **Whitney, Frederick L.** High-school opportunities in Colorado. Greeley, Department of educational research, Colorado state teachers college, 1927. 83 p. (Colorado state teachers college research bulletin, no. 12, August, 1927.)

Thirteen representative counties were selected and surveyed in detail with regard to what becomes of the eighth-grade child, how many do not enter or continue in high school, and why? Twenty-five basic conclusions were arrived at, the most important of which were that high-school education is better adjusted to girls than to boys; the high school is still undemocratic to a large degree; that in Colorado the high school is not an integral part of the free public-school system of the state; high-school education is mass education rather than individual in character; pupil success is dependent most of all upon mentality; and that high-school education in small schools is inefficient and uneconomical.

749. **Wilkinson, Helen V.** Factors that influence the high-school students' choice of courses. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

750. **Woody, Clifford.** Number and combination of subjects taught in the 1924-25 school year in the North central high schools of Michigan. *Educational administration and supervision*, 12: 529-48, November, 1926.

Over nine-tenths of the teachers were teaching but one or two subjects. Of all the teachers of one subject, almost half of them were teachers of English, mathematics, industrial arts, or home economics.

751. ——— and **Bergman, W. G.** The measurement and equalization of the teaching load in the high school. *North central association quarterly*, 1: 339-59, December, 1926.

Views the problem from standpoint of size of classes taught, mode of presentation of the class exercise, the number of preparations necessary each day, the number of classes taught each day, the number of pupils for each teacher, and the total number of clock-hours spent in all school work.

752. **Young, Charles F.** The organization of a high school for classroom work. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

See also items 19, 21, 30, 34, 37, 45, 46, 52, 57, 68, 90, 94, 103, 105, 108, 114, 133, 134, 136, 141, 146, 148, 191, 203, 229, 239, 257, 262, 282, 295, 297, 298, 299, 308, 325, 331, 345, 364, 366, 367, 368, 373, 375, 376, 387, 392, 400, 401, 406, 407, 410, 414, 416, 426, 430, 432, 437, 438, 439, 440, 441, 446, 448, 487, 488, 491, 492, 493, 494, 495, 497, 498, 499, 502, 504, 505, 507, 512, 513, 519, 520, 523, 524, 525, 528, 529, 531, 532, 533, 534, 536, 537, 538, 539, 542, 543, 546, 548, 549, 550, 554, 555, 560, 561, 583, 585, 599, 787, 788, 801, 802, 814, 817, 825, 832, 833, 839, 853, 876, 889, 901, 913, 919, 924, 925, 928, 933, 995, 996, 1005, 1010, 1019, 1036, 1039, 1044, 1062, 1078, 1079, 1082, 1084, 1090, 1104, 1106, 1111, 1114, 1117, 1119, 1121, 1123, 1126, 1127, 1129, 1130, 1146, 1163, 1155, 1163, 1170, 1172, 1174, 1182, 1221, 1224, 1229, 1247, 1248, 1252, 1262, 1267, 1270, 1291, 1305, 1309, 1314, 1319, 1323, 1324, 1326, 1342, 1362, 1355, 1368, 1372, 1376, 1379, 1385, 1387, 1391, 1411, 1419, 1455, 1470, 1473, 1478, 1525, 1529.

JUNIOR HIGH SCHOOLS

753. **Baker, Marietta.** Causes of failure in the junior high school among boys of superior intelligence. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.
754. **Brooks, Harold Bennett.** Factors contributing to the failure of pupils in the junior high school. Master's thesis, 1926. University of California, Berkeley.
755. **Dhus, Mabelle Dorothy.** A determination of the tendencies of junior high school mathematics. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. v, 78 p.
Reports the results of an analysis of the content of 19 high-school textbooks in mathematics published between 1917 and 1926. Points out present tendencies in the teaching of this subject.
756. **Fish, Olive Caroline.** The aims and content of junior high school geography. Doctor's thesis, 1927. University of Wisconsin, Madison.
757. **Howell, C. E., and staff.** Program of studies for junior high schools. Trenton, N. J., Public schools, 1927. 34 p. ms.
Object is administrative revision of the present subject and time schedule and curricula, with a complete outline of organization policies.
758. **Johnston, Asbury.** A proposed junior high school curriculum for the State of Kentucky. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.
759. **Martin, William Harris.** The results of homogeneous grouping in the junior high school. Doctor's thesis, 1927. Yale university, New Haven, Conn.
Undertakes to evaluate, by both objective and subjective methods, homogeneous grouping. Method followed is comparing equated groups of superior, average, and slow children. One of each is left in a homogeneous group, and the other three are mixed together and divided again into three nonhomogeneous groups. Finds that, considering both objective and subjective factors concerning behavior and learning, it is to the advantage of a superior child to be in a homogeneous group with other superior children; to the average child to be in a nonhomogeneous group; and to the slow child to be in a homogeneous group.
760. **National education association. Department of superintendence.** The junior high school curriculum. Washington, D. C., National education association, February, 1927. 562 p. (Fifth yearbook.)
761. **Olson, Zenas A.** Junior high school standards and organization in Oregon. Master's thesis, 1927. University of Oregon, Eugene.
A study of the junior high schools of Oregon and comparisons with the present recognized standards of the unit. Many so-called junior high schools fail to meet the standards, and a redefining and revision are necessary.
762. **Piercy, Mary Elizabeth S.** The playground in its relation to the leisure time of the junior high school pupil as seen by a survey of agencies for recreation in Fresno, Calif. Master's thesis, 1926. University of California, Berkeley.
763. **Reese, L. W.** Constants and variants in program of studies in 52 Ohio junior high schools. Columbus, Ohio department of education, 1927. 10 p. ms.
764. **Renfrow, Laura.** Teacher load in junior high school. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 67 p. ms.
765. **Riley, Thomas Milton.** The junior high school merit plan. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.
766. **Schelmading, Marguerite.** An experimental study of acceleration and grouping in a junior high school. Master's thesis, 1927. University of Rochester, Rochester, N. Y. 210 p. ms.
The study follows 200 children from time of entrance in junior high school through eight years.
767. **Senour, A. C.** An abstract of intelligence and success in the junior high school. East Chicago, Ill., Public schools, 1927. 6 p. ms.

Makes comparison of intelligence as indicated by IQ with success, as indicated by continuation in school, by retardation, by avoidance of failure, and by doing work superior in quantity and quality. Studied for 306 junior high school pupils.

768. **Spaulding, Francis T.** The small junior high school—a study of its possibilities and limitations. Cambridge, Mass., Harvard university press, 1927. 226 p.

A comprehensive survey of the small junior high school, finding that improvement in quality of instruction is a fundamental need. The small school must constantly train its teachers in service. There should be more consolidation of small junior and senior high schools in adjacent communities.

769. **Teall, Robert James.** The value of a junior high school in a California union high-school district. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

770. **Terry, Paul W.** The social experience of junior high school pupils. School review, 35: 194-207, 272-80, March, April, 1927.

Deals with opportunity for social activities and participation in them by 903 pupils enrolled in one junior high school. A type study for inventory on this subject. Opportunities for important social training are analyzed into three classes, namely, in school organizations (required and voluntary), in extraschool organizations, and in business activities. Data on each kind of organization as well as on pupil participation are given.

771. **Thompson, Roy Harrison.** A study of the interests of junior high school students in science. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

772. **Tryon, B. M., Smith, H. L., and Rood, Allen F.** The program of studies in 78 junior high school centers. School review, 35: 96-107, February, 1927.

An examination of programs of 78 junior high schools to discover which subjects are taught and to what extent they are given as constants or as variables. Finds that a number of new subjects have found their way into the seventh grade as constants. Foreign languages and commercial subjects are introduced into the eighth grade as variables. English, social studies, mathematics, and health are offered as ninth-grade constants. Composite junior high school program is presented.

773. **Walch, Leonard W.** Science interests of junior high school pupils. California quarterly of secondary education, 2: 251-54, April, 1927.

One thousand six hundred and thirty-three junior high school pupils were asked to check list of 160 science topics for the 10 topics in which they were most interested and the 10 in which they were least interested. It was found that science interests of junior high school pupils are wide and varied and differ considerably between boys and girls. Science from the humanistic point of view appeals, while controversial subjects, health and civics aspects, and fundamentals of science are not favored.

774. **Williams, L. A.** A curriculum study of ideals among junior high school pupils. Journal of educational research, 15: 263-68, April, 1927.

An investigation of heroes named by junior high school pupils and why those mentioned were chosen. Few pupils named as many as 25 heroes; few heroes were named because of their personal qualities; political and military leadership were most frequently indicated as reasons for choice.

775. **Winder, Eustace E.** The small junior high school. Master's thesis, 1927. George Washington university, Washington, D. C.

See also items 192, 249, 358, 404, 415, 419, 442, 444, 445, 447, 911, 1122, 1146, 1177, 1258, 1259, 1298, 1325, 1491.

JUNIOR COLLEGES

776. **Blezek, Louis.** Public junior colleges in Iowa. Master's thesis, 1927. State university of Iowa, Iowa City.

777. **Comer, John Randolph.** The origin and development of the junior college, with special reference to Texas. Master's thesis, 1927. University of Texas, Austin.

Traces the history of junior colleges in Texas, and gives detailed attention to the junior college at Hillsboro.

778. **Fuller, William David.** An investigation of some problems of administration confronting the public junior colleges of California. Doctor's thesis 1927. University of Washington, Seattle.

779. **Harbeson, John W.** Provision for recommended and nonrecommended groups in junior colleges. *Sierra educational news*, 22: 375-77, June, 1926.

The writer concludes that to accomplish the best results for both groups, the recommended and nonrecommended students must be placed in different classes and their education directed according to their respective needs.

780. **Henderson, Samuel Watson.** Efficiency of the public junior college in Texas. Master's thesis, 1927. University of Texas, Austin.

Comparison of the work and results of these colleges with the work of the first two years of the university.

781. **Isaacks, Ernest Buford.** The efficiency of the denominational junior college in Texas. Master's thesis, 1927. University of Texas, Austin.

Comparison of the work and results of these colleges with the work of the first two years in the university.

782. **Kelly, E. T.** Feasibility of establishment of a junior college in North Platte, Nebr. Master's thesis, 1927. University of Nebraska, Lincoln.

The writer concludes that the establishment of a junior college in North Platte, Nebr., is not feasible at the present time, due to state legislation denying support, and lack of housing facilities.

783. **Shields, H. J.** Preliminary report on the survey of elementary economics in the junior colleges of the United States. Chicago, Ill., University of Chicago, School of commerce and administration, 1927.

The purpose of this study was to ascertain the status of elementary economics in the junior colleges of the United States. Out of 107 schools reporting, 79 offered economics and 48 did not.

784. **Weaver, E. L.** A study of junior colleges in Iowa. Des Moines, Iowa state teachers association, 1927. 6 p. (Iowa state teachers association bulletin, no. 2.)

A questionnaire was sent out to the junior colleges of Iowa the last semester of 1926-27. A large percentage of the data given was gathered then and during the summer of 1927. At that time there were 10 public junior colleges. At the opening of the school year 1927-28, 10 new members were added to the group, and 3 of the former number added a second year to their course, making at present 7 offering two-year, and 11 offering one-year courses. There is a showing of increase over last year in enrollments, with the exception of one college.

785. **Wellemeier, J. Fletcher.** The junior college as viewed by its students. *School review*, 34: 760-67, December, 1926.

Questionnaire study of the character and attitudes of 469 students in eight public junior colleges of Kansas. More than three-fourths of the students in junior college expect to complete the course; one-half of those completing junior college plan to attend college for two more years. In 65 per cent of the cases a vocation has been decided upon. The advantages of attending junior college far outweigh any disadvantages. More than one-third of the students would be out of school if there were no junior colleges.

786. **Williamson, Zack Andrew.** The cost of higher education in the South Park school system. Master's thesis, 1927. University of Texas, Austin.

Contributes a system for salary and other cost allocations for junior college accounting in a total school situation.

See also item 51.

TEACHER TRAINING

787. **Baker, Claude.** The professional preparation of mathematics teachers for secondary schools. Master's thesis, 1927. Colorado State teachers college, Greeley.

788. **Ballietto, Ralph E.** A study of the improvability of inexperienced high schools teachers. Master's thesis, 1927. University of Wisconsin, Madison.

789. **Bowden, A. O.** The training of critic teachers in the United States. *Journal of educational research*, 15: 118-25, February, 1927.

Only 2.3 per cent of the critic teachers reporting have taken courses primarily designed for their work. Most critic teachers expressed need for more work in tests and measurements.

790. **Buswell, G. T.** A personnel study of students who have received the master's degree from the University of Chicago. *School and society*, 25: 730-36, June 18, 1927.

The study was made of 242 students during the period 1924-1927, with the following findings: Median age when master's degree was conferred, 33. Median time elapsing between bachelor's and master's degree, 6 years. Percentile rank on psychological examinations, 10 points higher than median of other graduate students. Median salary received, \$2,600. Correlation between salary and years of teaching experience, 0.66; between salary and age, 0.31.

791. **Cavins, L. V.** An experiment with standardized tests in a state teachers' examination. *Journal of educational research*, 14: 206-12, October, 1926.

The chief contribution of the experiment was the proof of the practicability of using standard tests in teachers' examinations. Tests permit an objective rating of teachers, which, in turn, will permit wide-spread comparisons. They introduce teachers in a concrete way to educational tests and measurements and also permit a ready method of analyzing and diagnosing an individual's specific and general weaknesses in various subjects.

792. **Chambers, Jay L.** A program for training rural teachers. Master's thesis, 1927. University of Kentucky, Lexington.

793. **Charters, W. W.** A technique for the construction of a teacher-training curriculum. *Journal of educational research*, 15: 176-80, March, 1927.

794. **Clement, Stephen C.** The selection and recruitment of candidates for entrance to normal schools and teachers colleges in our larger cities. Master's thesis, 1927. New York university, New York, N. Y.

795. **Collier, Clarence B.** The dean of the state teachers college. Doctor's thesis, 1926. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1926. 84 p.

A personal study of 42 state teachers colleges with regard to their administration.

796. **Coze, Warren W.** Survey of practice departments of New York state normal schools. Albany, Educational measurement bureau, New York state department of education, 1927. 20 p. ms.

The practice departments of the 10 normal schools of New York were surveyed, using the Otis classification test. Achievement was found to be a little low, with considerable difference between schools.

797. **Creager, J. O.** The professional guidance of students in schools of education in state universities. *Educational administration and supervision*, 13: 192-99, March, 1927.

Information collected from 32 schools of education in state universities resulted in the following findings: The largest single factor in student guidance is the degree of autonomy granted schools in the control of their policies and programs. The most satisfactory results are obtained by required registration in the school of education. A school of education should have exclusive control of curricula in its own field. A single rather than a divided system of guidance for students' programs is advisable; a four-year curriculum has many advantages over a two-year form of organization.

798. **Davis, C. O.** Our best teachers. *School review*, 34: 754-59, December, 1926.

A study of good teaching qualities and where most frequently found as expressed by 76 university students in the author's classes. Tables are presented on 35 desirable teacher traits and on the unit where the best teachers are found, whether in elementary school, high school, or college. Personal interest is chosen as the most desirable trait and the high school as the unit in which the best teaching was experienced.

799. **Davis, J. Thomas.** Rural teacher training in the state institutions of higher learning in Texas—defects and suggestions for improvement. Master's thesis, 1927. University of Texas, Austin. 226 p. ms.

800. **Fish, Louis J.** Professional equipment of Boston teachers. Boston, Mass., Public schools, 1927. 15 p.

Relates to professional and academic training and courses taken by Boston public-school teachers.

801. **Fitzpatrick, Edward A.** The scholarship of teachers in secondary schools. New York, The Macmillan company, 1927. 109 p. (Sachs prize essay of 1926.)

An extended essay, which finds that the fundamental requisites for secondary teachers are: (a) A liberal education; (b) mastery of three subjects which the candidate later expects to teach; (c) professional training intimately related to knowledge of subject matter. The principal effect of a liberal education is the integration of personality. The general conditions and environment of teachers should be made as favorable as possible; in organization of the institution, methodology, and equipment.

802. **Frederick, Robert.** Place of history of education in the training of high-school teachers. Liberty, Mo., William Jewell college, 1927. 6 p. ms.

A personal letter was sent to the heads of schools or departments of education in 25 leading colleges and universities, resulting in 18 replies to six questions. The findings are: (1) There is a wide difference of opinion regarding the place of the subject *history of education*. (2) The subject should not be a required course for a B. S. in education degree, and it is doubtful whether it should be required for the Ph. D. degree in education. (3) Courses in principles or philosophy might well be substituted for the history course rather than for the general introductory course.

803. **French, Lloyd O.** The Pennsylvania teacher-rating plan. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

804. **Garrison, Noble Lee.** Status and work of the training supervisor. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 98 p.

Data for this study were secured from hundreds of instructors and officials in 55 teachers colleges. It was found that the college work and the training-school work parallel each other, but are not coordinated and interpreted so that the college student understands each in terms of the other. This "double track" system should be eliminated by cooperative efforts. A professional outlook and attitude, despite discouragement, ensures a high type of cooperation on the part of the training supervisor.

805. **Geyer, Denton L.** The intelligence of prospective teachers. Chicago, Ill., Bureau of experimental education, Chicago normal college, 1927.

Deals with comparative scores of teachers in training, as a group and by courses selected; reliability and validity of five intelligence tests. About 2,000 cases.

806. **Guthrie, Raymond Gillette.** Student reactions to an introductory course in education, with some suggestions as to content and procedure for such a course. Master's thesis, 1927. Ohio state university, Columbus.

807. **Haggerty, M. E.** The professional training of college teachers. North central association quarterly, 2: 108-23, June, 1927.

A study of the proposal to require professional training for instructors teaching the first and second year's work in colleges and universities, and to ascertain the attitude of the members of the North central association regarding the requirement of educational qualifications for college and university teachers. It finds that improvement of college education would be retarded rather than promoted by the enactment at this time of a rule requiring professional training of instructors in the first and second years of college and university work.

808. **Hamrin, Shirley Austin.** A comparative study of the ratings of teachers in training and in service. Master's thesis, March, 1927. School of education, University of Chicago, Chicago, Ill. v, 107 p.

Comprises a comparative study of the ratings received by 108 student teachers in training, and the ratings which they received subsequently in service. Determines the relationship between the I Q's of the subjects and their ratings in both training and service. Finds that as a group, the supervisors rated the student teachers lower than did the superintendents. Regular grade supervisors rated the students lower than did the supervisors of special subjects. Neither scores made on the Army alpha intelligence test nor school marks were a guide as to the success of a teacher, as measured by superintendent's ratings. There was a higher relationship between supervisors' ratings and both intelligence scores and school marks than between these measures and the superintendents' ratings. The ratings of supervisors conformed more nearly to other so-called objective measures than did those of the superintendents. There was a marked tendency on the part of the superintendents to rate a teacher high or low on the basis of 'personal characteristics,' while the supervisors laid more stress on 'teaching technique.'

809. **Hebeler, Amanda.** Student teaching in an affiliated public-school center. Ellensburg, Washington state normal school, 1927. 76 p.

A descriptive plan of cooperative procedure in training student teachers at Selah training center. Many features of a manual for student teachers are included. Possibilities in the use of varied teaching facilities are shown; also the advantages of giving students training under conditions which are typical of school conditions throughout the state. Detailed problems for use are presented.

810. **Hill, Clyde Milton.** A decade of progress in teacher training. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 219 p.

Discusses administrative modifications in Missouri teachers colleges since the Carnegie survey of normal schools in Missouri. Makes comparisons and suggestions for further improvement. Student and teacher personnel, curricula, and relationship among state educational institutions are also discussed.

811. **Hinkle, Marian.** Use of government publications for four departments in teachers college. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

812. **Holton, Edwin Lee.** A study of the professional training of teachers of vocational agriculture. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. Washington, D. C., Federal board for vocational education, 1927.

A questionnaire was filled out by 663 teachers of vocational agriculture. A careful study of the teacher training curricula in all the land-grant colleges and all other available studies bearing upon the problem was made.

813. **Howard, Eleanor.** Activities performed by teachers in service toward professional improvement. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. 153 p. ms.

Attempts to develop a technique for determining the activities of teachers in service relative to professional advancement. Secures data from professional literature, from data blanks filled out by summer-school students, and from check lists presented to teachers for the addition of new activities. Determines frequency of performances by having the activities checked by experienced teachers. The technique developed in connection with this study may be used by other investigators in making similar studies. The list of activities derived may be used by teachers in training for their personal and professional advancement; by teachers in service in planning their programs and in discovering new ways of improving themselves; by faculties engaged in the training of teachers in discovering phases of their curriculum that need to be emphasized or reconstructed; and by administrators in advising and supervising their teachers.

814. **Inman, James Henry.** A study of the training of high-school teachers in Iowa colleges in relation to the subjects they teach. Doctor's thesis, 1927. State university of Iowa, College of education, Iowa City.

Purpose of the study is to find out the relationships between the subjects studied during the undergraduate period of college training of high-school teachers and the subjects they later actually teach. Method of study was by questionnaire, with 1,048 responses with complete usable data, from high-school teachers who were graduates from 11 Iowa colleges since 1921. It was found: (1) There is a wide variation in training, even within major subjects. (2) Readjustment in training is urgent in about 70 per cent of all cases. (3) For the first two years of teaching, the most frequent number of different subjects taught was four, but more than a third of the teachers taught five or more subjects during the two years. (4) The proportion of professional and academic subjects for which a need was felt in teaching is about the same, in the judgment of the teachers.

815. **Jarrett, B. P.** Psychology and tests and measurements in some degree-granting state normal schools and teachers colleges in the United States. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

Finds that many teachers of psychology and tests and measurements in degree-granting state normal schools and teachers colleges are not adequately trained. The number of course titles carried by the various catalogues does not seem justified by analysis of courses.

816. **Kay, Roy Ray.** A comparative study of training, experience, teaching load and other factors of instructors in colleges of education connected with universities. Master's thesis, August, 1927. University of Colorado, Boulder.

Gives presentation and analysis of data obtained by author from questionnaires sent to professors, associates, assistants, and instructors of 60 universities, distributed over 40 states throughout the United States. Shows: (1) High percentage of professors holding degrees; (2) wide and varied professional training; (3) no uniformity in teaching load; (4) clerical assistance is general practice.

817. **Linstad, Lina Louise.** A curriculum for a normal training course in high schools. Master's thesis, 1927. Stanford university, Stanford University, Calif.

818. **Linton, Clarence.** A study of some problems in the admission of students as candidates for professional degrees in education. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, Bureau of publications, 1927.

The purpose of this study was: (1) To state the major problems arising in the admission of students as candidates for professional degrees in education; (2) to present the more significant data obtained from a survey of current practice in admitting students to work in education in institutions authorized to grant degrees; (3) to indicate the need of definite educational principles as a basis for policies governing the admission of students to professional work in education; (4) to make recommendations relative to the procedure of officials responsible for the admission of students to professional work in education. The findings are based on returns from a questionnaire sent to 685 schools having education courses.

819. **Ludeman, W. W.** Flexible requirements for practice teachers. *Peabody journal of education*, 5: 18-21, July, 1927.

A study of systems of finishing practice teachers, which finds that practice teachers do not put in the same amounts of time, but finish work when a certain standard is reached.

820. **MacDonald, Marion E.** A catalogue study of courses in psychology in state normal schools and teachers colleges. *Educational administration and supervision*, 13: 272-82, April, 1927.

There are 155 institutions included in this study. Practically all offer courses in educational or general psychology, or both. At least one course in psychology is offered during the first year in every school studied.

821. **McMullen, Lynn Banks.** The service load in teacher-training institutions of the United States. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Bureau of publications, 1927. 97 p. (Teachers college, Columbia university. Contributions to education, no. 244.)

The topics studied are: (a) How teachers college teachers spend their time: (1) Class work; (2) preparation; (3) routine work; (4) student relations; (5) the service load; (6) outside activities for which pay is not received from the institution. (b) Summaries and conclusions. One thousand nine hundred and fifty-six teachers cooperated in the investigation.

822. **Martin, J. O.** Varying types of service rendered by Georgia teachers. Master's thesis, 1926. Atlanta, Ga., State department of education, 1926. 45 p.

* Makes recommendations for the training of teachers in service which the author finds necessary.

823. **Middlebrooks, Acton Elijah.** The development and present status of teacher training in the Methodist Episcopal Church, South. Master's thesis, 1927. Northwestern university, Evanston, Ill.

824. **Monroe, Walter S.** The undergraduate curriculum in education. *School and society*, 24: 177-81, August 7, 1926.

825. **Noble, M. C. S., jr.** The relationship between area of source of supply from high schools and area of beginning service from the teaching profession. Raleigh, N. C., State department of public instruction [n. d.] 25 p. ms.

Traces the prospective student from high school into college and from college into the first years of the teaching profession. Study is based on certificates issued to 774 prospective teachers in 1924-25.

826. ———. Specific preparation for elementary school teachers in North Carolina as revealed by transcripts presented in application for primary and grammar grade Class A teachers' certificates. Raleigh, N. C., State department of public instruction. 35 p. ms.

A detailed analysis of the academic and professional preparation provided for Class A teachers in the elementary schools. Shows amount of guidance rendered by institutions of higher learning in North Carolina. Also shows need for specific preparation.

827. **Noble, Stuart G., and Roy, V. L.** The personnel, preparation, and programs of the high-school teaching staff of Louisiana. Baton Rouge, Louisiana state department of education, 1926. 58 p. (State department of education pamphlet no. 14, December, 1926.)

Part I reports the number of teachers in Louisiana high schools, grouped according to size and the place and extent of their training. Part II reports the extent to which teachers are teaching the particular subject for which they are trained and the range and type of number combinations.

828. **Pressey, S. L.** Concerning professional training for college teachers. In *Research adventures in university teaching*. Bloomington, Ill., Public school publishing company, 1927. p. 140-47.

Results of a questionnaire addressed to members of the American psychological association concerning activities of its members, and data from the Association yearbook. The study deals with certain possible criticisms of, and improvements in, the program of work for the doctor's degree. The majority would favor some specific training with reference to college teaching problems.

829. **Furl, Annie L.** The professional preparation of teachers of spelling in our public schools. Master's thesis, 1927. Colorado state teachers college, Greeley.

Finds that teacher-training institutions should provide more extensive courses bearing upon the teaching of spelling.

830. **Reynolds, Nora.** The training of Iowa teachers for health and physical education. Des Moines, Iowa state teachers association, 1927. 8 p. (Iowa state teachers association. Bulletin no. 3, November, 1927.)

Report of the committee for the study of health problems, with an introduction by the chairman of the committee, Edith Countryman. A survey of what Iowa is doing at present to prepare teachers to carry out the provisions of the physical education law.

831. **Robinson, James Russell.** Educational records. - Doctor's thesis, 1927. George Peabody college for teachers, Nashville, Tenn. 110 p.

Handles the subject under the following topics: (a) instructional records needed by the teacher-training institution; (b) instructional records of the teacher-training institutions that are needed by other educational agencies; (c) instructional records of the teacher-training institutions that are needed by employers; (d) records needed for educational research.

832. **Seltz, C. C.** The achievement in the State normal school at Towson, Md., by graduates of secondary academic and commercial courses. Master's thesis, 1927. Johns Hopkins university, Baltimore, Md.

833. **Shannon, John Raymond.** Personal and social traits requisite for high-grade teaching in secondary schools. Doctor's thesis, October, 1927. Indiana university, Bloomington. 164 p. ms.

834. **Shedd, C. L.** The type of student interested in teaching. Master's thesis, 1927. University of South Dakota, Vermillion. 42 p. ms.

835. **Snyder, Agnes.** The value of certain measurements in the training of teachers (experimentally determined). Doctor's thesis, 1927. Johns Hopkins university, Baltimore, Md.

836. **Spears, Mary Chapman.** Scholarship as a factor in the success of young teachers. Master's thesis, 1927. University of Texas, Austin.

837. **Steele, Robert McCurdy.** A study of teacher-training in Vermont. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1926. 111 p. (Teachers college, Columbia university. Contributions to education, no. 243.)

Deals with preparation of teachers for general positions in high schools and graded elementary schools, including rural schools. Administrative phases and instructional and curricular phases are treated only in their bearing on administration.

838. **Stone, Theodore.** The professionalizing of subjects for teaching. Master's thesis, 1927. Ohio state university, Columbus.

839. **Stuart, Hugh.** The training of modern foreign-language teachers for the secondary schools of the United States. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927.

This study, which is but part of a larger investigation concerning the status of modern languages, is an attempt to ascertain the present facts regarding the amount and kind of training given to prospective teachers of French, German, Italian, and Spanish in American secondary schools.

840. **Uhler, Joseph M.** A partial analysis of the duties of the critic teacher. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

841. **Van de Voort, Alica.** The teaching of natural science in normal schools and teachers colleges. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Columbia university, 1927.

This study was undertaken primarily to determine, as far as possible, the adequacy of the training of teachers of science for the work placed upon them; to analyze the science curricula offered in normal schools and teachers colleges, with suggestions for modifying curricula for training of science teachers. It is found that teachers of science are not adequately prepared. Specialization does not prepare for teaching a variety of subject combinations. The general qualifications for the science teacher should include the pursuit of courses of collegiate rank over a period sufficiently extensive to give a wealth of scientific knowledge organized and adapted for teaching purposes.

842. **Wickersham, Florence Belle.** Some principles of learning and teaching applied to the supervising of student teaching. Master's thesis, 1927. University of Wisconsin, Madison.

843. **Wist, Benjamin O.** A study of teacher-training control throughout the United States, with some recommendations for a modification in the system of control in the Hawaiian Islands. Master's thesis, 1927. University of Hawaii, Honolulu. 128 p. ms.

Finds that the most objectionable feature of Hawaii's plan for the control of teacher training is the lack of direct coordination with the university.

844. **Wray, Orion D.** Analysis of scholastic work in Arkansas teachers college. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn. 73 p. ms.

Surveys the scholastic work of all students in Arkansas teachers college for the regular year 1924-25. Finds that membership in any student group is no indication as to the scholastic work of particular students.

845. **Yevell, Gladstone H.** The special work and the office of the state director of teacher training. Doctor's thesis, 1927. University of Cincinnati, Cincinnati, Ohio.

Presents the work of the 10 state directors, their experience, scholastic preparation, etc.

See also items 17, 47, 56, 73, 153, 233, 253, 255, 324, 383, 454, 514, 669, 880, 885, 1088, 1095, 1100, 1116, 1164, 1165, 1189, 1213, 1217, 1263, 1350, 1351, 1361, 1366, 1369, 1387, 1390, 1434, 1438, 1510, 1519.

TEACHERS' SALARIES AND PROFESSIONAL STATUS

846. **Anderson, Earl William.** The teacher's contract and other legal phases of teacher status. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 180 p. (Teachers college, Columbia university. Contributions to education, no. 246.)

Topics treated are: (1) A discovery of local legal restrictions and regulations affecting teachers; (2) a survey of the field of state control of teachers; (3) a determination of the limits of board control over teachers by contract; (4) a suggested optimum legal board-teacher relationship in the local situation.

847. **Bolton, Frederick E.** Preparation, supply, and demand for teachers in the Northwest. Committee report to Northwestern association of secondary and higher schools. 1927. 20 p. ms.

Concludes that more accurate statistics must be assembled by state departments before any reliable data can be secured.

848. **Brandenburg, G. C., and Remmers, H. H.** Purdue rating scale for instructors. Educational administration and supervision, 13:399-406, 519-27, September, November, 1927.

Investigates the validity and reliability of students' judgments of instructors. Finds that judgments when based on reactions of 90 or more students are valid and reliable when such judgments refer to the specific traits considered.

849. **Butler, Eugene Bogue.** The professional status of city and town superintendents and county superintendents in Indiana as of December 1, 1923. Master's thesis, 1927. Indiana university, Bloomington. 87 p. ms.

850. **Carr, John Winder.** Factors affecting distribution of trained teachers among the rural white elementary schools of North Carolina. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1927. 91 p. (Teachers college, Columbia university. Contributions to education, no. 269.)

One purpose of the study was to find significant conditions surrounding schools which cause some of them to have teachers with a large amount of training and others to have teachers with a relatively small amount of training. A second purpose was to apply the findings of the study to the solution of several problems in the field of state school administration.

851. **Coates, J. P.** A study of state organizations of teachers. Master's thesis. University of South Carolina, Columbia.

Topics: reasons for state organizations of teachers, organization, membership, etc.

852. **Conners, F. Herrick.** The substitute teacher service in the public schools. Doctor's thesis, 1927. Ohio state university, Columbus. 463 p. ms.

This investigation covers substitute service in the principal cities of the United States, with a representative showing for smaller communities. Reports were secured from administrators, teachers for whom substituting was done, and the substitute teachers themselves. It is found that to have permanent substitutes in a variable ratio depending upon size of city seems feasible and advisable in larger communities. Administrative practices in many respects can be greatly improved in most places.

853. **Cooper, Lewis B., and Pittenger, B. F.** Teachers of social science in the Texas high school. School review, 35: 59-66, January, 1927.

An investigation of status of 1,266 social science teachers in 614 Texas high schools. It includes tables prepared on attendance at higher institutions, degrees held, subject combinations required, teaching load, tenure, and teaching experience.

854 **Garner, Robert Jewel.** Teachers' placement committee, institutional and commercial, from the standpoint of the teaching profession. Master's thesis, 1927. University of Texas, Austin.

Investigation of the history and policies of placement agencies.

855. **Granrud, John.** The organization and objectives of state teachers associations. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city. Teachers college, Columbia university, 1926. 71 p. (Teachers college, Columbia university. Contributions to education, no. 234.)

An analysis of the functions and objectives of state teachers associations, and a survey of the organization, methods, and objectives by which they are attempting to achieve these functions and objectives. It finds that association objectives must be more clearly defined. Each association should critically determine the fields in which it can render the greatest service, and then plan specific steps which must be taken in order that improvement may be made. Centralization of control is a necessity.

856. **Guthrie, E. E.** Measuring student opinion of teachers. School and society, 25: 175-76, February 5, 1927.

Eight hundred students gave judgments on over 100 teachers at the University of Washington. Considerable agreement among students was found regarding ability of their teachers; and student opinions comparatively stable from year to year.

857. **Hamilton, Otto Templer.** The courts and the curriculum. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 168 p. (Teachers college, Columbia university. Contributions to education, no. 250.)

This compiled digest of court decisions affecting subject matter taught in public schools is apparently the first work of its kind. By giving court interpretations of statutes, the courts are shown to operate coordinately with legislatures and local authorities in affecting public-school curricula. It is a source of information concerning the position of the courts upon particular curriculum issues, as well as the revelation of some legal principles governing such issues. Some of the issues involved in these decisions are: Scope of the curricula; state and local control; exclusion of certain subjects, such as the Bible, various languages, etc.; and textbook adoption.

858. **Hearn, Rebecca.** The history of certification and development of state institutions offering professional courses for teachers. Atlanta, Georgia state department of education, 1927. 36 p.

Gives history of certification in Georgia, with requirements for, and regulations concerning the use of, certificates, with additional information of interest concerning certification in the state; also reviews of the legislative enactments on the subject.

Author finds three periods are evident in the history of the state: (a) In 1887, laws were significant in marking a step toward securing uniformity in licensing teachers, and establishing standards; (b) complete revision in 1911-12; (c) in 1922, increased emphasis on professional training is evident.

859. **Hendrickson, Gordon.** Attitudes and interests of teachers and prospective teachers. Doctor's thesis, 1927. University of Cincinnati, Cincinnati, Ohio.

860. **Jewell, J. William.** The certification of teachers. Master's thesis, 1927. University of Kentucky, Lexington.

861. **Kent, F. C.** The contributory plan providing retiring allowances for teachers and college professors. School and society, 25: 810-12, March 21, 1927.

862. **Kidd, Donald M., and Clem, O. M.** Salaries of superintendents of schools and mayors in cities of 100,000 population and over. American school board journal, 13: 49-50; 51-52, September, October, 1926.

Contains data regarding salaries of superintendents; the effect of fiscal independence on salaries of school and city officials; effects of commission and city manager types of city government on salaries of superintendents. Finds that superintendents in cities studied had not received positive increases in salaries.

863. **King, H. B.** What do you want to know about Delaware teachers? Dover, Delaware, State department of education, 1927. 10 p. ms.

Gives facts on the following items: (a) The number of one, two, and three or more teacher schools in Delaware; (b) number, sex, academic and professional training, experience, and salaries of teachers in Delaware.

864. **Kopf, Helen.** Graduates entering teaching profession in 1910-1925. Piqua, Ohio; Bureau of research, 1927.

An investigation of 87 graduates who became teachers in the Piqua public schools (1910-1925). Finds that 46 continued teaching; 21 married; 12 went into other work; 6 were in college; 2 died. Of the 12 entering other work, 4 entered war work.

865. **Laird, Marg Aleda.** A uniform teacher personnel record for the state of Colorado. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Contains: (1) General study of uses of uniform teacher personnel record; (2) analysis of items appearing on application blanks, information forms, and permanent record cards used in different systems throughout the United States; (3) copies and description of personnel record forms proposed by author for use in Colorado.

866. **Lemon, Allan C.** The leave of absence in universities and colleges. Journal of educational research, 16: 210-12, October, 1927.

Deals with present practice in 75 universities and colleges. Finds that 14 out of 75 granted no leave of absence. Eighteen gave no-salary allowance; 43 gave some financial aid. The usual period of absence is one year. The usual salary allowance, if given, is one-half. Leave is generally given for purposes of study or travel, especially if financial aid is granted.

867. **Litchen, Ruth Eleanor.** A survey of teacher appointment bureaus in State universities, land-grant colleges, State teachers colleges, and State normal schools for the year 1925-26. Master's thesis, 1927. University of Kansas, Lawrence.

868. **Minnesota. University.** Scales for the rating of teaching skill. [Minneapolis, Minn., 1927] 28 p. 8°. (Bulletin of University of Minnesota, vol. XXX, no. 12, February 18, 1927. College of education. Educational research bulletin, February, 1927.)

869. **Moshman, Arthur B.** Some considerations in building salary schedules. Journal of educational research, 14: 256-69, November, 1926.

The problem was to determine an index which would furnish a convenient instrument by which a salary schedule might be quickly arranged in any community. Significant trends developed by the data are: (1) The minimum salaries of elementary teachers with two years of training are higher than the wages of unskilled labor, (2) the minimum salaries of teachers with four years of training are higher than the return to skilled labor.

870. **Palmer, Nida Pearl.** A study of pension systems for public-school teachers in the United States. Master's thesis, 1927. University of California, Berkeley.

871. **Paneres, Augustin.** An evaluation of the technique of personal interview in the selection of teachers. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. v, 57 p. ms.

This study comprises an evaluation of the technique of personal interview in the selection of teachers. Compares the method of interview used by schoolmen with that used by business men.

872. **Phillips, Clyde Ulysses.** Experience and training of teachers in the second-class cities of Kansas, 1924-25. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. ix, 103 p. ms.

Comprises a comparative study of the salaries of teachers and executives and of the training and experience of teachers in the second-class cities of Kansas for the year 1924-25.

873. **Samuelson, Agnes.** Tenure, sex, salary, legal qualifications, method of election of county and state superintendents of Iowa. Master's thesis, 1927. State university of Iowa, Iowa City.

874. **Siggins, Margaret E.** Status of teachers in one-teacher schools of California. California state department of education, 1927. 9 p. ms.

Gives the total number of teachers of one-teacher schools in California, where trained, extent of training, and the number attending summer schools. This information is presented by counties and by sections.

875. **South, Winifred May.** State requirements for certification of music supervisors and teachers in the United States of America. Master's thesis, 1927. University of Southern California, Los Angeles.

876. **Stetson, F. L., and Wooten, F. C.,** A study of the social science teachers in Oregon high schools. Educational administration and supervision, 13: 73-84, February, 1927.

Geographical sources of social science teachers, institutional sources, preparation of social science teachers, and combinations of subjects taught are considered. Findings are: (1) Oregon's social science teachers are obtained from a very wide geographical area and from all sized and types of standard colleges and universities. (2) Uniformity in the training of the teachers is not practiced to any appreciable degree. The desirable extent of uniformity varies with the type of high school and the locality served by it. (3) It is next to impossible to advise a prospective teacher as to the most likely subject combinations for which to prepare, because of the great uncertainty as to the requirements of the high schools.

877. **Sullenger, T. Earl.** The utilization of leisure time at the University of Omaha. School and society, 25: 108-10, January 22, 1927.

A questionnaire was sent to grade, high school, and rural teachers to ascertain how they spent their leisure time. It was found that teachers participate to a larger extent at present in the activities and amusements of high-school pupils.

878. **Thompson, Donna F.** Professional solidarity among the teachers of England. New York, Columbia university press, 1927. 338 p.

Gives the history and description of the National union of teachers; causes of formation; early organization; growth; present organization; parliamentary influence; relations with labor organizations; the salary campaign; professional self-government. Finds that professional self-government, coupled with active efforts toward the advancement of the cause of teachers as a whole, have characterized the activities and aims of the National union of teachers.

879. **Tiegs, Ernest Walter.** An evaluation of technique of teacher selection. Doctor's thesis, 1927. University of Minnesota, Minneapolis.

880. **Wilmington college, Wilmington, Ohio.** A question of standards. Wilmington, Ohio, Wilmington college, 1927. 77 p. (Wilmington college bulletin.)

A statement of standards for high schools, teacher-training institutions, colleges and universities, and the various grades of teachers' certificates in effect in Ohio.

881. **Wilmington, Del. Public schools.** Teachers' salaries paid in Wilmington and in several other cities. Wilmington, Del., 1927. 15 p. ms.

Finds that Wilmington's salaries are lower than in most cities of equal size.
See also items 1, 38, 41, 43, 71, 182, 286, 1036, 1214, 1223, 1388, 1382, 1402, 1512, 1530, 1533.

HIGHER EDUCATION

882. **Akers, Lewis B.** Brief study of the American liberal arts college. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

883. **American association of collegiate registrars.** Degrees conferred by institutions of higher education in the United States and Canada, July 1, 1925, to June 30, 1926. Baltimore, Md., Johns Hopkins press, 1927. (American association of collegiate registrars bulletin, 2: 303-18, January, 1927.)

This study gives statistics concerning higher degrees granted in courses with the purpose, first, of showing the spread of institutional practice in designating academic degrees, and, second, to make available certain data not otherwise collectively published with regard to North American institutions of higher education. A report is also made on uniform enrollment terminology.

884. Bertine, Florence M. Means of predicting success in college first-year language work. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

885. Betts, George H. College students' reaction to education courses. *School and society*, 25: 494-96, April 23, 1927.

Courses and instructors in Northwestern university school of education were evaluated by students. Students regard educational courses above average in interest and as difficult as the average of other college courses. The students' estimates of school of education teachers were very favorable.

886. Bohannon, Charles D. The present status of attempts at improvement of instruction in land-grant colleges. State College, New Mex., New Mexico state college of agriculture and mechanic arts, 1927. - 68 p. ms.

Study based on the replies to a questionnaire of 45 land-grant colleges and a small number of other institutions. In only two institutions, the universities of Maine and Tennessee, were there found fixed requirements for work in education for college professors, but there is a movement in the direction of at least minimum requirements. Very few land-grant colleges have any specific requirements of teaching experience as a qualification for college teaching positions. Teaching experience both in high school and college is especially desirable for efficiency in teaching freshman and sophomore classes. Supervision of instruction in land-grant colleges is largely of an incidental nature. Some think that supervision would help; others are skeptical of its value. The writer lists 11 problems on which research is needed, having to do with the student body, the teaching personnel, technique of instruction, curriculum construction, the length and use of the class period, the most efficient arrangement of recitation rooms, laboratories, and library facilities. Colleges are entering upon what promises to be a new era in college work from the standpoint of attention to teaching technique, due to the consciousness of the need for improving instruction.

887. Booker, Ivan Albert. A study of the records of certain students of the University of Chicago who have attained eminence in life. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. viii, 125 p. ms.

Reports the results of a study of the scholastic records of 1,055 former students of the University of Chicago who have attained eminence in life. Eminence was determined by the names appearing in *Who's Who in America* for the year 1926-27. The results show that there is a definite relation between college marks and eminence. One-third of the individuals included in this study received one or more honors while in school. The relationship is closer among students who are candidates for the higher degrees than among those who are pursuing the regular academic courses. College marks are most prophetic of success in the teaching profession. There is a large predominance of men as compared with the number of women in this group. Eminent men and women obtain the master's degree or the doctor's degree at approximately the same age. The age of attaining eminence appears to be influenced by the kind of degree which the individual obtains and by the type of work which is chosen.

888. Bratcher, Emmett E. A comparative study of the college records of students from the three accredited classes of Kentucky schools. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

889. Brigham, Carl C. A study of men from certain preparatory schools in the Princeton classes of 1923, 1924, 1925, 1926, 1927, and 1928. Princeton, N. J., Princeton university, 1926. - 37 p. ms.

Statistical and explanatory data showing the academic standing of men from five private academies in the Princeton classes of 1923, 1924, 1925, 1926, 1927, 1928. Study shows a higher proportion of men dropped from private academies than from public high schools. The difference is not so great if allowance is made for the greater proportion of men from private academies. Princeton selects only one in five from public high schools. The reason does not lie in the direction of greater potential ability in this group. "A more fruitful field of speculation as to cause would seem to be that of attitude, or motivation."

890. Caldwell, V. V. Results of teaching college students how to study. Master's thesis, 1927. University of Idaho, Moscow. 90 p. ms.

891. Chasse, L. J. A study of student loans and their relation to higher educational finance. New York, Harmon foundation, Inc., 1926. 170 p.

Financial development of higher education; sources of educational income; allocation of higher educational costs; the student as a financial risk; financing the student; administration of student loans.

892. Clark, E. L. Family background and college success. *School and society*, 25: 237-38, February 19, 1927.

Seven hundred and forty male students at Northwestern university were examined to determine the relationship of certain easily defined aspects of family background and college success. Results were negative; hence, their practical significance for selection of students is nil.

893. **Oleston, Glen U.** The predictive value of certain measures of ability in college freshmen. *Journal of educational research*, 15: 357-70, May, 1927.

Findings: 1. Reliability coefficients: Thorndike intelligence examination, 0.85; Iowa high school content, 0.95; scholarship, 0.80. 2. Improvement of existing measuring devices may be best attained by establishing greater perfection in form and objectivity of measures.

894. **Creighton, Frances L.** Religious life of to-day in the colleges and universities of South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

895. **Faust, Hugh G.** The development of higher education in Oklahoma. Master's thesis, 1927. University of Chicago, Chicago, Ill.

896. **Frederick, Robert.** The term report as a college teaching device. Liberty, Mo., William Jewell college, 1927. 6 p. ms.

A personal letter sent to 25 professors of education; six questions were answered by 21 men in 16 States. The term report is a valuable teaching tool on the college level. It provides: (a) An agency of individualization; (b) variation on the basis of dominant interest. Finally, it is in accord with the principle that the students learn through their own activity.

897. **Furst, Clyde, and Maslon, Edythe.** Representative colleges in the United States. New York, Carnegie foundation for the advancement of teaching, 1927. 39 p. 1 large table.

Report upon information collected in 1925 and 1926 from colleges comprising the membership of the Association of colleges and secondary schools of the Middle States and Maryland. Report was compiled from answers to 24 questions concerning the first three standards for colleges adopted by the association. The data collected on 22 of the questions are presented and explained by means of tables, charts, and discussion. The complete data are also condensed in a large table. The subjects covered are: Certificate privileges; conditioned and special students; administration of entrance requirements; admission records; articulation with secondary schools; periods per week; length of periods; length of session; vacations; holidays; number and nature of degrees given; equivalence of degrees; residence required; catalogus requirements; students from other institutions; hours required for graduation; requirements concerning quality of work; degrees honoris causa; degrees granted in 1921, 1922, 1923, 1924; increases and decreases in general and particular institutions; number of students related to increase in degrees and proportion of students receiving degrees; number of teachers of various ranks and number of students per teacher related to percentage of students graduated; number of departments; average number of teachers in a department; subjects of departments; suggested curriculum.

898. **Gallup, Ethel Esther.** A personnel study of first-year students in the University of Chicago. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. vi, 62 p. fis.

Comprises a comparative study of the items of information contained on the application blanks for admission to the University of Chicago of two groups of first-year students, the one making the highest record and the other the lowest record, during the session of 1924-25. In most respects the differences between the two groups, as revealed by an analysis of their application blanks, are very slight, and are not enough to explain the failure of one group and the success of the other. The predictive value of the information contained on the application blanks is questionable.

899. **Gorham, Donald Rex.** The interest of college students: Its effect on achievement. Master's thesis, 1927. Colgate university, Hamilton, N. Y.

900. **Gray, William Henry.** A comparative study of the entrance requirements of Canadian and American universities. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. ix, 120 p. ms.

Comprises a comparison and interpretation of the current practices in regard to admission requirements to courses leading to the A. B. degree in universities and colleges of Canada and of the United States. The colleges of both countries require about the same number of entrance units, but the number of prescribed units is considerably higher in Canada than in the United States.

901. **Greene, W. K., and others.** Report of the committee on college-entrance requirements. Association of colleges and secondary schools of the Southern states, 1927. 32 p.

The committee's report is based upon information obtained by means of questionnaires from 106 colleges and universities of the association, from 37 four-year nonmember colleges, and from 516 secondary schools of the association.

902. **Griffin, Helen.** Study of religious opinion and practice in the senior class, Reed college. Bachelor's thesis, 1927. Reed college, Portland, Oreg.

Questionnaire was followed by conferences with individuals; 34 out of total 40 were comprised in final study. Findings: 1. Variety and complexity of responses show the invalidity of "yes" and "no" type of questionnaire. 2. Changes in religious views: (a) Almost universal; (b) general evidence of deepening and humanizing of opinion on religious questions.

903. **Guller, Walter Scribner.** The spelling of college freshmen. Oxford, Ohio, Miami university, 1927. 2 p.

The study was made to discover the extent to which the spelling of college freshmen can be improved by means of a carefully devised plan of diagnostic testing and individualized remedial study. The 77 weakest students in a class of 240 students were selected for improvement. The words selected for mastery were the 3,000 most commonly used words. The group of 77 weakest students improved to the extent that they moved up a 50-point scale, on the average, from 40 points to 47 points.

904. **Harper, W. A.** Participation of alumni in the government of colleges. Elon College, N. C., Elon College, 1927. 51 p. ms.

Questionnaire sent to colleges and universities to determine participation of alumni in government of college. Marked increase in alumni participation in recent years.

905. **Hatt, Elise, and McClusky, F. Dean.** A comparative study of two methods of defining scholastic failure in a university. Lafayette, Ind., Purdue university, 1926. 24 p. (Purdue university studies in higher education, no. 4.)

Treats of scholastic delinquency; voluntary withdrawals; success and failure of delinquent students. Purdue has employed three plans for determining what shall comprise scholastic failure: A faculty committee for scholastic delinquency, a minimum requirement of credit hours per semester, and probation. The probation plan not only possesses the advantages for which it was adopted, but in operation it produces fewer official failures than did the dismissal plan, in spite of a 700 per cent increase in delinquency. However, because of the large number of voluntary withdrawals, which occurred under the operation of the probation plan, it is inferior to the dismissal plan from the standpoint of student survival. In order that mortality from the probation plan should be as low as under the dismissal plan, the number of voluntary withdrawals will have to be reduced. This might be accomplished by advising freshmen placed on probation as to their chances for survival.

906. ———. A study of enrollment. Lafayette, Ind., Purdue university, 1926. 49 p. (Purdue university studies in higher education, no. 2.)

Includes enrollment at Purdue from 1874 to 1927, prediction of enrollment, relation of economic factors to enrollment, bibliography. Growth curve at Purdue during 52 years has been subject to wide fluctuations. Variations in freshmen engineering follow bank clearings index of business. Studies of economic indexes should enable administrative heads of engineering and agriculture to anticipate sudden drops which are liable to occur in their enrollments.

907. **Hochmeister, Fred Charles.** A comparative study of the records made in Indiana university by graduates of eight and nine months' schools of approximately the same size. Master's thesis, 1927. Indiana university, Bloomington. 65 p. ms.

908. **Hopkins, L. B.** Personnel procedure in education. Educational record, 7: 1-96, October, 1926.

Gives observations and conclusions resulting from visits to 14 institutions of higher learning. Author says: "To me it seems obvious that neither in the selective process alone, nor personal service, nor research may we hope to find anything approaching an ultimate solution of all of the problems of the college." Coordination will not of itself solve the problems of the American college, but the discovery of better methods for coordinating the various phases of education will be of great benefit.

900. **Hughes, E. M.** Graduate degrees conferred by colleges and universities accredited by the North central association. North central association quarterly, 1: 421-27, March, 1927.

Study limited to the last five years.

910. **Irvin, Oscar William.** State budget control of state institutions of higher education. Doctor's thesis, 1927. Teachers college, Columbia university; New York, N. Y.

The purpose of this study is to examine the various methods of state budget control of state institutions of higher education from two distinct points of view, involving two sources of data. First a consideration of the most recent laws regarding budgetary procedures in each of the 48 states was made in order to classify types of budgetary procedure according to law. Second, an examination of correspondence with 184 state officials and 138 officials of state higher educational institutions was made in order to determine the practice in any specific type of budgetary procedure.

911. **Klein, Arthur J.** Effect of the junior high school upon college-entrance requirements. North central association quarterly, 1: 288-93, December, 1926.

Questionnaire sent to 744 colleges regarding their entrance requirements especially as related to work done in junior high schools. Returns show that a higher percentage, 9.4 per cent, of colleges with enrollments of less than 700, admit upon the sole basis of 12 units earned in the three-year senior high school than is the case with any of the other classes of institutions for which tabulations are made.

912. **Kramer, Eileen.** A study of the relation between intelligence ratings, scholastic ratings, and vocational choice of college men. Doctor's thesis, 1927. New York university, New York, N. Y.

913. **LaBrant, Lou.** Intelligence rating of high-school pupils and their achievement in college. Master's thesis, 1926. University of Kansas, Lawrence. University of Kansas bulletin of education, 1: 20-23, December, 1926.

Investigation of (1) degree to which intelligence is a factor in the selection of college students in Kansas, (1,078 cases), and (2) degree to which this selection on the basis of intelligence affects achievement of these students in college (88) cases. Findings: Median intelligence test score of those who later went to college was eight points higher than that of those not going to college. Marked positive correlation was found between high intelligence test scores and scholastic success in college. No marked relation was observable between higher intelligence test scores and dropping out. Self-support was more frequent among those of lower intelligence test scores and participation in student activities more frequent among those whose intelligence test scores were high.

914. **Lemon, Allan Clark.** An experimental study of guidance and placement of freshmen in the lowest decile of the Iowa qualifying examination, 1925. Iowa City, State university of Iowa, 1927. 135 p. (University of Iowa studies in education, no. 3.)

This study attempts to formulate a satisfactory policy for a university's treatment of students found mentally and educationally deficient. A controlled experiment, with experimental and control groups of lowest decile freshmen at the University of Iowa, was carried on to determine if these students could be improved as a result of remedial work in reading and personnel guidance, and to develop a technique for the adjustment and proper placement of such students. Findings: Significant improvement can be made by intensive training and individual guidance. The number of students dismissed for low scholarship the first semester was six from the experimental group, and sixteen from the control group. The author offers recommendations and suggestions for further experimental study. Bibliography is appended.

915. **Marshall, Horace Ward.** Causes of elimination of students from Indiana university. Doctor's thesis, October, 1927. Indiana university, Bloomington. 262 p. ms.

916. **Martin, Jerry Walker.** The fee systems of the state higher institutions of learning in the United States. Master's thesis, 1927. University of Texas, Austin.

Data on fees charged in 34 state universities, 75 teachers colleges, and 22 technological colleges in the various states are included in this study.

917. **Mathiasen, Otto Ferdin.** Guidance and placement in university graduate schools of education. Doctor's thesis, 1927. Harvard university, Cambridge, Mass.

918. **Marwell, C. R.** Report of investigation of the methods by which institutions of higher learning adapt their work to the needs of freshmen. North central association quarterly, 2: 307-28, December, 1927.

Study of the technique used in 64 North central institutions of higher learning in adjusting freshmen to their first year's work. The study, which aimed to discover whether or not the technique used in adjusting freshmen might have an influence on success and failure, shows that the institutions in the North central association are attacking the problem of freshmen students by means of the freshmen week, by assigning advisers to freshmen, by sectioning their students on the basis of ability, and by the organization of freshmen courses. Some are giving attention to the selection of the members of the faculty that teach freshmen, to the assignment of heads of departments to freshmen sections, and to the general orientation courses. The study shows that the institutions are conscious of the necessity of organizing their work so that freshman mortality will be reduced.

919. ———. The success of high-school graduates of June, 1924, in their first semester of college work in 1924-25. North central association quarterly, 1: 190-220, September, 1926.

This study includes the records of 89.5 per cent of the graduates of the secondary schools in the North central association of June, 1924, that entered colleges and universities in September, 1924.

920. **Mersereau, Edward Burkhardt.** A study of the relationship of scholastic maturity and scholarship as shown by college marks. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. viii, 115 p. ms.

Reports the results of a comparative study of the scholastic marks received by freshmen, sophomores, juniors, seniors, and graduate students, and the marks which seniors received during their entire college course, to determine the relationship between scholastic maturity and scholarship. Scholarship as shown by college marks increases as scholastic maturity increases. The greatest differences in the increase in scholarship are found between the sophomore and junior classes, and the senior and graduate classes, with minor differences between the freshman and sophomore classes. There is an especially close correlation between the scholarship of the junior and senior classes. The value of marks tends to decrease as maturity increases. The consistency of students; that is, the tendency for the highest and lowest marks to be the same, decreases as maturity increases. The bearing of these conclusions upon the large problem of differentiation of courses would seem to be that, so far as scholarship as shown by marks is concerned, the main differentiation should come at the junior college level.

921. **Minor, J. B.** Scholarship and intelligence. *Personnel journal*, 6: 113-18, August, 1927.

The relation of Army Alpha test scores to student survival was studied in a group of 400 students who entered the College of arts and sciences at the University of Kentucky in 1921 and 1922. Findings: Results show that scholarship in the later years of a college course correlates more than twice as high with first semester's grades as with scores in an intelligence test. The question is left open as to whether it is on the whole desirable to use first semester's scholarship as a forecast of later college success. The solution of the problem of picking college students is still in the hands of research workers.

922. **Minnesota. University. Survey commission.** Report of the Survey commission X. Student aptitude and prediction of student scholarship. Minneapolis, Minn., University of Minnesota, 1927. 20 p. (Bulletin of the University of Minnesota, vol. 30, no. 75, November 8, 1927.)

A study of the selection and the progress of students in the University of Minnesota over a period of 10 years. It deals particularly with methods of predicting the performance of college entrants. The criteria which have been found reliable in predicting college performance are combined ratings based on high-school ranks and ranks in college ability tests. Those with ratings above 75 percentile do satisfactory work. It is much more difficult to predict which individuals will do work of an average of B grade. In 1925-26 a list was drawn up in which the object was to include all those who would secure an average of B. Of the whole group 39 made this record; and of these, 36 were included in the list in advance.

923. **O'Brien, F. P., and Thompson, B. B.** The grades of students from privately endowed and public colleges. *University of Kansas bulletin of education*, 1: 8-12, February, 1927.

A study of university grades with reference to transfer students from other colleges.

924. **Odell, Charles W.** Are college students a select group? Urbana, Ill., Bureau of educational research, University of Illinois, 1927. 45 p. (University of Illinois bulletin, 34, vol. 24, no. 36, May 10, 1927.)

The purpose of this study was to determine whether college students were a select group as compared with all high-school graduates. Findings: There is a small but reliable difference in ability between high-school seniors who plan to attend college and all seniors, the former ranking slightly higher. "A decidedly greater difference exists between those who actually become college freshmen and all high-school graduates." The mean I Q of the former is probably at least five points higher, and the mean average high-school mark about two points higher.

925. ———. Predicting the scholastic success of college freshmen. Urbana, Ill., Bureau of educational research, University of Illinois, 1927. 54 p. (University of Illinois bulletin, 37, vol. 25, no. 2, September 13, 1927.)

A study of 2,000 college freshmen in over 100 different institutions. The correlation found between high school and freshman marks were about the same as those obtained by other investigators, and those between test scores and freshman marks somewhat lower.

926. **Ohio. Joint legislative committee on economy and taxation.** Entrance requirements to state universities and colleges. In Ohio. Joint legislative committee on economy and taxation. Report, 1926. Columbus, Ohio, F. J. Heer printing co., 1926. p. 217-34.

Enrollment of Ohio colleges (1918-1925) is given. From 1900 to 1925 the following percentile increases obtained in Ohio: Population, 52; enrollment in grades, 36; enrollment in high schools, 286; enrollment in colleges, 400.

927. **Piersel, William Guthrie.** Methods of limiting admission to liberal arts colleges. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iv, 78 p. ms.

Comprises an investigation of the current methods of numerical limitation and selective admission employed in liberal arts colleges. Of the 131 colleges and universities included in this study, 53 use no method of limiting admission, 57 have a numerical limit, 78 use some selective admission plan, while 37 use both types of restriction. A freshman or institutional numerical limit should be sufficient in the majority of cases. Practice indicated that limitation on the basis of scholarship is desirable. Probationary measures appear desirable for state universities, which feel it their duty to give all a chance to try college work. Personality inquiries are desirable, and personality rating scales are preferable to character recommendations. Psychological examinations are rarely used in selective admission at the present time. Institutions are not justified in using numerical limitation without selective admission.

928. **Pierson, Celia D., and Nettels, C. H.** A study to determine who shall go to college. Los Angeles, Calif. Los Angeles City school [n. d.]

Undertakes to determine relative value of I Q marks in high school and character rating in prognosticating college success.

929. **Preasey, Sidney Leavitt.** Concerning the burden of detail in certain textbooks. In *Research adventures in university teaching*. Bloomington: Ill., Public-school publishing company, 1927. p. 127-33.

Study based on an analysis of (a) the factual load in a text in English literature; (b) characters in history; (c) The vocabulary burden of a beginning text in zoology. Findings: (1) A total of 2,461 different items were found in a text in English literature: 57 per cent appeared only once, 77 per cent were mentioned in only one chapter, 36 per cent of the dates did not appear in a second text in this subject. (2) An American history text mentioned 283 different persons, the majority of whom received scant consideration. (3) A beginning college text in zoology was found to involve a technical vocabulary at least twice as great as that in a language course.

930. **Reynolds, O. Edgar.** The social and economic status of college students. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

To gain a more intimate knowledge of the liberal arts college undergraduate, a questionnaire was sent to 10 per cent of the colleges and universities in five geographical sections. Data represent 15.66 per cent of the entire enrollment of 55 colleges and universities. Parental income median is \$1,129-2.8 per cent having less than \$1,000 and 8.2 per cent higher than \$10,000. Median women's college, \$5,140. Median men's college, \$4,688. Median state university, \$3,172. Median nongate coeducational university, \$2,903. Forty-five per cent of all students earn no part of their expenses; 13 per cent earn all expenses.

931. **Robart, Carl.** Achievement of graduate students as related to type of undergraduate institution. Master's thesis, School of education, University of Chicago, Chicago, Ill. 90 p. ms.

Graduates of the University of Chicago were compared with graduates of four types of undergraduate institutions as to amount and quality of graduate work in the University of Chicago. University of Chicago graduates do the least graduate study, receive the largest proportion of Ph. D. degrees, and maintain the highest quality of work. The nature of the curricula offered and the rating by the Association of American universities were the criteria used in classifying institutions into types.

932. **Roemer, Joseph.** Freshman failures in Southern colleges. *Peabody journal of education*, 4: 142-51, November, 1926.

Deals with the failures occurring during the first semester in each of the higher institutions of the Association of colleges and secondary schools of the Southern states. Findings: (1) There is a wide range of difference in the proportion of failures occurring in the various southern higher institutions. (2) There is a wide range of difference in the proportion of freshmen failing in the various subjects in any one institution. (3) There is a wide range of difference in the proportion of students that fail in one or more subjects in the various types of higher institutions. (4) The proportion of freshman failures is greater among state universities than among the other four types of higher institutions.

933. **Scates, Douglas Edgar.** Selective admission and selective retention of college students at the University of Chicago. Doctor's thesis, 1926. School of education, University of Chicago, Chicago, Ill. xiv, 383 p. ms.

Comprises a statistical study of the scholastic records of students in high school and in the first year of college, to determine the use colleges can make of these records in the admission and retention of students. There is a correlation of 0.56 between the high-school average and first year of college work. Raising the entrance requirement would eliminate a large body of students who do satisfactory work. Virtually no relation exists between size of high school and first year of college work for North central association high schools. There is a marked relation between first-year average and dismissal, probation, withdrawal in

good standing, average for four years, and graduation. Very few students dismissed and subsequently readmitted do satisfactory work. Students may be readmitted when contributory causes of failures were temporary and have been overcome.

934. **Scheidemann, Norma V.** A comparison of two methods of college instruction. *School and society*, 25: 672-74, June 4, 1927.

This study was undertaken to determine measurable differences of achievement as a result of lecture-conference and "individualized" methods during 1925-26 at the University of Iowa. Conclusions: The two methods of instruction proved equally effective.

935. **Schreurs, Esther Jones.** The relation of certain factors to success achieved in the study of freshman English and mathematics at Northwestern university. Master's thesis, 1927. Northwestern university, Evanston, Ill.

936. **Seashore, Carl E.** Learning and living in college. Iowa City, State university of Iowa, 1927. 124 p. (University of Iowa studies, vol. 2, no. 1, Series on aims and progress of research, March 1, 1927.)

The writer attempts to present a constructive program for collegiate organization and instruction which will lead toward the recognition of the abilities of the individual student. The writer emphasizes such schemes as departmental placement examinations, freshman week, sectioning on the basis of ability, individualized laboratory instruction, and the project method as means of giving recognition to the abilities of individual students. The establishment of the separate junior colleges, organized to serve the specific needs of the community and the division of the college of arts and science into junior and senior divisions, will furnish educational opportunity at the several social and intellectual levels. As an alternative to the present honors courses and honors awards there should be automatic and progressive selection and elimination in every subject so that the earning of honors shall be the cumulative effect of a large number of factors.

937. **Slater, Clarence Paul.** Fundamental principles for purchasing agents of universities. Doctor's thesis, 1927. State university of Iowa, Iowa City.

938. **Somers, Grover T.** Students' attitude toward examinations. Bloomington, Indiana university, 1926. 48 p. (Indiana university school of education bulletin, vol. 3, no. 1.)

An effort to determine objectively the attitude of college students toward examinations and the extent to which the newer type tests offer help in improving these attitudes.

939. **Spence, Ralph B.** The improvement of college marking systems. New York, Teachers college, Columbia university, 1927. 87 p. (Teachers college, Columbia university. Contributions to education, no. 252.)

Review of some of the suggested systems of handling grades and the proposal of a plan for checking and evaluating these and future systems, with applications to concrete data.

940. **Stone, Harry E.** Report of dean of men to president. Morgantown, West Virginia university, 1927. 18 p. ms.

Report on personnel problems with replies to questionnaires from other schools.

941. **Stowe, A. Monroe.** Thesis-response teaching in college. Lynchburg, Va., Randolph-Macon woman's college, 1927. 16 p.

Descriptions of a teaching technique evolved by experimentation in collegiate teaching. Includes thesis-response study assignments, unannounced A-D-U tests and thesis-response examinations. Situations are arranged in which a thesis affords opportunity for disagreement, agreement, or uncertainty. Thesis-response teaching offers an effective technique for attaining many of the objectives of collegiate teaching. Further research offers fruitful returns. Definiteness and motivation of students are afforded by the use of the technique.

942. **Sullivan, Katherine.** Discussion method in a college course. Master's thesis, 1927. Clark university, Worcester, Mass. 120 p. ms.

A study of the amount of discussion, the interest, and attitude of students toward the method. In certain types of courses there is a place for the discussion type of instruction as determined by a study of the students' interests and attitudes.

943. **Thompson, Thomas M.** Correlation of intelligence of college students with scholarship in relation to year in college. Hamilton, N. Y., Colgate university, 1927. 7 p. ms.

Correlations between intelligence and scholarship are computed for the classes of 1926, 1927, 1928, and 1929 at Colgate university for each semester in college. Also the average number of class credits is computed for each quarter section of each class on the basis of intelligence each semester. In relation to intelligence, the first year on the campus is the best year in the quality of work done.

944. **Toops, H. A.** The prediction of scholastic success in college. *School and society*, 25: 265-68, February 26, 1927.

945. **Voas, William Henry.** A study of the prognostic value of the Prévost "X-O" and Colgate mental hygiene tests in predicting scholastic attainment of college students. Master's thesis, 1927. Northwestern university, Evanston, Ill.

946. **Von Borgerströde, Fred Reinhold.** The relation of class size to the effectiveness of university instruction as expressed through a direct measure of student achievement. Doctor's thesis, 1927. University of Minnesota, Minneapolis.

947. **Von Roeder, Herbert Spencer.** The administrative loads of the work of faculty members in state universities. Master's thesis, 1927. University of Texas, Austin.

Compares the teaching loads of instructors in 32 state and 28 other universities.

948. **Walters, Raymond.** Statistics of registration in American universities and colleges in 1926. *School and society*, 25: 25-32, January 8, 1927.

Enrollment is increasing faster than it did immediately after the war.

949. **Whitman, A. D.** The selective value of the examinations of the college-entrance examination board. *School and society*, 25: 522-25, April 30, 1927.

950. **Winter, John E.** The psychology of freshman rules. *School and society*, 25: 323-26, March 12, 1927.

Seventy-five large schools responded to a request for objectives in freshman rules.

951. **Woody, Wilford H.** Influence of intelligence upon scholarship and mortality. Greeley, Colorado state teachers college, 1927. 25 p. ms.

Using the 626-freshmen who took the Thurstone classification test (1926 edition), on September 22, 1927, a complete scholastic and mortality record was kept for the Fall, Winter, and Spring quarters. Findings: 187 students—30 per cent failed to complete three-quarters of work involving an instructional expenditure of \$14,500. (2) Of the 187 who failed to complete three-quarters of the work, 40 per cent were in the lowest fifth of intelligence; 65 per cent—lower half; 13 per cent (24 in number)—upper fifth. (3) Of the three-quarters—more students were dropped during the Spring quarter than for either of the other two quarters. (4) Distributions of scholastic ratings by deciles according to intelligence show the intelligence scores to have a fairly high predictive value, particularly among the low scores.

See also items 14, 24, 33, 40, 49, 61, 66, 74, 190, 194, 197, 210, 262, 268, 300, 366, 382, 522, 523, 530, 561, 578, 592, 721, 733, 790, 807, 816, 828, 866, 867, 971, 1156, 1190, 1192, 1268, 1289, 1290, 1309, 1359, 1362, 1413, 1415, 1416, 1421, 1436, 1442, 1462, 1489, 1491-1492, 1504, 1540.

SCHOOL ADMINISTRATION

952. **American educational digest.** Selecting superintendents and principals. *American educational digest*, 46: 245-47, February, 1927.

Reports from 971 superintendents and officers of school boards on methods of selecting superintendents and principals. Some of the methods employed are undesirable, but boards of education are exercising more care than formerly.

953. **Archibald, Mary Catherine.** A uniform school register, for the state of Colorado. Master's thesis, 1927. University of Colorado, Boulder.

The study includes (1) general study of value of a uniform school register; (2) evaluation of items listed on 29 state and 13 city registers according to frequency of occurrence, use value to teachers, school administrators, and outside agencies; (3) detailed description and copy of uniform register proposed by author for state of Colorado and recommendations for its administration. Tables.

954. **Baker, Barney K.** Correlation of city superintendent's authority with training and experience, tenure and size of city. *American school board journal*, 74: 46, 157, 158, 160, June, 1927.

Investigation of small city school systems of Kansas, Missouri, Nebraska, and Oklahoma to determine relationship between superintendents' authority, training and experience. Factors other than training and experience and size of city exert considerable influence on the amount of authority allowed the superintendents of schools in the smaller cities of Kansas, Missouri, Nebraska, and Oklahoma.

955. **Bell, Requa W.** A job analysis of superintending in North central association. Master's thesis, 1926. Graduate school, University of Oklahoma, Norman. 58 p.

A study of the North central association high schools.

956. **Bender, John Frederick.** The functions of courts in enforcing school-attendance laws. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. - 187 p. (Teachers college, Columbia university. Contributions to education, no. 262.)

The purpose of this study is to discover what the courts do and why, and to suggest such improvements as will secure a higher degree of prompt and regular attendance. Forty-seven items are listed under "the findings and their application."

957. **Broady, Knute O.** The influence of the Federal courts of the United States on education. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. 108 p. ms.

Comprises an analytical study of the decisions of the federal courts of the United States relative to education. Traces the influence of these courts on education in general.

958. **Carmichael, Hobart Vermer.** Judicial decisions relating to legal liability of school boards in the United States. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iii, 94 p. ms.

Comprises an analytical study of the judicial decisions in the United States pertaining to the liability of school boards and school-board members. A school board is not liable for injuries incurred on school premises; for injuries to employees; for negligence of its employees, resulting in injuries to passers-by; for contracts with school-board members; and contracts entered into according to law. Members of the board are not personally liable for breach of teachers' contracts; for funds spent in excess of the debt limit; for libel, unless statements were wanton and malicious. The board is not liable for damages when pupils are expelled for such reasons as improper conduct outside of school, refusal to be vaccinated, failure to take part in opening exercises, and violation of rules relating to absence and tardiness.

959. **Cato, Austin Greene.** Centralization of school administration in Indiana. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. ii, 197 p. ms.

Traces the development of the school system of Indiana in an effort to discover and interpret the tendencies to concentrate the management of public education in the hands of a single individual or a single board.

960. **Collins, Leonard Franklin.** The professional functions of a city superintendent of schools. Master's thesis, 1926. University of California, Berkeley.

961. **Counts, George S.** The social composition of boards of education. Chicago, Ill., University of Chicago, 1927. 100 p.

Confined to boards that control public education in the United States. The typical city board of education is composed of six members, one a woman who follows the occupation of housewife. Of the five men, one is a merchant, manufacturer, or business executive, and one a salesman, clerk, or laborer. The typical State-board of education is composed of seven members. One is a woman (housewife). Of the six men, one is State superintendent of public instruction, one is Secretary of State, one a superintendent of schools, one a university president, one a lawyer, and one either a merchant or banker. The typical county board is composed of six members. One is a woman (housewife). Of the five men, three are farmers, one a merchant, one a physician. The typical State college or university board is composed of 10 members. One is a woman (housewife). Of the nine men, one is a State superintendent of public instruction, three are lawyers, one is a merchant, one a banker, one a farmer, one a manufacturer, and one a physician.

962. **Duker, Chancey M.** School law of Illinois as found by a survey of the supreme court decisions. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iii, 129 p. ms.

Comprises an analytical study of the school law in Illinois as expressed by the supreme court decisions of that state.

963. **Eginton, Daniel P.** A proposed system of census reporting for Colorado. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Presents: (1) A critical study of present conditions of census reporting in Colorado; (2) detailed descriptions and copies of census reporting forms proposed by the author for use in Colorado with directions for their installation and use.

964. **Engelhardt, N. L.** Property management in local school systems. Teachers college record, 28: 481-503, January, 1927.

The following topics are considered: Property values, classification of school property, responsibilities for management, property standards, standards for classroom equipment, use of school property, maintenance and operation programs, etc.

965. **Foots, John M.** School records and reports. Baton Rouge, Louisiana state department of education, 1927. 50 p.

Revisions of records and reports used by parish and state school systems.

966. **Gaiser, Samuel.** Purchase of equipment and supplies. American educational digest, 45: 533-35, 565-66, August, 1926.

967. **Grimm, L. E.** Slants on state's interest in schools. Illinois teacher 16: 2-5, October, 1927.

Shows hopelessness of supporting education adequately by plan of small local units.

968. **Grose, Clarence H.** The form and content of the periodic report of the chief state school official. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

969. **Hart, F. W., and Peterson, L. H.** The business of the board of education as seen by 225 school board members. American school board journal, 74: 38, April, 1927.

Shows distribution of vote of 256 individual members of 95 boards of education upon stated principles of methods of conducting board business.

970. **Henalik, F. E.** Superintendents give information concerning needs. Lincoln, Extension division, University of Nebraska, 1927. (University of Nebraska, Educational research bureau. Bulletin no. 2, p. 3-5.)

Reports the replies of 76 city superintendents and 49 county superintendents with regard to the type of service that can be best rendered by the department of school administration of the State university. The greatest service agreed upon was to serve as a clearing house for the collection, evaluation, and distribution of the best results of educational research in the state.

971. **Huber, Marion H.** The factors affecting the development of school administration at the University of Cincinnati. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 130 p., ms.

972. **Irvin, William Buel.** State boards of education in Texas. Master's thesis, August, 1927. Simmons university, Abilene, Texas. 30 p.

Findings: (1) State board should be appointed by the governor alone; (2) function of state boards should include correlation of higher institutions.

973. **Johnson, Lee E.** Selecting the school superintendent in Texas. Texas state teachers association research bulletin, November, 1927, p. 1-9.

974. **Jones, William E.** The right of school authorities to exercise control over pupils. American school board journal, 74: 47-49, May, 1927.

Cites cases and court decisions regarding control of school authorities over pupils outside of school.

975. **McGee, Ralph Kenneth.** The distribution of the town superintendent's time. Master's thesis, 1927. College of education, University of Colorado, Boulder.

The study includes a brief discussion of the general factors of the problem and the presentation and analysis of data obtained by the author from questionnaires returned from superintendents in 100 towns in Iowa, Nebraska, and Colorado, showing (1) too much time is being spent on teaching and clerical functions and too little on supervision; (2) no relation exists between experience and training and actual and ideal time distribution for teaching and supervision.

976. **Melby, Ernest C.** Rules, regulations, and written instructions as administrative controls. American school board journal, 74: 43-45, May, 1927.

An analysis of rules and regulations in cities of 20,000 population and over.

977. **Merry, Blanche.** Studies in school attendance. Indianapolis, Indiana state department of public instruction, 1927. 31 p. (Indiana state department of public instruction. Bulletin no. 91, 1927.)

978. **Morehart, Grover Cleveland.** The legal status of city school boards. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

The data used in this study were derived from the codes of the 48 states, the several city school surveys, and the researches and writings of experts. Many legal provisions for the control of city school boards are evaluated. Fifteen items are discussed among the "findings and applications."

979. **Morrison, Robert H.** Qualities leading to appointment as school supervisors and administrators. Educational administration and supervision, 12: 505-11, November, 1926.

The study gives the rank, frequency, and percentage distribution of qualities leading to appointment as school supervisor and administrators as listed in 40 interviews with employers of teachers. The first five in order of rank are: Executive ability, leadership, ability to supervise, broad experience and training, and ability to get on with people.

980. **Porter, Frederick W.** A study of the ideal relationships between school boards and superintendents. American school board journal, 74: 49-51, March, 1927.

Opinions of superintendents of schools on the relationships between boards of education and superintendents, based upon a lengthy questionnaire.

981. **Binsch, Emil.** An analysis of 56 city superintendents' annual reports. Master's thesis, 1927. Indiana university, Bloomington. 92 p. ms.

982. **Boudebush, B. E., and Russell, J. O.** The school board and the superintendent. Indianapolis, Indiana state department of public instruction, 1927. 15 p. (Indiana state department of public instruction. Bulletin no. 88.)

Discusses the relationship of superintendent to the school board.

983. **Scott, John W.** A study of the job analysis literature bearing on the function of school administration positions. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio.

984. **Shaw, Frank Leslie.** State school reports. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 142 p. (Teachers college, Columbia university. Contributions to education, no. 242.)

985. **Singleton, Gordon G.** A selected bibliography for superintendents of schools. Atlanta, Georgia state department of education, 1926. 34 p.

986. **Sliger, Ira Taylor.** A study of the work of a superintendent of schools in certain Tennessee communities with a population of 1,000 to 5,000. Master's thesis, 1927. College of education, University of Tennessee, Knoxville. 104 p. ms.

An attempt to find what the superintendents of these schools were actually doing and on the basis of this to recommend what they should do.

987. **Sorensen, Alfred.** The status and function of business managers of city school systems. Master's thesis, 1926. University of California, Berkeley.

988. **Stephenson, Frank Robert.** Constitutional and legal basis of public-school administration in Indiana. Master's thesis, 1927. School of education, University of Chicago, Chicago; Ill. iv, 111 p. ms.

Comprises an analytical study of the school law of Indiana as revealed by the Constitution, the statutes, and the decisions of the supreme and appellate courts.

989. **Tal, S. O.** Objective measures used in determining the efficiency of the administration of schools. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

The purpose of this study is (1) to build up two sets of criteria for the determination of the validity and adequacy of the measures used in rating the efficiency of school administration (2) to discover the measure for most of the important fields of city school administration and to classify them according to the degree of their usefulness in evaluating administrative efficiency. Findings: 1,477 measures were found and classified. The study makes available a classified and evaluated list of the measures developed in the field of measuring the efficiency of school administration. The criteria set up and the classification of measures reached will guide the school administrator in the selection of the more valid and more adequate measures for his use.

990. **Tidwell, Clyde Jesse.** State control of textbooks, with special reference to Florida. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y.

The purpose of this study is to determine the principles which should govern the relationship between the state and the local community with respect to the selection and provision of textbooks in Florida. General provisions which should be included in the proposed textbook law for Florida are suggested in accordance with the criteria proposed and in the light of existing conditions in Florida.

991. **Villar, Felisberto Rosario.** The legal status of the state board of education. Master's thesis. School of education, University of Chicago, Chicago, Ill. 125 p. ms.

A comparative study relating to the organization and personnel of the board; the relation of the board to the chief state school official; and the powers and duties. At the present time there are six states which do not have a state board of education. The author finds that the tendency is toward a state board composed of laymen.

992. **Weaver, Elbert.** The consolidation of city school management. Master's thesis, 1927. Department of education, University of Vermont, Burlington. 110 p. ms. including charts.

A study of a problem before Hartford, Conn., the only city having the district system of schools. "The answer to the thesis question is affirmative: City school districts should be consolidated for purposes of administration."

993. **Wilmington, Del. Public schools.** A study in administration and supervision. Wilmington, 1927. 11 p. ms.

The study tabulates the salaries of teachers in 1925-1927 in 49 cities of over 100,000 population. Wilmington lacks quantity supervision.

994. **Woellner, Robert C.** The liability of school boards in cases of accidents. American school board journal, 74: 49-50, April, 1927.

Cites cases and decisions regarding liability of school boards in cases of accidents.

995. **Wright, C. K.** The administration of public elementary and secondary education in South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

. See also items 7, 12, 22, 32, 39, 72, 107, 242, 634, 663, 674, 695, 725, 746, 778, 852, 937, 947, 1219, 1230, 1231, 1232, 1233, 1234, 1235, 1237, 1332, 1483, 1485, 1487, 1527.

EDUCATIONAL FINANCE

996. **Althaus, Carl B.** The distribution of the tax burden of township and community high schools in Illinois. Doctor's thesis, 1927. University of Chicago, Chicago, Ill. 98 p.

997. **Andres, Edward M., and Tallman, Russell W.** The national forest receipts as a source of school revenue in the United States. Gunnison, Western state college of Colorado, 1927. 15 p. (Western state college bulletin.)

All national forest receipts in the United States with Colorado supplement. It brings to light the importance of the national forest receipts as a source of school revenue. It shows the present practice of dividing these receipts between the road and the school funds and points out the fact that school officials might well concern themselves more with the indirect sources of school revenue than they have in the past.

998. ———. Sources of school revenue in Colorado. Gunnison, Western state college of Colorado, 1926. 6 p. ms. (Western state college bulletin. Mimeographed.)

List of sources of school revenues in Colorado under the subdivisions: Taxes, fines and forfeitures, and other sources. In each case is shown the source by use of the section number in the compiled statutes of Colorado, 1921, the limitation of the tax, or the amount of the fine, and into what fund paid. The study reveals the fact that nearly all of the money collected under fines and forfeitures is paid into the county fund, and that very inadequate reports are being kept of the moneys collected under these different fines.

999. ———. Why registered warrants? Gunnison, Western state college of Colorado, 1926.

This study deals with Colorado. In round numbers \$200,000 are expended annually for interest on registered warrants in the third-class districts of Colorado, with little or no educational returns therefrom. Methods for placing school districts on a cash basis are suggested.

1000. **Austin, Fuller C.** Waste in educational expenditures due to non-attendance. Lincoln, Extension division, University of Nebraska, 1927. p. 30-43. (University of Nebraska. Educational research bureau. Bulletin no. 2.)

A study was made of attendance and school costs of the state in general and of the Gordon school district in particular. It was found that the efficiency of the school dollar was reduced to 87.3 cents, thus indicating a loss to the state of \$2,850,973, or raised per pupil cost of \$11.93, attributable to nonattendance. It is shown that a large proportion of this nonattendance is avoidable.

1001. **Bird, Charles Roy.** Educational finances of Jackson county in North Carolina. Master's thesis, 1927. University of North Carolina, Chapel Hill.

1002. **Branson, Ernest P.** Cost per passing pupil, 1925-26. Long Beach, Calif., City schools, 1927. 1 p. ms.

1003. **California taxpayers' association, Committee of Santa Paula, Calif.** Report of Santa Paula, Calif. An analysis of past growth and expenditures and a projected 10-year financial program, 1927-1937. California taxpayers' association, Los Angeles. Report no. 7; November, 1927. 49 p.

Analyses of growth and expenditures and 10-year financial program include an educational section in 3 parts—elementary, kindergarten, and high school. Specifies school costs, attendance, teachers' salaries, buildings, including percentage distribution of costs of education, costs of high-school instruction by subjects, etc. Recommends economy. Study of data set forth for guidance and improvement.

1004. **California teachers association. Division of research.** The shift in California taxes. Sierra educational news, 23: 218-23, April, 1927.

Traces yearly, for the 10-year period 1916-17 through 1925-26, the percentage of tax load for education borne respectively by state, county, and district; shows type of property taxed in each case; and purposes for which income derived from the various sources is expended. Results of the study show that state funds are derived largely from public service corporations; that county and district funds are derived from the same sources—homes, farms, local businesses, personal property, and the like; that during the 10-year period studied there was a 524 per cent increase in amount of school money supplied by local school districts, a 207 per cent increase in the amount supplied by the counties, and a 222 per cent increase in amount supplied by the state, indicating that an ever-increasing proportion of the school tax burden has been falling upon the property taxed by the state and the counties. The conclusion is reached that there is nothing in the California scheme of taxation which guarantees an automatic adjustment in the rates of taxation on the two types of property, and that there is no justice in maintaining a condition which means greater and greater disqualification in tax burdens.

1005. **Callahan, John.** The financial situation in Wisconsin high-school districts. Madison, Wisconsin department of public instruction, 1926. 87 p.

State-wide study of high-school opportunities, their costs, and their sources of funds. Wisconsin high schools are in a critical condition financially, due to increased enrollments, doubling of building costs, increased instructional costs, decreased state aid, disparity between tuition revenues and costs of instruction, and small taxing unit for high-school support. It was found that the burdens are particularly heavy on the small high schools because of their small enrollments, their inadequate property valuations back of each pupil, and because of the fact that these small schools draw a large percentage of the tuition pupils. It was found that small high schools are most expensive and most poorly supported. The study recommends larger taxing units, more equal distribution of high-school opportunities, more equal high-school opportunities, and new tax sources. It was found that 19.62 per cent of the total area of the state now supports all of Wisconsin's high schools.

1006. **Ching, John Frederick.** Tax exemption as a factor in the problem of school support in the Vallejo school district. Master's thesis, 1927. University of California, Berkeley.

1007. **Clark, Harold F.** The effect of population upon ability to support education. Journal of educational research, 14: 336-39, December, 1926.

A study to determine a means of measuring effect of population on ability to support education. Communities with few adults in comparison to children, are less able than communities with large number of adults to support education. Author works out formulae for measuring how change from standard ratio of adults to children affects ability to support schools. Formula is $\frac{X^2}{4}$ when X equals the ratio of adults to children in community.

1008. ——— and **Royalty, Paul.** When to issue school bonds. Bloomington, School of education, Indiana university, 1926. 16 p. (University of Indiana, School of education. Bulletin, no. 6.)

Investigates the problem of determining the best time to issue school bonds, and finds no very satisfactory answer, other than it seems safe to say that bonds should not be issued from the middle of December to the middle of January.

1009. **Comstock, Ernest Bernard.** An investigation of the financing of the Dallas public schools. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. vi, 132 p. ms.

Comprises a financial study of the public-school system of Dallas, Tex., from the following standpoints: bonded indebtedness, depreciation, annual extension costs, saturation point and terminal costs, school lunch rooms, and resources for school support. Recommends the pay-as-you-go policy; the establishment of a reserve fund to take care of annual extension costs and for the replacement of worn-out buildings; the computation of terminal costs of enterprises already established; putting the lunch rooms on a paying basis; a revaluation of the city property; and an increase in revenue for schools.

1010. **Cross, H. A.** Teacher cost per pupil for subjects taught in Iowa high schools. Master's thesis, 1926. State university of Iowa, Iowa City.

Questionnaire study of valuation and teacher cost per pupil in all Iowa high schools enrolling fewer than 1,000 pupils. Study covers reports received, 1925-26, from 176 high schools.

1011. **Dawson, Heward A.** Standards of expenditures for the principal items of city school costs. Nashville, Tenn., George Peabody college for teachers, 1927. 173 p.

312 cities between 10,000 and 30,000 population are ranked on six measures of efficiency and the upper 50 per cent selected to determine practices in school expenditures. Formulae developed and their application shown.

1012. **Del Manzo, Milton Charles.** Public-school bonding in Iowa. Iowa City, College of education, State university of Iowa. July 15, 1926. 57 p. (State university of Iowa, Studies, 3.)

Bonded indebtedness in Iowa: Social and economic aspects of school bonding; the status of school bonding policies and criteria essential for efficient bonding; how to draft the bonding program. More care must be exercised in planning bond programs. Long-term bonds meet with objections. Serial plan best method. The amount required to house the total school population should be entirely liquidated during the accepted life.

1013. **Engelhardt, Fred.** Fiscal statements showing indebtedness. American school board journal, 73: 54-55, 143, August, 1926.

Shows the need of fiscal statistics regarding debt, relationship between debt plans, and current educational programs, gives case studies.

1014. ———, and **Engelhardt, N. L.** General principles of public-school accounting. Teachers college record, 28: 1,045-55, June, 1927.

Discusses the purpose of accounting in public-school systems, legal restrictions affecting accounting, accounting documents, etc.

1015. ———. Principles governing the indebtedness of local school systems. Teachers college record, 28: 928-48, May, 1927.

1016. ———. Some aspects of budgetary practice in local school systems. Teachers college record, 28: 394-412, December, 1926.

1017. **Findlay, B. A., and others.** The cost of certain school supplies. Los Angeles, Calif., City schools, 1927. 35 p. ms.

1018. **Godbey, J. O.** A comparative study of school support in 41 Missouri cities. (A summary) Master's thesis, 1927. University of Kansas, Lawrence. 2 p.

Based on a personal examination of records of all cities 1,000-7,000 population in Northwest Missouri state teachers college, Maryville, district to ascertain (1) real value of the property in each city, (2) amount of money raised for school purposes for each \$1,000 of real worth, (3) amount raised for each pupil in school attendance. The variations with regard to matters studied are found to be very great. A plan for equalization by state aid is presented.

1019. **Grimm, L. B.** Problem of nonhigh-school district tax rate. Illinois teacher, 15: 127-31, March, 1927.

The author has analyzed the system of financing high-school education of pupils living in territory not a part of four-year high-school districts; has made a statistical and legal survey of conditions in all of the 102 counties of Illinois; has recommended increased tax rates allowed by law. The legislature increased the rates 50 per cent.

1020. ———. A proposed new plan of state aid apportionment (in Illinois). Illinois state teachers association, Springfield, 1927. 15 p.

Exposes weaknesses of present law, and offers constructive suggestions for remedy.

1021. **Grimm, L. R.** Realizing the state's financial responsibility toward common schools. *Illinois teacher*, 16: 2-5; 2, 3, 16; November, December, 1927. The article analyzes sources of school funds in many states, and recommends tax reforms in Illinois.

1022. ———. Report of committee on distribution of state school fund. *Illinois state teachers association*, Springfield. 1927. 39 p.

The study shows the need of equalization of educational opportunities and of economic resources; discusses fundamental principles of state apportionment; suggests radical changes in methods employed. The report was effective; the recommendations are now law.

1023. **Hegel, Newton R.** The administration and collection of nonresident tuition. *American school board journal*, 74: 43-45, April, 1927.

Gives experience of Minneapolis nonresident students from whom tuition is collected; classification of tuition cases; and analysis of various tuition cases.

1024. **Hunter, W. F.** Finances in consolidated schools of Weld county, Colorado. *Educational administration and supervision*, 12: 491-96, October, 1926.

Finds that systems of accounting by consolidated schools are very inadequate. The cost of transportation needs special inquiry.

1025. **Jones, Baker.** The relation of cost to size in California elementary schools. Master's thesis, 1926. University of California, Berkeley.

1026. **Kutz, Russell Merrill.** A plan for the distribution of state and county school funds in Wisconsin. Doctor's thesis, 1927. University of Wisconsin, Madison.

1027. **Liggett, Earle C.** Educational expenditures for general control in the fourth-class school districts. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1028. **McDonald, Ralph W.** Necessity and means for an equitable increase in the proportion of state school aid in North Carolina. Master's thesis, 1927. Duke university, Durham, N. C.

1029. **McElhannon, Joseph Cooper.** The financial condition of public-school systems in certain Texas counties. Doctor's thesis, 1926. University of Chicago, Chicago, Ill.

1030. **Miles, B. E.** State reporting of the financial statistics of public schools in Ohio. Columbus, Ohio institute, 1927. 35 p.

A report on the problem of state reporting of the financial statistics of public schools in Ohio.

1031. **Moshlman, Arthur B.** Public school finance; a discussion of the general principles underlying the organization and administration of the finance activity in public education, together with a practical technique. Chicago, New York, Rand McNally & company [1927] xviii, 508 p. tables, diagrs. forms. 8°.

In view of the pressing difficulties incident to the present financial situation, the author points out the economic factors involved and presents a study of school finance which is free from theoretical accounting and excessive detail. The book recognizes the impossibility of discussing the financial phases of the school apart from the educational policies involved. Thus the legislative, the executive, and the appraisal functions are included.

1032. **Ohio. Joint legislative committee on economy and taxation.** Report of the Joint legislative committee on economy and taxation of the eighty-sixth general assembly, State of Ohio. Columbus, Ohio, Heer printing co., 1926. 270 p.

Chapters 9, 10, 11, 12 of a general study on economy and taxation are devoted to a study of state aid for school districts; which analyzes present system of raising and distributing state funds. Chapter 10 studies plan and effect of school districting. Chapter 11 studies school housing costs, enrollment, adequacy of plants and buildings, and building provisions in other states. Makes no recommendations as yet. Points out inequitable system of distributing state funds, showing effects, and proposes plan for supporting minimum program, state-wide. Advocates minimum county school tax of 5½ mills. If sufficient to support minimum program, no state aid is granted; if not, state aid in amount sufficient to support new program granted. Chapter 10 shows weaknesses of districting plan. Recommends legislation providing optional county school unit by popular referendum; legislation to enable county boards, through county superintendents, to organize the county as city districts are now organized; also recommends certification of administrative and supervisory officers, either by examination or possession of A. M. degree.

1033. **Overn, A. V.** The control of the tax income of school districts in Minnesota. American school board journal, 74: 47-48, April, 1927.

A comparison of the control of the tax income of school districts in Minnesota with that of other states.

1034. ———. A determination of the cost of collecting taxes for schools. American school board journal, 74: 46-47, 158-161, March, 1927.

Much more should be learned about procedures and possible economies before radical changes in state laws may be made with certainty that the best practice is being established.

1035. **Peterson, Elmer Theodore.** A study in the measurement of the ability of South Dakota to support education. Doctor's thesis, 1927. State university of Iowa, Iowa City.

1036. **Pool, R. H.** The cost of secondary education in Pawnee county. (A summary) Master's thesis, 1927. University of Kansas, Lawrence. 5 p.

Three-year financial survey of secondary education in five high schools located in one Kansas county. Teacher salary expenditure in the five districts ranged from 54 to 83 per cent of total current expenses. The mean cost of teaching per clock-hour per pupil was \$0.222, the range being from \$0.149 to \$0.342. The cost per pupil per unit of credit ranged from \$4.35 to \$61.67.

1037. **Rhode Island. Public education service. Commission on survey of school finance and records.** Survey of school finance and records in Rhode Island. Providence, Public education service, State of Rhode Island, 1927. 28 p.

The study aims to obtain more comprehensive information of the practice of school officers in recording transactions and in accounting revenues and expenditures in the several towns and cities, together with such other information as may be pertinent. Recommendations: School finance—Reports: (1) More detailed directions for school officials; (2) minor changes in blanks for reports of school committees; (3) a special blank for the treasurers' reports; (4) enforcement of law requiring reports to be made promptly; (5) closer relation of accounting systems to reports. Town treasurers: (1) Requirement that school accounts be kept by treasurers in a separate book; (2) that all school money pass through the town treasury; (3) requirement that they notify school committees monthly of receipts on account of schools. General: (1) That all school expenditures be made from school funds on the order of the school committee; (2) that school appropriations be voted by town meeting in one general fund, according to the requirements as estimated in the budget of the school committee; (3) early publication of statistical tables in order that they may be available for the school administrators of the state; (4) that poll taxes be collected; (5) that the law requiring fire-proof depositories for town accounts be enforced; (6) that an annual audit of school committee accounts be required; (7) that a uniform system of accounting for school committees be adopted to include an order book, schedule of bills and payroll sheets, cash book, and distribution book. General school accounting: (1) Uniformity in census, physical record, and transfer cards; (2) more adequate filing equipment in superintendants' offices; (3) sufficient clerical assistance for superintendents.

1038. **Korem, Silas Oshile.** A survey of the status of school accounting in 121 cities. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. ix, 115 p. ms.

Comprises a study of the status of school financial accounting in 121 cities of the United States. On basis of the findings, makes recommendations for handling school financial records.

1039. **Sanders, Vernon Taylor.** A study of unit costs in the continuation schools of Chicago. Master's thesis, 1926. University of Chicago, Chicago, Ill. x, 111 p. ms.

Reports the results of a study to determine the unit costs in the Chicago continuation schools. Compares the continuation schools with one another and with junior and senior high schools on the basis of unit expenditures. Since 1919 there has been a large increase in continuation school expenditures. For the years 1924 and 1925 the attendance-hour expenditures for the continuation schools were almost 100 per cent greater than the attendance-hour expenditures for the junior high school, and almost 50 per cent greater than the attendance-hour expenditures for the senior high school. In 1925 the average attendance-hour expenditures for the continuation schools were 19.5 cents, and the range of expenditures for all the schools was from 15.3 to 24.7 cents. Of the total operating expenditures of the continuation schools in 1925, 76.6 per cent went for teachers' salaries. The pupil-hour salary costs for class-teaching varied between schools from 1.3 cents to 14.0 cents. The average for all the continuation schools was 11.4 cents. Music, with an average cost of 5.8 cents, had the lowest pupil-hour salary cost, while stock-keeping had the highest with 29.8 cents. The median of the 58 subject costs was 11.5 cents per pupil hour. The difference in pupil-hour salary costs between subjects within the same school were due to (1) differences in average salaries of teachers, and (2) to variations in size of class.

1040. **Simpson, Alfred Dexter.** Financing education in Connecticut. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 198 p.

A proposed plan to enable the State of Connecticut to meet more adequately its educational responsibility. A plan is submitted for the equalization of opportunity, and one whereby each town in the state will participate in the support of education in proportion to its ability.

1041. **Smith, Harry P.** Financing education in Lawrence. Lawrence, Kans. Public schools. 1927. 31 p.

A comparison of the Lawrence, Kansas, financial situation with comparable cities of Kansas and of other parts of the country, including a discussion of the increased cost of education.

1042. **Smith, J. W.** Survey of the financial status of the St. Paul public schools and public library, with proposed plan for refinancing. St. Paul, Minn. Public schools, 1927. 26 p.

1043. **Stanley, Albert Floyd.** A manual of budgetary procedure for the superintendent, or principals. Master's thesis, 1927. Indiana university, Bloomington. 69 p. ms.

1044. **Tartar, Elmer Elsworth.** Cost of instruction in the accredited white public high schools of Kentucky. Master's thesis, 1927. Indiana university, Bloomington. 81 p. ms.

1045. **Thompson, Roger M.** Cost of elementary education. Hartford, Connecticut State board of education, 1927. (Connecticut State board of education. Bulletin series, 1926-27.)

A study of the increasing expenditures for public elementary education in Connecticut 1914-27.

1046. ———. A critical examination of the present method of apportioning state support in Connecticut. Hartford, Connecticut state board of education, 1927. 19 p. ms.

The purpose of this study is to examine the present plan of apportioning state money to various towns for the support of schools in the light of the criterion developed in the discussion of equalization of educational opportunity.

1047. **Tupper, Charles B.** The problem of the bonded school debt of the state of Arizona. Doctor's thesis, 1927. Stanford university, Stanford University, Calif.

1048. **Vandegrift, Roland A.** Report of Kern county, California ... fiscal year 1925-26. Los Angeles, California taxpayers' association, 1927. 78 p.

Covers expenditures, including educational, for fiscal year ending June 30, 1926. Details of cost, elementary, secondary, and various phases of each. Findings: (1) Small schools most expensive to operate. (2) Kern county spent \$17.10 more per pupil for elementary education than the state average in 1925-26. (3) Teaching load poorly adjusted in some schools. (4) By consolidating the 33 schools, with enrollments below 18 each, a saving of 1.3 per cent of the total cost of elementary education in the county could be made. (5) Recommends contract method for pupil transportation. (6) Recommends that the county support and manage all schools for migratory children. (7) Recommends centralization of school purchases. (8) Recommends further unionization of high schools to reduce great range in per capita teaching costs and to enable superintendents to offer enriched curricula to all secondary pupils.

1049. ———. Report of San, Diego county, California. Los Angeles, California taxpayers association, 1927. 124 p.

An analysis of the expenditures of the county, schools included, for the fiscal year 1925-26.

1050. **Vaughan, T. E.** The recent trend of current expenditures for schools. American school board journal, 73: 45-46, October, 1926.

The study gives data on various items of expenditures, 1910 to 1923. The need of further study of cause of great differences in expenditures among school systems is examined.

1051. **Wiley, Ross Bennett.** Elementary school costs: An analysis and determination of major contributing factors. Doctor's thesis. University of California, Berkeley. 85 p.

Data used are operating expenditures of Los Angeles, California, for 1924-25.

1052. **Wilmington, Del., Public schools.** Budget forecast; a five-year program for the Wilmington public schools. Wilmington, Del., Public schools, 1927. 36 p.

1053. **Wilmington, Del. Public Schools.** Comparative cost of platoon and traditional schools. Wilmington, Del., Public schools, 1927. 7 p. ms.
Shows that the cost remains approximately the same.

1054. ———. Fiscal independence versus financial dependence with reference to boards of public education. Wilmington, Del., Public schools, 1927. 8 p. ms.

1055. **Woods, Roy Cleo.** The financial support of education in a county as affected by the assessment policy and the fluctuation of the dollar. Doctor's thesis, 1927. State university of Iowa, Iowa City.

1056. **Young, Dale S.** Control of available public-school incomes, with special reference to cities of New York state. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

This study embraces an intensive investigation of certain phases of income control in the public-school systems of the cities and larger villages of New York state.

See also items 13, 90, 101, 104, 126, 286, 786, 891, 910, 916, 937, 1457, 1465, 1489, 1497, 1499.

SCHOOL MANAGEMENT

1057. **Bay, James C.** Double promotion: a study of the subsequent scholastic success of three elementary school pupils doubly promoted over a full-year's work. Doctor's thesis, 1927. New York university, New York, N. Y.

1058. **Benson, J. R.** The division of the principal's time. Elementary school journal 27: 94-100, October, 1926.

A check of duties conducted for one month by eight principals of elementary schools in St. Louis. Findings: Two-fifths of the time of these principals was given to administration, one-third to supervision, one-eighth to clerical duties, and one-sixteenth to community relations.

1059. **Benz, Harry Edward.** A proposed technique for the increase of school efficiency. Doctor's thesis, 1927. State university of Iowa, Iowa City.

1060. **Betts, George H.** Teachers' diagnosis of classroom difficulties. Elementary school journal, 27: 600-08, April, 1927.

A study made to inquire into the teacher's interpretation of problems or difficulties most frequently met or found most troublesome in the public-school classroom. Based upon replies from two groups of teachers. The 90 difficulties reported were found to fall into 11 groups and the importance of each of these groups, as judged by the frequency with which they were mentioned, is shown and discussed; the different points on the list are also weighted on the basis of the rankings of the 451 (group b) teachers. The conclusion is reached that this list constitutes the chief difficulties encountered by teachers in the classroom, or at least constitutes something like the least common multiple of classroom difficulties as recognized by the teachers themselves, as evidenced by the fact that the first 100 (a) group teachers mentioned every difficulty reported by the entire group of 256.

1061. **Bird, Charles.** The detection of cheating in objective examinations. School and society, 25: 261-62, February, 26, 1927.

Two hundred and sixty-six students were observed for the purpose of determining cheaters.

1062. **Branson, Ernest P.** Record of acceleration and retardation, grades 1-12. Long Beach, Calif., City schools, 1927. 8 p. ms.

1063. **Christensen, Arnold M.** A suggestion as to correcting guessing in examinations. Journal of educational research, 14: 370-74, December, 1926.

An experimental study to determine if guessing in examinations can be eliminated or corrected, conducted in a ninth-grade civic-science class. Time consumed was over two weeks. Giving a combination of tests, such as described, makes it possible to correct more definitely for guessing and also to increase the reliability and validity of an examination.

1064. **Conrad, Erna Barbara.** The reliability of the time chart in supervision. Doctor's thesis, 1927. University of Wisconsin, Madison.

1065. **Douglass, Earl Roy.** Experimental comparison of the relative effectiveness of two sequences in supervised study. Eugene, University of Oregon, 1927. (University of Oregon education series, vol. 1, no. 4, p. 173-218, December, 1927.)

It can not be said that either a recite-study or a study-recite sequence is more effective than the other in all classes or types of work. The study-recite sequence is more effective in classes in history and social science and in literature than the recite-study sequence. The recite-study sequence is more effective in mathematics and science classes. Neither sequence is peculiarly favorable for more capable or for less capable students.

1066. **Gary, Ind. Public schools.** Promotions and nonpromotions, second semester. Gary, Ind., Public schools, 1927. 61 p. ms.

The study shows the (1) relative amount of failure and promotion in the city as a whole; (2) relative amount of failure and promotion by buildings; (3) relative amount of failure and promotion by grade departments; (4) relative amount of failure and promotion by subject departments; (5) distribution of marks by teachers and by subjects in the seventh and eighth grades; (6) causes of failure as given by teachers; (7) relative failure and promotion of new entrants and transfers in the Gary schools.

1067. **Gill, Bessie.** An experimental study of the comparative value of teacher correcting and student correcting of themes. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1068. **Goodrich, T. V.** Membership and turnover. Lincoln, Nebr., City public schools, 1927. 7 p. ms.

The study gives a picture of conditions with reference to attendance, pupil turnover, causes of withdrawal, etc., in the Lincoln public schools. Conclusions: (1) A school is handicapped by nonattendance; (2) nonattendance is largely due to instability of the school population, a factor to be taken into account in framing school policies.

1069. **Hampton, W. O.** How principals use their time. Doctor's thesis, 1927. University of North Carolina, Chapel Hill.

A comprehensive study of the distribution of the time of 130 public-school principals. Two thousand five hundred and sixteen school days were analyzed. It is recommended that schools of education offer graduate curricula looking to the professional training of successful teachers for the specific duties of the principalship.

1070. **Helms, Roy S.** Teacher supervision. Master's thesis, 1927. University of Virginia, Charlottesville.

This study covers the history of supervision in the different type schools throughout the United States from the state, county, and city viewpoints.

1071. **Hickok, Katharine Cromer.** The objectivity of the time chart in supervision. Doctor's thesis, 1927. University of Wisconsin, Madison.

1072. **Jennings, Jos.** A study of absences from school in two counties of Tennessee. *Peabody journal of education*, 4: 276-93, March, 1927.

Several towns and counties were studied, but no city schools. Findings: (1) In each county absences occurred most frequently in the lower grades; (2) the two great causes of absence were personal sickness and work at home; (3) absences cause poor work and failure to make grades; (4) compulsory attendance laws are hardest to enforce in rural regions; (5) children of tenants are badly handicapped because of frequent moves on the part of their parents and because of being kept home for work more frequently than the children of owners.

1073. **Kircher, H. W.** A device for supervising grade placements and promotions under the ability grouping organization. Sheboygan, Wis., Public elementary schools, 8 p. ms.

The study gives a device evolved out of practice in Sheboygan elementary schools comprehending some 2,000 children.

1074. **Knight, F. B.** Possibilities of objective techniques in supervision. *Journal of educational research*, 16: 1-15, June, 1927.

The objective techniques of supervision described in this study deal exclusively with arithmetic. Eight "tools of supervision," e. g., weekly inventory drills, and diagnostic tests are described.

1075. **Kopf, Helen.** Trial promotion. Piqua, Ohio, Bureau of research. Finds that pupils failing will very often improve by repeating the work.

1076. **Monash, Louis.** The problem of pupil participation in school government. Master's thesis, 1927. College of the city of New York, New York, N. Y.

1077. **Moore, Benjamin Clay.** A general analysis and synthesis of the principles and problems of school management. Master's thesis, 1927. University of Illinois, Urbana.

1078. **Muth, Harry C.** A study of the causes of pupil absence in the Roosevelt junior high school, Rockford, Ill. Master's thesis. University of Chicago, Chicago, Ill. 47 p. ms.

Based on attendance records, weather reports, telephone reports, attendance officer reports, nurse reports, for the year 1926-27. Finds that personal illness and injury are the chief causes of absence.

1079. **Muzzall, Ernest L.** Disciplinary problems as indicated by a number of high-school principals. Master's thesis, 1927. State college of Washington, Pullman.

1080. **Nash, H. B.** Summary of failures in West Allis public schools. West Allis, Wis., Public schools, 1927. 7 p. ms.

Data on failures, grades 1 to 12. Comparisons are made on many points; failures by grades, sex, and subjects.

1081. **Nettels, C. H.** The annual age-grade report, Los Angeles city schools. Los Angeles, Calif., City schools, 1927. (Los Angeles educational research bulletin, May, 1927, p. 1-9.)

1082. **Oklahoma City, Okla. City schools.** Failure in Oklahoma City schools. Oklahoma City, Okla., City schools, 1927. 2 p. ms.

Deals with pupil failures in grades and subject failures in high school.

1083. **Philadelphia. Public schools.** Analysis of promotion rates. Philadelphia, Board of education, Division of educational research and results, 1927. 51 p.

An analysis of promotion rates for term ending January 31, 1927. Compares promotion rates with other cities. Shows promotion rates for 10-year period, as follows: 86.9 per cent of elementary pupils promoted; 83.7 per cent of junior high school pupils; 77.7 per cent of senior high school pupils promoted.

1084. **Rogers, Don C.** A study of pupil failures and subject failures in Chicago. Journal of educational research, 14: 247-55, November, 1926.

Finds that the high-school average of failure is higher than the elementary. There are 4 $\frac{1}{4}$ times more failure in 9-B than in 8-A. The high-school average shows that 32.4 of the high-school work is not done satisfactorily.

1085. **Rossman, John G.** Problems in nonpromotion. Bloomington, Indiana university, 1927. (Indiana university, School of education, Bulletin no. 5, p. 47-58, May, 1927.)

The study presents a summary of efforts extending over a period of years to solve problems connected with nonpromotion. Without any lowering of standards a larger percentage of pupils are succeeding in making normal progress through the grades, it is found.

1086. **Sazama, Joseph Elias.** The law relating to public-school discipline. Master's thesis, 1927. University of Chicago, Chicago, Ill.

1087. **Schenectady, N. Y. Department of public instruction. Division of research.** Nonpromotion study, intermediate schools. Schenectady, N. Y., Department of public instruction, 1927. 6 p. ms.

Tables in this study report nonpromotion percentages in grades 7-9 for 11 departments of instruction in the Schenectady schools.

1088. **Smith, Gale.** An investigation to determine the present status of courses in classroom management in state-teachers colleges. Master's thesis, 1927. Indiana university, Bloomington. 109 p. ms.

1089. **Townsend, M. E., and Howell, C. E.** Lincoln school organization. Trenton, N. J., Public schools, 1927. 9 p. ms.

Aims to determine the present condition as to pupil and teacher load, and to recommend a future policy to care for the needs as revealed.

1090. **Waterman, Dora.** A principal's relation to the personal contacts of his teachers. Master's thesis, 1927. University of Nebraska, Lincoln.

Questionnaires were sent to approximately 100 high-school teachers in Nebraska. Teachers exhibit faith in the constructive leadership of the high-school principal and delegate to him certain responsibilities of the type in question. They feel that he does not always meet these responsibilities in the most helpful way, however, and suggest constructive measures.

1091. **Wilson, Julia Stevenson.** A history of the supervision of instruction. Master's thesis, 1926. University of California, Berkeley.

1092. **Ziegler, Carl William.** School attendance as a factor in school progress. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

A study of the relations existing between the school attendance of pupils and their scholastic achievement and progress and their home environment, together with other causal factors.

See also items 6, 103, 624, 626, 633, 642, 648, 672, 684, 697, 700, 713, 718, 720, 723, 731, 736, 738, 744, 750, 766, 793, 1000, 1204, 1211, 1215, 1278, 1524.

CHILD ACCOUNTING

1093. **Godbey, Josiah Jerigan.** An adequate child-accounting system for an independent school district in Texas. Master's thesis, 1927. University of Texas, Austin.

Begins with a history of the development of child-accounting records, and a résumé of the essential elements of such records as shown in contemporary literature.

1094. **Greene, Harry A., chairman.** A uniform child-accounting system for the state of Iowa. Des Moines, Iowa state teachers association, 1927. 54 p.

A full study by a committee of the process of child accounting, giving forms to be used, provisions for transfer, etc.

1095. **Hudson, George Donald.** A study of techniques to be used in determining topics for a course in child accounting. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. iii, 92 p. ms.

Devises a technique for determining the topics of a teacher-training course in child accounting and derives a comprehensive list of activities to be used as the basis for this course. This study makes two contributions. The first is the technique devised for determining topics for a course in child accounting, the second is the master list of activities assembled.

1096. **Kellum, Howard A.** Child accounting in the Reading public schools. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio.

1097. **Merry, Blanche, and Russell, J. D.** Child accounting in Indiana. Indianapolis, Indiana State department of public instruction, 1926. 70 p. (Indiana State department of public instruction. Bulletin no. 85.)

Covers the accounting of accelerated, retarded, and normal students in public and parochial schools of Indiana.

1098. **Wilson, Claude E.** A uniform study of recording child progress in school. Master's thesis, 1927. College of education, University of Colorado, Boulder.

The study shows (1) importance and historical development of recording child progress in school; (2) analytical survey and frequency tabulation of items appearing on permanent child recording forms in Colorado and their comparison with other states; (3) copies and descriptions of child recording forms proposed by the author for uniform use in Colorado. Tables.

See also items 627, 676, 1496.

CURRICULUM MAKING

1099. **Courts, Stuart A.** Current practices in curriculum revision in public elementary schools. National society for the study of education. Twenty-sixth yearbook, 1926. Part 1. p. 119-34.

Reports from 122 cities regarding curriculum revision.

1100. **Dickson, Julia E.** Current practices and tendencies in the elementary curriculum of the training schools of teachers colleges and normal schools. Educational administration and supervision, 13: 145-58; 241-54, March, April, 1927.

Deals with current practices in elementary curriculum in training schools, teachers colleges, and normal schools, including practices related to placement and teaching of topics in arithmetic, of details in language and grammar, and professional relation of the teachers college to the training school in courses overlooking the teaching of these subjects. Finds (1) there are no universally accepted practices; (2) curriculum reorganization is in a very unsettled condition to-day. It is a very definite problem that teacher-training institutions must help solve.

1101. **Flanders, J. E.** Curriculum, making by the state legislatures. In National society for the study of education. Twenty-sixth yearbook, 1926. Part 1. p. 407-23.

Indicates the extent to which state legislatures have modified curricula.

1102. **Hogan, Ralph Montague.** The technique of activity and trait analysis applied to Young Men's Christian Association for curricular executive secretaries as basis. Doctor's thesis, 1927. University of Chicago, Chicago, Ill. v. 227 p. ms.

Describes techniques developed for obtaining and classifying material through the use of job analysis. Classifies and analyzes the activities and traits of Y. M. C. A. secretaries as a basis for selecting curricular materials for training in this vocation. The materials gathered in connection with this study may serve as a basis for organizing a curriculum for training new workers in this field. They may be used by the workers in self-analysis, in supervising the staff, and in the preparation of a manual of methods. The techniques developed may be used in training inexperienced secretaries.

1103. **Holloway, William James.** Initiative in curriculum making. Doctor's thesis. Teachers college, Columbia university, New York, N. Y.

This study was made to determine the effect of teacher participation in curriculum making. An experiment in curriculum making was carried on in seven Maryland counties. Findings: The teachers of the experimental groups made as much progress in professional spirit, attitude, and teaching skill in every county under investigation as did the teachers of the control groups. The teachers in the experimental group did more reading, and attended more summer schools, etc., with a view to improving their professional ability, than those in the control group. The communities served by the schools in the experimental groups were brought into closer relation to the work of the schools through the growing power of initiative on the part of the teachers and the vitalizing effect of the several curricula-making projects.

1104. **Lafier, M. O.** Curriculum and building needs in the high school, Lincoln, Nebr., Public schools, 1926. 24 p.

Study of curriculum and building needs in the Lincoln (Nebraska) high school. Tables, maps, and graphs are offered on enrollments, classrooms, alterations, and academic nature of the program.

1105. **Monroe, Walter S., Hindman, Darwin A., and Lundin, Roy S.** Two illustrations of curriculum construction. Urbana, Bureau of educational research, University of Illinois. (To be printed.)

1106. **Newlin, Mary.** A study of the curricula of township high schools of Illinois. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. vii, 142 p. ms.

Reports the result of a study of the curricula of 47 township high schools in Illinois to discover: (1) The similarities and differences; (2) the influence of local conditions in determining the course of study; and (3) the relative emphasis given to different departments and subjects within a department. Twenty-five curricula were found in the 47 schools, with the college preparatory leading. One hundred and twelve different subjects were offered, among which American history and English were the only two common to all schools. As a rule 16 units are required for graduation. Local conditions influence the course of study, especially when the school is located in or near a large city. The percentage of time devoted to the various departments is as follows: Vocational, 24.6 per cent; English, 21 per cent; mathematics, 12.6 per cent; language, 12 per cent; social science, 11 per cent; natural science, 11 per cent; physical education, 4 per cent; music and art, 3.6 per cent.

1107. **Phillips, George A.** Proposed course of study for the Stowe Jackson school. Master's thesis, 1927. University of Cincinnati, Cincinnati, Ohio. 231 p. ms.

1108. **Sipple, E. M.** A unit-activities curriculum in the public schools of Burlington, Iowa. National society for the study of education. Twenty-sixth yearbook, 1926. Part 1. p. 207-17.

It was proposed to develop a suggestive instructional schema and perfect organization that would place the more vital aims of the school in a commanding position.

1109. **Slawson, S. J.** First steps in curriculum building. Johnstown, Pa., Board of education, 1927. 86 p.

Primary, intermediate, and secondary departments are covered in this study.

1110. **Thornton, Everett W.** The development of the curriculum in the Philippine public schools. Master's thesis, 1927. University of Chicago, Chicago, Ill. vi, 196 p. ms.

Traces some of the changes through which the curriculum of the Philippine public elementary and secondary schools has passed since its establishment in the early days of the American occupation. The facts revealed by this study seem to indicate that "the curriculum was better adapted to the actual needs of the country in its earlier period of development than in the later period. This is true in the sense that there was a closer articulation between school and life. As the curriculum developed it tended to become settled in conventional grooves." As a whole, the curriculum reflects too much of American culture and too little of Filipino life and conditions.

See also items 40, 533, 563, 574, 635, 662, 663, 681, 686, 737, 757, 758, 760, 820, 824, 857, 1249, 1252, 1347, 1356, 1397, 1401, 1509.

EXTRACURRICULAR ACTIVITIES

1111. **Atkins, Helen Ludlow.** An experiment in a medium-sized high school to justify placing extracurricular activities on school time. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Includes: (1) A study of opinions of educators on (1) value of extracurricular activities; (2) presentation of data on a school-time activities program experiment conducted by the author in a Denver high school; (3) its justification determined by teacher and pupil opinions obtained from questionnaires, (4) approval of the plan after two-year continuance.

1112. **Bedichek, Roy.** Interscholastic nonathletic contests. Master's thesis, 1927. University of Texas, Austin.

Gives an historical discussion of the use of rivalry and contests in education.

1113. **Carey, Katherine Lee.** Extracurricular activities: trends, and current practices. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1114. **Davidson, B. L., jr.** A survey of extracurricular activities in Missouri high schools. Master's thesis, 1927. University of Missouri, Columbia. 125 p. - ms.

Out of 561 first-class Missouri high schools which received questionnaires, 256 replied and were included in this study.

1115. **Draper, Edgar Marion.** A philosophical study of the contribution of extracurricular activities to school and community citizenship. Doctor's thesis, 1927. University of Washington, Seattle.

1116. **Earp, Essie L.** Extracurricular activities in normal schools. Master's thesis, 1927. George Washington university, Washington, D. C.

1117. **Knowles, Robert Riley.** An investigation to determine the desirability of extracurricular activities in the high school. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Contains: (1) Evaluation of opinions obtained by questionnaire from 125 teachers and students of the University of Colorado summer school on prevalence and value of extracurricular activities and their relation to cardinal objectives of secondary education; (2) favorable influence of activities on scholarship as found by scientific experiment by author in Sterling, Colo., high school.

1118. **Lehman, Harriet C., and Witty, Paul A.** Newspaper versus teacher. *Educational review*, 73: 97-101, February, 1927.

Five thousand children were asked to check from a comprehensive list of 200 daily activities those in which they had been engaged during the preceding week. The data here presented show clearly that reading the newspaper is a common practice of all children.

1119. **O'Brien, F. P., and Thompson, L. L.** Student activities in the small high school. Master's thesis, 1926. University of Kansas, Lawrence. (*University of Kansas bulletin of education*, vol. 1, no. 1, p. 13-16.)

Investigation of third-class cities in Kansas, to determine status of high-school student activities.

1120. **Pfeiffer, Otto Andrew.** The scope and function of home rooms, clubs, and assemblies in the program of special activities in Joel Chandler Harris union school at San Antonio, Tex. Master's thesis, 1927. University of Texas, Austin.

A thorough review of the literature on the work of home rooms, clubs, and assemblies. In addition, a detailed account of the pioneer work done in these fields in the junior schools of San Antonio.

1121. **Scott, Homer Hayes.** The "Hi-Y" club as an extra curricular activity in the Indiana high schools. Master's thesis, 1927. Indiana university, Bloomington. 81 p. ms.

1122. **Sprenger, Florence Helen.** A constructive plan for extracurricular activities in junior high schools. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1123. **Sturtevant, Sarah M., and Flemming, Cecile W.** Extracurricular activities from the viewpoint of the high-school girl. Teachers college record, 28: 884-89, May, 1927.

Study based upon questionnaires filled out by 260 Horace Mann girls, of whom 55 per cent voted athletics most enjoyable.

See also items 287, 656, 685, 1252, 1279.

MARKS AND MARKING

1124. **Ashbrook, William A.** A program of marking for Kentucky schools. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1125. **Bolton, Frederick E.** Do teachers' marks vary as much as supposed? Education, 48: 23-39, September, 1927.

An analysis of marks assigned by Seattle teachers on the given set of 24 sixth-grade arithmetic papers shows great uniformity of rating by the 22 teachers. Previous studies have not been properly made and biased conclusions have resulted.

1126. **Branson, Ernest P.** Distribution of high-school marks, 1926-27. Long Beach, Calif., City schools. 6 p. ms.

1127. **Dawson, Charles D.** A special study of 43,633 marks given to junior-senior high-school students of Grand Rapids, Mich., the first semester of the school year, 1925-26. Grand Rapids, Mich. Board of education, 1926. 6 p. ms.

Study of distribution of marks for 1925-26 and comparison of this distribution with that for 1920-21. The shape of the distribution curve for marks has not changed noticeably since 1921. Such deviation from normal as is found for the two years study is due principally to the granting of relatively too many B's and too few C's.

1128. **Garlough, Leslie Nathan.** A suggested system of marking based on the standard deviation. Master's thesis, 1927. University of Minnesota, Minneapolis.

1129. **Huffington, Paul E.** A study of marks of high-school pupils of Prince George's county, Maryland. Master's thesis, 1927. University of Maryland, College Park.

1130. **Jones, T. J., and Nash, H. B.** A study of failure and distribution of school marks in junior and senior high school. West Allis, Wis., Public schools, 1927. 11 p. ms.

Study of failing grades and distribution of teachers' marks in the junior and senior high schools of a 6-3-3 system enrolling 1,500 pupils in high-school grades. Detailed tables are presented of failures and distribution of marks by subjects in the various grades. Suggestions for teachers on how to mark pupils are included.

1131. **Nash, H. B.** Distribution of school marks. West Allis, Wis., Public schools, 1927. 11 p. ms.

Showing the failures of pupils in junior and senior high schools and the variation in teachers' marks. Finds a lack of uniformity of standards among various teachers, and subjectivity of ratings.

1132. ———. Preliminary report on the use of objective tests to secure more objective teachers' marks. West Allis, Wis., Public schools, 1927. 9 p. ms.

Discusses use of standard tests to aid in evaluating teachers' marks. Says that realization by teachers that objective evaluation is going to be made of their marks will make them more careful and tend to eliminate subjective factors.

1133. **Ohlsen, David.** School marks versus intelligence rating. *Educational administration and supervision*, 13: 90-102., February, 1927.

A study of the marks of 506 graduates of the Everett, Wash., high school to determine the correlation between their intelligence scores in the Terman group test and their marks received in high school. *Findings*: (1) Departments giving the largest percentages of high marks show the least correlation between intelligence and marks; (2) home economics and art and manual arts, "think subjects," show poor correlation with the Terman test scores; (3) English, history, mathematics, and science, "think subjects," show, in the order named, the best correlation with the Terman scores; (4) of the academic subjects, foreign language show the lowest correlation with the Terman test scores; (5) intelligence scores alone would not have been a very good basis for determining the capacity of the students in this group for doing satisfactory high school work (or the marks given are no evidence of capacity to do work in the various subjects); (6) low correlation may be due in part to special interest in certain subjects, and an entire lack of interest in other subjects included in the particular course the student has followed.

See also item 939.

SCHOOL BUILDINGS AND EQUIPMENT

1134. **Billman, Dale Campbell.** School building survey of Sullivan (Indiana) city schools. Master's thesis, 1927. University of Wisconsin, Madison.

1135. **Chamberlain, Leo M.** Building materials in Indiana schoolhouses. Master's thesis, 1927. Indiana university, Bloomington. 126 p. ms.

1136. **Dudley, Lofton Leland.** The location of city school plants. Doctor's thesis, 1927. Harvard university, Cambridge, Mass.

1137. **Fish, Louis J.** School planning and trend of school population. Boston, Mass., Public schools, 1927. 35 p.

1138. **Ifert, Robert E.** A study of school building sites in certain districts of Allegheny county. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1139. **Morphet, Edgar Leroy.** The measurement and interpretation of school building utilization. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 103 p. (Teachers college, Columbia university. Contributions to education, no. 264.)

Fifty-eight secondary school buildings were studied to determine the actual percentages of room and pupil station utilization for each of the various types of rooms. It was found that in these studies of 58 schools, only 75.4 per cent of the rooms and 41.1 per cent of the pupil stations are used in the "average building." A tentative measure of probable maximum room and pupil station utilization is proposed. The conclusion is reached that "buildings should be planned on the assumption that the maximum percentage of pupil station utilization will be much less than 100 per cent and will seldom exceed 70 per cent."

1140. **Poince, George I.** The status of janitorial service of township consolidated schools of Indiana. Master's thesis, 1927. Indiana university, Bloomington. 192 p. ms.

1141. **Reeves, Charles E., and Ganders, Harry S.** School building management. New York, Teachers college, Columbia university. (In press. To make about 500 printed pages.)

A technical study of the work of school building management embracing the following phases: administration, cleaning, heating and ventilation, and special work.

1142. **Schwartz, Harwood Muzzy.** Improvement in the maintenance of public-school buildings. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 74 p.

A study of the maintenance of public-school buildings in a city of more than 500,000 population to determine the frequency of different types of repairs and the relative importance of these several types from the standpoint of cost and frequency of recurrence. The author suggests that a complete repair survey be undertaken annually and a work program set up in keeping with the repair budget.

1143. **Taylor, Robert Burns.** Principles of school supply management. Doctor's thesis, 1926. Teachers college, Columbia university, New York, N. Y. An intensive study was made of current practice in the management of school supplies in 15 cities having a population range of 15,000 to 100,000 and representing four states.

1144. **Thomas, Minor Wine.** Public-school plumbing equipment. Doctor's thesis. Teachers college, Columbia university, New York, N. Y. (To be published.)

1145. **Vander Meer, Cornell H.** The status of the school janitor in the Rocky Mountain region. Master's thesis, 1926. Colorado State teachers college, Greeley.

1146. **Wiener, Joseph Baxter.** The prevalence, equipment, and utilization of auditoriums and study halls in junior and senior high schools. Master's thesis, 1927. University of Wisconsin, Madison.

See also items 108, 615, 664, 715, 966, 1372, 1488.

HEALTH EDUCATION AND SUPERVISION

1147. **Arnold, E. H.** Bad posture or deformity? American physical education review, 31: 1058-64, November, 1926.

Study by means of X ray of the conditions of the spine in persons of college age who are considered as having bad posture. Nine out of ten cases of bad posture are due to structural conditions of the bony framework, especially of the spine, which can not be improved by special exercises. Building up the general musculature through a general system of gymnastics will do as much toward improvement of these cases as anything.

1148. **Boyer, Philip A.** Survey test in health education. Philadelphia, Pa., Public schools, Division of educational research and results. 5 p. ms.

This was a study as to the retention of health information by grade 8-A pupils in elementary and junior high schools. The instrument used was a multiple choice test containing 40 elements and "so constructed as to cover rather completely the important items of health knowledge prescribed for teaching by the course of study for grade 7-B." Conclusions: The general city median for all pupils tested was 25.3 questions correct, indicating that half the pupils tested answered correctly more than 63 per cent of the questions of the test. The results in elementary and junior high schools were practically uniform throughout the entire range of achievement.

1149. **Burkard, William Edwin.** An analysis of education objectives and outcomes in the field of health education. Doctor's thesis, 1927. University of Pennsylvania, Philadelphia.

1150. **Garmichael, Orin B.** An experiment performed in Breckenridge, Colorado, public school to measure the effect of the mid-morning lunch on the achievement of grade pupils. Master's thesis, 1927. College of education, University of Colorado, Boulder.

The study gives (1) a general survey of pupils' breakfast habits showing need of mid-morning lunches; (2) presentation of author's experiment in the Breckenridge, Colorado, public school involving as subjects of the experiment pupils of the entire school; (3) results obtained statistically showing almost 20 per cent more increase in pupil achievement when milk lunches are provided than when no nourishment is given.

1151. **Clark, Felie W.** A workable plan of establishing health habits. Master's thesis, 1927. University of South Carolina, Columbia.

1152. **Hadley, Hazel, and Hathaway, Winifred.** Sight-saving classes, their organization and administration. New York, N. Y., National committee for the prevention of blindness, inc., 1927. 50 p.

Covers the aims of sight-saving classes, eligibility, supervision, city and rural classes; training of teachers, methods of teaching, equipment, etc. About one child in 500 is in need of special care as to conservation of vision and special methods of instruction. There is a summary of legislation bearing on the subject.

1153. **Heaton, Wilbur McKean.** Health education in high schools in the United States, past and present. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Contains: (1) A brief history of beginnings of health education in several states; (2) attention given the subject in textbooks of educators; (3) present practices and opinions of high-school principals as determined by a questionnaire; (4) quotations from authorities as to most efficient methods of teaching health education.

1154. **National committee for the prevention of blindness, inc.** A brief survey of myope classes in England and Scotland, September-October, 1926. New York, National committee for the prevention of blindness, inc., 1927. 53 p.

Seventeen elementary and two secondary school classes were visited in London. Classes at Bradford, Swanley, Birmingham, and Piltown were visited in England, and classes in Edinburgh and Glasgow, in Scotland. Eligibility to classes, financial support of classes, types of schools, equipment, transportation, etc., are described in detail.

1155. **Stetson, F. L., and Cosens, F. W.** The organization and administration of health education in the secondary schools of the United States. Eugene, Oreg., University of Oregon, 1927. 112 p.

Aims to obtain all available information regarding the present status and administration of health education in secondary schools and to make constructive recommendations. Thirty-four states have made physical education or some form of health education work compulsory in secondary schools. Only 39 states have definitely outlined programs for health education. Five of these have no supervisors of health education. Eight states have definite programs, but without effective organization and direction. Five states attempt little and six do practically no work. In nine states having compulsory features the emphasis is on physical education, which usually means a limited program. The chief state school executives are not in agreement, either, as to the importance of this objective, or as to the best means of achieving it. Organization in states and in cities is usually inadequate. Recommendations are given: (1) We believe, our state departments must have clearly in mind what health education really is, what its special objectives are, and what represents a satisfactory program for the secondary schools. (2) A policy for state organization must be formulated. * * * This committee should formulate a definite program of health education and keep it constantly before the secondary school people of the state. (3) A scheme should be established for evaluating the individual school program.

1156. **Storey, Thomas A.** The status of hygiene programs in institutions of higher education in the United States. Stanford university, Calif., Stanford university press, 1927. 125 p.

Undertakes to appraise the programs that are now maintained by institutions of higher education in the United States for the educational hygiene and health benefit of the young men and young women. Says: "The great majority of the institutions of higher education in the United States are not furnishing opportunities for a competent general education in hygiene to the young men and young women. The leaders of public opinion and public action, the men and women who amend the beliefs and customs of the masses and who change institutions, laws, ethics, and philosophies of society, are, as a general rule, inadequately and poorly educated in hygiene—the sciences and the arts of preserving the health of the individual, the home, and the public. Few leaders are equipped with a knowledge of scientific hygiene, and very few are trained for leadership in hygiene." Statistical material is furnished from 442 institutions.

1157. **Taylor, Laura J.** Health education bibliography. Monmouth, Oregon normal school.

A critical compilation, with careful annotations, of the best material available to teachers for work in health education in elementary schools.

1158. **Willard, Dudley Wilson.** A social critique of current tendencies in health education. Doctor's thesis, 1927. University of Washington, Seattle.

See also items 506, 511, 670, 830, 1511, 1513-1514.

MENTAL HYGIENE

1159. **Cosens, Frederick W.** Status of the problem of the relation of physical to mental ability. American physical education review, 32: 147-55, March, 1927.

A brief survey of existing literature regarding the relationship of mental and physical ability. "With boys and girls of elementary school age, three points seem fairly well established: (1) The better developed a boy or girl is for his or her age, the more able he or she is in school work; (2) the general level of physical ability of children who rate high on intelligence tests is distinctly superior to that of children who rate low on intelligence; and (3) there seems to be a direct relationship between ability in physical tests and promotion or scholastic results. With regard to the college data, it seems evident that there is only one conclusion to draw, namely, that there is no correlation between physical ability as measured by 'big muscle' tests and mental ability as measured by group or individual tests."

See also item 945.

PHYSICAL TRAINING

1160. **Bliss, James G.** A study of progression based on age, sex, and individual differences in strength and skill. Parts 1 and 2. American physical education review, part 1, 32: 11-21, January, 1927; part 2, 32: 85-99, February, 1927.

This study contains two parts: Part I states the purpose of the investigation, and outlines, in detail, a plan for testing the physical ability of boys and girls in the sixth, seventh, and eighth grades, in city public schools in New York, New Jersey, Ohio, and California. Tests were given to 6,000 children and the results tabulated. Part 2 presents the experimental data with comments and conclusions. Tabulated results with comments and conclusions are given showing the range in physical ability for children of various ages as well as for boys and girls. The tests used in this investigation (parts 1 and 2) and the results achieved "should be valuable in outlining a plan of curriculum construction, whereby physical education may be classified as a pioneer among school subjects in the reconstruction of the curriculum."

1161. **Brace, David Kingsley.** Measuring motor ability. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

The purpose of the study was to produce a scale of motor ability tests. This involved (a) the determination of tests of motor ability, (b) scaling the tests. Thirty tests were selected for trial. One thousand five hundred and fifty-five individuals were tested and their scores comprise the data.

1162. **Clement, J. A.** Report of subcommittee on physical education. North central association quarterly, 1: 544-59, March, 1927.

1163. **Edwards, Paul Duncan.** The teacher of physical education for boys in California secondary schools. Master's thesis, 1927. University of California, Berkeley.

1164. **Elliott, Ruth.** The organization of professional training in physical education in state universities. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. 67 p. (Teachers college, Columbia university. Contributions to education, no. 268.)

Study of existing types of organization in 18 state universities, and the extent to which curricula are being organized within schools of education. Four types of organization exist: (1) School of physical education independent of the school of education, represented by one university; (2) division of physical education independent of the school of education, represented by one university; (3) dual organization in the liberal arts college and the school of education, represented by five universities; (4) organization within the school of education, represented by 11 universities. Sixteen of the eighteen universities studied have professional curricula in physical education organized within the school of education. The organization of departments of physical education for men and for women favors a differentiation of professional curricula in physical education for men and women. Distribution of units, degrees given, postgraduate courses, etc. are summed up.

1165. **Herahberger, Edith Rodgers.** A study in the selection of prospective teachers of physical education. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1166. **Holsbaur, Ida C.** Reducing the overweights. American physical education review, 32: 297-99, April, 1927.

A description of the method used and the results brought about in regard to a special class for reducing 60 overweight girls. The results of this experiment for 3½ terms were somewhat inconsistent. However, 12 girls were sufficiently reduced to be excused from the class.

1167. **Johnson, Georgia Berg.** Organization of the required physical education for women in state universities. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

The author visited several large universities to determine (a) the present practice regarding departmental organization of required courses in physical education for women; (b) to secure an expression of expert opinion based upon the experience of those who are in immediate control of the situation in each case.

1168. **Kindervater, A. E.** Physical ability tests in elementary schools. Public school messenger, 24: 13-16, November, 1926.

Seventy-six schools tested in running, jumping, and throwing.

1169. **Lehman, Harvey C.** Measuring the results of gymnasium instruction. American physical education review, 32: 108-10, February, 1927.

Article presents a useful technique for obtaining information regarding pupils' play behavior. It also contains suggestions for evaluating playground supervision and gymnasium instruction, by means of the technique herein described. It includes tabulated information regarding an experiment of this kind among children in city public schools in several cities in Kansas. The experiment is illustrative of the type of investigation that may be used for quantitative determination of the extent to which boys and girls participate in the various activities for which opportunity is afforded.

1170. Marshall, G. H. The status of high-school athletics in Kansas. *School review*, 35: 113-20, February, 1927.

Questionnaire study of high-school athletics in 77 Kansas high schools. Summary given of replies to questions regarding physical training, interference of athletics with school work, financing of athletics and athletic schedules.

1171. Neil, Thomas. Tests and measurements in physical education at Western Reserve university, Cleveland, Ohio. *American physical education review*, 31: 1018-24, October, 1926.

Author endeavored to measure the development of the student's ability to concentrate and respond accurately to complex directions and thus ascertain the relationship of this development to various types of instruction in physical education. Information obtained from a three-year experimental study of 572 students in Adelbert college is presented in tabulated form with comments and conclusions. The experiment tends to show that either good students are good gymnasts, or that men who become good gymnasts are more likely to be good students. Granting certain specified assumptions, "the results prove definitely that the development of one's ability to control one's body accurately, and with confidence, is directly responsible for an increase in one's mental ability to concentrate and respond accurately to a given stimulus."

1172. Plummer, Leonard Brodnax. Athletics in secondary schools. Master's thesis, 1927. University of Texas, Austin.

A study presenting a description of various types of athletics for boys and girls in secondary schools, with special emphasis on organization and administration.

1173. Rogers, Frederick Rand. The measurement of individual needs in physical education. *American physical education review*, 32: 418-20, June, 1927.

A discussion of the need for reorganization of physical education programs, in order that they may be more suitable for the individual needs of the pupils. The author believes that the use of physical tests would be helpful in preventing the failure of many programs today which only emphasize athletics. If the program of physical education is moulded to discover the needs of the individual child, and rational steps to meet these needs are taken, physical education will become the most important subject in the public-school curriculum. It will make a contribution to the growth of the individual child which will be unsurpassed by any other work of the school.

1174. Wiggins, B. E. Digest of questionnaire on time required and credit given for physical education. *American physical education review*, 32: 372-73, May, 1927.

The study consists of a table showing the requirements of 39 large cities in the United States regarding physical education as a part of the required curricula of three-year and four-year high schools. A summary of this table points to the fact that 65 per cent of the high schools in cities included in this study require physical education of all students three or four years. The number and lengths of periods required vary from two 45-minute periods per week to five 60-minute periods per week. The credit given varies from .8 to 6 credits for graduation.

See also items 29, 217, 292, 643, 655, 830, 1446, 1507, 1514, 1533.

PLAY AND RECREATION

1175. Bilhuber, Gertrude. Functional periodicity and motor ability in sports. Purdue university, Lafayette, Ind. *American physical education review*, 32: 22-25, January, 1927.

An experimental study of 31 students attending Purdue university to find out "whether during menstruation there was any change in efficiency, i. e., skill, speed, and coordination in sports." Findings: "The application of standardized motor tests did not reveal a periodic inefficiency or diminishing of skill, speed or accuracy of motion in normal women or in those deviating slightly from the normal physically or psychologically. Increased or decreased efficiency during critical periods appeared to be a matter of chance of the effect of influences other than menstruation. In cases where inefficiency was found, it was usually only during part of the period. Improvement due to practice continued unabated from week to week. . . . It would appear, therefore, that it is time that we recognize the so-called periodic inefficiency in normal women as a delusion to be discarded in the light of scientific health education."

1176. Goetter, Bertha A. A study of the recreational activities of employed women. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1177. **Hermle, Otto Barnes.** The present status of intramural sports in the Los Angeles junior high schools, with special reference to boys' activities. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1178. **Lehman, Harvey C., and Anderson, T. H.** Social participation and solitariness in play. University of Kansas bulletin of education, 1: 3-7, February, 1927.

Lehman play quiz was administered to 558 grade-school pupils

1179. ——— and **Witty, Paul A.** Periodicity and play behavior. School of education, University of Kansas, Lawrence. Journal of educational psychology, 18: 115-18, February, 1927.

The Lehman play quiz was administered to 6,000 children in grades III to XII, with the following results: (1) Attempts to differentiate certain chronological age periods in terms of differences displayed by children in diversity of play activities during these periods seem unjustifiable. (2) The play trends which characterize a given age group seem to be the result of gradual changes occurring during the growth period. These changes are not sudden and characterized by periodicity but are gradual and contingent. (3) No age or group of ages between 7½ and 19½, inclusive, can be characterized by play behavior primarily social or primarily individualistic.

1180. **Michie, Orbie C.** Trait ratings received by versatile and nonversatile groups of boys. Master's thesis, April, 1927. Department of education, University of Kansas, Lawrence.

Six thousand children of ages 3 to 12 were tested by Lehman play quiz. Character traits of boys versatile in play were compared with those of boys nonversatile in play, and great individual differences discovered in extent of play interest. Two lists of character traits are presented, one for boys versatile in play, the other for boys nonversatile in play.

1181. **Playground and recreation association of America.** Stadiums. New York, Playground and recreation association of America, 315 Fourth Avenue, 1927. 11 p.

Number, cost, shape, size, construction, uses, and management of university, high school, and other stadiums. * * * Facts are tabulated.

1182. **Springer, Wilbur.** Intramural athletics in high school. School of physical education, Harvard university, Cambridge, Mass., 1927. 6 p. (Ohio state university bulletin, V-32, no. 3.)

Statistics compiled over period of three years in Salem, Ohio, high school giving contrasts with other systems. The trend of athletics is, and should be, toward the mass rather than the few. This manuscript was read before the Seventh annual session of the Ohio state educational conference at Columbus, April 8, 1927. It was altered slightly to be read before the Physical education section of the Northeastern Ohio Teachers association at Cleveland, November 4, 1927.

See also items 172, 655, 762, 1505.

SOCIAL ASPECTS OF EDUCATION

1183. **Barnett, Owen Lee.** Public-school publicity. Master's thesis, 1927. Brigham Young university, Provo, Utah.

Study included year's publication of school news of the three newspapers published in Salt Lake City and the Provo City Herald.

1184. **Beatty, Edward Corbyn Obert.** The economic science of everyday life as revealed by a study of current periodical literature. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. ix, 191 p. ms.

Classifies the economic materials found in current periodical literature according to the amount and frequency of appearance. Interprets these data in the light of their bearing upon the content of the curriculum in economics. The useful economic information appearing in current periodicals may be grouped under the following heads: Production, exchange, economic conditions, public finance, consumption, and distribution. The emphasis placed by the reading public on these fields varies greatly according to social groups, the greatest interest lying with topics most closely associated with earning a living. Information about concrete problems of everyday life is desired more than discussions of economic theory.

1185. **Bray, Chalmer G.** A study of pupil migration in towns of 1,000 to 2,000 population in Iowa. Master's thesis, 1927. College of education, State university of Iowa, Iowa City.

One thousand two hundred and eighty-eight twelfth-grade pupils were examined in order to learn how many times they changed residence during the period of their school life and the effect of the change upon their educational status. Two pupils out of every three changed systems at least once; one-half of the seniors made only one change, one-fourth made two changes; and only one-twentieth made four changes. The greatest migration was in grades 6 and 8; 8 out of 10 lost no time on account of these changes; and only 10 per cent repeated grades because of the changes.

1186. Curtis, S. A. The influence of certain social factors upon scores in the Stanford achievement tests. *Journal of educational research*, 13: 311-324; 14: 33-44, May, June, 1926.

The purpose of this study is to present measures of the distinctive influence of environmental factors, more specifically the measurement of the effect of attendance at Sunday school upon the scores in Stanford tests made by children from homes professing church membership. It is difficult to arrive at definite conclusions because of the complexity of life. It is difficult to evaluate the effect of even a single variable, let alone four and more at once.

1187. Garlin, Raymond E. A study of educational publicity in Texas newspapers. Doctor's thesis, 1927. University of Texas, Austin.

A study of (1) the quantity and nature of school publicity appearing in Texas newspapers, and (2) the part taken by them in getting the findings of the Texas State educational survey before the public.

1188. Hawkes, Evelyn J. Social training as a curriculum problem. Doctor's thesis, 1927. University of Pennsylvania, Philadelphia. Philadelphia, Pa., Westbrook publishing co. 130 p.

This investigation attempts to discover the extent to which individuals acquire the ability to meet social situations through the ordinary processes of life. The study illustrates a procedure (1) in determining what are the situations that make for effective mingling with other human beings, and (2) in discovering how nearly the accepted standards of conduct are met by heterogeneous groups.

1189. Kriner, Harry L. A social survey of the student population at the State normal school, California, Pa. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa. 132 p.

1190. Smith, W. E., and Cummings, M. C. The influence of educational environment. Master's thesis, 1926. Bureau of school service and research, University of Kansas, Lawrence. *University of Kansas bulletin of education*, 1: 3-6, December, 1926.

A comparison of college and noncollege communities as to high-school graduation and college entrance. The study involves 2,500 high-school graduates. Finds that college communities are vastly superior.

1191. Todd, William Hall. What citizens know about their schools. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Bureau of publications. (Teachers college, Columbia university. Contributions to education, no. 279.)

This study takes inventory of the information the public has concerning the school. One hundred fifty-four thousand six hundred and fifty responses were made by over 7,000 individuals. The school has accepted the responsibility of keeping the public advised concerning public education. At this time the good citizen has only 50 per cent of the minimum requirements of knowledge concerning the public school affairs of his community.

1192. Wagner, Maxie Earle. Superstitions and their social and psychological correlations among college students. Master's thesis, 1927. University of Buffalo, Buffalo, N. Y.

See also items 113, 115, 146, 241, 481, 548, 630, 650, 691, 698, 708, 770, 892, 906, 930, 961, 1115, 1206, 1200, 1220, 1236, 1341, 1353, 1461, 1493, 1506, 1508.

CHILD WELFARE

1193. Fuller, Raymond G. Fourteen is too early. Some psychological aspects of school-leaving and child labor. New York, National child labor committee, Department of research, 1927. 40 p.

Discussion of 14 years as legal minimum age for compulsory school attendance. Inquiry into reasons for elimination from school. Conclusion reached that 14 years of age is too early.

1194. Gibbons, Charles E., and Tuttle, Harvey N. Children working in Missouri. New York, National child labor committee, 1927. 31 p.

A study of child labor as to kind of work, hours, etc., was made in 10 communities of the state. With respect to the child labor situation in Missouri, two fundamental needs are found; one is a tightening up on the enforcement machinery, particularly with respect to the granting of work permits. This is discussed at length in the report. The other need is that more adequate protection be provided in the law. At present the standard falls considerably below reasonable minima. Recommendations are given.

1195. **Laws, Gertrude.** Parent-child relationships. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Bureau of publications.

A study of the attitudes and practices of parents concerning social adjustment of children.

1196. **Marshall, Clarence.** Child labor laws and regulations in the United States and their relation to education. Master's thesis, October, 1927. Department of education, Indiana university, Bloomington. 72 p. ms.

1197. **Sidwell, Bertha Ardella.** The changes and trends in child labor legislation in the United States since 1900. Master's thesis, 1927, School of education, University of Southern California, Los Angeles.

RURAL EDUCATION

1198. **Bennett, Thomas T.** Ohio rural schools since 1914. Master's thesis, 1927. Department of education, University of Cincinnati, Cincinnati, Ohio. 99 p. ms.

1199. **Blankenship, Albert S.** The accessibility of rural schoolhouses in Texas. Doctor's thesis, 1926. Department of educational research, Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Bureau of publications, 1926. 62 p. (Teachers college, Columbia university. Contributions to education, no. 229.)

This study attempts to determine the extent of inaccessibility of rural schoolhouses in Texas and to discover factors influencing accessibility. Consolidation programs and other efforts at increasing the pupil group at rural high school centers are examined.

1200. **Canfield, James Willard.** The daily program in one-teacher schools in the state of California. Master's thesis, 1927. University of California, Berkeley.

1201. **Collings, Ellsworth.** The McDonald county, Missouri, experimental school. In National society for the study of education. 26th yearbook, Pt. I. Bloomington, Ill., Public school publishing company, 1926. p. 297-303.

Study of a one-room country school in which the curriculum was the chief variable. It was found that at the end of four years the experimental group, using a curriculum selected directly from their purposes in real life, excelled the controlled group using the state course of study.

1202. **Eash, Cornelius E.** A survey of the school system of Warren township, a semirural school unit under the six-six plan. Master's thesis, October, 1927. Department of education, Indiana university, Bloomington. 181 p. ms.

1203. **Gordon, Mary Agnes.** A study of county schools of the university. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1204. **Hoppes, W. O.** The value of supervision in the rural schools of Oakland county. Lansing, Mich., Michigan education association bulletin no. 7, June, 1926. 40 p.

Findings: The achievement of pupils in supervised schools was 76 per cent greater than that of unsupervised school pupils. Supervised teachers (60 in all), with very few exceptions, heartily indorsed supervision.

1205. **Hrudka, Ladimar.** Training of farm boys and girls. Doctor's thesis, 1927. University of Wisconsin, Madison.

1206. **Hypes, James Lowell.** Social participation in a rural New England town. Doctor's thesis, 1927. Department of sociology, Teachers college, Columbia university, New York, N. Y. 102 p.

Description of voluntary primary group structures of a typical rural New England town (Lebanon, Conn.); measurement of participation taking place in and through these group structures; and correlation of structures and participation with their conditioning factors.

Distance, tenure, and mortgages are found of minor importance as determinants of the primary group activities of the town, while geography, history, the dominance of the city, differences in nationality, the time of year, age and sex factors, and modern means of transportation are of major importance. The educational implications of the study are the strategic importance of the public schools and the church as socializing agencies, and the need of vocational education in agriculture for adult farmers. The "rural community" in its usual local geographical significance is not a satisfactory unit for the organization of many socio-economic activities in towns like Lebanon. Mutuality of interests is a better workable basis for most rural life organizations than geographical juxtaposition.

1207. **Indiana rural education survey committee.** Report of rural education survey: Indianapolis, Indiana state department of public instruction, 1926.

Analyzes rural education conditions in Indiana.

1208. **Irwin, Eugene Jerel.** Improvement of educational standards in rural schools. *Sierra educational news*, 23:279-81, May, 1927.

Studies of (1) the duties of county school boards and (2) the possibilities of improving rural instruction; based upon examination and tabulation of experiments and contributions made by various California county boards and questionnaire returns from 57 of 68 county superintendents. As result of the foregoing study the six following avenues for improvement of the quality of instruction are developed: The curriculum; promotion plans; accrediting schools; continuous records; professional advantages of teachers; more supervision.

1209. **Krishnayya, Stephen G.** A study of the community aspects of certain American schools, with special reference to the needs of rural India. Doctor's thesis. Department of educational research, Teachers college, Columbia university, New York, N. Y.

Writer seeks to find out what are the activities and conditions of the rural community in India, what part the school is playing in meeting these rural situations, and in what ways similar peculiar community conditions have become registered in especially adapted forms of education in the United States

1210. **Li, Yuntin-Cheng.** A study of the organization of the American one-teacher school with suggestions for possible adaptation to the Chinese village school. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y.

This study furnishes factual bases for the improvement of the organization of the American one-teacher school. It presents various devices suggested and employed in the attempt to modify the traditional graded organization of the one-teacher school. It indicates possibilities for further investigation and experiment in improving the one-teacher school organization. It shows that certain American educators have undertaken to exploit the potentialities of the one-teacher school as an educational institution.

1211. **Luten, Inez Ware.** The status of rural school supervision in the United States with particular application to Kentucky. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1212. **Miller, Restus James.** A study of the educational needs of Honey Creek township, White county, Indiana. Master's thesis, October, 1927. Department of education, Indiana university, Bloomington. 84 p. ms.

1213. **Myers, Charles Everett.** Normal school graduates in one-teacher schools. *Pennsylvania state education association bulletin*, no. 2, Harrisburg, October, 1927. 8 p.

A complete record of the qualifications of all normal school graduates teaching in one-teacher schools of Pennsylvania. Twenty-three per cent of one-teacher schools were found to be taught by normal school graduates.

1214. **Nankivell, James E.** History of education in Jessamine county. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1215. **Nelson, Milton G.** Analyzing the activities of district superintendents of schools in New York state. Doctor's thesis, 1926. Rural education department, Cornell university, Ithaca, N. Y.

The writer of this thesis made an analysis of the activities of the district superintendents in New York state and grouped together the activities of a similar nature and those that required similar abilities. These groups are as follows, according as the activities included deal with: (A) Teachers, pupils, and classrooms. (B) Communities, parents, and school officials. (C) State departments, reports, and clerical-office routine. (D) Personal professional development.

1216. **Orleans, J. S., and Seymour, E. F.** Arithmetic in the rural and village schools of New York state. Albany, N. Y., Educational measurements bureau, State department of education, University of the state of New York press, 1928. 37 p.

A state-wide survey of achievement in arithmetic as revealed by the results of standard tests, with an analysis of teaching practice as gathered by questionnaires filled out by teachers. Recommendations relate to systematic use of time devoted to teaching of arithmetic, teaching technique, and use of state syllabus in arithmetic.

1217. **Palmer, Bertha B.** Report of teachers' institutes in 1927. Bismarck, N. Dak., State department of public instruction, February, 1928. 12 p.

A report of why and how the form of North Dakota institutes was changed. A description is given of the new plan whereby a corps of visiting teachers go to the various schools and aid the teacher in her work. This program was received enthusiastically by county superintendents. The plan is more economical for teachers, counties, and the state.

1218. **Shively, Arthur W.** Certain aspects of the professional status of the rural school-teacher for the eastern half of North Dakota. Master's thesis, 1927. Department of education, University of North Dakota, Grand Forks.

Comprehensive data on sex, age, turnover, experience, tenure, grades of certificates, experience, and salaries of rural school-teachers in the eastern half of North Dakota.

1219. **Smart, Thomas J.** A proposed larger school unit for an area in northeastern Kansas. Lawrence, University extension division, University of Kansas, 1927. (University of Kansas studies in education, vol. 1, no. 8, July 1, 1927.) 117 p.

A detailed study of the factors involved in the administration of five rural high-school districts, including valuations, school tax levies, present school costs, in relation to enrollment and to class size, and buildings, with a view to improving the administrative unit for the five schools.

1220. **Smith, A. N.** A survey of the social and agricultural conditions of the Garden Grove, Iowa, community. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

Conditions existing among the older members of the community, particularly with respect to educational opportunities were contrasted with those of the younger generation. The thesis presents a picture of the existing conditions in the community as they affect the curriculum.

1221. **Steger, Francis Adrien.** The county high school. Master's thesis, 1927. Department of education, State university of Montana, Missoula. 88 p. ms.

Finds that small high schools fall far short of potentiality in health education, extracurricular activities, community social development, and in vocational educational opportunities.

1222. **Stone, C. W., and Curtis, W.** Progress of equivalent one-room and graded-school pupils. (Spokane county.) Journal of educational research, 16: 260-64, November, 1927. (Also Master's thesis, 1927. J. W. Curtis. School of education, State college of Washington, Pullman.)

Findings: Progress of graded-school pupils was approximately one-half school year in advance of equivalent pupils from adjoining one-room schools.

1223. **Stout, Dorman G.** Status of rural teachers in East Tennessee. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

Sixteen representative counties were selected from east Tennessee, and for means of comparison one county was taken from each of the other two grand divisions of the state for this study, which undertakes to reveal the status of the rural elementary teachers in east Tennessee through an inquiry into their salaries, training, experience, certification, age, sex, residence relation to the community in which they teach, and whether married or single. The study finds that the youngest, most inexperienced, and most poorly trained, and the most poorly paid teachers are in the one and two teacher schools. This condition exists not only among the counties taken as a whole, but also in the school groups within the county which are administered as one unit.

1224. **Thomas, Francis.** Accomplishments of secondary schools, Lackawanna county, Pa. Scranton, Pa., 1927. 16 p. ms.

1225. ——— Accomplishments; Second survey of the one-teacher schools of Lackawanna county, Pa. Scranton, Pa., 1927. 16 p. ms.

1226. **Turrentine, G. E.** A study of the rural schools of Pope county, Arkansas. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

1227. **Weaver, Abraham E.** Library and instructional material in one and two room schools of Elkhart county, Indiana. Master's thesis, June, 1927. School of education, Indiana university, Bloomington. 94 p. ms.

1228. **Whittaker, Milo L.** Rural community organization. De Kalb, Ill., Northern Illinois state teachers college, 1927. 45 p. ms.

A comparative study of two rural communities in northern Illinois, under direction of the United States Department of agriculture, Bureau of agricultural economics.

1229. **Woods, Ralph H.** The patronage area of rural high schools. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

See also items 91, 96, 97, 100, 138, 267, 278, 393, 589, 671, 724, 729, 792, 799, 850, 874, 975, 1024, 1072, 1106, 1341, 1349, 1358, 1482-1483, 1505, 1510, 1516, 1523.

COUNTY UNIT ORGANIZATION

1230. **Berges, William B.** The legal status of the county unit system of school organization in the United States. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. v, 72 p. ms.

Comprises a study of the general laws of the 48 states to determine the extent to which the county unit system has been adopted, the form adopted, and the organization, composition, powers, and duties of the county boards of education. The county unit system has been adopted in some form in 20 states with the southern states taking the lead. The county boards are usually composed of five members, elected to serve four years. As a rule, the boards exercise authority over school property; appoint the county superintendent, teachers, and principals; prepare the school budget; and apportion the school funds.

1231. **Blanton, Annie Webb.** A study of the county as a factor in school control. Doctor's thesis, 1927. Cornell university, Ithaca, N. Y.

1232. **Cole, Early Clinton.** The county as a unit of supervision in Texas. Master's thesis, 1927. University of Texas, Austin.

Reviews the agencies and instruments which have been developed in city school administration, and the extent to which these devices have been adopted and applied to rural schools.

1233. **Huang, Ching-Sze.** Elementary supervision on a county basis by specialized agents in selected states. Doctor's thesis. Department of educational research, Teachers college, Columbia university, New York, N. Y.

A study of elementary school supervision in seven selected states where one or more supervisors are employed on a county administration staff as specialized agents. The author investigates the administrative and supervisory practices, and from these derives norms of practice and procedure. The theories involved in better practices discovered are applied in a proposed tentative plan of county supervision workable in China.

1234. **Johnson, William P.** The county unit organization. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1235. **Smith, Nora A.** Policies of boards of education in Beaver county, Pa. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

CONSOLIDATION OF SCHOOLS

1236. **Drummond, Glenn, and McCracken, Charles C.** Community interests and school consolidations. Logan county, Ohio. 1927.

Maps illustrate: (1) The progress of consolidation of schools in Logan County, Ohio; (2) the centers of community interests within the county as determined through a study of trade, church, telephone, and banking interests of the people of the county, and the condition and placement of roads; (3) the gradual tendency of districts to conform to the social and economic interests of the people.

1237. **Grimm, L. E.** Factors and problems in the centralization of elementary schools in Illinois. Springfield, Department of research, Illinois state teachers association, December, 1927. 31 p. ms.

Analyzes social, economic, and educational trends that point toward district reorganization among the 12,000 districts of Illinois; presents a legal survey of all states regarding factors in consolidation of districts; and recommends county-community plan of formation with considerable state financial aid.

1238. **Heatly, Mary Hoyle.** The movement for centralization of rural schools in Oklahoma; a study in consolidation. Master's thesis, 1927. University of Texas, Austin.

Traces the historical progress in the organization of the different types of districts in Oklahoma.

1239. **Hicks, J. Allan.** Comparative educational accomplishment of pupils in consolidated and one-room country schools. Master's thesis, 1927. Child welfare research station, State university of Iowa, Iowa City. 79 p. ms.

1240. **Kiss, Theodore T.** The place of general agricultural instruction in the consolidated school as shown by a survey of Prescott community, Adams county, Iowa. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

An attempt to derive a course of study from a community farm survey.

1241. **Orr, Paul Jahu.** Transportation of public-school children in the United States. Doctor's thesis, 1927. University of Washington, Seattle.

1242. **Porter, H. H.** Comparative study of a system of county school consolidation. Master's thesis, 1927. Rural school department, George Peabody college for teachers, Nashville, Tenn. 99 p. ms.

Undertakes to determine whether the present school system of Jackson county, Okla., affords better educational opportunities since consolidation than it did before.

1243. **Roudebush, Roy B.** School consolidation in Indiana. Master's thesis, 1927. Indiana university, Bloomington. 110 p. ms.

1244. **Snodgrass, Joe Fifer.** A survey of the consolidation of rural schools in Illinois. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. v, 79 p.

Reports the results of a study of the present status of consolidation of rural schools in Illinois. Evaluates the success of this plan of school organization in producing desirable educational results in the rural sections. Points out difficulties involved in affecting consolidation.

1245. **Squire, George B.** Consolidation of schools in the United States with special reference to consolidation in Montana. Master's thesis, 1927. Department of education, State university of Montana, Missoula.

See also item 1140.

MORAL EDUCATION

1246. **Beiswanger, George W.** A statistical study of judgments as to the worth of children's literature in a program of character education. Master's thesis, 1927. State university of Iowa, Iowa City.

1247. **Bundy, Sarah Elizabeth.** The provision of moral education for pupils in the senior high school. School review, 34: 606-17, October, 1926.

Summary of replies from 45 school officials on how moral instruction is handled in their schools. Inquiries concerned: Direct and indirect moral instruction; provision of moral instruction through special classes, home-room periods, all classes, stated assemblies, and occasional assemblies; use of character and conduct texts; contribution of student-body organizations. Finds that a special class for moral teaching is not to be recommended for every school. The most practical mediums for moral instruction are the home room, the voluntary discussion group, a compulsory group for pupils of a particular grade, and the school assembly.

1248. **Burnham, Grace Emma.** A course of study in character education for grades 1 to 12. Master's thesis, 1927. College of education, University of Colorado, Boulder.

Gives: (1) A detailed study of the needs, aims, and methods of character education for each period of child development from grade 1 to 12; (2) an extensive list of detailed type lessons covering the entire field of character education for grades 1 to 12, with suggested methods for approach in teaching.

1249. **Carmichael, Albert Max.** Moral situations of six-year-old children as a basis for curriculum construction. Doctor's thesis, 1927. State university of Iowa, Iowa City.

1250. **Douglas, Marjorie Mae.** A critical study of selections from American literature exemplifying high ideals for personal and group life. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1251. **Florent, Sister M. Louis.** Analysis of the moral concepts of 6 and 7 year old children. Master's thesis, 1927. Teachers college, University of Akron, Akron, Ohio.

1252. **Hubbard, Edith May.** Possible contributions of curricular and extra curricular activities of the senior high school to character development. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1253. **Husband, Ivy O.** A statistical study of the grade placement of fairy, myth, and legend material in character education bibliography. Master's thesis, 1927. State university of Iowa, Iowa City.

1254. **Huxtable, Zelma.** An investigation into the individual and social values to be derived from a formal course of character training in the public schools. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1255. **Loose, Mary Elizabeth.** Some ethical problems of high-school girl reserves and their procedure in meeting them. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1256. **Marie, Sister.** The Catholic students' mission crusade as material for character formation. Master's thesis, 1927. Department of education, University of Notre Dame, Notre Dame, Ind.

1257. **Rosebrook, Wilda Mae.** Sex education in the public school. Master's thesis. Department of psychology, Ohio state university, Columbus. 103 p. ma.

This is an investigation of what sex information is needed in our schools and how it should be furnished. The ideal agency to carry on this education is the home, but the home is not prepared; hence it is the business of the school to educate the youth of to-day in order that they may be the better parents of to-morrow.

1258. **State teachers college, Mankato, Minn.** Training school staff. A program for the teaching of courteous behavior. School progress, 8: 1-15, January, 1927; 1-15, February, 1927.

From kindergarten to the junior high school inclusive.

1259. **State teachers college, Moorhead, Minn.** Training school staff. Educating for desirable attitudes in conduct. (The junior high school.) Moorhead state teachers college bulletin, 22, October, 1926. 32 p.

The study gives details for organizing a junior high school cooperative club. A play, "Knights of 1926" is given in full in the bulletin.

1260. ———. Experiments in conduct education. Moorhead, Minn., Moorhead state teachers college, 1925-1927. 40 p.

1261. **Steers, John Howard.** A study of character traits as related to scholastic achievement. Doctor's thesis, 1927. Cornell university, Ithaca, N. Y.

1262. **Wilson, H. B.** Character education. California quarterly of secondary education, 2: 43-48, October, 1926.

Summary of those parts of the report of the character education committee of the National education association which concern high schools. (For complete report see fourth yearbook of the Department of superintendence.)

Tables presented to show pupil activities situation and ideals, desirable character education outcomes, and methods employed in character education.

See also items 36, 774, 1274, 1410, 1495.

RELIGIOUS AND CHURCH EDUCATION

1263. **Archibald, William Darrell.** The development and present status of teacher training in the Methodist Episcopal Church. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1264. **Benedict, Marion Josephine.** The God of the Old Testament in relation to war. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Bureau of publications. 185 p.

The author tries to determine by means of a detailed study of the conception of God in each of the Old Testament writings, what attitudes or methods imputed to Him would be capable of furthering either peace-making or war-like tendencies on the part of children (or adults) taught to accept such an idea of God. Finds that there is material involving attitudes conducive to war and other material tending toward peace.

1265. **Betts, George H.** A comparison of church-school with public-school standards. *Religious education*, 22: 61-64, January, 1927.

One hundred and ninety-six educators and ministers ranked eight measures of educational success on the basis of observation and experience, comparing the two systems of education. Average of rankings shows the church school to have less than 50 per cent of the efficiency of the public school.

1266. **Black, Harvey Wilson.** Present status and activities of the international council of religious education. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1267. **Bonney, Merl E.** Religious influence upon character attainment in high school. Master's thesis, 1927. Department of education, Stanford university, Stanford University, Calif.

1268. **Boyer, Edward S.** Religious education in colleges and universities. Doctor's thesis, 1926. Department of education, Northwestern university, Evanston, Ill.

Fifty-six institutions of higher learning were surveyed: 21 state colleges and universities, 27 church colleges, and 8 schools of religion.

1269. **Brandt, Herman Francis.** The development and present status of religious education among the Mennonite Brethren of North America. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1270. **Carino, Francisco.** A suggested program of religious education for Filipino high-school students, based on a study of five church programs in Evanston, Ill. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1271. **Cisler, Lillian Eleda.** Martin Luther's ideas concerning religious education, with a discovery of parallels in present practice in the United Lutheran Church. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1272. **Downing, William Leander.** The Bible in education considered historically and constructively. Master's thesis, 1927. University of Texas, Austin.

Traces the teaching of the Bible in the schools, and gives special attention to the use of the Bible in Texas public schools. Discusses the advantages of such teaching.

1273. **Ekblad, A. H.** Week-day religious education. Master's thesis, 1927. Department of school administration, University of North Dakota, Grand Forks. 150 p. ms.

1274. **Elliott, Mabel Fay.** An annotated bibliography of the articles on moral and religious education as found in the *Religious education* magazine, 1906-1925. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1275. **Fleener, J. Blankenship.** Religious education in the public schools. Master's thesis, 1927. Department of education, University of Cincinnati, Cincinnati, Ohio. 112 p. ms.

1276. **Forsythe, Nathaniel Frederick.** A survey of the religious education system of Hammond, Ind. Doctor's thesis, 1927. Northwestern university, Evanston, Ill.

1277. **Howe, Mary Elizabeth.** Conduct values in course V of the international graded lessons. Master's thesis, 1927. Yale university, New Haven, Conn.

1278. **Johnson, Lawrence William.** A comparative study of enrollment, attendance, and punctuality of the public, private, parochial, and Sunday schools of Evanston, Ill., for January, 1927. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1279. **Kopf, Helen.** Effect of extra curricular, religious education upon conduct of public-school pupils. Piqua, Ohio, Bureau of research, 1927.

The study was restricted to truancy and offenses punishable by corporal methods. No immediate results were noticeable but the study is not regarded as conclusive.

1280. **Maxwell, S. A.** Religious education and the public school. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1281. **Mull, Lewis Benjamin.** The status of the Bible in the public schools of the United States. Doctor's thesis, 1926. School of education, Indiana university, Bloomington.

An attempt to show the present legal status and current practice as to the use of the Bible in the public schools of the various states, without concern as to religious education or controversy and without evaluation of the Bible for religious education. The constitutional provisions, the legislative enactments, the court decisions, and the current practices given for the various states are useful source information.

1282. **Palmer, Mary Leigh.** The amount, sources, and conduct pattern of the extra-Biblical material in the International graded lessons. Master's thesis, 1927. Northwestern university, Evanston, Ill.

1283. **Smith, Enid S.** The place of the mission schools in the educational system of Hawaii. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1284. **Smith, Robert Seneca.** A critical evaluation of the use of Old Testament material in current graded curricula of religious education. Doctor's thesis, 1927. Yale university, New Haven, Conn.

The child-centered principle of curriculum construction is gaining ground. "Social objectives" and the use of the Old Testament have rarely been combined with success in the same course; there has been a very meager provision for conduct activities; a few notable courses in Old Testament history and literature are available.

1285. **Tenney, Edward Vernon.** Some factors which condition the formation of religious and ethical ideas. Doctor's thesis, 1927. Department of education, University of California, Berkeley. 140 p. ms.

Two hundred and two persons were tested to find indices of their religious and ethical ideas, with the following results: (1) The prevalent forms of religious education are inefficient in effecting the formation of extensive and intensive knowledge of religious and ethical ideas. (2) Interest is an effective factor associated with the formation of religious and ethical ideas. (3) There has been insufficient encouragement and direction of reading on religious-ethical topics and problems involving at the same time a critical examination of meanings. (4) Intelligence has been overstressed as a factor in the development of religious-ethical knowledge. It was found that judging from the frequent comments made by those questioned upon what the purpose of the church should be, students would welcome aid in the solution of personal problems, assuming, of course, that such aid is of a critically intelligent order.

1286. **Twente, J. W., and Hall, C. A.** Week-day religious education in Kansas. University of Kansas bulletin of education, 1: 17-19, December, 1926. A study of 39 Kansas cities conducting 231 schools of religious education, with 28,868 pupils enrolled. Finds that the interdenominational cooperating type of school is most common.

1287. **Vieth, Paul H.** A study of the personnel and work of the office of director of religious education. Chicago, Ill., International council of religious education, 1926. 64 p.

1288. ———. The use and value of pupil-report cards in the church school. Chicago, Ill., International council of religious education, 1926. 31 p.

The use and value of pupil report cards in the church school; equipment for the church school; a list of selected books for the church school library.

1289. **Wellans, Ralph Dillingham.** The organizations set up for the control of mission union higher-educational institutions. Doctor's thesis, 1927. Teachers college, Columbia university, New York, N. Y. New York, International missionary council, 419 Fourth Ave.

This study tries to discover the significance of the several types of organization controlling mission schools relative to certain fundamental functions in college administration.

There is great freedom in the right to initiate policies in all types of organization. In the 17 institutions studied missions have the right to appoint their own representatives on the boards of control on the field.

1290. **Wilkinson, William J., and Bede, Brother Edward.** Religious education in non-Catholic colleges and Catholic colleges. Doctor's thesis, 1927. Department of education, University of California, Berkeley. 201 p. ms.

Finds as follows: (1) In general, Catholic colleges do not honor entrance credits in religion and fail to make suitable provision for those who enter with advanced standing in other subjects but with deficiencies in religion. (2) Academic credit for courses in religion is not granted in all Catholic colleges. (3) Practically all the courses in religion in Catholic colleges are required courses; there are very few elective courses. (4) In only very few cases is the religious instruction in Catholic colleges organized into a regular department, with instructors whose duties are limited to that department. (5) Attendance at religious services offers no problems to the Catholic college. (6) There is little or no difference in the methods used in religious instruction in the Catholic college from those used in other colleges in related or similar subjects. (7) Catholic colleges are lacking in facilities for the training of teachers of religion and for research and group action in the study of their problems of religious instruction.

See also items 10, 23, 45, 49, 50, 55, 59, 69, 84, 95, 114, 137, 142, 147, 781, 823, 894, 902, 1186, 1292.

MANUAL AND VOCATIONAL TRAINING

1291. **Ambler, Leon Newton.** Comparative reliability of four types of objective examinations in high-school woodwork. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

Data are presented which were found by author in an experiment in which 600 freshmen and sophomores in Marion, Augusta, Newton, Eldorado, Osawatimie, Anthony, and Wellington, Kans., high schools were tested, with results, based on analysis of sampling of 100 pupils, showing that completion tests had highest and true-false lowest reliability for high-school woodwork.

1292. **Bonflin, Sister.** Industrial arts in the elementary school curriculum. Master's thesis, 1927. Department of education, Catholic sisters college, Washington, D. C. 33 p. ms.

History of manual and industrial arts; purpose of industrial arts; survey; industrial arts in Catholic elementary education.

1293. **Drueck, Margaret Sarah.** A study of traits for real-estate salesmen. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. lii, 53 p. ms.

Reports the results of a study of the traits and trait actions necessary for success in selling real estate. Presents lists of traits and activities which may serve as the basis of a course for training new workers in that field.

The information gained through this study can be used in the following ways: By vocational counselors on the college level; by educational institutions in the organization of new courses in real estate; by real-estate students in choosing electives; by students and salesmen in self-analyses; and by executives in studying and classifying their men.

1294. **Fee, Edward M.** Qualifications of state supervisors of trade and industrial education. Master's thesis, 1927. Department of vocational teachers training, University of Pennsylvania, Philadelphia. 8 p.

1295. **Forsyth, Orrin Mack.** Employment and vocational training in printing. Master's thesis, 1926. University of California, Berkeley.

1296. **Fryklund, Verne O.** Factors affecting the use of instruction sheets. State teachers college, Kearney, Nebr. Milwaukee, Wis., Bruce publishing company, July, 1927. 5 p.

A study of word selection in writing instruction sheets.

1297. **Greene, Stanley S.** A study of time and cost standards in performing farm shop jobs. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y. 139 p. ms.

A study of the records of farm shop work done by trainees in the rural education department, Mississippi agricultural and mechanical college, for the past six years.

1298. **Horning, Samuel D.** A study of auto mechanics as a junior high school subject. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1299. **Killingsworth, Mary Elizabeth.** Occupational training in the orphanages of South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

1300. **MacDonald, David James.** An analysis of the single-color pressman's trade, with instructional material and curriculum suggestions. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y.

This study analyzes the single-color offset pressman's trade in such a way as to provide a satisfactory basis for setting up a course of study and for preparing instructional material suitable for apprentices.

1301. **Mathews, William C.** Development of vocational education in Europe and America. Master's thesis, 1927. Stanford university, Stanford University, Calif.

1302. **Rogers, Lewis Edgar.** The school training of occupational groups, Knightstown, Ind. Master's thesis, October, 1927. School of education, Indiana university, Bloomington. 63 p. ms.

1303. **Salley, Mrs. Von Ettam.** Vocational schools in South Carolina. Master's thesis, 1927. University of South Carolina, Columbia.

1304. **Sanders, H. W.** A study of farm shop work in Virginia and suggestions for its improvement. Blacksburg, Department of agricultural education, Virginia polytechnic institute, 1927. 22 p. ms.

1305. **Shively, John D.** Development of Smith-Hughes work in North Dakota high schools. Master's thesis, 1927. Department of school administration, University of North Dakota, Grand Forks.

Finds that the development is not striking.

1306. **Templeton, Clifford Arthur.** A course of study in mathematics and science adapted to trade and industrial classes. Master's thesis, 1926. University of California, Berkeley.

1307. **Unger, Edna W.** Vocational training for subnormal girls. Vocational adjustment bureau, New York, N. Y. Journal of personnel research, 5: 243-55, October, 1926.

An experiment in the garment machine operating trade to determine whether or not subnormal girls can be trained for semiskilled or skilled occupations. The results obtained through experiments show that a certain proportion can be trained, and that this proportion can be chosen in advance by the use of various selective devices.

1308. **Wilson, Clyde Hubert.** Part-time education in Tennessee under the provisions of the Smith-Hughes act. Master's thesis, 1927. College of education, University of Tennessee, Knoxville. 156 p. ms.

Considers the present situation regarding part-time education in Tennessee under the Smith-Hughes act, with recommendations.

1309. **Yates, Charles Dennis.** A study of high school and college vocational units in relation to intelligence and college achievements. Master's thesis, 1927. University of Idaho, Moscow.

See also items 131, 185, 207, 252, 254, 438, 708, 746, 1394, 1414, 1500-1503.

EDUCATIONAL AND VOCATIONAL GUIDANCE

1310. **Bates, Carl Everett.** The influence of vocational agriculture on the occupational attitudes of pupils. Master's thesis, June, 1927. School of education, University of Chicago, Chicago, Ill. vi, 71 p. ms.

Reports the results of an investigation to determine the influence of Smith-Hughes vocational agriculture on the vocational attitudes of pupils. Secures data by means of a questionnaire from both vocational and nonvocational schools.

The results show that the Smith-Hughes vocational agricultural program in a high school apparently does not influence the percentage of pupils who attend and complete the high-school course. It does not influence occupational attitudes of pupils who take less than two semesters of work in this field. It does not affect the number of pupils choosing the occupation of farming as a life work. Approximately 30 per cent of the boys in both the vocational and nonvocational schools expect to become farmers.

1311. **Buchwald, Leona C.** Informing city teachers about the work in educational and vocational guidance. Master's thesis, 1927. Harvard university, Cambridge, Mass.

1312. **Beckington, Lulu B.** Experiences with a vocations program in home-room organization. Teachers college record, 28: 563-79, February, 1927.

The study of vocations directed the attention of the pupils in a definite, organized way to their life work. It provided a means whereby pupils could look at themselves objectively and talk over their individual problems with their home-room teachers, who were, in the majority of cases, interested counselors.

1313. **Del Rosario, Formin.** The use of certain objective tests in the selection of apprentices. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1314. **Eddy, John Melvin.** A study of the vocational opportunities for high-school graduates in the territory of Hawaii. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. v, 82 p. ms.

Analyzes the aspirations and abilities of high-school graduates in Hawaii, and tries to match these factors with occupational possibilities. Finds that the vocational opportunities of high-school graduates in Hawaii are restricted somewhat by the importation of cheap labor and the favoritism shown certain racial groups in plantation and governmental positions. The already crowded clerical and teaching fields are chosen the most frequently as vocations. Additional emphasis should be given to vocational subjects and vocational guidance in the high schools. The students seem to differ in mental capacity according to racial groups.

1315. **Ferguson, Jessie.** The diagnosis and rehabilitation of probation students. Doctor's thesis, 1927. Ohio state university, Columbus.

1316. **French, Fannie.** An analysis of activities involved in pupil guidance. Master's thesis, December, 1926. School of education, University of Chicago, Chicago, Ill. iii, 101 p. ms.

Presents a master list of 180 activities performed in pupil guidance, as derived from the Commonwealth fund study of teacher-training curricula, from a survey of professional literature, and by the use of check lists. Checks the activities most frequently performed and those most important, as evaluated by experts and counselors. Holds that in selecting the activities which should be included in a counselor-training course those which have the highest ranks both in frequency and importance should probably receive most consideration. These are vital activities which the counselor has to perform.

1317. **Fryer, Douglas.** Interest and ability in educational guidance. Journal of educational research, 16: 27-39, June, 1927.

The writer asks: (1) Is an individual's expression of educational interests predictive of ability in educational subjects? Does an individual feel most interested in the subject in which he has the greatest ability? (2) Are the individual's estimates of ability in educational subjects predictive of ability in these subjects as measured by school grades? Finds that the median correlation between estimated ability and ability as measured by school grades is about +0.40. A prediction from 8 to 14 per cent better than pure chance is possible according to the correlations. Hence ability as measured by school grades can not be dependably predicted from the student's estimate of his ability in educational subjects.

1318. **Holland, Ansel C.** Vocational information in the high-school curriculum as a means of vocational guidance. Master's thesis, 1927. University of North Carolina, Chapel Hill.

1319. **Jessup, A. S.** Measuring the value of a course in occupations in the ninth grade. Master's thesis, 1926. University of Colorado, Boulder. 54 p. ms.

Finds that the teaching of a course in occupations does not impart enough vocational information to justify itself.

1320. **Kitson, Harry Dexter.** The scientific compilation of vocational histories as a method to be used in vocational guidance. Teachers college record, 28: 50-57, September, 1926.

1321. **Lane, O. H.** Vocational training in agriculture. School and society, 25: 423-24, April 9, 1927.

Nation-wide study of effectiveness of vocational training in agriculture, showing that out of 533 farm boys who had taken vocational agricultural work one or more years, 59 per cent were actually engaged in farming, 8 per cent were in related agricultural occupations, and 9 per cent had entered a state agricultural college.

1322. **Linehan, William Francis.** A philosophy of guidance in education. Doctor's thesis, 1927. Boston college, Chestnut Hill, Mass.

1323. **Miller, Harry Adalbert.** Vocational guidance with a suggested scheme for Texas city high schools. Master's thesis, 1927. University of Texas, Austin.

1324. **Pinner, Charles H.** Some evidences of the need of a vocational guidance program in the high schools of North Carolina. Master's thesis, 1927. University of North Carolina, Chapel Hill.

1325. **Smith, Mary Louise.** A plan for educational and vocational guidance in the junior high schools of Hutchinson, Kansas. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

Topics included are: (1) General study of principles underlying a good guidance program. (2) Need for guidance in junior high schools. (3) Plans used in cities of varied size. (4) Author's guidance plan for Hutchinson's junior high schools, with detailed analysis of steps necessary to its establishment.

1326. **Thompson, Samuel Edward.** The vocational guidance of the Omaha technical high school boys. Master's thesis, 1926. University of California, Berkeley.

1327. **Wehrenberg, Edward Ludwig.** Vocational guidance in a strictly agricultural community. Raleigh, School of education, North Carolina state college of agriculture and engineering, 1927.

Undertakes to study the present status of guidance in strictly rural communities with the hope of learning the needs; what is being done; and to suggest methods for improvement. It is suggested that more systematic efforts at standardization of work in all school work be made. School-attendance is to be encouraged through the use of occupational information in connection with all class work, but especially through English and vocational civics. It is also suggested that one person in each school be given oversight of the vocational guidance work, and if possible that there be a supervisor of this work for each county.

See also items 702, 708, 711, 912, 914, 917, 1341, 1388, 1526.

PERSONNEL STUDIES

1328. **Ho, Ching-Ju.** Personnel studies of scientists in the United States. New York, Department of educational research, Teachers college, Columbia university.

The technique of massed vocational histories was applied to this investigation. Judging by the number of prominent scientists in the field, it seems that the greatest number of opportunities is to be found in those sciences which can be applied in a practical way. Chemistry, engineering, and medicine are examples of these.

See also item 898.

AGRICULTURE

1329. **Baker, G. F.** Some results of instruction in vocational agriculture. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg.

A study to determine the performance of students of vocational agriculture classes in farming, based on yields compared with the yields of their fathers for the years 1923-1925.

1330. **Brown, Ralph Newton.** The development of agricultural evening classes in California. Master's thesis, 1926. University of California, Berkeley.

1331. **Cammack, Robert Emmett.** A study of home and farm conditions affecting a joint program of agriculture and home economics. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

In connection with a joint program of home making and agriculture, it is evident that there are many activities involved in the operation of the home and the farm which might be performed either by the boys and their fathers or by the girls and their mothers. Through an extensive questionnaire survey in the state of Alabama, the author of this thesis has sought to determine which members of the family perform the ordinary activities in the home and on the farm.

1332. **Durham, Lee.** The inspectional duties of state supervisors of agricultural education. Master's thesis, 1927. University of California, Berkeley.

1333. **Fitzgerald, N. E.** Transportation cost for teachers of vocational agriculture in Tennessee. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

This thesis was based on data secured from teachers of vocational agriculture in Tennessee over a 12 months' period. The purpose of the study was: 1. To determine the exact cost of teachers of supervised farm practice and doing community work. 2. To compare the salaries of teachers of agriculture with other teachers in the same high schools. 3. To study the methods of payment now used throughout the community "with a view of making recommendations regarding such method or methods of reimbursement" after a study of these trends has been made.

1334. **Garris, E. W.** The organization and administration of a state program in agricultural education. Tallahassee, Fla., State board for vocational education, 1926. 85 p.

1335. **Kay, A. W.** Some results of vocational instruction in agriculture in Virginia. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg. 70 p. ms.

A comparison of the extent to which rural high schools having vocational instruction in agriculture have kept farm boys in agriculture with the situation in schools not having such instruction. The study shows that the percentage of boys going into farming from vocational agricultural departments is double the percentage going into farming from the rural high school with no department of vocational agriculture. Also, the more vocational agriculture a boy takes, the greater his chance to become a farmer. The more general high-school education he takes, the less chance there is of his becoming a farmer.

1336. **McKay, Kenneth G.** The extent and nature of the training in veterinary science essential to the teaching of vocational agriculture. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

A summary of widely diverse opinions regarding the amount of veterinary training that should be included in the course of those preparing for vocational agriculture.

1337. **Magill, E. C., and Cline, E. W.** Part-time instruction in vocational agriculture. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg. 110 p. ms.

This study undertakes: 1. To determine the possibilities of part-time instruction in agriculture in a typical Virginia county. 2. To set up and test out good part-time procedure. 3. To determine the place of part-time instruction in the Virginia program. Findings: 1. There are plenty of part-time possibilities but they are so widely scattered that group instruction is difficult. 2. School census is no indication of part-time possibilities. 3. The feasibility of a part-time class can only be determined by a more or less informal survey by the instructor. 4. Recommended practice is set up as to how to conduct the instruction.

1338. **Martin, Veroy G.** Tenure of agricultural teachers in Mississippi. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y. 75 p. ms.

The purpose of this study was to trace out the factors affecting the tenure of agricultural teachers in Mississippi and to determine what problems with respect to prolonging tenure these factors present. The data obtained indicate the following conditions: (1) During the six-year period, 1922-1928, included in the study, 80 teachers engaged in 236 tenures of teaching. (2) Of these tenures 13.3 per cent were one-year tenures and 21.3 per cent were 5 years or more. (3) The mean tenure was 2.41 years. (4) The tenures involving no change make up 19 per cent of the total. (5) There has been a decline in turnover from 56.7 per cent in 1922 to 23.6 per cent in 1927.

1339. **Miller, Adam.** A study of the farm survey as a means of improving agriculture, based upon three surveys of the farms in the Dana, Iowa, community. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

A summary of the improvements in farm practices over a three-year period, when the agricultural department of the local consolidated school set itself the task of getting specific community results.

1340. **Nelson, G. V.** A compilation by enterprises and jobs of reference material for instructors of vocational agriculture in Virginia. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg. 364 p. ms.

1341. **Nieman, Allan E.** A survey of the vocational intentions of high-school pupils in 101 high schools of northwest Iowa. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

Particular study was given to the expressed desires to leave or remain in the country. Differences in intentions to farm were noted in schools of different sizes, greatest interest in farming being detected in the farming population of the largest high schools.

1342. **Phillips, Frank Roy.** A procedure for making a course of study in farm management for secondary schools in Randall county, Tex. Master's thesis, 1926. Rural education department, Cornell university, Ithaca, N. Y.

The object of this thesis was to set forth and illustrate in application a procedure with criteria which should be a guide in formulating a course of study in farm management. The survey data used were secured from 118 Randall county farms during the winter and spring of 1923 and covered the business of the previous year from January, 1922, to January, 1923. Two kinds of questionnaire forms were used, one on 43 farms to ascertain the labor incomes, the other on 75 additional farms to secure data concerning the number and kind of farm enterprises. The 43 farms referred to are located within four miles of the city of Canyon, the county seat. The farms surveyed for enterprises are in the three other neighborhoods studied, located in different parts of the county.

1343. **Sanders, H. W.** Occupational selections of Virginia polytechnic institute graduates in agriculture. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg.

1344. **Shannon, A. E.** Intelligence tests in agricultural education. Master's thesis, 1927. Department of agricultural education, Virginia polytechnic institute, Blacksburg.

1345. **Smith, Raymond Charles.** A study of report forms used by county agricultural agents. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

The purpose of this study was: (1) To find out present conditions and trends in the system of reporting in county agent extension work in the states (2) To summarize in a consensus of opinion of state directors of extension, county agent leaders, and supervisors certain desirable features of weekly, monthly, and annual reports and the better methods of judging and utilizing these reports.

1346. **Smith, William Arthur.** Discovery of a method of determining results of vocational training in agriculture. Study of results in improved farm practice in Harrison township, Clay county, Ind. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

The purpose of this study was the development of a method for the measurement of the effectiveness of teaching on the basis of improvement in the farming practices of the boys participating in the instruction. In the development of this method Harrison township, Clay county, Ind., was surveyed as a test case. A carefully prepared survey blank was used to obtain information on the school record and educational experience of the individuals concerned, the probable experience background in the home and on the farm, the present occupational status, the amount of higher education, experience in junior club work, and the farming practices of the individual reported by enterprises.

1347. **Stephenson, Earl E.** A study of the farm survey as a means of improving agriculture in the Paton, Iowa, community. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

This thesis presents the results of three annual surveys which were used as the basis for the course of study in agriculture of the local consolidated school.

1348. **Wilhoit, Samuel F.** An analysis of the difficulties involved in the supervision of projects in vocational agriculture. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

The study is based on the difficulties reported by 60 Iowa teachers and summarized solutions for each from a number of the most successful and experienced.

1349. **Wilkey, C. B.** The community program of the teacher of vocational agriculture in Arkansas. Master's thesis. College of education, University of Kentucky, Lexington.

See also items 67, 260, 812, 1220, 1240, 1310, 1321, 1327.

HOME ECONOMICS

1350. **Bratley, Hazel.** A study of the problems and difficulties of student teachers of home economics of Cornell university. Master's thesis, 1927. Rural education department, Cornell university, Ithaca, N. Y.

The purpose of this study is to determine what the student teachers of home economics and those interested in directed teaching of home making feel to be the problems and difficulties of cadet teachers. The facts revealed by the rating scales, questionnaire, and office records, used as sources of information for the study, were tabulated and summarized. Then a specific study was made by the case method to determine the specific problems and difficulties of each individual. The conclusions of each method of study employed were summarized and recommendations for further investigation of the subject were made.

1351. **Brown, Clara M.** An analysis of the responsibilities of the teacher-training in home economics. Department of home economics, University of Minnesota, Minneapolis. Baltimore, Md., Warwick & York, Inc., 1926. 10 p.

An analysis of the responsibilities of the home-economics teacher-trainer's job made by the home-economics teacher-training staff of the University of Minnesota. The result of this study brought about a clarification of their problems in home-economics teacher-training work; a unification of the subject matter to be taught; methods of teaching to be used, relationships to be maintained with other educational agencies; and the orientation necessary for potential home-economics teachers in order to keep abreast with the subject.

1352. **Clement, J. A.** Report of subcommittee on home economics. Ann Arbor, Mich., North central association quarterly, 1: 532-43, March, 1927.

A study of the subject of home economics in secondary schools in relation to educational objectives. A bibliography is appended.

1353. **Coss, Millicent M.** A study in social-home problems. Master's thesis, 1927. Department of household arts, Teachers college, Columbia university, New York, N. Y. 51 p. ms.

The problem as stated in this study was to determine some of the vital social-home problems on a basis other than conjecture. A total of 45 representative current periodicals (a sampling of magazines of different types) were read from September, 1926, to June, 1927, inclusive, and the contents examined for material relative to home life.

Thirty-two and one-tenth per cent of the 144 articles read were found of value for this study. Articles relative to the home and family appeared with first frequency, and to child development with second frequency. Among the topics discussed were parent and child adjustments, the mother and a career, husband and wife relations, character development of children, buying of clothing, family use of leisure, aids to household labor, and social responsibilities of families. Recommendations were made that more home-economics content be based on life situations, interpreted in terms of local conditions; that the teaching of skills be retained but definitely related to the effect of those skills on family welfare; that an effort be made through the home economics curricula to bring about better adjustments between parents and children; that boys (the future men) as well as girls be educated for greater appreciation of family living and home activities; that better living and understanding of social-home problems be the goal of home-economics instruction.

1354. **Dyer, Annie Robertson.** The administration of home economics in city-school systems. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y.

A study of present and desired practice in the organization of the home-economics program. The author has interpreted the data in terms of progress in a school system, growth from the "traditional" through "established" practice and "beginning" progress to "common" practice and then on to "desired" practice.

1355. ———, and others. Home-economics curriculum study. I. The placement of home economics content in junior and senior high school. New York, Office of research in home economics education, Teachers college, Columbia university, 1927. 112 p.

Interpretative studies were made of the data to determine the extent of content, kind of content, organization of content, standardization or agreed placement, and differentiation of content in junior and senior high school.

Findings: 1. There is a very large amount of content in home-economics courses of study, probably too large for the amount of time commonly allotted to home economics in the school program. 2. The home economics courses now include content on more subjects than foods, clothing, shelter. 3. The kind of subject matter now emphasized is largely that from the producer and managerial aspects. 4. There is a decided tendency to place some content of all the home-economics subjects, food, clothing, etc., in all of the grades. 5. The subject matter seems to be unified around some central theme of home living, such as women's work in the home or future home making. 6. Many of the topics are equally emphasized in all grades. There are decided tendencies to adapt the instruction to the needs of girls as home members at various ages rather than to prepare all girls directly for a future vocation of home making.

1356. **Engle, Edna M.** Testing a course of study. Master's thesis, 1927. Household arts department, Office of research in home economics education, Teachers college, Columbia university, New York, N. Y. 48 p. ms.

Standardization and some of the results of tests based upon the Baltimore courses of study.

The tests have furnished the basis for determining what material should receive more attention and what has been omitted and what should have been included. The results will show how one class compares with another within the school and in the city as a whole.

1357. **Giblette, Katherine T., and O'Brien, F. P.** A project test of achievement in sewing. School review, 35: 217-21, March, 1927.

Study of aims of sewing and methods for measuring achievement as reported by 125 teachers in 88 high schools. -A test for measuring achievement was prepared and over 1,000 sewing specimens graded. Results of test indicate that aims of sewing instruction are not being satisfactorily realized.

1358. **Hines, Zella M.** Teaching rural home life through our schools—Plainview school in Union county a specific example. Master's thesis. College of education, University of Tennessee, Knoxville.

1359. **Hull, Mabel R.** The development of the home-management course at the college level in the United States. Master's thesis, 1927. University of Illinois, Urbana.

1360. **Kuenzel, Mae Bartlett.** A survey of recent development in methods of teaching home economics. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1361. **Leonard, Lucy.** The development of home-economics teacher-training in Oklahoma. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

1362. **Mintle, Vera L.** A beginning college course in foods based on the problem method of teaching. Master's thesis, 1927. Iowa state college of agriculture and mechanic arts, Ames.

Three years' experience is here summarized. Objective measures of results from different teaching procedures are presented.

1363. **Oglesby, Bess.** An analysis of the activities of a home-economics supervisor. Master's thesis, 1927. Office of research in home-economics education, Teachers college, Columbia university, New York, N. Y.

Two hundred and ninety-six supervisors' activities were listed. These included activities of housing, staffing, office and finances, relations with school system, curriculum and courses of study, texts and teaching pupils, tests and pupil achievement, classroom visitation, teachers' conferences and meetings, technique of teaching, research program, professional development and setting up the home-economics program. Findings: There was general agreement on 83 per cent of the activities. About 10 per cent of the activities were performed alike by all supervisors. An extensive bibliography is also included.

1364. **Philippine Islands. Bureau of education, Manila.** Results of achievement test in food selection and diet. Industrial bulletin, no. 4, August, 1927. 7 p. ms.

Results of Philippine educational achievement test in food selection and diet. Divisions receiving high scores are those under direction of industrial supervisors.

1365. **Rogers, Bertha Moore.** A study of the home-making course in the public schools, including the problem-project method. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1366. **Stewart, Anna Rebecca.** The four-year home-economics curricula in state teachers colleges and normal schools. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1367. **Tracy, Elizabeth Lail.** Methods of teaching home economics. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

See also item 1522.

COMMERCIAL EDUCATION

1368. **Beynon, A. Blodwen.** Factors determining the choice of commercial subjects by high-school students. Lincoln, Extension division, University of Nebraska, 1927. (Educational research bulletin, Teachers college, no. 2: 6-14, January, 1927.)

Lincoln, Nebr., high-school seniors and juniors had Terman group test. Questionnaires were also filled out (1,463 cases). Average I. Q. of high-school student is 104.3; of commercial pupils, 99.3. Students who were refused admission to commercial course had average I. Q. of 108.8. Thirty-nine per cent of juniors and seniors not in commercial department desired change to that department. Reasons given were (a) better training, (b) preparation for earning a living, (c) more-interesting work.

1369. **Blackstone, E. G.** Training of commercial teachers. College of education, State university of Iowa, Iowa City, 1926. 19 p. (University of Iowa extension bulletin, 141.)

A study was made of the commercial teacher-training programs in 42 of the institutions training commercial teachers. The author presents many interesting tables covering such factors as length of course, admission requirements, requirements for degrees, courses offered, and practice teaching requirements.

1370. **Butsch, Russell Lewis Carl.** An experimental study of progress in typewriting. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. ix, 179 p. ms.

* Comprises an experimental study of progress in typewriting from three standpoints: (1) The learning curves of advanced students; (2) certain particular features of the learning curve at the higher levels; and (3) the more important strokes used in typewriting.

1371. **California. University. Survey committee.** Employment and education in business. *In its* A study of vocational conditions in the city of Fresno. Berkeley, University of California, 1926. 25 p.

A study of commercial education in Fresno and of requirements and opportunities in business occupations in Fresno. Tables of data regarding employment and promotional opportunities and requirements for different office occupations are presented. A study of the pupils in the commercial departments of the Fresno schools includes data regarding occupational choices. Revisions of the present commercial curriculum are suggested.

1372. **Chambers, Hazel Hilliard.** Housing and equipping a high-school commercial department. Master's thesis, 1927. University of Texas, Austin.

Discusses the development of aims and curriculum in high-school commercial departments.

1373. **Debra, Esther.** An analytic study of present methods of teaching typewriting. Master's thesis, June, 1927. School of education, Indiana university, Bloomington. 108 p. ms.

1374. **Dush, Willa M.** What is an effective classroom measurement of pupil learning in Gregg shorthand principles? Master's thesis, 1927. New York university, New York, N. Y.

1375. **Elmer, M. C., and others.** Women in clerical and secretarial work. Minneapolis, Minn., Woman's occupational bureau, 1927. 42 p.

A study of 8,200 clerical workers in 191 establishments employing a total of 34,360 employees. This comprehensive study contains tables of data, charts, and findings on a large number of topics including: Distribution of workers by sex, age, occupation, education, salary, and length of service; causes of labor turnover; opportunities for promotion; amount of experience required by different firms; sources of obtaining new workers; preference for single women; and housing of clerical workers.

1376. **Giles, J. T.** A survey of commercial graduates in Wisconsin high schools. Madison, Wisconsin state department of public instruction, 1926. 6 p. ms.

The problem was to follow up graduates from the commercial departments of high schools in order to determine the vocational use made of commercial subjects. Of the 4,918 graduates studied, 13 per cent of the boys and 32 per cent of the girls hold positions requiring a knowledge of shorthand, whereas 25 per cent of the boys and 23 per cent of the girls hold positions requiring a knowledge of bookkeeping. The program of the larger schools are more appropriate to the needs of the graduates than those of the smaller schools.

1377. **Gilman, Albert Franklin, jr.** Trends of instruction in the writing of business letters. Master's thesis, March, 1927. School of education, University of Chicago, Chicago, Ill. iv, 114 p. ms.

Presents the results of an investigation of state courses of study, textbooks, and actual practices in school systems, to determine trends of instruction in the writing of business letters. Compares textbooks published since 1910 as to tendencies revealed. The investigation reveals the following tendencies that are common to two or more types of data: (1) To devote more time to business-letter writing; (2) to motivate the business letters by an actual situation; (3) to emphasize the correct form of the business letter; and (4) to correlate business-letter instruction with the forms of discourse.

1378. **Hainfield, Charles.** A study to determine whether it is more economical to learn the keyboard of the typewriter by sections or to learn the whole keyboard from the beginning. Master's thesis, 1927. New York university, New York, N. Y.

1379. **Holmes, George Benjamin.** The teaching of bookkeeping in the secondary schools of California. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1380. **Iowa. State university.** Research studies in commercial education. University of Iowa monographs in education, 1st ser., no. 7, July, 1926. 160 p.

Reports of research studies by 15 leaders in commercial education at the Iowa research conference on commercial education called by the University of Iowa in 1926 to foster research in commercial education. Many of the leaders in commercial education discussed, among other topics pertaining specifically to this field, the following: Unsolved problems; problems in small communities; psychological tests; problems of guidance, measurement, and improvement of instruction in particular subjects; significance of community background, occupational surveys, and job analyses; and specialization of commercial teachers.

1381. **Limp, Charles E.** A work in commercial prognosis. Journal of educational research, 16: 48-56, June, 1927.

Ten tests were selected from among 40 because of their high predictive value. After several years of experimenting the average error of prediction in terms of school marks has been reduced from 7.2 to 6.3 points for shorthand, and from 5.8 to 5.2 points for typewriting. From these findings it seems that ability to learn shorthand and typewriting can be predicated with a fair degree of accuracy.

1382. **Lemax, Paul S.** The comparative status of the commercial teacher. School of education, New York university, New York, N. Y. Education bulletin, State of New Jersey, Department of public instruction, Trenton, 13: 359-65, May, 1927.

A quotation from a study made to determine the status of commercial teachers of New Jersey regarding such items as preparation, teaching experience, salaries, state and local requirements, turnover, etc. The author presents some interesting tables regarding the salaries of commercial teachers and teachers of other subjects, the median number of years of teaching experience for various groups of teachers, the per cent of teachers of the different subjects holding baccalaureate degrees in 1912 and 1924, and various other factors.

1383. **Money, Helen.** Uses of calculating machines in business. Boston, Mass., Department of elementary education, Boston university, May, 1927. Survey made in Fitchburg, Mass.

1384. **Raymond, F. E., and Adams, E. S.** Standards in elementary shorthand. New York, Gregg publishing co., 1926. 115 p.

Study aims to determine the standards of achievement in elementary shorthand in five western states and to diagnose weaknesses in instruction. Contributes a series of tests and tables of data showing median scores and range of scores of the superior group. In the future use of these tests, the scores can be used as standards.

1385. **St. Louis, Mo. Board of education.** Survey of St. Louis high-school commercial students in employment. Public school messenger, 24: 28-30, June 15, 1927. (Research and survey series, no. 2.)

Questionnaires were sent to graduates of two-year and four-year commercial courses in St. Louis high schools during past six or seven years. Findings: Subjects regarded as most important in high-school course in order of frequency with which they were mentioned: Typewriting, English, stenography, book-

keeping, arithmetic, commercial law, penmanship, spelling, salesmanship, mathematics. Subjects regarded as least helpful: Sciences, foreign languages, history, civics and vocations, bookkeeping, commercial geography, mathematics, commercial law. List of needed skills or knowledge: Business machines, business English, office routing, filing.

1386. **Scudder, Kenyon Judson.** The predictive value of general intelligence tests in the selection of junior accountants and bookkeepers. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1387. **Selby, Paul Owen.** The preparation of commerce teachers for Missouri high schools. Master's thesis, 1926. Graduate school, University of Missouri, Columbia, Mo. 88 p. ms.

1388. **Strong, Edward K., jr.** Differentiation of qualified public accountants from other occupational groups. School of business, Stanford university, Stanford University, Calif. Journal of educational psychology, 18:227-37, April, 1927.

A study of the interests of 1,271 successful men, distributed in 18 occupational groups, to determine for guidance purposes what interests were characteristic in the respective occupational groups. Each of the 1,271 was requested to indicate whether he liked or disliked, or was indifferent toward 263 types of activities. Members of each occupational group have characteristics distinctive from those of other occupational groups. Together with the findings of an earlier study the data presented seem to be significant in the field of vocational guidance, particularly in higher institutions.

1389. **Tremblay, Florette Emma A.** Methods of presenting the fundamentals of bookkeeping. Master's thesis, 1927. Boston university, Boston, Mass.

1390. **Walters, R. G.** Commercial teacher-training requirements. Columbus, Ohio, Ohio state educational conference, 1927. 7 p. (Ohio state university bulletin, 32.)

Results of a survey of state supervision of commercial education in the various states of the Union in which information was received from 45 states and the District of Columbia. Questionnaires showed 36 states had accredited commercial teacher-training institutions. The number of colleges, universities, and normal schools teaching commercial training is increasing; private business schools are relatively less important than they once were as teacher-training institutions. The majority of states now require for commercial teachers from two to four years of training beyond high school. Seventeen states and the District of Columbia no longer certificate teachers to teach the entire range of commercial subjects, but they certificate teachers to teach only those special commercial subjects which appear upon the face of the certificate.

1391. **Weersing, F. J.** A study of certain aspects of commercial education in the public high schools of Minnesota. Doctor's thesis, 1927. University of Minnesota, Minneapolis.

A survey of the actual status of commercial education in Minnesota, including a follow-up study of 695 commercial graduates. Gives reports from administrators and commercial teachers, a survey of 15 communities, and occupational data from census reports. The author concludes that the curriculum is not well planned and that it does not fill the professed aims.

See also items 205, 832, 1535.

PROFESSIONAL EDUCATION

GENERAL

1392. **Leonard, Robert J.** Dangers incident to the continual lengthening of professional curricula. School and society, 25: 759-68, June 25, 1927.

Entrance requirements to professional schools during last 50 years are tabulated.

LAW

1393. **Wigmore, John H.** Report of the dean of the faculty of law on an educational survey, 1925. Evanston, Ill., Northwestern university, 1927. 296 p. ms.

This survey is a very comprehensive study of legal education in Northwestern university. It is composed of five sections, the first dealing with general policies; second, the faculty; third, the curriculum; fourth, the students; fifth, the alumni, library, location, and equipment.

MEDICINE

1394. American association of social workers. Vocational aspects of medical social work. New York, American association of social workers, 1927. 32 p.

Discusses the origin of medical social service; problems of social service illustrated by cases, opportunities, salaries and preparation. A list of institutions offering training courses and a bibliography are attached. This is the third of a series of vocational studies.

See also item 1481.

ENGINEERING

1395. Boller, Samuel Jed. A study of the effect of solid geometry as a prerequisite for engineering. Master's thesis, 1927. State university of Iowa, Iowa City.

This study aims to find if the deficiencies in third algebra, solid geometry, or both, have any influence in the grades earned in these subjects taken in engineering and what subjects, if any, are affected by these deficiencies. The conclusions show that students do receive slightly higher grades in studies that are peculiar to engineering schools than those students who are deficient in solid geometry. Students deficient in both solid geometry and third algebra receive slightly lower grades than those that are deficient in solid geometry only. However, in either case, the difference in grades is so slight that the findings of this study seem to cast some doubt on the assumed value of solid geometry for the successful pursuit of engineering studies.

1396. Hammond, H. P. Summary of the fact-gathering stages of the investigation of engineering education. *In Society for the promotion of engineering education. Proceedings, 1926.* p. 52-114.

Deals with personnel, curricula, and methods of instruction; supplementary services of the engineering colleges and of the costs of engineering education; relationship of engineering education to the professions and to American industry; studies of engineering education in Europe. Engineering students are as good material, fundamentally, as could be expected. Teaching personnel is good, number of graduate students is high. One million, five hundred thousand dollars is spent for research; 5 per cent of the amount spent for undergraduate instruction. Cost per engineering student per year averages \$610. Of this amount the student pays \$172.

1397. John, Walton G. A study of engineering curricula. *In Society for the promotion of engineering education. Proceedings, 1926.* p. 454-513.

Discusses requirements for entrance and for graduation in the colleges which grant first degrees in engineering. The five curricula of widest occurrence and largest enrollment are included. Treatment is primarily quantitative. Ninety-two colleges are included in the study.

1398. Ohmann, Oliver Arthur. A study of the causes of scholastic deficiencies in engineering by the individual case method. Iowa City, 1927. 58 p. (University of Iowa studies in education 3, January 15, 1927.)

In view of the need for the development of techniques of selection, replacement, motivation and adjustment of college students from the point of view of both group administration and the individual student, this study proposes to find the causes of scholastic deficiency among students of engineering. The study concludes that there is a definite need for guidance clinics in universities where students may come voluntarily for expert diagnosis and advice; that at present group tests are not adequate for the prediction of serious scholastic deficiency nor for the diagnosis of the defects. Mass measurements should be followed with a program of individual adjustment. The major groups in order of significance of the causes of scholastic deficiency are motivation and interests, intellectual factors, emotional factors, educational factors, environmental factors, study habits and methods, physical factors, teaching methods and content, motor factors.

1399. Sackett, B. L., and committees. Engineering graduates and nongraduate former students. *In Society for the promotion of engineering education. Proceedings, 1926.* p. 172-216.

To determine relationship of graduates' work to college courses, and the means through which they obtain first positions. Sixty per cent of graduates are in same lines of work as their college courses, one-fourth are in "closely associated" or "unassociated" lines of engineering, and remaining 15 per cent have left engineering. Graduates in engineering obtained their first positions as follows: Through a teacher or other official of the college, 24.7 per cent; through the solicitation of an employer, 20.5 per cent; through work done prior to graduation, 15.7 per cent; through personal solicitation of employer by the graduates, 14.3 per cent. 22.5 per cent of all graduates obtained their first positions through organized efforts of colleges or employers.

1400. Society for the promotion of engineering education. Second report of the Board of investigation and coordination. *Journal of engineering education (New York, N. Y.), 18: 37-56, September, 1927.*

This report summarizes two important phases of the survey recently made by the Society for the promotion of engineering education. It considers the alternative between a unified and divided education process in the training of engineers, and the question of the normal length of the engineering curriculum. Respecting the first issue it is shown that a unified educational process implies a curriculum in which humanistic, scientific, and technological studies are combined into an orderly whole, constituting a complete and self-contained branch of higher education under unity of supervision. A divided process is based on a distinct pre-engineering curriculum under separate auspices and an engineering curriculum set up on purely technical lines, as is the practice in law, medicine, and dentistry. The board favors an education program which is complete in itself and which may be entered direct from the secondary schools. The second issue regarding the length of the curriculum is the result of the opinion that more than four years are required to prepare creative leaders for the engineering profession. The alternative is between a longer prescribed program and normal undergraduate programs, with a variety of supplementary programs to meet different needs and preferences.

1401. **Society for the promotion of engineering education.** A study of evolutionary trends in engineering curricula. *In its Proceedings, 1926.* p. 551-85.

Evolutionary survey of 10 engineering schools, with diversity of origins, status, and location.

1402. **Warren, Charles H., and committee.** Engineering teaching personnel. *In Society for the promotion of engineering education, Pittsburgh, Pa. Proceedings, 1926.* p. 217-61.

Aims to obtain certain aspects of the status of engineering teachers in the United States and Canada, with a view to improving teaching staffs. Findings: Teaching load, 17.6 hours per week. Sixty-five per cent of engineering schools have no policies as to sabbatical leaves for engineering teachers. Larger salaries should be paid to prevent industry from getting the most capable men. Problem of getting better teachers is greatest of all in engineering education.

1403. **Worcester polytechnic institute, Worcester, Mass.** Engineering incomes. *In its Journal, May, 1927.* p. 2-3.

The purpose of this survey was to furnish a basis for service exchange operations, to inform graduates about their relative standings, and to guide employers in establishing salary scales. The tabulations show the average income of all graduates, the average incomes of the upper 20 per cent, and the average incomes of the lowest 20 per cent.

See also item 594.

ARCHITECTURE

1404. **Association of collegiate schools of architecture.** Minutes of the fourteenth annual meeting, May 9-10, 1927. 30 p. ms. (Secretary, Roy C. Jones, University of Minnesota, Minneapolis, Minn.)

Among the important discussions of this meeting were those bearing on the collaboration between the several arts of design, such as represented by architects, painters, and sculptors, and the problem of the selection of proper juries to make design judgments.

CIVIC EDUCATION

1405. **Carr, Mildred Irene.** Training for citizenship—an experiment in the use of newspapers and periodicals. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1406. **Crane, Walter Bergen.** The teaching of citizenship to general continuation classes in part-time education. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1407. **Daeley, Sister Regina.** Some contributions of a Greek history course to the development of democratic ideals. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1408. **Ludeman, W. W., and Woods, Cora Wilson.** Civics curriculum for the elementary grades. Springfield, S. Dak., Department of education, Southern state normal.

Studied many courses of study in civics. Proposed one for all grades from first to sixth, inclusive.

1409. **Nash, H. B.** Results of a teaching program in civics. West Allis, Wis., Public schools, Department of educational measurements, 1926. 8 p. ms. This study contains tables showing results of the Mill tests in civics information and civics attitudes.

1410. **Bandall, Cyril Franklin.** A character scale for judging citizenship. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1411. **St. Louis, Mo. Board of education.** Knowledge of pupils regarding the provisions of the United States Constitution. Public school messenger, 24: 3-23, June 15, 1927. (Research and survey series, no. 2.)

Tests on the Constitution of the United States were given on November 30, 1926, to all pupils enrolled in the St. Louis public schools in grade seven and above, including the high schools and teachers colleges. Tests were designed to discover what types of constitutional provisions are best known to the pupils and particularly what provisions are known increasingly better from grade to grade. The definite and formal teaching of United States history to all pupils in grade eight gives them a temporary store of knowledge concerning the provisions of the Constitution, only part of which carries over to the succeeding year. Recent amendments are better known than earlier ones.

1412. **Starrett, Adda Mabel.** Civic ideals through literature. Master's thesis, 1926. University of California, Berkeley.

See also item 52.

MILITARY EDUCATION

1413. **Chambers, Merritt Madison.** The status of military training in American universities. Master's thesis, 1927. Ohio state university, Columbus. History, present status, methods, and purposes of military training in universities. Published by the Public school publishing co., Bloomington, Ill., under the title "Every man a brick." 100 p.

EDUCATION OF WOMEN

1414. **Evans, Maude Darrow.** A study of the interrelation of training received under the Smith-Hughes act at the University of California, Southern branch, and the postgraduate activities of the women who have received this training. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1415. **Hamilton, Zona.** The development of higher education for women in Georgia. Master's thesis, 1927. Brown university, Providence, R. I.

1416. **Hutchinson, Emilie J.** A study of the professional experience of 1,000 women who have received the Ph. D. degree from American colleges and universities. New York, Barnard college, Columbia university, 1927. 253 p. ms.

Academic training, positions held, research carried on with reasons and obstacles, cost of graduate study, and advice to others. The complete study is rather a description of the professional experience of these women; more data would be necessary for conclusions.

1417. **McDonald, Blanche.** The education of women in the time of Queen Elizabeth. Master's thesis, 1927. Teachers college, Columbia university, New York, N. Y.

1418. **Reed, Mattie Williams.** The evolution of theory and practice in the education and sphere of women in America. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1419. **Sturtevant, Sarah M., and Strang, Ruth.** A study of the 24-hour schedules of 40 high-school girls. Columbia university, New York, N. Y. Teachers college record, 28: 994-1010, June, 1927.

The study shows the details, relationship, and balance of activities of adolescent girls. For teachers, parents, and personnel workers, the individual's daily schedule is a valuable supplement to standard tests, physical examination, and other methods of studying the individual. For the girls themselves, the schedules offer an opportunity for an objective evaluation of their daily activities.

1420. **Vassar college, Poughkeepsie, N. Y., Class in statistics, 1927.** Earnings of Vassar students. Vassar journal of undergraduate studies, 3: 1-12, May, 1927.

How much money can a Vassar student earn while in college? Skilled jobs are held by upper classes; unskilled by freshmen, both for year and summer. Seniors spend more time in paid work than freshmen. Greatest percentage of all classes earned less than \$25 during the college year.

1421. **Walker, Mary.** A study of leadership among college senior women. Master's thesis, 1927. University of Texas, Austin.

Seventy senior women of the university were studied with reference to intelligence, scholarship, "Will-temperament" traits, and leadership.

See also items 29, 75, 83, 1123, 1167, 1176, 1255, 1307, 1375, 1446, 1459, 1522.

EDUCATION OF RACIAL GROUPS

INDIANS

1422. **Gartlett, Thomas B.** The community of ideas of Indians. University of Denver, Denver, Colo. Psychological review, 34: 391-99, September, 1927.

White and Indian children were given the continuous association test. "In community of ideas Indians and White are not found to be different in so far as these data are concerned."

1423. ———. A comparison of mental abilities of nomadic and sedentary Indians. American anthropologist, 29: 206-13, July-September, 1927.

Comparison was made by three educational sub groups from the fourth to the tenth grades. Group psychological tests were used. "In tests of higher mental process, the Indians of nomadic ancestry are on the average 35 per cent better than those of sedentary ancestry." They are more nearly alike in their performance of memory tests and least alike in ingenuity tests.

1424. ———. Mental fatigue of Indians of nomadic and sedentary tribes. Journal of applied psychology, 10: 437-52, December, 1926.

Indians from 11.8 to 18.3 years were tested by the Thorndike-Addition sheets and the subjects reported as to sense of fatigue. It was found that the nomadic Indians excelled the sedentary Indians. "The sedentary subjects were not so inclined to acknowledge feelings of fatigue as freely; though they 'fatigued' more than the nomadic."

1425. **MacFarland, Ruth.** Intelligence of Indian children. Master's thesis, 1926. Department of education, State university of Montana, Missoula. 60 p. ms.

A study of Indian children in the public and private schools of Montana. The intelligence of the children of five different tribes is compared, and the intelligence of each is compared with that of white children, half-breeds, quarter-breeds, etc. Otis tests were used. Findings: White children ranked much higher than full-blood Indian children, except upon those questions which had to do with outdoor life and Indian environment. Mixed breeds ranked between the white and full-blood Indian children, the I. Q. rising with the percentage of white blood.

1426. **Morley, Clyde Anson.** A general survey of the schooling provided for the American Indian throughout our country's history, with a special study of conditions in Wisconsin. Master's thesis, 1927. University of Wisconsin, Madison.

JEWS

1427. **Cohen, Irma Loeb.** The comparative intelligence of Jews. Master's thesis, 1927. Department of psychology, Ohio state university, Columbus. Columbus, Ohio state university press, 1927. vii, 43 p.

An attempt to discover whether the group of Jewish students in a particular course at Ohio state university differ in mentality from the rest of the class. A small but consistent superiority of the Jewish group is evidenced and clearly demonstrated.

LATIN PEOPLES

1428. **Drake, Rollen Harrison.** A comparative study of the mentality and achievement of Mexican and white children. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1429. **Flores, Zella K. Jordan.** The relation of language difficulty to intelligence and school retardation in a group of Spanish-speaking children. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. v, 96 p.

Compares a group of Spanish-speaking children with a group of English-speaking children in the same school, in order to determine the relation of language difficulty to intelligence and retardation. Finds that there are significant individual differences in the degree to which language difficulty is experienced among Spanish-speaking children.

1430. Loftin, J. O. Mexican secondary education as developed in the Sidney Lanier junior high school of San Antonio, Texas. Master's thesis, 1927. Education department, State teachers college, Greeley, Colo.

1431. Mead, Margaret. Group intelligence tests and linguistic disability among Italian children. *School and society*, 25: 465-68, April 16, 1927.

On group intelligence tests, forms A and B, were given to the American and Italian children in grades 6 to 10 of the Hammonton, N. J., public schools. American children were found superior to Italians in these tests.

1432. Parr, Eunice Elvira. A comparative study of Mexican and American children in the schools of San Antonio, Texas. Master's thesis, September, 1926. School of education, University of Chicago, Chicago, Ill. ix, 70 p.

Reports a comparative study of Mexican and American children with respect to chronological, mental, and educational ages; the achievement in certain school subjects; progress in the first grade; home environment; and other conditioning factors. Mexican children average 2 years older than American children in chronological age, but American children average 4.2 months older in mental age, and 4 months older in educational age. American children average 7 months higher than Mexican children in reading ability, and 2.8 years higher in spelling and arithmetic. Mexican children show a much higher percentage of retardation in the first grade. The home environment of American children is superior to that of Mexican children. "The study indicates that American and Mexican children should be in separate schools for the good of both and should be taught by different methods, the direct method being preferable for non-English speaking children."

1433. Taylor, Merl Cobb. Retardation of Mexican children in the Albuquerque schools. Master's thesis, 1927. Stanford university, Stanford University, Calif.

NEGROES

1434. Bond, Horace Mahn. An investigation of the nonintellectual traits of a group of negro normal-school students. Master's thesis, 1926. School of education, University of Chicago, Chicago, Ill. viii, 167 p. ms.

Presents the results of a series of tests given to 300 negro normal-school students in an attempt to obtain data concerning the existence and differentiation of certain personality traits other than intelligence in that group. The group studied was much inferior in intelligence to white students of similar classification, and inferior to a lesser degree to negro students of a similar classification in other parts of the country. However, there were a few individuals in the group equal to the highest norm of similarly classified whites. The fact that some of the individuals were so low in intelligence showed that negro high schools are not exercising the selective function. Negro subjects tend to make lower scores in the Downey will-temperament test than whites. They are also more self-conscious and sex-conscious than white subjects, as measured by the Pressley X-O tests; and females are more susceptible in this respect than males. The negro students studied tend to deviate more from modal choices than do whites; however, the more intelligent the individual the less he tends to deviate from the group, and conversely.

1435. Busby, Clyde. Survey of colored pupils in Richmond. Richmond, Va., Public schools, Research department, 1927. 12 p. ms.

Comparison of colored pupils with pupils elsewhere. All comparisons are made with white children. Colored pupils compare favorably.

1436. Graham, James L. A comparative study of rational responses of negro and white college students. Doctor's thesis, 1927. George Peabody college for teachers, Nashville, Tenn.

A study of differences between negro and white college students in responses to certain intellectual and higher mental tests. Consists of two parts: 1. A study of the average differences in the abilities of the two racial groups in the given tasks. 2. An analysis of certain tests for the purpose of discovering possible or qualitative trends of difference.

1437. Joint committee on negro child study in New York City. A study of delinquent and neglected negro children. Joint committee on negro child study in New York City, 1927. 49 p.

Includes the extent of negro delinquency and neglect; the character of offenses for which negro children are brought into court; the disposition of cases of delinquency and neglect; present facilities for the care of these cases and future needs. Proportionally there is considerably more delinquency among negro than white children; the most common charge against negro boys is disorderly conduct. Contributing causes to delinquency are (a) lack of opportunity for supervised recreation, (b) lack of parental control, (c) retardation in school and resulting tendency to truancy. There is less provision for mild delinquents than for white children. Recommendations are given.

1438. **McAllister, Jane.** The training of negro teachers in Louisiana. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y.

Findings: The value of teacher training is everywhere being more fully appreciated. Louisiana is financially able to support education, and the social and economic condition of negroes shows that they are ready for improved teachers and better education. Statistics are adduced to show that the supply of adequately trained teachers in Louisiana is not equal to the demand.

1439. **Mosley, William Garrison.** The relation of intelligence of negro students to passing of plane geometry. Master's thesis, August, 1927. College of education, University of Colorado, Boulder.

(1) A discussion of increasing need for guidance of negro pupils in secondary schools; (2) the relation of grades in plane geometry to intelligence quotients of 262 students measured and compared by the author in a scientifically-conducted experiment in a St. Louis, Mo., negro high school; (3) recommendations for guidance on basis of results obtained.

1440. **Pries, Joseph St. Clair.** The classroom work of the negro elementary school teacher in West Virginia. Institute, W. Va., West Virginia collegiate institute, 1927. 87 p. (West Virginia collegiate institute bulletin, series 14, September, 1927.)

Aims to evaluate classroom instruction by means of deriving norms adapted to the 1,304 negro children after classifying them by means of intelligence scale and Stanford achievement test. Work limited to grades 4 to 8, inclusive. Recommendations regarding the following are made: Classification, promotion, systematic follow-up system, establishment of department of educational research, and guidance.

1441. **Taylor, Douglas Barnes.** Negro education in Texas. Master's thesis, 1927. University of Texas, Austin.

1442. **Trotter, Edgar B.** The negro as influenced by the Southern negro college. Master's thesis, 1927. University of South Carolina, Columbia.

1443. **Witty, P. A., and Scruggs, S. D.** Reading interests of negro children. Master's thesis, December, 1926. University of Kansas, Lawrence. University of Kansas bulletin of education 1: 7-11, December, 1926.

Covers 1,455 negro pupils in grades 4 to 9 in Kansas City, Kans.

EDUCATION OF BLIND AND DEAF

1444. **Hayes, Samuel P.** Ten years of psychological research in schools for the blind. Philadelphia, Pa., Department of research, Pennsylvania institution for the instruction of the blind, 1927. 16 p.

General survey of psychological research among the blind.

1445. **National research council, Washington, D. C. Division of educational relations.** Survey of schools for the deaf.

A survey of about 40 schools for the deaf was made in 1924-25, under the auspices of a committee of the Division of educational relations of the National research council. The report upon this survey is being published serially in the American annals of the deaf, the first chapters having been prepared jointly by Prof. Herbert E. Day and Prof. Irving S. Fushfeld, and the later chapters by Professor Fushfeld. Up to June 30, 1927, the following chapters have appeared:

Part I. The survey of schools for the deaf. Introductory chapter. American annals of the deaf, 70: 391-421, November, 1925.

Part II. Residential schools. *Ibid.* 71: 97-135, March, 1926.

Part III. Residential schools (continued). *Ibid.* 71: 234-348, September, 1926.

Part IV. Residential schools (physical features). *Ibid.* 72: 2-34, January, 1927.

1446. **Osborn, Vivian Eva.** Physical education for blind girls. Master's thesis, 1927. University of California, Berkeley.

1447. **Thompson, Helen.** An experimental study of the beginning reading of deaf mutes. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Bureau of publications, 1927.

Two groups of 10 deaf children were secured which were approximately equal according to tests. The experimental group were taught the proposed method of reading one hour daily for a year. This study

proposes the following procedure: 1. To begin during the child's first year of formal education by teaching him to read as well as to lip-read and speak. 2. To base the method of instruction upon the visual sense by explaining word meanings in a pictorial manner. Findings: 1. That in one hour a day deaf-mutes of an average age of 6 years and 10 months can achieve in one year of beginning reading five-sixths of the achievement of a normal hearing class in one year of beginning reading. 2. That in one year of beginning reading, two and one-half times as much reading ability can be developed as is developed under the present system.

See also item 326.

EXCEPTIONAL CHILDREN

1448. **Buhl, George S.** The education of low-grade feeble-minded through job analysis. Woodbine, N. J., Department of patient welfare, State colony for feeble-minded males.

Outlining a method through the use of charts showing minute gradations of progress, of recording the progress of low-grade feeble-minded under training.

1449. ———. The population survey as a basis for institutional administration. Woodbine, N. J., Department of patient welfare, State colony for feeble-minded males.

1450. **Foster, Violet Hermine.** A study of the responses of gifted children to the Kent-Rosanoff association test. Master's thesis. Department of psychology, Ohio state university, Columbus. 78 p. ms.

This is a study of the reactions of 170 children in the special classes for gifted children in Cleveland, to the Kent-Rosanoff association words. Tables of frequency are prepared for these words. Some conclusions are that gifted children show a tendency to give about twice as many individual responses, 32 per cent of the total responses being responses not given by adults. Normal children give fewer reactions in almost every case than adults.

1451. **Glassing, G. A.** A study of youthful delinquents. Master's thesis. Department of education, University of South Dakota, Vermillion. 50 p. ms.
Individual study of 114 delinquent boys and girls in the training school at Plankinton, S. Dak.

1452. **International society for crippled children, Elyria, Ohio.** Education committee. Progress in the education of crippled children. Education committee, International society for crippled children, September, 1927. 20 p.
History, powers granted to school authorities, exemplary state programs, progress in rural districts.

1453. **Jensen, Dortha W.** The gifted child. Journal of educational psychology, 15: 34-45; January, 1927; 126-133, February, 1927; 198-209, March, 1927.
This study surveys the present school provision for the gifted child. The number of cities providing special classes for gifted children is increasing.

1454. **Kiefer, Frieda.** Manual motor correlation in superior children. Doctor's thesis. Department of psychology, Ohio state university, Columbus.

The differences in performance on manual motor tests of superior and average children are negligible, and while our data may be too limited to be conclusive, they show that the difference in practice-effects on a motor function between the two groups is insignificant. Tasks involving manual motor ability might well be added to the course of study for superior children, provided local conditions warrant it.

1455. **Lester, William S.** The gifted pupil in high school. Master's thesis, 1927. College of education, University of Kentucky, Lexington.

1456. **Moulton, Mary.** Provision for gifted children in schools of Massachusetts. Boston, Mass., Department of educational psychology, Boston university, May, 1927.

An attempt at a thorough state-wide survey. Only meager returns received.

1457. **Ohio institute, Columbus.** Special education for handicapped children in Ohio with particular reference to state support. 1927. 100 p. ms.

1458. **Orleans, J. S.** Influence of grade progress on achievement of subnormal pupils. Albany, Educational measurements bureau, New York state department of education, 1927. Teachers college record, 28: 916-27, May, 1927.

The tendency is, ability being constant, for those most advanced in grade to achieve most.

1459. **Pate, Ethel Mary.** A study of the intelligence and the personality of a group of delinquent girls. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. v, 115 p. ms.

Presents the results of a study of 60 delinquent girls as to intelligence and personality. Compares several groups of delinquent girls with one another, and the subjects as a whole with delinquent boys and normal girls. The results of this study seem to show that neither chronological age nor intelligence alone has any influence upon either trustworthiness or emotional stability. The younger and less experienced delinquents were more frank in admitting emotional disturbances than the older and more experienced ones. The unmarried mothers tended to be the oldest, the least intelligent, the most impulsive, and the least bold about cheating. They lacked self-control and ability to look ahead and estimate the consequences. They were exceedingly cautious when questioned by older people. The most experienced delinquents tended to be of low-grade intelligence, were somewhat younger than the unmarried mothers, were willing to cheat and take undue credit, and were bold about it. The first offenders averaged younger in chronological age than either of the other groups and were the most intelligent.

1460. **Bidenor, Gordon M.** The superior child. Corning, N. Y., City schools, 1927. 21 p. ms.

This study leads to the suggestion that there is a necessity of giving to superior boys and girls an enrichment of subject matter through the grades.

1461. **Robinson, Ellouise.** Juvenile theft, a study of family, social, and personal histories. Master's thesis. Department of psychology, Ohio state university, Columbus. 40 p. ms.

Many data are presented, together with tables on the family, social, and personal histories of 200 juvenile thieves. No conclusions are drawn. The 28 tables are furnished for the use of other students of this problem.

1462. **Seashore, C. E.** The gifted student. Division of educational relations, National research council, Washington, D. C.

A study of means for finding the gifted student in colleges and universities and for enabling such students to make the most of their superior capacities, involving discussion of this problem at a large number of institutions. The results of Dean Seashore's studies have recently been published in the University of Iowa studies, vol. II, no. 1, March 1, 1927—"Learning and living in college," 124 p.

1463. **Sullivan, Ellen B.** Age, intelligence, and educational achievement of boys entering Whittier state school. Whittier state school, Whittier, Calif. Journal of delinquency, 11: 23-38, March, 1927.

A study of the per cent population of the Whittier school (for delinquent boys) with reference to age, intelligence, and educational achievement and needs. Findings: Average age of commitment is 14. Average age of boys at school, 15. Average age of placement, 16. In intelligence the group is a normal one. There is a larger group of border-line and dull normal. Some boys are very much accelerated intellectually and educationally.

1464. **Wallin, J. E. W.** Special classes for handicapped children. Columbus, Ohio state university, 1927. 5 p. (Educational research bulletin, September 14, 1927.)

Provisions for physically and mentally handicapped children in Ohio cities of over 2,000 population. Forty-six Ohio cities maintain special classes for mentally deficient, backward, and border-line children, together or separately. Classes for cripples are maintained in 45 cities, and home instruction is given in 26. Classes for the blind or visually handicapped are supported by 61 cities and there are classes for the deaf or hard-of-hearing in 19. Author urges need of legislation and state subvention to encourage establishment of special classes for mentally handicapped.

See also items 156, 187, 231, 665, 753, 1307, 1437.

EDUCATION EXTENSION

1465. **Arnett, Emmett W.** Some educational and financial phases of the Indiana university extension classes. Master's thesis, June, 1927. Department of education, Indiana university, Bloomington. 84 p. ms.

1466. **Buis, Almon Ray.** The history and work of the extension division of Indiana university. Master's thesis, June, 1927. Department of education, Indiana university, Bloomington. 153 p. ms.

1467. **Freden, Gustav, and Robbins, C. L.** The prison school. School and society, 25: 577-82, May 14, 1927.

Study was undertaken to gain direct knowledge of the school situation in state prisons. Questionnaires were sent to 35 wardens. Findings: The aim of the prison school is generally considered to be the elimination of illiteracy. Eighteen out of 24 offer correspondence courses; in several states these courses are given by the state university. On the whole, schooling is a secondary issue, not to be compared with the work done in day or night schools outside. Trained civilian teachers are urgently needed to take charge of the work.

1468. Maurer, James M. Questionnaire on university extension. Tulsa, Okla., Extension department, University of Tulsa, April 21, 1928. 4 p. ms.

To determine methods of administration of extension work, particularly methods used to compensate instructors for evening work.

1469. Noall, Irvin Simon. Administration of the Utah part-time school law. Master's thesis, 1926. University of California, Berkeley.

1470. Taylor, John Carey. A comparison of Baltimore evening high-school students with those of day high schools to determine the former's probability of success in college. Master's thesis, 1927. Johns Hopkins university, Baltimore, Md. 40 p. ms.

1471. Wilson, S. G. Field survey—continuation school, Trenton, N. J., Continuation school, 1926-27.

Undertakes: 1. To determine causes of leaving school; 2. To better understand the child; 3. To assist in meeting needs of the child.

1472. ——— Intelligence of continuation school pupils. Trenton, N. J., Continuation school, 1926.

Undertakes: 1. To determine the causes for leaving day school. 2. To assist in better grouping.

See also items 42, 48, 98, 203, 622, 657, 1039, 1308, 1330, 1337, 1406, 1528.

LIBRARIES AND READING

1473. Childs, Will Paul. An analysis of the location, size, equipment, and general content of high-school libraries in Southern California. Master's thesis, 1927. School of education, University of Southern California, Los Angeles.

1474. Jefferis, Angelina Woodrough. A study of reading interests of young people in industry. Master's thesis, 1927. School of education, University of Chicago, Chicago, Ill. v, 166 p. ms.

Reports the results of a study of the interests of young people in industry, as exhibited in the newspapers, magazines, and books which they read. The investigation included 1,868 young people from 14 to 21 years of age (nonhigh-school graduates), who lived in Chicago and its environs. The data were gathered by means of questionnaires, follow-up interviews, and standardized tests. Findings: One hundred per cent of young people included in this study have some reading interest. In reading ability the group ranks slightly above the normal for the eighth grade in both rate and comprehension. The newspapers are read by 98.5 per cent of the subjects. The particular phases of the newspapers which they enjoy most are sport news, funnies, stories, jokes, and cartoons. About half of them are interested in reading of crimes. In general, fiction is the most popular type of magazine material with this group. In the choice of material, sex differences are greater than those of chronological age.

1475. Kocs, Frank Hermann. State participation in public-school library service. Doctor's thesis, 1927. Department of educational research, Teachers college, Columbia university, New York, N. Y. New York, Teachers college, Bureau of publications, 1927. 246 p. (Teachers college, Columbia university. Contributions to education, no. 265.)

The purpose of this study is to discover the legal status of public-school libraries and of organizations which contribute service to school libraries; to find out the legal powers and duties of state education departments, state libraries, and library commissions in their relations with public-school libraries; to ascertain the detailed activities and services authorized by law; to set up a program of these activities in the light of the evidence found; and to propose a plan for their allocation.

1476. Manwiller, Charles E. An educational index of the Pennsylvania school journal. Master's thesis, 1927. University of Pittsburgh, Pittsburgh, Pa.

1477. Rasche, William Frank. Methods employed by teachers and librarians to stimulate interests in reading. Master's thesis, June, 1927. School of education, University of Chicago, Chicago, Ill. ix, 231 p. ms.

Reports the results of an investigation to determine the best practices in stimulating reading in the schools and libraries of the United States. Lists 110 master methods employed by teachers and librarians. The findings of this study indicate that less than one-third of the 110 master methods reported are used in common by teachers, school librarians, and public librarians. The primary function of the teacher seems to be that of stimulating and arousing interests, while that of the librarian is to provide rich stores of reading materials. Teachers and librarians are equally responsible for improving and fixing tastes in reading. Methods of improving reading qualitatively have not been developed so successfully or extensively as those for stimulating and arousing initial interests in reading. The effectiveness of the work of both teachers and librarians is greatly neutralized by environmental circumstances. There appears to be a definite need for research specialists to carry on experimental studies that will improve instructional and library techniques.

1478. **Sealey, R. M.** Survey of Florida high-school libraries. Florida state council of teachers of English and Florida state library association.

A complete survey of Florida high-school libraries (1926-27) as to organization, administration, maintenance, etc. A complete list of all books on hand was secured, and these have been checked according to a simple classification. Follow-up service will include definite suggestions as to improvement.

See also items 338, 345, 1042, 1227, 1443, 1536.

PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION

1479. **Abel, James F.** Information about the certificates issued by the Scottish education department. 1926. 10 p. ms. (Foreign education circular, no. 7.)

1480. **Annusson, Juri.** Public education in Estonia. 1926. 24 p. (Foreign education leaflet, no. 2.)

1481. **Colwell, N. P.** Medical education, 1924-1926. 1927. 14 p. (Bulletin, 1927, no. 9.)

1482. **Cook, Katherine M.** Progress of rural education, 1925 and 1926. 1927. 46 p. (Bulletin, 1927, no. 15.)

1483. ——— Some essentials of a state's supervisory program for the improvement of instruction. 1927. 9 p. (Rural school leaflet, no. 43.)

1484. **Deffenbaugh, W. S.** Recent movements in city school systems. 1927. 26 p. (Bulletin, 1927, no. 8.)

1485. ——— Report of the administration of the schools of New Castle, Pa. 1927. 11 p. (City school leaflet, no. 24.)

1486. **Fox, Florence C.** How the world rides. 1926. 81 p. (Bulletin, 1926, no. 8.)

1487. **Ganders, H. S.** Personnel and organization of schools in small cities. 1926. 36 p. (Bulletin, 1926, no. 6.)

1488. **Glueck, Eleanor T.** Extended use of school buildings. 1927. 80 p. (Bulletin, 1927, no. 5.)

1489. **Greenleaf, W. J.** Expenditures of state universities and state colleges, 1924-25. 7 p. (Higher education circular, no. 32.)

1490. **Hamilton, William.** Work of the Bureau of Education for the natives of Alaska. 1927. 5 p. (Bulletin, 1927, no. 6.)

1491. **Klein, A. J.** Effect of the junior high school upon college entrance requirements. 1926. 9 p. ms.

1492. ——— Higher education, 1922-1924. 1926. 29 p. (Bulletin, 1926, no. 20.)

1493. **Lathrop, Edith A.** State school improvement associations. 1927. 16 p. (Rural school leaflet, no. 42.)

1494. **Myers, G. C.** Education of young children through celebrating their successes. 1927. 13 p. (City school leaflet, no. 26.)

1495. **National education association. Committee on character education.** Character education. 1926. 59 p. (Bulletin, 1926, no. 17.)

1496. **Phillips, F. M.** An age-grade study in 900 city school systems. 1927. 9 p. (Statistical circular, no. 8.)
1497. ——— Per capita costs in city schools, 1925-26. 1927. 9 p. (Statistical circular, no. 7.)
1498. ——— Statistical summary of education, 1923-24. 1926. 7 p. (Bulletin, 1926, no. 19.)
1499. ——— *and Bond, N. J.* Comparison of city and school finances in 95 cities. 1927. 7 p. (Statistical circular, no. 6.)
1500. **Proffitt, M. M.** Experiment in the study of individual differences and aptitudes in cross-cutting a board. 1926. 5 p. ms.
1501. ——— Relating foreman programs to the program for vocational education. 1926. 6 p. (Industrial education circular, no. 25.)
1502. ——— Time allotment to manual arts work. 1926. 10 p. (Industrial education circular, no. 26.)
1503. ——— Values of the manual arts. 1927. 16 p. (Industrial education circular, no. 27.)
1504. **Batchliffe, Ella B.** Accredited higher institutions. 1926. 105 p. (Bulletin, 1926, no. 10.)
1505. **Ready, Marie M.** Games and equipment for small rural schools. 1927. 16 p. (Physical education series, no. 8.)
1506. ——— The organized summer camp. 1926. 14 p. (Physical education series, no. 7.)
1507. ——— Physical education in American colleges and universities. 1927. 51 p. (Bulletin, 1927, no. 14.)
1508. **Reeve, Margaretta W. and Lombard, Ellen C.** Parent-teacher associations. 1927. 28 p. (Bulletin, 1927, no. 11.)
1509. **Reynolds, Annie.** Characteristic features of recent superior state courses of study. 1926. 13 p. (Rural school leaflet, no. 41.)
1510. **Robinson, William M.** Curricula and differentiated courses for the preparation of rural elementary school teachers offered by state normal schools and teachers colleges (for whites) in the United States. 1927. 15 p. ms.
1511. **Rogers, James F.** Better teeth. 1927. 19 p. (Health education series, no. 20.)
1512. ——— The health of the teacher. 1926. 64 p. (School health studies, no. 12.)
1513. ——— Is your child ready for school? 1926. 32 p. (Health education series, no. 19.)
1514. ——— School hygiene and physical education. 1927. 20 p. (Bulletin, 1927, no. 3.)
1515. **Budy, A.** Educational progress in the Free City of Danzig. 1927. 16 p. (Foreign education leaflet, no. 3.)
1516. **United States. Bureau of education.** Bibliography of certain aspects of rural education. From January 1, 1920, to September 1, 1926. 1927. 56 p. (Bulletin, 1927, no. 4.)
1517. ——— Biennial survey of education, 1922-1924. 1926. 886 p. (Bulletin, 1926, no. 23.)
1518. ——— Cities reporting the use of homogeneous grouping and of the Winnetka technique and the Dalton plan. 1926. 11 p. (City school leaflet, no. 22.)

1519. **United States. Bureau of education.** Data in regard to state teacher training institutions, 1926. 30 p. ms.
1520. ———— Educational directory, 1927. 1927. 139 p. (Bulletin, 1927, no. 1.)
1521. ———— A handbook of educational associations and foundations in the United States. 1926. 82 p. (Bulletin, 1926, no. 16.)
1522. ———— Home economics for more girls. 1927. 35 p. ms. (Home economics letter, no. 2.)
1523. ———— Improvement of instruction in rural schools through professional supervision. 1926. 54 p. (Bulletin, 1926, no. 12.)
1524. ———— Length of the school day. 1927. 5 p. (City school leaflet, no. 25.)
1525. ———— List of references on secondary education. 1927. 22 p. (Library leaflet, no. 32.)
1526. ———— List of references on vocational guidance. 1927. 22 p. (Library leaflet, no. 33.)
1527. ———— Manual of educational legislation. 1926. 67 p. (Bulletin, 1926, no. 22.)
1528. ———— Methods of teaching adult aliens and native illiterates. 1927. 58 p. (Bulletin, 1927, no. 7.)
1529. ———— An outline of methods of research with suggestions for high-school principals and teachers. 1926. 31 p. (Bulletin, 1926, no. 24.)
1530. ———— Pay status of absent teachers and pay of substitute teachers. 1926. 14 p. (City school leaflet, no. 21.)
1531. ———— Pupils' readiness for reading instruction upon entrance to first grade. 1926. 6 p. (City school leaflet, no. 23.)
1532. ———— Records of current educational publications, April 1, 1926, July 1, 1926, October 1, 1926, January 1, 1927, January-March, 1927. 1926-1927. 5 pamphlets. (Bulletin, 1926, no. 15, 17, 21; 1927, no. 2, 12.)
1533. ———— Revised list of requirements by state departments of education for directors and supervisors of physical education in grade and high schools. 1926. 11 p. ms.
1534. ———— Statistics of city school systems, 1923-24. 1926. 181 p. (Bulletin, 1925, no. 41.)
1535. ———— Statistics of private business and commercial schools, 1924-25. 1926. 29 p. (Bulletin, 1926; no. 14.)
1536. ———— Statistics of public, society, and school libraries, 1923. 1926. 179 p. (Bulletin, 1926, no. 9.)
1537. ———— Statistics of state school systems, 1924-25. 1927. 54 p. (Bulletin, 1927, no. 13.)
1538. ———— Survey of education in Utah. 1926. 510 p. (Bulletin, 1926, no. 18.)
1539. **Waite, Mary G.** The kindergarten in certain city school surveys. 1926. 44 p. (Bulletin, 1926, no. 13.)
1540. **Zook, G. F.** Residence and migration of university and college students. 1926. 127 p. (Bulletin, 1926, no. 11.)

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