BIBLIOGRAPHY
OF RESEARCH STUDIES
IN EDUCATION: 1927-1928

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BIBLIOGRAPHY OF RESEARCH STUDIES IN EDUCATION
1927-1928

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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1930
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter of transmittal</td>
<td>vii</td>
</tr>
<tr>
<td>Foreword</td>
<td>ix</td>
</tr>
<tr>
<td>Educational history</td>
<td>1</td>
</tr>
<tr>
<td>Educational biography</td>
<td>3</td>
</tr>
<tr>
<td>Current educational conditions:</td>
<td></td>
</tr>
<tr>
<td>General and United States</td>
<td>4</td>
</tr>
<tr>
<td>Foreign countries</td>
<td>9</td>
</tr>
<tr>
<td>International aspects of education</td>
<td>11</td>
</tr>
<tr>
<td>Educational theory and practice</td>
<td>11</td>
</tr>
<tr>
<td>Educational psychology</td>
<td>13</td>
</tr>
<tr>
<td>Child study</td>
<td>16</td>
</tr>
<tr>
<td>Educational sociology</td>
<td>19</td>
</tr>
<tr>
<td>Psychological tests</td>
<td>20</td>
</tr>
<tr>
<td>Educational tests and measurements</td>
<td>25</td>
</tr>
<tr>
<td>Educational research</td>
<td>29</td>
</tr>
<tr>
<td>Individual differences</td>
<td>30</td>
</tr>
<tr>
<td>Special methods of instruction and organization:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>32</td>
</tr>
<tr>
<td>Platoon school</td>
<td>32</td>
</tr>
<tr>
<td>Project method</td>
<td>32</td>
</tr>
<tr>
<td>Supervised study</td>
<td>33</td>
</tr>
<tr>
<td>Visual instruction</td>
<td>33</td>
</tr>
<tr>
<td>Special subjects of curriculum:</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>34</td>
</tr>
<tr>
<td>Tests</td>
<td>37</td>
</tr>
<tr>
<td>Handwriting</td>
<td>37</td>
</tr>
<tr>
<td>Tests</td>
<td>38</td>
</tr>
<tr>
<td>Spelling</td>
<td>38</td>
</tr>
<tr>
<td>Tests</td>
<td>39</td>
</tr>
<tr>
<td>English language</td>
<td></td>
</tr>
<tr>
<td>Grammar and composition</td>
<td>40</td>
</tr>
<tr>
<td>English literature</td>
<td>44</td>
</tr>
<tr>
<td>Tests</td>
<td>46</td>
</tr>
<tr>
<td>Ancient classics</td>
<td>48</td>
</tr>
<tr>
<td>Tests</td>
<td>49</td>
</tr>
<tr>
<td>Modern languages</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>49</td>
</tr>
<tr>
<td>French</td>
<td>51</td>
</tr>
<tr>
<td>Spanish</td>
<td>51</td>
</tr>
<tr>
<td>Tests</td>
<td>52</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>52</td>
</tr>
<tr>
<td>Arithmetic</td>
<td>54</td>
</tr>
<tr>
<td>Tests</td>
<td>56</td>
</tr>
<tr>
<td>Algebra</td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td>58</td>
</tr>
<tr>
<td>Geometry and trigonometry</td>
<td>59</td>
</tr>
<tr>
<td>Tests</td>
<td>60</td>
</tr>
</tbody>
</table>
IV CONTENTS

Special subjects of curriculum—Continued.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science—</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>60</td>
</tr>
<tr>
<td>Tests</td>
<td>62</td>
</tr>
<tr>
<td>Nature study</td>
<td>62</td>
</tr>
<tr>
<td>Geography</td>
<td>63</td>
</tr>
<tr>
<td>Tests</td>
<td>65</td>
</tr>
<tr>
<td>Geology—</td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td>65</td>
</tr>
<tr>
<td>Biology and botany</td>
<td>65</td>
</tr>
<tr>
<td>Chemistry</td>
<td>66</td>
</tr>
<tr>
<td>Tests</td>
<td>68</td>
</tr>
<tr>
<td>Physics</td>
<td>68</td>
</tr>
<tr>
<td>Tests</td>
<td>69</td>
</tr>
<tr>
<td>Social studies—</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>70</td>
</tr>
<tr>
<td>History</td>
<td>71</td>
</tr>
<tr>
<td>Tests</td>
<td>73</td>
</tr>
<tr>
<td>Economics</td>
<td>74</td>
</tr>
<tr>
<td>Music</td>
<td>74</td>
</tr>
<tr>
<td>Tests</td>
<td>75</td>
</tr>
<tr>
<td>Art education</td>
<td>75</td>
</tr>
<tr>
<td>Tests</td>
<td>76</td>
</tr>
<tr>
<td>Dramatics and elocution</td>
<td>77</td>
</tr>
<tr>
<td>School journalism</td>
<td>77</td>
</tr>
<tr>
<td>Thrift</td>
<td>78</td>
</tr>
<tr>
<td>Safety</td>
<td>78</td>
</tr>
<tr>
<td>Preschool, kindergarten, and primary education</td>
<td>79</td>
</tr>
<tr>
<td>Elementary education</td>
<td>81</td>
</tr>
<tr>
<td>Secondary education:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>83</td>
</tr>
<tr>
<td>Junior high schools</td>
<td>91</td>
</tr>
<tr>
<td>Junior colleges</td>
<td>94</td>
</tr>
<tr>
<td>Teacher training:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>95</td>
</tr>
<tr>
<td>Normal schools</td>
<td>100</td>
</tr>
<tr>
<td>Teachers' colleges</td>
<td>102</td>
</tr>
<tr>
<td>Practice teaching</td>
<td>104</td>
</tr>
<tr>
<td>Professional status of teachers:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>105</td>
</tr>
<tr>
<td>Appointment and tenure</td>
<td>107</td>
</tr>
<tr>
<td>Certification of teachers</td>
<td>109</td>
</tr>
<tr>
<td>Improvement of teachers in service</td>
<td>110</td>
</tr>
<tr>
<td>Rating of teachers</td>
<td>111</td>
</tr>
<tr>
<td>Teachers' pensions</td>
<td>111</td>
</tr>
<tr>
<td>Teachers' personality</td>
<td>112</td>
</tr>
<tr>
<td>Teachers' salaries</td>
<td>112</td>
</tr>
<tr>
<td>Higher education</td>
<td></td>
</tr>
<tr>
<td>School administration:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>121</td>
</tr>
<tr>
<td>Educational finance</td>
<td>126</td>
</tr>
<tr>
<td>School supervision</td>
<td>131</td>
</tr>
<tr>
<td>School principals</td>
<td>132</td>
</tr>
</tbody>
</table>
## CONTENTS

<table>
<thead>
<tr>
<th>School management:</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genera</td>
<td>133</td>
</tr>
<tr>
<td>Child accounting</td>
<td>134</td>
</tr>
<tr>
<td>Classification, grading, and promotion</td>
<td>135</td>
</tr>
<tr>
<td>Curriculum making</td>
<td>136</td>
</tr>
<tr>
<td>Examinations</td>
<td>138</td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>140</td>
</tr>
<tr>
<td>Failures of pupils</td>
<td>142</td>
</tr>
<tr>
<td>Marks and marking</td>
<td>143</td>
</tr>
<tr>
<td>Retardation and elimination</td>
<td>144</td>
</tr>
<tr>
<td>Student self-government</td>
<td>145</td>
</tr>
<tr>
<td>School buildings and equipment</td>
<td>146</td>
</tr>
<tr>
<td>Health education and supervision</td>
<td>149</td>
</tr>
<tr>
<td>Mental hygiene</td>
<td>153</td>
</tr>
<tr>
<td>Physical training:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>153</td>
</tr>
<tr>
<td>Athletics</td>
<td>155</td>
</tr>
<tr>
<td>Play and recreation</td>
<td>157</td>
</tr>
<tr>
<td>Social aspects of education</td>
<td>158</td>
</tr>
<tr>
<td>Child welfare</td>
<td>161</td>
</tr>
<tr>
<td>Rural education:</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>161</td>
</tr>
<tr>
<td>Consolidation and transportation</td>
<td>164</td>
</tr>
<tr>
<td>County unit</td>
<td>165</td>
</tr>
<tr>
<td>Moral education</td>
<td>166</td>
</tr>
<tr>
<td>Tests</td>
<td>168</td>
</tr>
<tr>
<td>Religious and church education</td>
<td>169</td>
</tr>
<tr>
<td>Manual and vocational training</td>
<td>174</td>
</tr>
<tr>
<td>Educational and vocational guidance</td>
<td>176</td>
</tr>
<tr>
<td>Agriculture</td>
<td>179</td>
</tr>
<tr>
<td>Home economics</td>
<td>180</td>
</tr>
<tr>
<td>Commercial education</td>
<td>183</td>
</tr>
<tr>
<td>Professional education</td>
<td>184</td>
</tr>
<tr>
<td>Civic education</td>
<td>185</td>
</tr>
<tr>
<td>Military education</td>
<td>187</td>
</tr>
<tr>
<td>Education of women</td>
<td>187</td>
</tr>
<tr>
<td>Negro education</td>
<td>188</td>
</tr>
<tr>
<td>Education of blind and deaf</td>
<td>189</td>
</tr>
<tr>
<td>Exceptional children</td>
<td>190</td>
</tr>
<tr>
<td>Education extension</td>
<td>193</td>
</tr>
<tr>
<td>Libraries and reading</td>
<td>195</td>
</tr>
<tr>
<td>Author and subject index</td>
<td>199</td>
</tr>
<tr>
<td>Index of institutions</td>
<td>221</td>
</tr>
</tbody>
</table>
LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
Office of Education,

SIR: The value and significance of research in the field of education is daily becoming more evident. Teachers and school officials are more than ever convinced that there is much to be gained from the scientific study of school procedure. Realizing this fact, students of education throughout the United States have turned their thoughts and efforts toward solving some of their problems through research and experimentation. So extensive has the movement become that it is almost impossible for one to keep informed concerning the latest approved school procedures and the newest proven truths concerning child development and management. Professors and students in schools of education, research workers in State and city school systems, child clinics, and other organizations are all engaged in research activities in this field, and it is small wonder if at times duplication is found in the various studies undertaken. In order that the large number of persons interested in educational research might be kept informed and the duplication of effort might thereby be reduced, the Office of Education in September, 1927, began collecting and disseminating information concerning all investigations in education. The bibliography here presented is the second one to be printed. It lists research studies in education completed during the school year 1927-28.

I recommend its publication as a bulletin of the Office of Education. Respectfully submitted.

WM. JOHN COOPER,
Commissioner.

THE SECRETARY OF THE INTERIOR.
FOREWORD

The accompanying bibliography, containing 2,403 titles of research studies in education completed during the year ended June 30, 1928, continues Bulletin, 1928, No. 22, Bibliography of Research Studies in Education, 1926-1927. As in the preparation of the former bulletin, letters were sent to various research agencies requesting information and publications for inclusion in the list. The responses to these requests, received from 303 institutions and organizations throughout the United States, furnished the material for the present volume.

An examination of the titles included herein emphasizes the fact that there is no generally accepted definition of the term educational research. Some of the titles reported to this office certainly do not suggest research work. However, as we had no opportunity to examine the studies themselves, it was thought advisable to include them in the list. Many of the reports received were very incomplete. Therefore, it has not always been possible to be certain of the exact date. While an effort was made to include only material completed between July, 1927, and June, 1928, it is likely that some of the investigations mentioned do not fall within that period. Abstracts of many studies were supplied by the authors of the studies, or by the institutions or agencies reporting them. In other instances the annotations were made in the library division of the Office of Education. Since educational periodicals are indexed in the various guides to periodical literature, no attempt was made to index them for this list, but when research studies published in periodicals were reported to this office by the authors or others, they have been included.

The entire material has been classified by subject and, edited into its final form in the library division of the Office of Education. Where advisable, cross-references have been made from the main group to other references classified elsewhere. An author and subject index immediately following the list will give ready access to the material. The Index of Institutions at the end of the volume shows the institutions and agencies mentioned in the bibliography.

Both published and unpublished studies are included in the present list, so far as the Office 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 by the agencies reporting the studies.

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 compiler of the bulletin, who has tried to make the list as complete as possible.

This office can not supply the publications listed in this bibliography, other than those expressly designated as publications of this office. Printed material here mentioned may ordinarily be obtained from the respective publishers. Many of the studies are available for consultation in various public and institutional libraries. For information concerning master's and doctor's theses, address the institution under whose supervision the study was made.
BIBLIOGRAPHY OF RESEARCH STUDIES IN EDUCATION

EDUCATIONAL HISTORY


   A history of the Ohio state teachers' association from 1847 to 1928, stressing its administrative organization. The writer says that the Ohio state teachers' association is a comprehensive body which has been stimulated by and has now absorbed nearly all the earlier and contemporary educational bodies of the State. In its organization it exemplifies the standards which have been set up in previous theoretical studies of such bodies.


   The study covers Europe and the United States.


   An analysis of the economic, social, political, and religious conditions obtaining in the province and district of Maine from the time of the first authentic records of explorers and fishermen upon its coast in 1602 until 1820 when it became a state, and the resulting educational tendencies in elementary and secondary schools in the subperiods: 1602-1692; 1692-1785; 1785-1820.

5. **Cummings, Lillian Gibson.** Trends in administration of conduct since 1865. 1928. University of Southern California, Los Angeles.


   An historical review of the development of the biological viewpoint in the major periods of educational history.


   A study of the early schools in Bergen, schools in Jersey City before 1882, and schools under the Board of education from 1882 to 1900, including buildings, organization, attendance, teacher training, and curriculum.

   Findings: Interest in and adequate provision for education except in field of secondary education, which was high in quality but delayed; inadequate high-school accommodations in last year of the century.
A study of the American frontier from the period of colonization to the completion of territorial expansion. Findings: The chief credit for the development of unity belongs to the public-school system.


Describes surveys in New England, South Carolina, and Virginia.


An investigation of the changing conception of the teaching of arithmetic trends and the kind of materials in course of study and textbooks. The social conditions underlying and causing these changes. The study shows a decided swing away from the idea of mental discipline to practical applications.


An historical study of education in the Philippine Islands from ancient times until the close of the Spanish régime.


A study of the development of the public high-school systems in Virginia and North Carolina from their inception to the present time, showing that effective systems of public high schools became possible only after the far-reaching social and economic changes of the three decades following the close of the Civil War.

The scope of this study includes an investigation into the origins of the early schools, parochial, private, semi-public and public, together with a discussion of their curricula and methods, their founders and teachers. The study excludes the many factors indirectly bearing on education such as libraries, historical societies, lyceums, newspapers, etc.


   An historical survey to discover functions and significance.


See also Items 55, 58, 64, 75, 78, 80, 88, 90, 122-123, 1236, 1268, 1292, 1299, 1370, 1504, 1819, 1860, 2010, 2034, 2052-2053, 2063, 2075, 2274, 2280-2281, 2293, 2327, 2342, 2359, 2361, 2386.

EDUCATIONAL BIOGRAPHY


   A study of the life, writings, and correspondence of Thompson Simpson, one of the best of the British textbook writers of his time.

   A study of Tagore's experiment in the infantilization of education in the light of India's history. Part II deals with Tagore's educational theory and practice.


   The author has organized the material to exhibit the social status of the times and the cosmopolitan character of the population of the Ohio county which created a demand for books of McGuffey tone and theme.

A critical review of the educational theories of Herbert Spencer.


A systematic survey and evaluation of Dewey's writings on education and an attempt to trace Dewey's influence in the schools.


See also Item 150.

CURRENT EDUCATIONAL CONDITIONS
GENERAL AND UNITED STATES

47. Adams, Romanzo, and Kai, Dan Kane-Zo. The education of the boys of Hawaii and their economic outlook. A study in the field of race relationship. Honolulu, University of Hawaii, January, 1928. 59 p. (Research publications, no. 4)

A survey of the school plant, school population and financial status of the Springdale, Ark., school district. Recommends a reorganization of the school system on the 6-6 plan and suggests a school building program for the city.

An investigation of the adequacy and efficiency of the entire school plant, the ability of the community to pay for good schools, teaching staff, administration and supervision, etc. Findings: The plant is old and antiquated in most particulars and inadequate to house the children seeking admission; the teaching staff is below average in scholarship and professional training; salaries are poor; the community is financially able to erect a good plant and pay reasonably good salaries; practically no effective supervision.

A social, economic, industrial, religious, educational, and geographical survey, with recommendations.


52. Bezoier, Nellie Elizabeth. Trends in education as shown by a study of reports of the National education association. 1928. University of Southern California, Los Angeles.


A comparative study of the two systems of education as they exist in North Carolina and Sierra Leone. Shows how the systems in the latter can be improved by suggestions from the former.

A study of historical development, present conditions, etc., with recommendations for future growth.


A general survey of the condition of the township schools—a comparison with the survey of 1921-1922.

Conclusions: There is general improvement over conditions five years ago. However, there is need for a junior high school and special classes.


A study of historical development and present conditions, with recommendations for future growth.


Gives quotations from most of the more prominent economists of the past 50 years.


A study of the educational needs of Quincy, the public-school offering, the evolution of the offering, and extensions and improvements needed. Conclusions: Quincy needs: (1) a comprehensive school building program; (2) more classes for mentally and physically handicapped pupils; (3) extension of practical arts classes for men and women; (4) establishment of a department of research and publicity; (5) better method of admitting children to first grade, etc.


Comprehensive study of all educational phases of Gloucester county, Va.


Findings: In intelligence, overageness, and educational quotients the transient children were below the native children as well as below the standard norms; in reading, arithmetic, and language, the differences indicate the native children made better progress than the transient children; in nature study and science, and history and literature, there were no significant differences in progress made; only in spelling did the transient children show any advantage and then the difference was not highly significant.


A study of the historical development and present conditions, with recommendations for future growth.


The study reveals increased attention to problems of administration in 1926.


General study of existing school conditions including buildings, teachers, attendance, consolidation, transportation, financial support, and fire and storm insurance on buildings. Makes recommendations.

68. Hinson, Jesse J. Rates of promotion as a means of efficiency in school surveys. 1928. Johns Hopkins University, Baltimore, Md.


A survey of the organization and curriculum of schools under Spanish and American regimes.

71. Jensen, George C. A cross section of a community; a survey of Humboldt county, Calif. A study made under the joint auspices of the division of research, California teachers' association, and Humboldt state teachers college, Arcata, Calif. Sierra educational news, 24: 21-30, May 1928.

Waste and taxation in school administration compared with waste and prices in private services.


Ten school systems, widely distributed throughout the Big Bend country of Texas, form the basis for this study. Findings: On every item of cost comparison, the expenditure per pupil is greater in the American schools than in the Mexican schools; the conditions of buildings, playgrounds, and equipment have lower ratings in the Mexican schools than in the American schools; more Mexican schools are failing to meet the minimum state standards than American schools; the supplies furnished each group of schools are more commensurate with needs in the American schools; the number of years of training, experience, and tenure is greater in American schools than in the Mexican schools.


Findings: The organization of the Shelbyville school system is not such as to guarantee that every child in the district shall have such education as he or she may be able profitably to receive; as measured by comprehensive standard achievement tests, the Shelbyville schools are, as a rule, well up to grade standards. Measured on the basis of age standards, Shelbyville pupils are approximately typical of average pupils over the country. When their mental ability is measured by standard group tests of intelligence, the Shelbyville pupils are, on the whole, achieving about as nearly in proportion to their ability as are the pupils in the typical American school.


A study of the historical development and present conditions, with recommendations for future growth.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


As a part of this study the efficiency of small and large schools on several different bases is studied. The large schools are found to be much more efficient than the small schools.


A study of the historical development and present conditions, with recommendations for future growth.

A complete survey of history, social conditions, social or community center, schools, population, and resources. Four plans for improvement are suggested for the complete consolidation of schools.


Analysis of Crosby-Ironton school system as to its efficiency in organization, administration, supervision, teaching results, and financial condition.

Advance sheets from the Biennial survey of education in the United States, 1924-1926.

A study of historical development and present conditions, with recommendations for future growth.


Analysis of holding power of the Oakland public schools based upon the number of pupils enrolled in each grade.

A study of historical development and present conditions, with recommendations for future growth.

A survey of buildings, instruction, and ability to pay.

A study of the community and its population, the school building program, the financing of education, educational achievement, school opportunities, the teaching personnel, and administration, together with recommendations.

A thorough survey of the school system of Duval county and Jacksonville, Fla., with recommendations for the reorganization and improvement of the situation to meet future needs.

Recommends a junior-senior high-school plant for Rye as the most immediate need.

95. ——— The need of further school accommodations in Pleasantville, N. Y. New York city, Teachers college, Columbia university, 1928. 24 p. (School survey serics.)


The purpose of this survey was to scientifically measure the efficiency of the entire school system with the hope of finding the weakest spots. Tests of equal difficulty, which were given approximately six months apart, were used as a basis of pupil progress and incidently the teacher’s efficiency was measured. One chapter of the survey is devoted to the progress of pupils from month to month in spelling and handwriting. Progress was measured by means of a standard scale and improvements from month to month, with total teacher improvements for the year.


A survey of the school plant, equipment, organization, administration, supervision, finances, teachers, pupils, etc.


The index number is determined by eight separate measures which are ordinarily considered indicative of a well administered school system.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


A report of a survey of the public-school system in the District of Columbia made in response to a request from Senator Lawrence C. Phipps on behalf of the Senate committee in charge of appropriations for the District of Columbia.
RESEARCH STUDIES IN EDUCATION


An analysis of past growth and expenditures and a projected ten-year financial program, 1927-1937, for the city of Santa Paula, Calif. About one-third of the report is devoted to schools. The report shows the necessity and wisdom of a comprehensive budget program. Mexicans require special school provisions, because of language handicap and their slowness and retardation.


An extensive and intensive study of educational conditions in the county. Educational tests, intelligence tests, and financial and administrative analysis.


Complete study covering all features of the Schenectady school system with cooperation of entire Schenectady supervisory and teaching staff. The local school authorities have represented a progressive people and the supervisory and instructional staff have carried forward an educational program in the midst of perplexing problems and difficulties of adjustment. Many of the recommendations were put into effect as the study proceeded, showing the highest type of cooperative effort.

FOREIGN COUNTRIES


A study of the system of setting and scoring examinations in secondary schools of Manitoba, as conducted by the Department of education for the Province. The variations in standards have been great, but a system of marking was evolved to eliminate these variations.


A study of the bearing of Chinese philosophy upon the education of China, the educational agencies utilized, and the effects of both upon Chinese society.


A consecutive treatment of public secondary education in Canada, with the purpose of bringing into relief the important characteristics of the system, stating the principal facts on which they are based and the important problems which these facts raise.


The author analyzes the prevailing attitude of modern education in Germany toward the new democracy, and allows one to infer that under such dominating influences as the Youth movement and the current ideals and practices in painting and literature and other influences, the modern educational movement is a natural expression of a modern democracy that throws its strongest emphasis upon that type of education that secures fully developed, harmonious personality which stands ready to serve the community of man.

125. Lilliehem, Clara C. Educational progress and development of modern Poland. 1928. University of Southern California, Los Angeles.


An analytic study of the trends in school developments forecasting developments to 1951.


This study presents the Austrian federal boarding schools in their relation to the pre-war Austrian system of education and the post-war school reforms, with attention to the physical conditions of the institutions, their selection of pupils, cooperation of parents, standard of faculty groups, social purpose of the schools, and curricula and methods of instruction.


RESEARCH STUDIES IN EDUCATION

A study of the national school systems of the United States, Scotland, Denmark, Switzerland, Germany, France, and England. The structure, organization, articulation, curricula, school statistics, size of schools and classes are taken up in detail.

135. Wong, Grace D. The junior high school problems in China. 1927. Syracuse university, Syracuse, N. Y.


INTERNATIONAL ASPECTS OF EDUCATION


137. Henry, James C. World citizenship. 1927. Institute of character research, State university of Iowa, Iowa City. 67 p. (University of Iowa studies, no. 136, August 1, 1927)

A measurement of certain factors determining information and judgment of International affairs.

138. Terman, E. L. The development and application of national educational survey techniques with special emphasis upon criteria for measuring intelligence internationally. 1928. Teachers college, Columbia university, New York, N. Y.

Intelligence tests were given to 92,000 children in China, 1,000 in Japan, and 1,000 in the United States. Findings: There is no appreciable difference in the intelligence of Chinese, Japanese, and American children.


A study of 181 children's books on France, available in the libraries of the City of New York. Traces of nationalism were found; emphasis has been put on historical literature rather than on literature giving a knowledge of the people themselves.

See also Item 2239.

EDUCATIONAL THEORY AND PRACTICE


A study confined to New York city showing that definite objectives are lacking in the assignments of many teachers.


A survey of the principles of education written up for the layman, parent-teachers' associations, school board members, and legislators.


A report of experimental teaching done in the rural schools of Craven county, N. C. An experiment was carried on in two second grades for the purpose of ascertaining if informal teaching is accompanied by more or less retention than formal teaching. The findings indicate that the pupils in the informal situation acquired subject-matter habits, skills, and abilities a little better than the pupils in the formal situation, and in addition developed in much greater degree, worth-while abilities in habits and skills, and attitudes.


Conclusions: (1) Recall was always beneficial. (2) A late recall or after six presentations proved the most economical.


Consultation of various sources to determine the content of the course and inquiry into the nature and reasons for choice of textbooks used.


A detailed outline of procedure in the organization of subject matter dealing with North Carolina life. The purpose is to demonstrate the first step in recording the plan followed in larger unit teaching.


The purpose of this study was to examine the issues of educational theory persisting in educational literature today in the light of certain modern conceptions of unity of behavior that have developed in various fields of thought. The data employed were obtained from a reading of the textbooks and references used in undergraduate courses on general educational theory offered in the schools of the American association of teachers colleges.


A presentation of the recitation theory and of behaviorism with a criticism of their educational implication. Conclusions: Neither theory can be accepted as a point of departure for organizing materials and methods in democratic schools.


The author distinguishing the service study from the pure research investigation says that the service study is undertaken to solve an urgent problem of the school, or classroom while the research study is often undertaken as much to develop techniques of investigation as to find solutions for the problems. This study considers some methods of conducting service studies.

See also under Educational biography and Items 361, 1375, 1748.

EDUCATIONAL PSYCHOLOGY


Effective practice was found to compensate for slight deficiencies of intelligence. Study shows importance of a method of work.


162. Burké, Margaret M. An experimental study of the comparative gain made by pupils making high and low scores. 1927. Syracuse university, Syracuse, N. Y.


A study of the comparison of intellectual resemblance between foster parents and their foster children. Findings: Nurture contributes only 17 per cent to a child’s intelligence; 70 per cent of the children have an I. Q. within 5 to 9 points of that which nature would give them.


The purpose of this investigation was to examine the results of certain types of mental work done by two individuals in collaboration. The subjects used were students at Stanford university and the San Jose teachers college during the school year 1926-1927.


Written in cooperation with W. W. Chase and Curtis Merriman.


Thirty-two subjects learned a sonnet on each of four schedules, each schedule covering 8 days. Retention tests were made 21 days later. Conclusions: Study periods, particularly when they decrease in a geometric progression, contribute more than the rest intervals to retention.


This study included tests of 200 pupils for articulation rate, mental age, sex, etc. Findings: Girls develop earlier than boys in articulation rate; boys exceed girls after 12 or 13 years of age; etc.


The scope of the study is to find out to what extent vocabulary difficulties affect the achievement of students in an introductory course in educational psychology.


A comparison of general educational psychologies published between 1907 and 1927, inclusive. Findings: There has been a decrease in emphasis on such topics as attention, interest, will. The emphasis on the nervous system as a foundation for behavior has declined in the last decade when compared with the former. The amount of discussion given to educational measurements, social psychology, and learning show an increased emphasis on these topics in the last decade.


Investigation of the superstitions held by a number of people in each of a number of communities of the Fox River Valley. Tests were given in various schools and organizations to determine the extent to which these superstitions affect everyday life. Findings: Superstition plays a very important part...
in the daily life of many of the people in the communities investigated. It affects the young as well as the old. Certain superstitions have a very bad influence and ought to be eradicated. One of the objectives of education is clearly defined by the study.


The study included 1,500 subjects, ages 8 to 70. Technique similar to Kent and Rosanoff, except that subjects were blindfolded. Conclusions: Time of reaction greatly lengthened; small sex and environmental differences; large age differences.


A research and experimental study describing apparatus and technique. Findings: The apparatus described will measure the psychogalvanic reflex with sufficient accuracy; the measurements show reliable differences in character of responses in morning and afternoon; the responses may be related to intelligence in their occurrence in success and failure.


The subjects in the experiment were 100 school children between the ages of 6 and 7.5 years. Findings: (1) A child may learn a relationship like that of "opposites" by a procedure that can not be accounted for by the trial and error theories of learning, such as those of Thorndike and Watson; (2) a statistical measure of the age at which a child is capable of passing a given mental test, such as that involved in the present study, can be provided by the method of constant stimuli—a method herefore restricted largely to psychophysical experiments.


The specific purpose of this study was to gather such data on will-activity as are available from experimental and rational psychology and the experimental observations of moral and aesthetic writers, and to compile this information in such manner as to make it readily accessible to the educator.


Study and experimentation in high-school classes of science and chemistry. The study showed high positive correlation between school marks and sustained application.


The study included three university classes including 186 students. Findings: Attitude, a readiness to act, built up by suggestion, has a significant positive effect upon transfer of training.


The general problem undertaken in this study was to find out to what extent training young children to exercise judgment may be regarded as a significant part of the educational process. For purposes of attack the problem was considered from six angles, involving the study of data from history, psychology, opinion, observation, practice, and philosophy. Findings: In the six fields of inquiry mothers appear to be the only ones who seem not to strongly favor training young children to exercise judgment. The
conclusion drawn from the study is that training young children to exercise judgment is a very significant feature in the educational process. It can be educative, however, only when the educator observes psychological, biological, and sociological principles.


The theory of learning.


The special vocabulary tests of this experiment proved to be reliable measuring instruments for the 1,100 children who were tested. The children’s current knowledge of vocabulary was highest in words typical of the books which they liked best, was next on books neutral in interest, and was lowest on words found in books interesting to the opposite sex.


This study was made by means of Victor phonograph record to test discrimination of audience to emotionally toned auditory stimuli. Over 900 cases were used. Results varied from previous studies in which photographs were used.

187. Reed, Oliver B. The age at which general intelligence reaches maturity. 1928. Kansas state agricultural college, Manhattan.


Mathematical consideration of assumptions and probable fallacies in the too frequent use of the Gaussian curve. The author advocates the use of a variety of curves fitting more closely the actual distributions of ability.


Deals with 103 selected cases of each kind, 17 to 19 years of age. Findings: Introvert is definitely slower in certain simple manual movements; his emotional life is flatter and more constricted. These groups probably represent the extreme ends of a normal distribution which may be thought of as based on (a) social adjustability; (b) autonomic predominance; (c) infantile fixation of an inhibitory type.


The subjects for this investigation were 16 high-school seniors studying civics, meeting five times each week. The data presented corroborate Norsworthy’s results, i.e., the more rapidly we learn the more permanently we retain.


Findings: Some evidence of prognostic value of Downey will-temperament test.

195. Washburne, John V. Relation of reversal of image to conduct. 1927-28. Syracuse university, Syracuse, N. Y.


See also under Psychological tests and Items 357, 909, 1869.

CHILD STUDY


This review presents a summary of the significant investigations in child psychology during the past five years from the experimental and theoretical aspects. A total of 339 references are cited, these include references to special bibliographies.


The four Wallin peg boards were used in a study of the development of form perception and motor control of preschool children. Emphasis was placed on the psychological processes involved rather than on the development of test standards; the approach was experimental and analytical. Four hundred and ninety-eight series of tests, including 229, repeated series, were given to 360 children, between the ages of 2 and 3 years, who were in daily attendance at the preschool psychological laboratories of the Iowa child welfare research station.


A special investigation of adolescence in rural high schools of Vermont.


Two hundred and eighty-nine cases of intentional misrepresentations form the basis of this study, which endeavors to throw light on two questions, what are the objective elements in situations to which 6-year-old children respond with intentional misrepresentation of fact, and how do these elements combine.


An annotated bibliography of books and pamphlets on child study, education, etc.


Seven situations, designed "to discover whether there exist in individuals in varying amounts a tendency to persist in a given mental set when no distracting stimuli are introduced into the situation," were applied to a group of preschool children.

Findings: (1) Both groups of children—those with average and higher intelligence—laughed practically the same number of times each day; (2) an interesting difference in age groups appeared, the middle group—the 3-year-olds—showed an average amount of laughter less than either the younger or older group; (3) the social or personal element in laughter appeared to be the same for all the children from 2 to 5 years of age. They laugh most frequently when playing with other children; they seldom laughed when with adults or when alone.


Many fallacies exist in regard to "only" children. The ordinary assumption that the overwhelming majority of such children are selfish, spoiled, etc., seems not to hold when a sufficient number are compared with other children.


An experimental study of 17 subjects, who ranged in age from 18 months to 40 months, to ascertain whether or not the responses of children to taste stimuli (especially to annoying stimuli) were modifiable. The experiment showed that the responses were modified. The annoying stimuli came to be less annoying, indifferent, and even satisfying. The satisfying stimuli became less satisfying.


This study aims to determine the effect of constant visual and auditory stimuli upon the induction of sleep, to construct a battery of reaction variables that will measure the degree of sleep reached. Findings: (1) stimulus system largely successful for sleep induction; (2) hypnotic effects noted; (3) part of adopted reaction measures successful to warrant further study which is being carried on at University of Pittsburgh.

209. Gregg, Alice, Linton, Ethel, and Miller, Marion. A study of the laughter of young children. 1928. Institute of child welfare research, New York, N. Y.

Three groups of preschool children were studied. Every situation in which laughter occurred was recorded, descriptively. An index of social reponsiveness was evolved, i.e., the ratio of laughter to "exposure" for each child. Great individual differences evolved. There was also a marked difference in the set or situation provoking laughter, as between individuals, and as between age-groups.


A study of 105 families, both parents and two or more children. Data are reported on the dominance of superior intelligence, the influence of the mother, the influence of the same sex, the issue of unlike parents, and the maximum influence of heredity. Findings: Parent-child resemblance in mental traits is practically the same as in physical traits.


A critical review of two earlier studies, and presentation of data on intelligence differences in 41 pairs of siblings. No reliable difference, attributable to birth order, was found.


An outline and selected bibliography for the guidance of adult groups studying the characteristics of adolescence.


An outline and selected bibliography for the guidance of adult groups studying the play interests of children of preschool age.

216. Olson, Willard C. The measurement of nervous habits: a quantitative study of normal children. 1928. University of Minnesota, Minneapolis. (To be printed by the University of Minnesota press as a monograph of the Institute of child welfare)

The study included preschool and elementary children. A method of observational measurement was developed which yields a quantitative score of determinable reliability for each child. Reliability coefficients by various methods argued about 0.87. Nervous habits have been studied in relationship to the following variables: Family history, familial resemblance, imitation, habit, fatigue, nutrition, sex, etc.


A study of four infants for five months by five procedures: (1) The history; (2) monthly physical examination; (3) monthly psychological examination; (4) intensive observations for three hours a week; and (5) the health-habit record. The main contribution consists in the analysis and organization of the observational data to show peroidic descriptive reports of each child and to show variation in the environmental stimuli and the responses of the different infants and the same infant from period to period. The method of study is suggested for infants in homes, in home economics practice houses, and in institutions.


A study of 1,032 children between the ages of 3 and 6. Young children prefer the color red; boys and girls have about the same color preference.


This project was undertaken for the purpose of ascertaining what constitutes helpful methods and materials for use with groups composed of parents having a limited educational background. Groups used as a basis for the study were organized and conducted in seven different localities in New York city. These were in operation for one, two, three and in one instance, four seasons.


The study consists of an examination of data secured from 6,000 children, fourth through twelfth grade, in response to requests to write the worst lies they ever heard of, and also the most justifiable lies, if they believed a lie ever justifiable. Lies fall into several large classifications. The largest percent of lies cited are lies to avoid punishment. Rather marked sex differences were found after 10 years of age. Boys like to brag more than girls; girls lie to acquire more than boys.


One hundred and fifty-nine poems were used in making this study. Of these, 34 are reminiscent; 23 (not including the lullabies) treat of babies; 31 are lullabies; 42 are written about children; 19 have the death of children for a theme; 40 contain humor; and 8 are unclassified.


The interrelations of various indices of social behavior are described in detail. Includes studies by Margaret Barker, Alma Perry, Ruth Hubbard, Able Loomis, Ethel Linton, Marion Miller, Mary Herben, Janet Nelson, etc.


This investigation is an attempt to study the acuity of visual perception of distance and the relative influence on this acuity of the two factors, size of the retinal image and linear perspective. The experiment included: (1) A preliminary study of the distance vocabularies of young children; (2) a study of the ability of 4-year-old children and adults to distinguish differences in distance of two stimuli varying around a standard distance of 905 cm. from the observer; (3) a secondary study of the distance perceptions of 4-year-old children and adults at long range; and (4) a secondary study of the distance perceptions of four 2-to-3-year-old children and adults at a distance of 1 m. Findings: The difference limen for distance perception in the 4-year-old children was in general slightly less than that of the adults, although the limens closely approximated each other. The results showed that the judgments of the children were no more variable than those of the adults.


The material for this study is taken largely from habit clinic records, covering cases handled by the author while she was psychologist in Dr. Donald A. Horn's habit clinics in Boston. The cases reported here support the theory that there is not one environment only for a family, but that there are as many environments as there are members in the family.


The purpose of this study was: (1) to note some of the emotional difficulties which prevent the child from adjusting to school situations; (2) to find wherein these difficulties are due to the home and physical conditions and to suggest ways in which the school may help in these adjustments; (3) to find out which difficulties are due to the school situations and to see what changes in method and subject matter these findings suggest; (4) to examine the contributions of psychiatry, psychology, and general educational method in order to find out what valuable techniques for personality adjustment each presents and how these techniques may be combined into an educational procedure which holds constructivism and personality integration as a major objective.

See also Items 970, 975.

EDUCATIONAL SOCIOLOGY


All map studies or map projects made since 1914 that include as a major area the island of Manhattan have been summarized as to content, purpose, and in fact, every available bit of information. Particular emphasis has been placed upon those maps that represent social phenomena of an educational sociological significance.


A report of case studies of social interaction between pupil and student-teachers. Conclusions: The pupil-student-teacher relationship is different from pupil-teacher relationship and needs more study from the point of view of behavior problems.

PSYCHOLOGICAL TESTS


Acquisition and retention of facts tested, involving five types of associations, learned by 112 college alumni and 47 high-school students. Conclusions: 1) Associations, or thought relationships, actually influence retention of subject matter. 2) A wide variation exists as to the effectiveness of the respective types of thought relationships in the fixation of knowledge in the minds of both adults and adolescents. 3) In general, time and place relationships are relatively ineffective in the fixation of knowledge, whereas relationships of comprehension, relationships to the truth, and relationships of cause and effect are relatively effective, etc.


This is a study of the use of a relatively new method of scoring test items and the effectiveness of that method in improving the value of the Otis test in predicting success in English marks and in general achievement. Conclusions: The use of the new scoring method increased the validity coefficients by 12 per cent and 30 per cent in two instances.


The problem of this study was to select or devise professional tests which in combination with each other or with other measurable traits will form a measure of the teaching efficiency of high-school teachers. Data are presented from small high schools, from a teacher-training high school, and from a large city high school. While the results obtained were negative in character, they indicate that there is a large hope for obtaining more satisfactory measures of teaching efficiency by extending the types of the tests to include other traits and characteristics.


The aim of the present study is to compare certain types of intelligence tests as to their relative degree of teachability.


One hundred and ten pupils of the Peabody demonstration school were given the Ayres spelling test, the National intelligence test, the Binet-Simon test and the Monroe reading, rate and comprehension test. Findings: With a highly selected group of pupils, there is very little variation in the performance of pupils, as is evidenced by the closeness of the grouping of the scores around the median point. Fifty per cent of the pupils did not vary more than ±0.55 sigma from the median point.

RESEARCH STUDIES IN EDUCATION

21

The author tested a total of 500 children in the four grades, and a year later tested 400 of the same children. Special criteria were adopted for evaluating the merits and the limitations of each of the following tests: Cole-Vincent test for school entrants, Dearborn group tests of intelligence, Series I; Detroit first grade test; Haggerty intelligence test, Delta I; Otis primary intelligence test; Pitner-Cunningham primary mental test; Kingsbury primary group intelligence scale; Peabody primary classification test; Myers mental measure. A summary of conclusions indicates desirable procedure in each grade for answering certain definite questions.


Findings: (1) There was a relationship between percentile ratings and pupil success in school as indicated by teachers' marks, (2) on an average a direct relation was found between home conditions, percentile ratings, and scholarship marks, (3) on an average, a relation was found between health of pupils, percentile ratings and scholarship marks, (4) the school authorities should not be satisfied with one testing on a pupil but should use several tests and the tests should be of different types.


A repetition and extension of a similar study of Cyril Burt's, from which he concluded that the Binet test was a measure chiefly of school work. Results do not confirm Burt's findings.


A study of the correlation of parts within a test, as compared with correlations of parts with total score. Conclusions: The mathematical desideratum of low intercorrelations and high correlations with total score can be closely approached.


Findings: Power is the principal factor in performance on scaled tests, even when there are time limits.


Nine hundred white and full or mixed Indians in United States Indian schools and in common schools were tested. Findings: Common school Indian students were slightly more intelligent than those in United States Indian schools. White students were most intelligent.


A study of the use of three group tests in 1-4 grade, their reliability and a method for translating scores directly into letter ratings.


An evaluation of the techniques which tend to produce good rapport with preschool child through verbatim records of actual test situations.

The use of a relatively new item goodness coefficient to determine the goodness for English mark prediction of various types of intelligence test items. The conclusions are conditional - miscellaneous results concerning the item coefficient and value of types of items are presented.


Correlations of Terman group test, the Otis self-administering higher, and the Thorndike-McCall reading scale with school achievement for one-term. Findings: Coefficient of correlation ranged from 0.06 to 0.52, median being about 0.3 for intelligence tests; reading age yielded the four following coefficients, when correlated with achievement: 0.22, 0.24, 0.24, and 0.42.


A study of students at the University of Akron. Findings: (1) There is a positive relationship between intelligence ratings and academic work; (2) there is a positive relationship between intelligence rating and the number of semester hours a student can carry; (3) there is a relation between the intelligence rating and the length of time a student remains in school; etc.


The purpose of the study was to find the relative competence for admission to high school, also to determine what subjects should be studied by first-year students in high school.


A criticism of Pearson formula for computing correlations, with a substitute formula comparing its results with Pearson coefficients of correlation. Findings: The Pearson formula is entirely inadequate. Faults inherent in most group intelligence tests result in high Pearson coefficient of validity and reliability.


A series of language and intelligence tests were given to 130 high-school and grade pupils of Munfordville graded and Hart county high school, Munfordville, Ky. From the data obtained, a decided positive relationship was found to exist between intelligence tests and language tests. The relationship, however, was much lower with spelling than with the other phases of language.

280. ——— ——— The effect on the intelligence quotient of change from a poor to a good environment. 1927-28. Bryn Mawr college, Bryn Mawr, Pa. 9 p. (Offprint from the 27th yearbook of the National society for the study of education, 1928, Pt. 1)

The subjects of the study were 64 girls of native American stock, who came originally from extremely poor social and educational conditions and who now are in superior environment. These results show no appreciable effect of the environmental change upon the intelligence quotient. Such differences as are found may well be due to accidental causes.


Three intelligence tests were used with 40 ninth grade and 40 tenth grade pupils. Findings: The Otis test ranks first in (a) its correlation with the composite score of the intelligence tests; second in (b) its correlation with the composite score of the diagnostic tests; third in (c) discriminative capacity; and fourth in (d) administrative features. The Terman test ranks second in (a), first in (b), second in (c), and first in (d). The Dearborn test ranks third in (a), third in (b), first in (c), and third in (d). On the whole the tests rank Terman first, Otis second, and Dearborn third.


Findings: The German and Anglo-Saxon (American-born parents) rank very close in test responses; the Mexican ranks lower than the American white; the professional and town groups make better scores on intelligence tests than the child of laboring and rural groups; the differences in the responses of different nationalities are differences of degree and not of kind; a significant difference was found between the I. Q.'s of the two Anglo-Saxon groups; the German group ran higher for errors in the same-different test than any of the other groups; the nonagricultural group consistently stood higher than the agricultural group in all verbal tests; the scores indicated that the Mexican child stood better in tests involving calculation than in tests involving use of language, etc.


A study of the results of the Thurstone psychological examination applied to three successive seniors in the University of Arkansas shows the relationship of psychological scores to persistence in college and to scholastic marks in the university. Findings: A high correlation in both persistence and in scholarship was found.


The intelligence level of the children from the homes of typical Louisiana farmers and the educational attainments of a typical school system are studied. The pupils studied were decidedly below the standard level of intelligence as established by Terman, as measured by the Dearborn, and also by the Haggerty tests of intelligence. They showed weakness in reading as measured by the Monroe and the Burgess tests. The results of the arithmetic test showed rather satisfactory progress in that subject. The girls excelled the boys on the intelligence and also on the educational tests.


The five-letter form of the Rational learning test, preceded by a fore-exercise, was given to 150 children in the fourth, fifth, and sixth grades of Peabody demonstration school, Nashville, Tenn., and the Training School of Examiners.
RESEARCH STUDIES IN EDUCATION

School of Western Kentucky State Teachers College, Bowling Green, Ky. The purpose of the study was to determine whether the test predicts brightness and dullness of a subject and to what extent the National learning test measures the same thing measured by the Binet-Simon, the National intelligence tests, and the Stanford achievement tests. Concludes that the test predicts brightness or dullness of a subject.

Final report on the standardization of the Merrill-Palmer test scale. Contains material on personality factors entering into test situation; growth of young children in ability to do tests; effect of sex, environment, etc., on performance.

290. Todd, G. Evelyn. Analysis of Terman group test to ascertain its predictive value with high-school subject. 1928. University of Chicago, Chicago, Ill.

291. Toops, Herbert A. The concept of two or more arbitrary origins and its application to the solution of standard deviations. Educational research bulletin (Ohio state university), 6: 372-75, November 23, 1927.


This is the results of an investigation of 151 junior high school boys. Evidence is presented which shows that the reliability of the subtests in the scales varies over a wide range. The subtest scores do not show significant correlations with school grades.


Gives the results of experiments with 445 children of the fifth, sixth, seventh, and eighth grades. Findings: On an average children who never had an Intelligence test will rank lower on the first test than on any subsequent comparable test up to at least six. Where six group intelligence tests are given at intervals of one month to children who have had no previous practice the superior children improve more steadily, reach their peak performance less quickly, and maintain their level more tenaciously than do inferior children.


See also Items 558, 739; 1097, 1382.

EDUCATIONAL TESTS AND MEASUREMENTS


The aim of this study was to reclassify pupils in Dunn elementary schools on the basis of tests and results. Pupils were found to be overrated and underrated in many instances. Subjects taught by home room teachers rated highest in test results.


A study of the results of the Bureau of education semestral tests in second year history, third year English, and fourth year physics administered in November 1927, in all secondary schools offering the courses to be tested, and a comparison of these results with the scholastic ratings given by teachers to the students in these courses at the end of the semestral rating period. The results show no appreciable correlation between the teachers' ratings and the students' test scores.


This study shows the progress of pupils in grades three to eight in Volusia county in reading and arithmetical operations as measured by Monroe's silent reading and Woody-McCall arithmetic fundamentals tests.


The study involved achievement and intelligence testing, and reclassification, in grades kindergarten to VII, inclusive. Such a program may be accomplished even though the teachers are untrained in testing, under direction of supervisor. The program is valuable for reclassification and diagnosis of children, and for the training of teachers in service.


Findings: The Indiana composite achievement test has a predictive power, when taken alone, or presented by the correlation of 0.60 for semester marks and when used the same way a predictive power for standard test scores in high-school subjects represented by the correlation of 0.55. The predictive power of the Indiana composite achievement test can be raised from a value represented by a coefficient of correlation of 0.60 to a value represented by a coefficient of correlation of 0.70 for semester marks when teachers' ratings on industry are included with its score.


Review of developments in educational tests during the year 1927.


Attempts to discover under what conditions and with what success the results of repeated measurements with the same or parallel forms of group tests may be utilized to increase the reliability of prediction of individual performance as compared with that based upon scores from a single, recent testing.

316. King, Callie M. An attempt to compare the A. Q. of children trained in public school with the children trained in training school, using grade six for testing. Pittsburg, Kans., State teachers college [1928]


The Terman group intelligence and the Stanford achievement tests were given to all 6A pupils.


An experimental study showing tendency of gain when students check first impressions when taking objective tests.


The Stanford achievement tests were given to nearly 15,000 elementary school pupils. Findings: In reading, Kansas City medians were practically the same as the Stanford standards; in history and literature, the Kansas City medians average 0.4 of a grade or 4 months below the Stanford medians; in nature study and science, the Kansas City medians average 0.4 of a grade or 3 months below the Stanford standards; in dictation, spelling, the Kansas City medians average 0.1 of a grade of 1 month below the Stanford standards; in arithmetic, the Kansas City medians average 0.1 of a grade above the Stanford standards; and in language, the Kansas City medians average 0.2 of a grade above the Stanford standards. As the elementary course in Kansas City is only seven years, the seventh grade medians are compared with eighth grade medians of other cities.

321. Morris, John Van Liew. Objective tests in English 1, 2, 3, and 4, algebra, geometry, American history, for high schools. April 20, 1928. Northwestern state teachers college, Alva, Okla.

322. Myers, C. Everett. Measuring educational efficiency. Harrisburg, Pa., Pennsylvania state educational association, 1928. (Research bulletin, no. 3)

Pt. I develops a theory of measurement based upon the relation of school attendance to pupil learning; Pt. II rates 93 school districts and 27 counties according to the theory developed on "Instructional efficiency," showing significant differences in attendance, but small and insignificant differences in pupil learning; Pt. III rates the school systems on "Financial efficiency"; and Pt. IV compares rural schools varying in size. The large graded schools make a better showing on standard test results if the comparison is made on a grade basis rather than on an age-group basis.


An analysis of all group tests to determine characteristics and nature of accessory materials furnished with them.


This study shows comparative achievement on the subjects named and semester achievement for all classes. Various modifications of classroom procedure have developed and have been adopted.

A list of tests available for general use, limited to tests in school subjects and in general intelligence. Information is given as to the various parts or divisions and forms and the grades for which each test is intended. A brief description and criticism of each test is also given.


In this list of tests in school subjects and general intelligence, information as to the grades for which each test is intended, together with a very brief description and criticism of each is given.


A manual intended for teachers—meets the difficulties inexperienced and untrained teachers have in test construction.


Includes 10 tests, two forms each—arithmetic computation, arithmetic reasoning, reading, language usage, spelling for grades 2 to 8, history, geography for grades 4 to 8, grammar for grades 6 to 8, nature study and physiology (in collaboration with O. A. Sealy) for grades 2 to 8.


An experimental evaluation of the recall-completion, four-choice, two-choice, true-false and matching types of examination and the effect of various corrections for chance. The four-choice form was found to be the most valid.

330. Beisner, George Laurence. A study of certain educational tests of mental ability to determine whether or not there is any relation between type of question and score made by urban and rural pupils. Master's thesis, 1927. Pennsylvania state college, State College.


The following tests were used: Illinois intelligence test, Stanford achievement test in spelling and arithmetic, Monroe arithmetic test, Stanford achievement and Monroe tests in reading. Gives distribution of medians of all classes in city in subjects noted, together with median of medians and Q.


A city-wide survey of intelligence, arithmetic, reading, and spelling. Distribution of medians of every class in the city of Baltimore in the subjects noted above, together with median of medians and Q.


A summary and explanation of the time and labor saving devices that have made possible the giving, scoring, tabulating, and summarizing of more than 125,000 tests in the city of Baltimore each semester.


One hundred students in three high schools were given 100 true-false questions followed a week later by 100 completion items covering the same material. The completion tests were more reliable than the true-false. The students made lower scores on the three completion tests than they had in the previous true-false tests on the same content.


Findings: Marked correlation between Pressey English test and intelligence; no correlation between achievement in English and intelligence; high correlation between Hotz algebra and intelligence; same correlation four months later which would indicate that they can be used as a prognosis test; more intelligent pupil gets his algebra better.


The function of this manual is to give to teachers a notion of the nature, uses, and advantages of these newer instruments for measuring educational attainments; illustrations showing their superiority over ordinary classroom tests have been incorporated.

See also under Psychological tests, Special subjects of curriculum, and Items 348, 1076, 1097, 1187, 1421.

EDUCATIONAL RESEARCH


An analysis of processes of research in the form of a check list, together with application of check list to 100 researchers. The value of check lists as an aid to persons engaged in research work, especially those who are inexperienced.


Functions and organization of the Division of educational research.


345. ——— Technique of research in education. 1928. University of Southern California, Los Angeles. 320 p.


A handbook and manual of information for graduate students, research workers, and public-school administrators and investigators.


This study consists largely of references to illustrations of research procedures. It is designed to assist the reader in understanding the techniques of educational research.

INDIVIDUAL DIFFERENCES


A study of the intelligence quotients and teacher ratings in relation to difficulty in school subjects.

351. Billett, B. O. A controlled experiment to determine the advantages of homogeneous grouping. Educational research bulletin (Ohio state university), 7: 133-140, 165-172, 190-96, April 1, 18, May 2, 1928.

Conclusions: Teachers' ratings of teachers' marks should never be used in toto or in part as a basis for homogeneous grouping; homogeneous grouping for the purposes of education should be based on traits not subject to chance through education, such as the intelligence quotient, the probable learning rate, or the index of brightness. Grouping on the basis of the intelligence quotient has shown a marked measurable advantage for slow pupils, some measurable advantage for average pupils, and a slight measurable disadvantage for bright pupils.


A study of 56 pupils in the public schools of Daisy, Tenn. In this experiment an average correlation coefficient of 0.93 is found between successive practices in the Army alpha, of 0.96 in the case of the spelling, of 0.90 for substitution, and of 0.75 for the English tests. There is a general tendency for the group to show convergence, as measured by the coefficient of variation, in the different practice stages; thus indicating that the individuals are getting more alike as they practice.


355. Donoy, Russell. The consistency of grouping children in ability groups over a period of six years. Kalamazoo, Mich., Department of research, Public schools [1928].

The purpose of this study is to take the classification ratings obtained from the use of intelligence tests four in number and tabulate them to learn to what extent these ratings have been consistent.


An experiment with the fourth, fifth, and sixth grades, which showed superior achievement through individual instruction in the three grades in all subjects in comparison with the control schools.


A study of one procedure of individualized teaching with large and small classes. The findings seem to indicate a worth while procedure of teaching certain subjects.

An experimental study of the distribution of abilities within the individual. The performance of 40 first-year high-school boys in the 30 subtests of four intelligence examinations is the basis of this study. Findings: Trait variability within the individual approximates the curve of differences between individuals. No relation was found between trait variability and I. M. S., between the distribution of abilities and general intelligence.

364. **Malloy, Kathie V.** Problems of individual differences in the Theodore Roosevelt junior high school, Syracuse, N. Y. 1927. Syracuse university, Syracuse, N. Y.

A statistical treatment of the performance of 52 first-year high-school girls as measured by 30 subtests of four intelligence examinations, to answer the questions: "How do an individual's various abilities compare with one another? Do his abilities scatter, or are they clustered around a certain central average?" A normal distribution of abilities for the individual was found, but with differing variability which fluctuates independently of general intelligence.


Adapting college instruction to individual differences in students.


From this study of two methods of grouping, the conclusion was reached that better instruction of elementary school pupils resulted from homogeneous rather than from heterogeneous grouping.

A scientifically controlled experiment comparing individual vs. group methods of instruction in reading and geography in the fifth, sixth, and seventh grades. Group method was found to be superior in the fifth grade, individual method superior in seventh and eighth grades.
RESEARCH STUDIES IN EDUCATION

SPECIAL METHODS OF INSTRUCTION AND ORGANIZATION

GENERAL


A study of progress in subject matter in the first four grades. The progress of pupils in subject matter was affected very little the first year by departmental teaching. However, the slight advantage in each subject measured was in favor of departmental teaching in over three-fourths of the subjects.


The history of the puzzle, types of puzzles, expert and other opinion concerning the educational value of the puzzle. The consensus of opinion of those consulted is that puzzle solving has educational value.


PLATOON SCHOOL

378. Barrows, Alice, and Evans, Florence E. Source material on platoon or work-study-play schools. Washington, United States Bureau of education, 1928. 33 p. ms. (City school circular, no. 7, June 1928)

379. Douglass, Carleton E. Experimental applications of the unit plan of instruction as developed by the Lincoln school of Teachers college, to public-school situations with special reference to platoon as well as traditional schools. A series of reports by principals and teachers. 1928. Department of education, Baltimore, Md. 18 p. (Baltimore bulletin of education, March and April 1928)


See also Items 900, 2250.

PROJECT METHOD


The study includes minimum essentials, objectives, extent of work and projects for each of the three primary grades.


A brief history of Columbus with projects for use in intermediate and junior high school grades.
RESEARCH STUDIES IN EDUCATION


The nature of student and teacher activities engaged in by X-Y-Z groups under the problem method of instruction.


A review of best pieces of recent project work, with suggestions for practice. Conclusions: Project method now assuming fixed place in good pedagogical practice.

See also Item 2158.

**SUPERVISED STUDY**


387. **Branson, Ernest P., and Stoker, Dora D.** Testing the results of supervised study. Department of research, City schools, Long Beach, Calif. 1928. 6 p. ms.

Five-hundred pupils in three grades of the junior high school having supervised study were paired with pupils in schools not having supervised study and tests administered at the beginning and end of school year. The unsupervised group make larger gains. This is true at all levels of ability though less marked at the higher levels. Discusses the reasons for the unsatisfactory showing in the supervised group and concludes that measurable gains are not to be attained unless methods of study are improved or study time conserved under the supervised study method.


An historical study of present status.

389. **Holmes, Ethel.** Directing study in social studies, mathematics, science, English and foreign language. Los Angeles, Calif., Department of psychology and educational research, City schools, 1928.


Findings: The pupils having the higher I. Q. make poorer progress under supervised study than they do under unsupervised study, while those having the lower I. Q. make better progress under supervised study. It is concluded that experienced teachers get better results from supervised study, while inexperienced teachers get better results from unsupervised study.


**VISUAL INSTRUCTION**


A theoretical treatment. Conclusions: There is some doubt as to the value of moving pictures unless used under direction of educational experts.


A study of pictures, cartoons, maps, charts, and diagrams found in elementary school books, 1890-1925. Findings: (1) An increase in emphasis upon all visual aids, 1890-1925; (2) an increase in emphasis upon visual aids that are social and scenic, industrial and economic; (3) a decrease in emphasis upon topics...

The purpose of this investigation was to ascertain the nature of the contribution of the photoplay in the study of history in the junior high school. Findings: (1) value demonstrated in terms of better appreciation of the subject, amount learned, time saved, interest in subject created as revealed by reading, etc.


The author lists the essential data of the investigations which have followed scientific procedure in determining the value of visual instruction.


A study of specific values of certain selected visual aids used in connection with the teaching of elementary geography, criteria for selecting such aids, and suggestions regarding sources. The study lists and discusses values and criteria for the following aids: (1) Central or unprojected picture, (2) stereoscopic view, (3) lantern slide, (4) film strip, (5) motion picture, and (6) exhibit.

400. Smith, Mildred S. Use of slides as an aid to memorization. 1928. Detroit Teachers college, Detroit, Mich. 4 p. ms.

The study included a 10th grade in each of six schools; one the experimental the other the controlled group. Scores of the experimental group were slightly higher, although the evidence was not conclusive.


See also Items 1981, 2025, 2030.

SPECIAL SUBJECTS OF CURRICULUM

READING


A detailed list of selections for fifth-grade reading arranged under such headings as the following: animals, animals, animals, words, common things, cooperation, country, courage, courtesy, etc.


An attempt to determine the extent to which ability in reading conditions works for success in other subjects. Conclusions: Reading is one of the principal factors in the successful pursuit of other subjects.


The purpose of this study was to determine the relation which exists between the speed of reading and the amount of peripheral vision available. Conclusions: Slow readers make little use of peripheral vision; great individual differences occur in the manner in which readers use peripheral vision.


A survey of 66 city courses and 46 state courses, analyzing selections most frequently recommended for basic use, etc. Conclusions: Objectives and suggestions for teaching are not in harmony with materials recommended for basic use.


An analysis of 18 fourth readers containing copyright from 1917 to 1927, 15 fifth readers, from 1917 to 1927, and 14 sixth readers from 1918 to 1927. Findings: There was considerable duplication of material, which could not be relied upon entirely to disclose. Duplications occurred more frequently in readers published prior to 1921. The greatest number of duplications occurred in fifth readers compared with other fifth readers; more poetry was duplicated than prose.

417. Horrall, A. H. Reading course of study and book list for grades one to six. San Jose, Calif., School department, 1928. 50 p.


Two schools were used for this study, one as an experimental group and another as a control group. The National intelligence tests, the four Gates reading tests, the Stanford reading tests, the Peabody test, and Pressey attainment test were given at the beginning of the school year. After five months of instruction, the same tests were given to both schools and comparisons were made from these results. Findings: The control group was below the standard in reading in all grades; the experimental group was somewhat below the standard in most grades according to the results of the Gates tests, but it was normal according to other tests.


An experiment in teaching reading based on pupil activities. Conclusions: Progress rapid; reading thoughtful.


This study covered a period of four months. Final results were taken from a comparison of a group of 500 A children taught by means of manuscript with 500 A children taught by means of script. There was an attempt made to control the groups in respect to age, intelligence, teacher efficiency, and homogeneity of the classes. Findings: Teaching by script procedure is definitely less effective for reading print than the print procedure; print pupils score higher than script pupils after eight weeks' instruction and likewise score higher at the end of the semester; there is some evidence that the script procedure creates unnecessary difficulties for the pupils when they pass from script reading to print reading, etc.


This study has as its aims: (1) to determine the vocabulary of the two primers; (2) to determine frequency of various words in each primer; (3) to determine correlation existing between vocabulary of the two primers; and (4) to determine what vocabulary terms should be added to the fundamental vocabulary.


The object of the study was to determine whether or not junior high school courses of study included books most enjoyed by children. A study of 10 courses of study indicated that actual interests of children were not included in reading lists.


The purpose of this study was to see how well the kindergarten group takes up reading in primers and readers, having first completed the Souther-Smith picture story reading lessons, series 1.


A study of approximately 400 town pupils in one school system and 150 rural pupils in 11 schools of two counties. Findings: Town pupils are better readers in all grades than rural pupils. The chief factor responsible is the better prepared teacher in the town schools.


A study of correlations among scores on Thorndike-McCall reading scale, Stanford achievement test, and Thorndike test of word knowledge. Conclusions: Word knowledge or vocabulary correlates with reading, as measured, .55 (Pearson product moment coefficient of correlation).


See also Items 360, 457, 663, 778, 1320, 1707, 2285, 2309.

TESTS


Findings: The average improvement in reading is practically equal to one term of school work. That is, on an average, each present grade is a full term ahead of its record two years ago in the same test.


For this study two groups of students being taught by trained and untrained teachers were selected in grades three to seven in eight schools of Sabine Parish, La. Monroe’s silent reading test and the Woody-McCall mixed fundamentals in arithmetic were used. The results of the study seem to indicate that there is an improvement in pupils taught by trained teachers of from 30 per cent to 73 per cent over pupils taught by untrained teachers.


The Philadelphia silent reading test for grade 2B (Form A) was given as a part of the voluntary testing program in February, 1928, to 9,318 pupils of grade 2B in 138 schools. The results of these tests are given.


The study included 100 high-school students in two high schools. Findings: The sum total of intelligence correlates better with reading ability than does any specific mental trait as measured by the tests used. Scores on units of mental tests which require reading ability for their interpretation correlate more highly with scores on reading tests than do scores on units of tests which involve mathematical material.

See also Items 303, 309, 332.

HANDWRITING


SPELLING


Sixth grade classes in 12 schools cooperated in an experiment designed to find out how accurately sixth grade pupils mark spelling papers. Findings: In the average class at the beginning of the experiment about 91.5 per cent of the words were correctly marked; about 50 per cent of the pupils had all their papers for a week correctly marked; on about 80 per cent of the daily papers all words were correctly marked. In the average class after using suggested techniques for increasing the accuracy of the marking, the percentages were increased to 90.5 per cent, 60 per cent, and 70 per cent, respectively.


A plan was worked out for the improvement of spelling in the senior high school at Hobart, Okla., using a 15-minute activity period per day. Findings: Spelling improvement may be expected of high-school students without spelling being a part of the regular curriculum and without credit toward graduation, if the students are properly motivated and "purpose to do." The study of spelling in the high school does not yield the by-product of a significant increased reading vocabulary, etc. This study provided the data for the construction of a 2,000-word spelling scale based on the experience of 238 senior high school students in spelling them. It also provided the data for 100 "spelling demons" for senior high school students.


A study of controlled classes in Ithaca public schools. Findings: No one method showed definite superiority.

Findings: "Average and above" adults of the present day, spell 87 per cent of the commonly used words. There is little doubt that they have suffered some "fall off" since the close of the learning period and that their average is lower now than when leaving school. A number of schools and counties in the state survey made averages above 90 per cent on a speller whose word lists are longer and more difficult than that of the speller recently adopted. It is the belief of the committee that social and business efficiency demands at least a spelling ability of 85 per cent of the common words as a minimum attainment. To insure this, after a certain "fall off" which is natural and consequent to the learning period is provided for, it seems strongly probable that an average of about 90 per cent will need to be set as a goal, with a minimum of 85 per cent as a passing mark.

The purpose of this study is to trace from the beginning the history of the teaching of spelling; to find out when and through what influences spelling began to be considered of importance and by what steps the present methods of teaching it have been reached.


465. Stigler, W. A. Spelling in the first and second grades. El Paso, Texas, Department of research, Public schools, 1928. 5 p. ms.
The conclusion reached was that instruction in spelling in the first and second grades is of little value.


See also Item 1707.

TESTS

An experimental study of six forms of spelling tests, i. e., modified sentence, column, sentence, selection of correct spelling, recognition of misspelling in context, completion of sentence by dictated words. By the use of equivalent lists of the Morrison-McCall scale the effect of form upon achievement was determined. Findings: Sentence method, as employed in Stanford achievement examination, produces a score which closely approaches true score. Selection of correct spelling and recognition of misspelling were found to be distinctly inferior; modified sentence, column, and completion of sentence by dictated words were found to be of about equal value.

79595—30—4


This test was administered in 150 schools to 97,024 pupils in grades 2A to 8B. The median per cent score for all grades combined is 86. Very nearly half of the pupils tested either had perfect papers or misspelled but one of 20 words of the test.

See also Items 309, 324, 2285.

ENGLISH LANGUAGE

GRAMMAR AND COMPOSITION


The subjects of this experiment were 181 college freshmen of the State teachers college at Peru, Nebr. The results of the experiment show that for the freshmen taking freshman English the conference method is better than the nonconference method.


Many city and state courses of study and pamphlets on the use of the dictionary were examined.

478. Brainerd, Margaret S. Remedial work in language usage, based upon English survey, grades four to eight. Martins Ferry, Ohio, Public schools, 1927. 4 p. ms.

An analysis of prevalent weaknesses in English usage and remedial suggestions. Findings: Success in use of games and good English posters in fixing language habits.


A study of speech habits of 238 freshmen children of negro extraction, as observed and checked over a period of two years. Conclusions: So long as the speech standards of the negro home and school clash, just so long will the speech habits of negro children continue to be faulty. The problem is a social one that can not be solved acceptably until the plane of living in the average home is elevated.


This is a study of errors in capitalization and punctuation, diction, and syntax, based on 950 written compositions from grades three to seven, inclusive, and first and fourth year high school. Findings: On the whole the third-grade errors in capitalization and punctuation persist in the fourth and fifth grades although there is a tendency for them to decrease in the upper intermediate grades and practically disappear in the high school; the greatest number of errors is in the use of the verb; etc.

A classification of questions, evaluation, and suggestions for improvement. From the standpoint of teaching, just the grammar needed as an aid in using language, many of the questions should be omitted. One thousand nine hundred and ninety-four questions were classified.


Conclusions: Mistakes in sentence structure are mainly confined to a few fundamental errors, namely, sentence fragment, omission of words and phrases, and inconsistencies of structure (more than 50 per cent). University freshmen make the same errors that junior high school pupils make. An improvement of only 13 per cent in sentence structure occurred in freshman year in the university; some errors actually increased in the freshman classes.


Correlation between the abilities of 25 college freshmen, 25 junior high school pupils, and 25 sixth grade children in talking and in writing. Findings: There is a correlation in the organizing and inventive elements of written and oral composition of all achievement levels. This is not true of mechanics.

A study of the errors of speech among Portland children, both grade and high school.


This study attempts to measure the results of teaching written composition in the senior high school grades. The formal elements are measured by Pressey's diagnostic tests, while the subjective quality is measured by the judgments of five teachers of English.

Grades four to eight were included in this study. Results of 1926 were compared with results of 1928.

The assembling of a body of material in the field of oral English, and a presentation of this material adapted to the needs and abilities of students in the upper grades of the high school.


An examination of errors in three ninth grades in the industrial part of the city, foreign part, and part housing children of business and professional men. Conclusions: Environmental differences do play an important part in pupil's use of the English language.


A comparison of vocabulary growth based on the results of an experiment and a controlled group of ninth year students.


This study draws the conclusion that children of low I. Q. use only the most common words in their writing vocabularies, and they use fewer words than children of high I. Q., hence they need to know how to spell fewer words. Spelling vocabularies, therefore, should vary according to the intelligence of the individual.


Six familiar principles requiring in modern texts on principles of education were made the conscious criteria for determining the method and emphasis for the four semesters during which the author taught a class in college English. The procedures were such as the author felt necessary to realize the principles determined upon. The results show a decided improvement in promotion rate but unfortunately the study is not fully reported because of conditions at the last over which the school had no control.


This study shows objectives in English as set forth in state courses of study and relations of suggested materials to those objectives. Also points out those objectives which are considered most important by makers of courses of study.


An investigation of the frequencies of language forms in stenographic reports of conversation. Findings: The differences in utility are so marked and the correlation with actual errors so great that the principles can be used as a guide in the organization of corrective language programs.


A study of objectives in English and social science set up by modern educators. Suggestions for correlating the two subjects.


The study included the elementary grades—two schools in Denver, Colo. Findings: Some evidence of value of supervision.


This investigation revealed a need of individualized instruction in all phases of English composition.


Comparison of two groups in junior high English accomplishment in fall and spring of one year. Findings: Extremes in inferior group; increase in ratio where first was below 100; increase where I. Q. was below median, in this case 107.

531. Wilson, I. G. Actual use of authors and magazines and newspapers of the mechanics of English. [1928.] Kansas state teachers college, Pittsburg.

A study of the words used by second, third, and fourth grade pupils in their written discourse and the compilation of a vocabulary of these words.
See also Items 257, 377, 385, 389, 394, 431, 577, 605, 609, 1154, 1222, 1228, 1263, 1637, 1665, 2218, 2297.

ENGLISH LITERATURE


A survey of the literature on the teaching of poetry.

An experimental study of the influence of motivation among junior high school students in learning poetry. Findings: Motivated groups make more rapid progress and retain better than other groups.

An introduction to aesthetic criticism. Includes fine arts.

A textbook for use in classes in children's literature in normal schools and colleges.

Forty-four classes in use in 38 states were examined to find out if secondary school English can encourage belief in character analysis by physical signs. Since 69% of the classes examined contained suggestions of character analysis by physical signs, the conclusion drawn was that secondary school English can encourage belief in an unscientific form of character analysis.


A study of the variations and changes in the literature offerings on all school levels. Conclusions: The tendency to subdivide literature must eventually be asked to justify itself or the practice will be discontinued.


Findings: (1) Books should stress good citizenship; (2) author is in agreement with the report of the committee on literature of the North central association of colleges and secondary schools; (3) literature should be related to life.


Twenty-seven histories of English literature were studied. These comprised practically all of the volumes of this sort which are commonly used as textbooks in American high schools. Findings: It was found that of the great authors, Shakespeare received most space, Rossetti, least; of the great classics, Shakespeare's plays received most space, A Tale of Two Cities, least.


The purpose of this study was to provide a working plan by which the teachers of Ann Arbor may develop experimentally a course of study in literature for the Ann Arbor public schools.


The syllabus is designed to provide an outline and working plan for the course in children's literature given at Detroit teachers college.


Consideration was given mainly to magazine articles in this study. The writer advocates more extensive and intensive use of library, wider use of standardized tests, and cooperation of English teachers.


An experiment carried on with an unselected group of high-school seniors to discover whether or not they could be stimulated to write verses perhaps of equal merit to those written by a selected group and published in high-school publications from September, 1925, through June, 1927. It further attempted to discover the type of student through intelligence test records, Ingalls vocabulary test, and a blood-traits "Exercises in judging poetry." Conclusions: The study shows that pupils in the unselected group can be stimulated to write verses comparable to those written by the selected group. Nationality, age, intelligence test records, progress in school, course, grade, vocabulary tests, or sex are not factors in the growth of poetic expression.

A study of the offerings in American literature in 20 Texas colleges and universities. Findings: 31 different names are used for the 56 courses offered; 11 of them deal with modern, contemporary, or present-day themes. Southwestern university and Simmons university consider only Emerson, Lowell, and Poe worthy of intensive study. The University of Texas offers the greatest number of courses, seven, with a value of 414 term hours.


Tests were given to equivalent groups of sixth-grade children. The data derived from the tests gave ground for the assumption that, in so far as the verses used were concerned, figurative language and involved sentence structure tended to obscure meaning and proved a difficulty of some moment, and that choice of verse tended to be in the direction of that which was most meaningful to the reader, etc.

See also Items 395, 1639, 1987.


The study included a test of functional grammar and one which tests the subject matter of the junior high school English course, punctuation, use of books and periodicals, use of the telephone, outlining, literary knowledge and appreciation, and vocabulary. Scores are reported by grades, schools, sex, and type of preparatory school. Reliability in three grades was 0.72.


A study of correlations among Otis self-administering tests, the Cross English test and English marks with a high-school group. Findings: Success in English in the high school may be predicted more accurately by means of achievement tests in English than by means of intelligence tests.


Data on the same 238 students (106 boys and 132 girls) consisting of scores made on two forms of the same test by grades 7, 8, 9, 10, 11, and 12 were used. Findings: (1) The average correlation for all the grades based on total scores was 0.74; (2) the average correlation for all grades based on separate items in the test was 0.56; (3) for purposes of prediction, total scores represent a measure 33 per cent better than a guess; (4) for purposes of prediction, the average of the separate items represents a measure only 14 per cent better than a guess; (5) the test correlated 11 points better for girls than for boys; and (6) for purposes of prediction in the test represented a measure 13 per cent better for girls than for boys.

561. LaBrant, Lou L. Diagnostic tests and remedial measures for the teaching of English in the high school. Lawrence, Bureau of school service and research, University of Kansas, 1928. 24 p. (University of Kansas. Bulletin of education, vol. 1, no. 7, April 1928)

A program is presented for employing objective measuring devices and determining the individual difficulties which should be taken into account in teaching the subject to high-school students. Specific remedial measures are suggested to meet the shortcomings that are disclosed by the results of the various tests used.

562. Markham, W. T. English vocabulary tests for high-school and college students. Bloomington, Ill.: Public school publishing company, 1928.

The tests consist of two forms, Form I and Form II. There is a class record sheet and scoring key to accompany each. Temporary norms have already been established for all classes in high school. The coefficient of correlation between Form I and Form II is 0.82.

The test was given to 506 high-school pupils, 244 college students, and 60 graduate students. These groups represent 23 states in different sections of the country. Findings: The test showed that: (1) There was a gradual rise in the number of right choices from the lower high-school pupils to graduate students; (2) attention given to the poetic effect was the strongest aid in the selection of the right choice; (3) students failed to distinguish the right choice when placed in line with the two wrong choices. This memory was not helpful in distinguishing the work used by the poet in well-known passages; (4) some of the right choices had a very large frequency, while certain other right choices had a very small frequency; (5) some of the wrong choices had a large frequency. The greatest difficulty in the test was the ability to recognize the poetic effect.


A test given to 7A pupils and a few 7B pupils in the elementary schools of Kansas City, Mo. The results of the test show that pupils are able to choose the correct work much more frequently than they are able to select the rule that applies to the choice.


The Philadelphia English test was administered to 18,911 pupils of grade 5A to 6B, inclusive, and to 13,833 pupils of grade 6B to 7B, inclusive, in order to provide as early as possible in the term an inventory of pupil performance in the technical phase of English composition so that suggestive instruction may be guided thereby. The results reported give definite indication of improvement in pupil command of certain fundamental skills in the field of technical English.


569. Rinsland, Henry D. Standardized tests and practice exercises in high-school English. 1928. University of Oklahoma, Norman. 3 p. ms. (Address before the American research association, Boston, February 1928)

Validation of English tests and value of 100 practice exercises designed to cover the 100 most frequently occurring errors in English. Findings: Exercises do remove errors to a certain degree. Most tests of English are “proof reading” tests and not tests of composition.


The study takes up capitalization, punctuation, spelling, syntax, diction, and paragraphing as used by pupils in junior high schools. Gives rules and examples for the use of these, with numerical values based on opinions of junior high school English teachers and college English teachers.


A standardized word list of 100 words, graded in difficulty and adapted to grades six through twelve. Findings: Vocabulary tests distribute with a fair degree of accuracy the ages and grades found in junior and senior high schools. Such tests furnish means for suggestive but not exhaustive study of mental ability. In any test of general intelligence a vocabulary should form an important part but should not be relied on to measure all of intelligence.

See also items 268, 309, 321, 324, 338, 490.
An analysis of the pupils who failed in Latin in the senior and junior high schools and the reasons for their failure. Findings: (1) A number of pupils with fairly high I. Q.'s have failed; (2) the reasons reported by the teachers indicate the need for more attention to case studies of failures.

Findings: Careful assignment group was superior on all tests.


576. Englar, Margaret T. Latin failures in the Western high school. Baltimore, Md., Bureau of research, Department of education, 12 p. ms.
An analysis of Latin failures in the Western high school covering a period of four years. Findings: (1) Ability grouping helps to eliminate failures; (2) close articulation of junior and senior high schools helps to eliminate failures.

An examination of beginning Latin texts used in Pennsylvania secondary schools to determine the actual presence of determined helps to correlate Latin with English. Findings: Super lack of correlating material; lack of proper distribution of those texts having English helps and unifying material.

A questionnaire was sent to 100 leading liberal arts colleges and universities to ascertain the position of Livy as the Latin for college freshmen study and what books of Livy were preferred for reading. The following conclusions were deduced from the replies: Livy still holds its place as first choice for college freshmen Latin; books 1, 21, and 22 are generally preferred. This study gives an illustration of one of the many ways by which a background for the reading of Livy's history may be developed from Vergil's Aeneid.


Achievement of 2,500 first-semester and 500 second-semester Latin pupils measured by new diagnostic Latin test; ultimate object to develop a series of similar half-year tests to aid in testing pupils and schools, in establishing standards and norms, in revising state syllabus, and in diagnosing difficulties.

This study included 280 schools, involving 6,000 pupils in New York. Findings: Great variation; large city schools best, rural schools poorest.


This study contains a justification of the direct method in elementary language instruction and shows how the laboratory technique is an improved form of the direct method.


The period covered is 1933 to 1923. The purpose was to discover what changes had taken place, and if the changes were influenced by general educational practices and theories. A study was made of textbooks on methods and reports. Findings: There have been significant changes in purpose, content and method, apparently influenced for the most part and in keeping with general educational practices.


The purpose of this study was to verify the claim that the study of Latin increases the ability to learn high-school French vocabulary. It attempts to show the relation of the vocabularies of high-school Latin and high-school French. Dr. V. A. C. Henmon's French word book, a Latin word list, prepared by the College entrance examination board, and Lodge's The vocabulary of high-school Latin, were used in this study. Findings: Of 2,212 French words treated, 90 per cent are of Latin derivation; of these, 71 per cent are high-school Latin words.


A report containing a plan, method, and course of study for the first two years of high school by the committee on the subnormal pupil.


An actual count was made of the indirect statements in 16 first and second year Latin texts. Suggests a program of teaching units in indirect statement to provide economy and better gradation.

**TESTS**


See also Item 581.

**MODERN LANGUAGES**

**GENERAL**


Historical trend of languages since 1890. Findings: Latin and foreign languages are declining in schools, both secondary schools and colleges.


Review of various types of teaching, with analysis of causes of failure and success. Findings: Modified direct method generally most suitable.


A survey of the present attitude in regard to the teaching of French and German in the high school. Much of the study is devoted to a consideration of the "aims" and "methods" of the various state departments of education.


598. O'Shea, M. V. The reading of modern foreign languages. Extent to which those who have pursued French, German, or Spanish in high school or in college or in both read these languages after graduation. Washington, United States Government printing office, 1927. 78 p. (U. S. Bureau of education, Bulletin, 1927, no. 18)


Findings: In American universities (62 reporting) it is almost the universal practice to count elementary college instruction against high-school instruction in approximately the ratio of two to one. Material gathered from selected universities indicates that low or failing grades are made by approximately 45 per cent of first year modern foreign language students and 31 per cent of second year students.


An experiment on method and rate of learning.


The purpose of the study was to determine how much foreign language study influences development of abilities in English. Conclusions: The amount of transfer depends principally on the I. Q., the higher the I. Q., the greater the amount of transfer; the lower the I. Q., the smaller the amount of transfer.


Given the results of an exhaustive inquiry into the present situation with respect to the teaching of modern foreign languages in this country. The study was begun in 1924.


See also Item 389.

An investigation into the values of the study of French from a practical and cultural standpoint to ascertain whether French belongs in a progressive curriculum for high-school boys and girls of normal intelligence.


A study of the last 4,556 words of Thorndike's 'The teacher's word book.' Excluding the 20 proper names contained in the last 4,556 words of the list we have left 4,460 words. The New English dictionary gives the origin of 1,712, or 38.36 percent, of these words as French. With these have been grouped 7,000 additional words from the same French roots, making a total of 8,732 words of French origin.


A classified list of all the syntax forms in two modern French texts.


A survey of historical background and present registration in French, organization and methods of teaching the subject.


See also Items 587, 591, 596, 598.

SPANISH


The purpose of this study was to determine if the quality of performance improves with each additional translation. Conclusion: The value of repetition is fixative and not corrective.


University of Oklahoma, Norman. 27 p. ms.
This study was made to determine the resulting relative strength of vocabulary bonds representing each of the following combinations: (1) Printed Spanish to English equivalent; (2) printed English to Spanish equivalent; and (3) pronounced Spanish to English equivalent. The last was found to be the strongest.

A study of the present aims and objectives of Spanish teaching as revealed by representative courses of study, together with a discussion on historical development and methodology.


See also Items 591, 598.

TESTS


A study of the relative reliability of scale scores and teachers' marks, and the relative reliability of the scale in scoring compositions on the scale topic and on a variety of other topics. The following values were computed: The coefficient of reliability, probable error of raw score, probable error of estimated true score, and the ratio of probable error of true score to the standard deviation of scores. Findings: 1) The scale is highly satisfactory for the measurement of groups and fairly satisfactory for the measurement of individuals. Scale scores were more reliable than teacher's marks. Scoring of scale-topic compositions was no more reliable than scoring of nonscale-topic compositions.


A partially standardized French test in vocabulary, grammar, and comprehension designed to objectively measure pupils in the first two years of a high-school course.

MATHEMATICS

GENERAL


An analysis of the pupils who failed in mathematics in the senior and junior high schools and the reasons for their failure. Findings: A number of pupils with fairly high I. Q.'s have failed. The reasons reported by the teachers indicate the need for more attention to case studies of failures.


A personal visitation, conference, and observation of 200 junior high school drop-outs to determine mathematical requirements of jobs held. Also conference with 25 employers. Findings: Fundamentals and fractions of small denominators alone used. They need to be mastered.


The purpose of this study is to suggest an organization of mathematical thinking, a body of material, and a method of teaching which will give a more acceptable product than the one generally found at the end of one year of mathematics. A test was given to 200 9A students to determine the degree of mastery achieved.


A summary of current educational opinion regarding the relative importance of mathematics in the high school, its practical, disciplinary, and cultural values, and methods and content.


Comparison of tests with respect to content, method of presentation and the like.


The study covers the trend in requirements in mathematics both entrance and college for the A.B. and the B.S. degree. Findings: (1) The trend is toward lower college requirements in mathematics for both the A.B. and the B.S. degree; (2) there has been a 69.8 per cent decrease since 1918 as compared with the amount required in 1910 for the A.B. degree; (3) the trend since 1923 is toward requiring more mathematics for entrance to the A.B. curriculum; and (4) the Association of colleges and secondary schools of the Southern States is the highest in all its mathematical requirements of any of the groups studied.

See also Items 32, 358, 380, 382, 831, 1153, 1184, 1250, 1263, 1273.


A study of score cards and the construction of a score card for judging arithmetic texts.


A study of the effects of information concerning mistakes, comparisons of mistakes with other group numbers, drill, mental age, I. Q., and chronological age on progress in multiplication. Findings: Information, and comparison with others, drill, and their combination superlatively, determine progress. No relation was found between mental age, chronological age, or I. Q.


The purpose of this study was to determine the actual kind and amounts of nonvocational uses of arithmetic in adult societies, and to find out by sociological objective methods what arithmetic is now taught in the elementary schools of the United States and is practicably useful. Findings: The schools are now teaching 85 per cent more arithmetic than is useful.


This is a report of an experimental study of the development of children's number ideas in the primary grades. The children who were used as subjects had all had at least two months of school training. Group tests were given to approximately 1,300 children in the first five grades in six schools in Champaign, Urbana, and Danville. The investigation shows that children of different grade levels employ different methods to apprehend visual concrete numbers. Some evidence has been found that the younger pupils count and that the older pupils make use of grouping.


A case study involving 12 cases was made to ascertain the more common causes of difficulty in solving verbal problems. Remedial treatment was then set up to correct the difficulty.


An analysis of the difficulties involved in the placing of the decimal point. 

Findings: From the standpoint of difficulty it was found that long division caused approximately twice as many errors as the use of the decimal point.


The study included the pupils in grades two to six, inclusive, in six consolidated rural schools in New Mexico. Findings: The growth of pupils taken as a whole who had the advantage of systematic drill showed a growth of 83 per cent in the total number of problems solved correctly as compared with a growth of 52 per cent made by the group without drill. Significant gains both in speed and accuracy were made as a result of drill.

661. \textbf{Hayes, Margaret.} A study of mental habits of pupils in working arithmetic. New Bern, N. C., Craven county public schools, 1928.


An analysis into the cause of errors and a suggestion for remedial instruction in prehigh school classes, and in first term high school.


This study includes vocabularies of four arithmetics and four readers of second and third grades compared with each other and with accepted word lists.

664. \textbf{Horrall, A. H.} Arithmetic course of study for grades one to six. San Jose, Calif., School department, 1928. 45 p.


A list of facts and skills needed for rapid accurate work in four fundamental operations of arithmetic.


Gives trends of arithmetic failures in the intermediate grades during the scholastic years 1925 to 1928.

Findings: There is a decrease in percentage of failures over this period of six semesters; failures tend to be higher in June than in January, although there are exceptions to this tendency; no one grade shows an excessive percentage of failures.


Men in 40 lines of business were interviewed concerning the kind of mathematical operations which were used in their business, and also problems were secured by pupils of junior high school. The four operations—addition, subtraction, multiplication, and division—are used by all; common fractions with small denominators are used by practically every one interviewed; no use was found of the G. C. D. and the L. C. M. in dealing with fractions, etc.

79505—30—5


A reorganization of the course of study in terms of teaching units.


A reorganization of the course of study in terms of teaching units.


See also Items 16, 360, 419, 636, 1320, 1707.

**TESTS**


This study was undertaken in order to find out what degree of accuracy and speed typical pupils of Grade VI A perform some of the frequently used operations in arithmetic and the nature and extent of their weaknesses in these processes. It was found that the original teaching and subsequent drill both direct and indirect, which the pupils under study have received in the five types of problems here considered have been adequate for the mastery of the processes by approximately only three-fourths of the pupils.


688. Grover, C. C. Report on ability in arithmetical computation of 1-6 grade pupils as shown by Woody-McCall mixed fundamentals arithmetic test. Oakland, Calif., Bureau of curriculum development, research and guidance, Public schools, 1928. 5 p. ms.

689. --- Report on arithmetical ability of H-8 grade pupils as shown by Stanford achievement arithmetic test. Oakland, Calif., Bureau of curriculum development, research and guidance, Public schools, 1928. 11 p. ms.


The aim of this study was to set up definite standards of attainment or goals of achievement in arithmetic for the seventh grade. Results: An outline for teachers in accordance with the state course of study, supplemented by a study of the best practices as set forth by Morton, Osborn, and others.

691. Jennings, Joe. Second annual arithmetic survey in the Knoxville white elementary schools. Knoxville, Tenn., City schools, Department of research, 1928. 13 p. ms.

Courts standard research tests in arithmetic, series B, form 3, were given to 6,293 pupils. Findings: Knoxville children can not work rapidly and accurately with whole numbers in the fundamental operations; they are from one to three years behind the average of other cities.


An attempt to select and evaluate a list of arithmetical problems suitable for the sixth grade. The purpose of the study was to secure problems which could be used for testing the ability of sixth grade pupils, and for measuring progress at frequent intervals.

693. Kopf, Helen M. Preparation of diagnostic test for arithmetical computations, grades 1A to 5B. Piqua, Ohio, Public schools, 1928.


The results of tests given in Kansas City, Mo., indicate that in 80 per cent of the elementary schools the work in arithmetic is as good as can be expected. The increase for 1927 over 1915 in problems solved correctly averages for the various grades 113.8 per cent.


Gives the results of an arithmetic reading-test given in the elementary schools of Kansas City, Mo. The results indicate that pupils have not been taught to do the careful, accurate reading that is necessary to interpret arithmetic problems.


The chief value of this test lies in providing a means for diagnosis of small units.


A comparative study of algebra textbooks as to contents, method of arrangement and adaptation to present tendencies. Conclusions: The recent textbooks contain more illustrative material than those of a decade ago. They are simpler and place more emphasis on the practical problems. All of the textbooks place a great deal of emphasis on the equation and formula.


A survey of studies relative to aims, organization, content methods, and testing with respect to algebra.


The study contains 426 exercises which occur in five objective tests in first-year algebra together with the percentage of correct answers for every exercise.


Terms of Pressey vocabulary arranged according to estimated importance, estimated difficulty, frequency in textbooks, probable familiarity. Results: A selected and classified list of terms deserving careful attention in the teaching of first-year algebra.


The trait of accuracy was selected. A campaign for accuracy was carried on in two experimental classes (algebra 112 classes) and four other classes used as control groups. In each of seven situations the experimental groups tested were more accurate at the end of the semester than the control group.

See also Items 636, 681.


Mental and achievement tests correlated with scores in algebra and geometry. Conclusions: Good correlation between mathematical ability and high scores in mental tests.


Tests were given by teachers to students of four representative schools where the number of algebra students ranged from 70 to 350.


A study of achievement in specific skills of ninth-grade algebra in relation to intelligence. According to Ruchek tests, achievement in algebra depends upon intelligence.


Tests were administered in 14 junior high schools to 3,743 pupils and in four senior high schools to 2,960 pupils, making a total of 5,703 pupils. Findings: The wide distributions of pupil performance in each subject indicate the necessity for adjustment of subsequent instruction to particular individual needs. If these variations in performance are called to the attention of the pupils themselves, a strong incentive may be developed for improvement in the processes involved.


See also Items 255, 321, 338.

GEOMETRY AND TRIGONOMETRY


Analysis of intelligence and geometry tests and of the results of a questionnaire to determine probable cause of failure.


Findings: Distinct superiority for well-organized practical.


The purpose of this study was to determine the progress of pupils given a prescribed laboratory course in plane geometry as compared with those who are taught the same subject by the traditional method.


Two classes of 50 students each in Pueblo, Colo., were used for this study. One class was taught by the analytic method, the other by the synthetic method. Findings: As a class procedure the analytic method used above acted as a deterrent and an inhibitor. The mechanics of the analytic method were so difficult that the slower ones could not master them, and so unmanageable as to interfere with the thinking of the brighter ones. The mastery and use of the synthetic method came more quickly and thoroughly. The synthetic method was favored by teachers and pupils.


To improve interest and decrease waste of pupil time in plane geometry classes by presenting the subject matter in the form of an experiment in which the pupil discovers and verifies geometric truths.

See also Items 371, 636, 715, 833, 1643.

TESTS


The study included eight beginning classes in plane geometry in the Austin, Texas, senior high school. Findings: The advantage of the use of the new type objective tests lies in the fact that they (1) give the teacher a higher coefficient of reliability and therefore furnish a basis for providing remedial instruction, (2) give a more correct estimate of a pupil's score, (3) give a high positive correlation with the student's possibility for growth, and (4) make a better provision than the essay type test for individual differences in learning ability.


An investigation of three modern textbooks in plane geometry as to technical terms. Conclusions: The student is expected to master too many technical terms, many of which are unnecessary.

See also Items 255, 321.

SCIENCE

GENERAL


The study included eight volumes of the Literary Digest for 1912 to 1927. Findings: Facts about health rank highest among science facts presented; physics, with radio ranks high, with chemistry also very important.
737. Burk, John M. Evaluation of a course in general science in terms of
This study is an attempt to evaluate the course in general science in terms of the desired
outcomes. The course is taken by students in the seventh grade of the junior high school. The
evaluation is made to determine the degree to which the course contributes to the common objectives
of a general science course. Conclusions. It seems to be the consensus of opinion that the
emphasis in general science teaching in the seventh grade should be upon health and hygiene. The
outstanding objectives as revealed are (1) Health, both community and personal; (2) help to interpret
environment; (3) help to understand natural phenomena; and (4) help to understand what science has
done for everyday living.

738. Cain, C. E. The status of science teaching in the secondary schools of
college, Agricultural College. 103 p. ms.
The study included such information as sciences offered, grade placement of sciences, number of stu-
dents taking sciences, laboratory facilities of schools, size of classes, teaching loads, and tenure of science
teachers, textbooks used, and methods of teaching used in secondary schools of Mississippi for the year 1925-26.

739. Davis, James Ernest. The relationship of the content of science sequence
in high school to performance in certain psychological tests. Master's thesis,

740. Frank, J. O. The need for standards in courses in the teaching of
general science. 1928. State teachers college, Oshkosh, Wis. School science
A study of courses in the teaching of general science in the colleges and universities of the United States,
dluring content, method, student activities required, teaching giving course, etc. It was found that
standards are lacking. There is no standardization of courses, resulting in great loss to teachers who can
not transfer credits from one school to another. A suggested sequence of courses is given.

741. --- and White, H. K. Vocabulary of scientific terms for high-school
students. 1928. State teachers college, Oshkosh, Wis. 1,500 p. ms.

742. Guthrey, Casey Garnett. Science department heads in high schools of
Missouri. Master's thesis, 1928. George Peabody college for teachers, Nash-
ville, Tenn.
The purpose of this study was to investigate the extent to which the department head of science in high
schools of Missouri is performing administrative, supervisory, and miscellaneous duties in the high school.
Furthermore, department heads are performing duties for which they have not had training. The teacher-
training institutions of Missouri do not offer courses which will prepare the departmental heads of science for
the duties they must perform.

743. Hawley, T. U. Science concepts in selected fictions and their use in the
senior high school. Master's thesis, 1928. University of Southern California,
Los Angeles.

744. Heinerman, Allise Mikels. A determination of principles and problematic
University of Chicago, Chicago, III.

745. Hurd, Archer, Willis. Methods in the teaching of science at the college
level. Doctor's thesis, 1928. University of Minnesota, Minneapolis. Min-
Experimental studies in anatomy, physiology, physics, with particular reference to laboratory instruc-
tion. Development of "techniques" stressed.

746. Kennedy, Ella Mae. An experimental study of general science abilities
of boys and girls with approximately equal mental ability. Master's thesis,
1928. University of Southern California, Los Angeles.

747. Klipp, William Josiah. An experimental study to determine the
relative merits of three methods of teaching general science in the high school.

749. Persing, Ellis C. Present objectives of general science. 1928. Western Reserve university, Cleveland, Ohio. 32 p. ms.

The purpose of the study was to discover all the specific objectives in approved courses of study, textbooks and curriculum investigations, and to assign to each objective a measure of its frequency of occurrence in these courses. The most significant conclusion is that there is a great need for further original analysis to discover the specific useful objectives of junior high school science.


751. Rule, Harry C. The relative value of teaching eighth grade general science daily, as compared with teaching the same subject on alternate days for an equivalent number of days. Master's thesis, 1927. University of Kansas Lawrence.


754. Thurston, G. N. The role of pupil experience in the teaching of high-school science. Master's thesis 1928. Ohio Wesleyan university, Delaware.


See also Items 389, 633, 1263, 1718, 1731, 1740, 1872, 2163, 2399.

TESTS


A study of scientific attitudes as portrayed by 120 people's reactions on tests of (1) logical selection and (2) facts (2 forms). Findings: Scientific attitudes closely related to knowledge of fact, but presence of knowledge of fact does not predict scientific attitude interests, scientific reading, science study, and supernatural affect attitudes.


A standardized test covering the scope of general science work as determined by analysis of commonly used books.

NATURE-STUDY


The courses of study of 12 states of the South were examined and the classics taught in five or more of the states selected for study. Seven hundred and seventeen references relating to nature material were found;

The purpose of this study was to find out, first, what nature material was available for the use of the schools of Raleigh, N. C.; second, to locate this material, and last, to show how some of the material may be used in the school curriculum.


The textbooks adopted for use in Tennessee were analyzed page by page to determine their natural study content. Findings: (1) The tests of each of the grades contain an appreciable amount of biological material from 1 per cent to 50 per cent; (2) the amount of material dealing with animals is much greater than that dealing with plants; (3) the number of birds discussed is very much greater than that of any other class of animals; (4) trees are the most frequently discussed class of plants; (5) the proportion of biology in the first four grades is more than twice that of the last four grades; and (6) these facts would seem to indicate that the elementary teacher should include nature study in her preparation.


The aim of this study was to plan a complete activity to develop and understanding of animal life, to teach respect and care for animals and pets, and to teach the tool subjects through interest of children.


A survey of 120 summer camps organized as private and municipal camps to determine aims and procedures. Findings: There is little or no uniformity in aims and procedures in nature work in camps. Nature leaders receive equal recognition with other leaders.


A survey of nature education as recognized in all states of the union, particularly in state departments of education, higher institutions of learning and city public school systems. Findings: There is a more general recognition and adoption of the ideals and practices of nature education than formerly.


A study of 31 representative institutions responsible for training of 8,851 teachers in training per year. Findings: There is some uniformity of procedure and content in work done in these institutions but less cooperation with work in training schools than seems desirable.


A study of geography through essential activities of man made in the Haw Creek Elementary School. Results: Pupils have a better knowledge of what geography really is; know how to use information and how to organize and use this information.


A survey of previous similar investigations and the conduct of a rotation experiment using visual and auditory methods. Findings: Chances are 27 out of 100 that the visual presentation employed really exceeds in results the auditory method employed. A combination of the visual with the auditory method is about as effective as the auditory method.


An investigation of the ability of 96 children in city schools and 307 children in rural schools. The study was confined to seventh grade children who had completed or nearly completed their systematic study of elementary school geography. The children tested do not have adequate knowledge of the relationship between human activities and their relationship to time and longitude.


The aim of this study was to find out how children all over the world work and live. Habits and skills resulting from the study were: (1) Making use of material on hand; (2) desire to create; (3) use of tools and paint; (4) better cooperation; (5) more interest and pleasure in school work; (6) self-reliance; and (7) leadership.


Data here given are based on returns from nine states and 24 cities, from 127 teachers and 180 classes; from 5,544 pupils, 2,720 of whom are boys and 2,824 are girls. Findings: This experiment in place geography indicates that pupils readily accept individual responsibility in the performance of a worthy school task, and that they obtain results of high value through the process of self-education. The experiment seems to indicate that pupils may learn geography better if the learning process is made, in some measure, a matter of individual responsibility. Spontaneous interest in such a geographical task is present in a large measure among pupils.


This study involved the collection of material on all phases of the oil industry and organizing it into a teaching unit to be used in the elementary grades.


Part I includes a chapter on the contribution of geography to elementary education, one on aims and objectives of geography in the elementary school, and one on content and method. Part II is devoted to teaching techniques; and Part III to geographical materials for the education of children.

See also Items 399, 804, 877, 886, 2244.
A cooperative project involving the development of "goals" and units of work and their evaluation under actual classroom conditions. Results: More adequate teaching, fresh outlooks on the subject by teachers and pupils, reduction in number of failures.

The findings of this survey seem to indicate that there is a wide divergence in the type of geographical information which is emphasized among the Newark schools. Schools having the platoon plan of organization show no apparent benefits from having been taught by special geography teachers. The results in all-year schools are poorer than in the ten-months schools both in the platoon group and in the traditional group. The junior high school group exceeded the city median in each grade; there is a distinct correlation between comprehension in reading and proficiency in geography, etc.

GEOLGY

TESTS


The study deals with the use, practicality, reliability, and other evaluation of a new type test in college geology, as determined by careful experimentation. Findings: (1) The new type test employed does not measure mere intelligence; (2) the new type test employed is as reliable, if not more so, than the old type ordinarily used.

BIOLOGY AND BOTANY


Catalogues of 60 denominational schools, 38 universities, and 25 teachers colleges of the South were used in making this study. Findings: The sequence of the biological courses offered by the three types of schools did not vary much. In elementary biology they are also agreed as to type, content, and amount. This standardization does not extend to the advanced courses of most of the schools. The teachers colleges in particular show great diversity in the type of advanced courses offered. In considering the total amount of undergraduate biology offered, the denominational colleges rank the lowest, the teachers colleges rank slightly higher, while the universities offer more than twice as much biology as the denominational colleges and almost twice as much as the teachers colleges.


Questionnaires for this study were returned by about 200 persons. The study obtained declarations of what items out of biology had functioned in their lives since they had studied them.

Two series of experiments, each consisting of 24 laboratory exercises, were conducted under typical school conditions to determine the relative efficiency of the lecture-demonstration, the group, and the individual methods of conducting laboratory work in high-school biology. The rotation technique of experimentation was employed. Findings: No statistically significant differences were found in the outcomes of the three different methods of instruction, which implies the importance of each teacher finding out for himself experimentally his own best method of teaching.

796. — An evaluation of the courses in elementary botany as projected into sequent courses in the college of agriculture and forestry. Doctor's thesis, 1928. University of Minnesota, Minneapolis. 271 p. ms. (To be printed by University of Minnesota press, Minneapolis)

Findings: (1) Certain courses considered as prerequisites for subsequent courses at some time in the past have perpetuated their status by virtue of this early position rather than because of any preparatory value which they may now possess; (2) in the development of the curricula, a multiplicity of courses has been added. With this expansion, the required and elective advanced courses in botany have given way to more specialized courses in the college of agriculture and forestry; etc.


Findings: Application of the facts and principles which experimental work in the psychology of learning has established can be made with profit to the teaching of such complex subject matter as that of biological science directed toward health education in the secondary school level. The teaching of biology in non-experimental classes contributed to health education so far as this is concerned with the field of communicable disease prevention. Proper selection of specific material for teaching and proper guidance of children's interest can increase the health education value of biology without demanding more emphasis than is now being given to such material and without minimizing the contribution now being made to other objectives.


A tenth-grade biology class of 26 members in the Aurora, Colo. high school, was used for this study. Findings: Informal objective tests carefully made and validated by the teacher are more satisfactory in measuring the results of a year's instruction in a particular course of study than a regular standardized test which does not fit the course as given.


Findings: Vacant lots offer some material for the study of insect life, other small invertebrates, general plant structures, and the interrelation of plants and animals, and can be used when field trips to other more desirable places can not be taken.


See also Items 762, 764, 1809.

CHEMISTRY


The facts illustrated by the work done in this study are: (1) Experiments should always be tried out before being published, and (2) the meaning of the principles of chemistry can be performed with cheap and common apparatus.


A survey of texts since about 1800 and of laboratory manuals since their inception with respect to content, organization, and method.


The study aims to evaluate typical recommended practices, especially, the author's adaptation of the "problem method," and to test their relative attainment of the goals: Information, manipulative skill, and ability to solve perplexities of a chemical nature.


Shows need of reducing vocabulary in high-school chemistry, and method by which this may be done.


This study shows the quantitative requirements of both chemistry and science in relation to all college degrees and other related matter. Findings: Relatively small amount of science and no chemistry presented for college entrance; extreme diversity of college standards in both science and chemistry. There is a need for study of chemical education problems, articulation of high-school and college courses in chemistry, laboratory, and classroom requirements.


Books used in secondary schools covering period 1847 to 1925 were analyzed. A study of the evolution of the present course. Findings: (1) Descriptive chemistry dominant type; (2) theoretical chemistry greatly stressed in recent years; (3) industrial chemistry being stressed now also; (4) organic chemistry has received little emphasis since 1860. (5) exercises changed from catechism type of question to problem-solving type.


A study of six groups of students in inorganic chemistry at the University of Minnesota. Findings: Group having more laboratory showed some superiority in general achievement.


A study of 26 common items in both high-school and college texts. An overlapping of 76.24 per cent was found.


See also Items 636, 1130.

TESTS


The study included the development of the test into four pairs of supplementary forms. Statistics on 877 second and 290 first semester students. The test is a trifle too easy, but quite valid. Pupils required to study chemistry do not do as well as those who elect the subject.


Objective measurements applied to the teaching of chemistry.


Determination of the "goodness" of items of four chemistry tests and the consideration of two item goodness coefficients. Findings: (1) Items vary considerably in goodness, as measured; (2) item coefficients for the same item vary when computed with different groups notably a high-school and college group; (3) difficulty of an item is slightly correlated with its goodness; (4) the Vincent "index" coefficient seems inferior to the liberal coefficient of correlation.

PHYSICS


A discussion of traditional teaching devices in the high school; presentation of laboratory procedures with practical problems as starting point; methods: Convincing arguments for use of practical problems; series of laboratory experiments in high-school physics based on practical problems.


This study is based on 100 records of grades and scores of students in college physics from two colleges in the state of Georgia. The students were divided into two groups; those who entered college with a unit of high-school physics and those who entered without a unit of high-school physics. Findings: It was found that the men who enter college with a unit of high-school physics do not do as well in college physics as those men who enter without having studied physics at all. The women who enter college with a unit of high-school physics do better in an elective course in physics than those women who enter without having studied physics at all.


A study of 160 pupils in second term physics at West High School, Minneapolis, and 160 pupils in physics at St. Paul Central High School, St. Paul, Minn. According to the data obtained, the rotation system seemed to be superior to the even front system.


Findings. There is much variety in order in courses and texts. The most prevalent order in the schools is: (1) Mechanics, (2) heat, (3) sound, (4) light, (5) magnetism, and (6) electricity. The order of regents question difficulty, easiest being first, is: (1) Magnetism and electricity; (2) light; (3) sound; (4) mechanics; and (5) heat.


A comparative study of textbooks of physics for secondary schools and use made of physics in everyday life, in accordance with the new idea of curriculum construction as advocated by Bobbitt, Charters, Cox, etc.


Psychological approach to subject matter and the same applied to new content. The following conclusions were reached by analysis of extracts treating of the principles underlying a psychological approach to teaching the subject matter and method of science: (1) Both the subject matter and the method of science are important, but the teaching of the scientific method is more important than the teaching of any part of the subject matter. (2) The subject matter must be chosen and the emphases distributed with reference to the previous experience of the students and its natural connection with their interests and forms. (3) The approach should be largely through problematics, situations, and projects which make a genuine appeal to the pupils' interests; (4) the human and social relations of the scientific facts and methods of procedure should be clearly brought out; and (5) there should be sufficient demonstration experiments and laboratory practice so that the students may catch something of the real spirit of scientific investigation and be brought into sympathy and appreciation for scientific research.


Ten physics texts were analyzed for their use of geometry. This involved listing of theorems and geometrical vocabulary. Twenty different constructions and 25 theorems were found to be used.

See also Items 386, 2169.

TESTS


Test standardized in 800 cases in four states. Reliability .92.


Detailed standardized tests covering important phases of high-school physics.


To provide a course of study, together with standards of attainment and suggested materials and procedure, for use throughout the elementary and junior and senior high schools.


The purpose of this study was to determine the effect of a sixth grade social studies course of the activity type upon certain outcomes of instruction. Twenty schools, 25 teachers, and approximately 700 pupils were included in the investigation.


Experimental materials were used in 10 seventh-grade classes majoring with 10 other classes using regular materials. Findings: No significant difference.


Case studies of 47 good and 47 poor teachers are presented.


Basic generalizations were gathered from books written by competent authorities. From the original statements thus collected a list of basic generalizations was made by combining duplicates and rephrasing those dealing with the same topic where this could be done without distorting meanings. The final list of central themes is a composite of four separately prepared lists.


851. Kelly, Arthur H. A social science curriculum for Colorado junior high

This bibliography is a part of the general curriculum about to be published in complete form by the Ann Arbor public schools.


A survey of printed textbooks in social studies with annotations.


Boston, Mass. 105 p. ms.


Says that secondary school textbooks in sociology should provide material which pupils can comprehend.


See also Items 589, 497, 520, 1231, 1869.

HISTORY


Organization of the 7B course of study and determination of minimum essentials in knowledge, habits and skills, and appreciations. Practice tests and review tests on each unit.

The conceptions of nine educational writers as to what constitutes an attitude and as to its use in education were assembled. Characteristics of the firm attitude were secured by describing the actions or conduct of a person who had a particular attitude. Nine methods used by American history teachers to engender the attitudes of responsibility, open-mindedness and critical-mindedness were collected, six actions of the teacher that had a tendency to influence the students were noted by the observer.


A course of study in history for Catholic schools.


Report of data collected in 161 high schools of Pennsylvania. Findings: Influence of newer suggestions for curricular reorganization; much more marked than popularly supposed.


An analysis of eight senior high school American history textbooks. Results: An abbreviated alphabetical wordlist.

872. Gustin, Margaret. Standards of attainment and types of activities in history for the seventh grade. Beaufort, N. C., Carteret county public schools, 1928.

The aim of this study was to set up definite standards of attainment in history for the seventh grade based on the North Carolina state course of study and adopted text.


A study of concepts in the teaching of history as set forth in the Historical Outlook and School Review from 1879 to 1927. Lists the concepts found in these periodicals.


Experimental determination of achievement when pupils are taught with diagrams as compared with results when taught without them. The indications were that the use of diagrams improved the achievement of pupils more than did the nondon diagram method.


A study of the use of the Thorndike word book and a history vocabulary test to determine pupil difficulties with vocabulary of texts. Results show uncommonness of words and pupil ratings on history vocabulary test taken from texts.


In considering this subject, it was found that Thomas Arnold first introduced history as a separate subject into the schools and he made most of the progress in this field during the nineteenth century.


Analysis of textbooks, courses of study in states and cities and teacher suggestions used.


The place of ancient history in the high school since 1909; changes in emphasis in ancient history textbooks. Conclusions: Tendency today is to combine ancient and medieval history or to make it part of one-year course in world history. The newer textbooks give more attention to pre-Greek history and to social and economic phases.


The purpose of this study was to determine the objectives by use of expert opinion and to determine changes in emphasis during the last 40 years. One hundred and eighty-seven sources were used. The study furnishes a complete list of objectives classified in an objective manner. The classes and subclasses may be rearranged to suit subjective views. The shifting emphasis indicates present trends.


886. Noble, M. C. S., Jr. The teaching of state history and state geography in the United States. Raleigh, North Carolina state department of public instruction [1928] shows local provisions, amount of time, texts used, grades in which state history and state geography are taught. Data were secured by questionnaire method.


See also Items 383, 396-397, 2244, 2397.

TESTS


893. Melcher, George. [History tests in the public schools of Kansas City, Mo.] Kansas City, Mo., Public schools, 1927. 2 p. ms.

According to the results obtained from the Gregory tests given in 1925, the work in American history is almost one-half year below standard. Conclusions. More attention should be given to historical readings in grades five and six, and there should be a more careful evaluation of things in history.

See also Items 268, 321, 889.

ECONOMICS


An historical and descriptive survey of courses of study and methods of teaching in economics. Findings. Course began 100 years ago, was taught in 5 per cent of the schools in 1890, and in 41 per cent of the schools in 1922.


The purpose of this study was to find to what extent economics is being taught in the high schools of the state, the reasons why it is not more widely taught, changes which might tend to improve the subject material, improved methods of subject presentation and opinions as to whether or not the subject should be more widely taught.

MUSIC


A determination of I. Q. and rhythm perception by tests (Stanford-Binet and Seashore rhythm test) then after a period of intensive training, giving rhythm test again to determine development. Conclusions. A very bright child makes no more development in rhythm perception during a period of intensive training than a duller child. General intelligence and rhythm perception have no correlation.


The object of this thesis was to set forth an analysis of the present status of music teaching in the high schools of California. In order to do so, it was necessary first to discover what branches of music study are incorporated as a part of the high-school program, next to determine how wide the extent of this institution...


The purpose of the bulletin was to present a supplementary course in music appreciation and music memory contest. While the course is planned primarily for the elementary grades, high schools may take the course, and a separate contest for music memory will be provided for the high-school pupils.

909. Seashore, Carl E. The present status of research in the psychology of music at the University of Iowa. Iowa City, State university of Iowa, 1928. 29 p. (University of Iowa studies, vol. II, no. 4, June 15, 1928.)

See also Item 1296.

TESTS

910. Branson, Ernest F. A music test for sixth grades. Department of research, City schools, Long Beach, Calif. 7 p. ms.

An informal test devised and administered to upper sixth grades. Reports scores made and makes suggestions for revision.


A statistical study of grades, attainment ranks, scores of ability test, and scores of achievement test in music. Conclusions relatively low though decided correlation.


Measurement (1) of achievement of students in theory of music, at the close of the first semester in the School of Fine Arts, and (2) of its contributing factors, i.e., general intellectual ability and innate music capacity.


ART EDUCATION


917. Federated council on art education. Report of the committee of

The development of the movement toward the introduction of color into our public school drawing courses, from its inception nearly 50 years ago up to the present time. A list of the principal books about color study and teaching published during the past 50 years is given.


This investigation deals with pupils in an Art I class in University high school predicting creative imagination in art. Findings: Creative artistic abilities accompanied by intelligence, culture in hearing, above average work in other subjects, character above average, originality.


An investigation of the qualitative contribution of art to the social, vocational, and leisure-time objectives of modern education.


A study of one year's issues of each of 12 magazines and one month's issues of each of five newspapers. Findings: The interests of the public as shown by the references to art in current periodical literature seem to correspond rather closely to the phases of art being stressed in the most up-to-date courses of study in our modern public schools.

925. Seidel, Ida. Suggested outline for the adapting of the course of study to a fine and industrial arts program. Raleigh, North Carolina state department of public instruction [1928].

This bulletin presents a study of social conditions related to art conditions. With this study as a background an outline course is presented for use in working out a closer correlation in certain elementary school subjects.

See also Item 1986.

TESTS


Test designed to determine the extent of a person's sensitiveness to aesthetic qualities.


The purpose of this paper was to make a product scale of color combinations chosen by children in the fourth grade, which might represent a standard for children of this grade as determined by the combined rating of many competent judges.

RESEARCH STUDIES IN EDUCATION


DRAMATICS AND ELOCUTION


A comparative study of speech education in the elementary schools of England and the United States: Findings. Evidences based on the literature from educational authorities, and on the opinions of business men in England and the United States show an agreement as to the importance of good speech in life. These evidences also indicate an agreement as to the strategic position of the elementary school for the achievement of good speech. American authorities stress the language element in speech and say very little about the voice. English authorities consider the art element in speech very important together with the scientific knowledge of speech sounds as an aid toward the elimination of provincialisms.


An analysis of current practices in light of Gestalt. Concludes that current practice must be radically changed.


This study is historical and descriptive. Findings: There is a tendency toward making dramatics a definitely curricular in high school.


SCHOOL JOURNALISM


An analysis of two papers each from 151 schools in 31 states.


The purpose of this study was to determine two things: (1) The value of the annual, and (2) the best method of producing it. As rated by superintendents of 101 rural and 33 exempted village schools.
An analysis of high-school papers from 29 different states. The following kinds of loyalty were recognized: (1) blind; (2) righteously discriminating; (3) intelligently cooperative; and (4) vicious. Findings 9.50 per cent of space was given to building up loyalty. The space was distributed as follows: blind, 94 per cent; vicious, less than 1/2 per cent; righteously discriminating, 3.50 per cent; and intelligently cooperative, 4.6 per cent.


A study of the theory and practice in high-school publications, covering comparison of practices in many schools. Findings: Value of high-school publications very great, but must be carefully supervised to bring real educational results.


THrift


See also Item 1044.

SAFETY


The investigation is an attempt to show the present practice in the elementary schools in giving instruction in accident prevention methods and to determine, if possible, to what extent such instruction is given, and from the data collected to formulate a suggestive curriculum in safety education, make recommendations regarding methods of teaching the subject and present an outline of such methods.

954. Falkland, N. C. Union school. Roads, how they are built, their uses to mankind, how to be safe and make other people safe while riding on highways. Greenville, N. C., Pitt county public schools, 1928.

This manual is developed into three parts. Part I. The safety education movement, is a history of the growth of the needs of safety education and of the development of the organizations encouraging safety instruction. Part II. Safety hazards, treats the main sources of danger and collects the most important facts to be presented. Part III. A condensed outline course of study by grades, includes suggestions intended as a guide for the teacher, and more instruction from her own ingenuity.


Contains the Escanaba plan for teaching safety and traffic regulations.

PRESCHOOL, KINDERGARTEN, AND PRIMARY EDUCATION


The data for this problem are furnished by a record kept by the experimenter of the activities of the 44 preschool children who selected subjects, ranging in age from 19 months to 49 months, and attending the nursery school of the Institute of child welfare research at Teachers college, Columbia university, for 33 weeks. Findings: A child's solving activity was found to be determined more definitely by the nature of the problem situation than by any one other factor. Exploration and elimination were not only found to be the most frequent response but also yielded the greatest number of solutions. Transfer and retention seem to be indices not only of the presence of insight but also of the degree to which it is present. The amount of insight and its manifestation in a practical solution are favored by emotional, temperamental, and mental factors.

959. Ashburn, Emma G. The effect of school participation on the personality of the child 4 to 6 years as measured by his health, habits, social adjustments, and mental activities. Master's thesis, 1928. University of California, Berkeley.

The problem was to analyze and as far as possible measure the influence of the school on the life of the child, or to show specific results of kindergarten education of personality tendencies. The problem was limited to the study of a kindergarten group of 30 children.


The purpose of the study was to show the benefits of free activity.


This investigation included first, the construction of a scaled analysis of specific, observable teaching activities of procedures in the nursery school, kindergarten, and first grade; and second, the experimental use of the scale by many raters in divers school situations. Findings: (1) The nursery school procedures show decided strength in the care for physical health and development of children; in this respect the kindergarten and first grade are less vigilant; (2) the lowest scores on nursery school teaching are on items related to creative expression; (3) the average scores of practically all items of the scale are higher for nursery school teachers than for kindergarten teachers; and (4) in general, the kindergarten teachers average somewhat higher than the first-grade teachers except on the items social skills which relate to reading, writing, and number.


Covers materials and methods based on experiment and practice in Cortland State Normal School, Cortland, N. Y. Findings, Kindergarten materials and methods in need of careful reorganization, now in state of flux.


Findings, Kindergarten pupils are accredited with decidedly fewer failures. Social rank estimates of teachers rank kindergarten pupils ahead of no-kindergarten children. Boys receive less from kindergarten that contributes to success in the primary school than girls do.


A study of grade, age, and sex differences in choice of materials and of outstanding interests as indicated by the products made. Findings, Grade and age differences are small and gradual. Many materials are chosen equally often by the sexes. There was an outstanding interest in making receptacles, buildings, natural objects, and vehicles.


969. Haines, Edna. Courses of study for kindergarten, first and second grades of Oberlin kindergarten-primary training school and Oberlin public schools, Oberlin, Ohio, Oberlin kindergarten-primary training school, 1927. 72 p.


The purpose of this investigation was to obtain experimental evidence of the reasoning processes of preschool children. Three nonverbal performance tests were devised; they were given under controlled laboratory conditions on different days to 54 preschool children from 2 to 6 years of age. Twenty-five adults were also given two of the tests. The conclusion is that preschool children characteristically resort to the trial and error method in solving reasoning problems.


Findings, Many eminent educators, etc., are favoring a less formal type of school than has prevailed in the past. An informal program of instruction fully meets the requirements of the Virginia State course of study in language, writing, and arithmetic. In reading the requirements were fully met by 85.2 per cent of the children tested; 37 per cent went far beyond the requirements. In the formal program much worthwhile factual knowledge was gained, desirable attitudes and appreciations were established, and many opportunities for character development were afforded.


The time spent by each of a group of 18 children in social groups was recorded over a period of time. Index of social participation was computed, showing ratio of time in groups to possible time in groups for each child, etc. Interesting individual differences evolved.


The primary problem of the study was to discover what responses the preschool child makes to a guinea pig and to what extent the child adapts himself to this animal. Findings. In general the responses of the same child vary from one period to another as much as the response of one child differs from that of another child. In other words, the child is constantly making a new adaptation.


Findings. For little children "the story, the thing," more so than other factors concerning the book, score card and multiple regression equations obtained can be used effectively in rating new books.


A bulletin of information concerning the physical, mental, and social equipment of the preschool child and different age limits. The purpose of the bulletin is to promote child study and to provide for improved child development.


The development of an activity program, showing units around which courses may be organized.


Two-hundred and twenty-nine children were observed in individual examinations. Findings: The peak of negativism is at or below 2 years of age. Teachers rate the children as less negativistic than the parents. No sex difference in negativistic tendencies is evident. The educational backgrounds of the children do not show any decided effect on the negativistic score. As mental age increases, the negativistic score tends to decrease.


The data for this study were obtained from observation, experience, and records that were kept in a specific situation for a period of three and one-half years. After discussing the existing conditions, the writer shows how an effort was made to break away from formal teaching and discipline and traces the gradual development of a program which gave the children some freedom.


Findings. This study shows that the Child hygiene division of the State board of health and the cooperating agencies have done very efficacious work in protecting and preserving the health of children below school age. Parents, through a number of agencies in the state, are organizing themselves into study groups to better fit themselves for more intelligent parenthood in order to safeguard the lives of their children.

Through the development of nursery schools and kindergarten education the safeguarding influences of such education have been promoted. Institutions of higher learning are offering in their curricula to contribute to the safeguarding of the preschool child.


ELEMENTARY EDUCATION

985. Armentrout, W. D. A comparison of the time allotments of subjects in elementary training schools and elementary public schools. 1927. Colorado


990. Greene, Charles E. Appraisal and curriculum testing program in elementary schools. Denver, Colo., Department of research, Public schools, 1928. 16 p. ms.


The purpose of the study was to secure complete stenographic reports of superior lessons representing...
This study shows some ways in which professional spirit and training of teachers may be improved.

999. ——— Suggested list of activities, Grades 1 to 6. Raleigh N. C., Public schools [1928]
The purpose of this study was to compile bibliographies on activities and criteria for judging activities. Increased interest in teaching by large units or activities.

1000. ——— Teaching in grades 4, 5, and 6. Raleigh, N. C Public schools [1928]
This study shows plans of organization and units around which courses may be organized.

Findings: Possibly the only effect summer vacation has upon the educational achievement of children may be explained by the emotional disturbances that result from the restraint which they must necessarily experience upon their return to school after a period of freedom. The process of adjustment to the new situation naturally has some effect upon pupils and teachers, and it is quite probable that a child's abilities specific subjects are affected only in so far as he finds it difficult to adjust himself immediately to his surroundings.


Differences between pre- and post-vacation scores on the Stanford achievement tests, the Woody-McCall arithmetic and the Morrison-McCall spelling tests.

A study of the development, organization, and problems of the public schools and the Catholic schools in the islands.
See also under: Rural schools, School administration, School management, Special subjects of curriculum, and Items 115, 117, 122, 126, 270, 305, 325, 33 369-370, 390, 1160, 1171, 1269, 1271, 1346, 1720, 1724, 1726, 1796, 1835, 197 1982, 2008, 2045, 2047, 2073, 2077, 2152, 2238, 2244, 2283, 2368, 2882, 2384.

SECONDARY EDUCATION

GENERAL

1007. Allen, Charles Forrest. A study of pupil preferences and pupil difficulties in the junior and senior high schools of Little Rock, Ark., 1927-2
A study of 108 graduates of the four-year courses of the Manhattan, Kans., high school and of the Kansas state agricultural college.

Findings: (1) The average sized class in the Akron high schools is just slightly larger than elsewhere, (2) more teachers in Akron carry six or more classes than in other cities investigated, (3) Akron teachers have many more daily student hours than is customary in cities of the size of Akron.

An analysis of the functions of the principal and the specialist in the supervision of instruction. From the evidence at hand the author concludes that "the responsibility for determining what shall be taught and how it shall be taught is to be transferred from the high-school principals to * * * newly appointed specialists."

A study of the minimum standards for accreditation of secondary schools in the 48 states of the Union.
Findings: A very decided lack of uniformity and much indefiniteness of standards.

This study deals with the predictive value of certain factors of equipment of high-school graduates in determining their success as college freshmen. The factors considered are mental rating found by intelligence tests, and academic preparation as represented by high-school records and by the results of educational tests. Comparisons are made between these ratings and freshmen marks. The conclusion is that no satisfactory solution of the problem of selection and prediction may yet be claimed.


A study of the programs of studies furnished by the principals of 63 high schools of the Southern association of colleges and secondary schools selected at random from 11 Southern states, and the state courses of study for high schools put out by the 11 state departments of education.

Comparison in high-school achievement of elementary and junior high school graduates who attended a New York city high school. Findings: (1) No significant difference in mean or variability of Regents grades for the two groups; (2) 34 per cent of elementary group graduated, where 68 per cent of junior high school group graduated; (3) of those who graduated, acceleration was greater and retardation less by about 7 per cent of the total number of cases for the elementary school group as compared with the junior high school group.


   The findings are based upon a survey of California senior high schools and represent practices in 74 different departments in schools ranging in enrollment from 600 to 3,400.


   The field of investigation is restricted to the origin, the growth, and development of the public high school of Pennsylvania. As a background a general survey was made of the educational conditions in those European countries from which the Pennsylvania settlers came. Then the history of certain private classical schools was taken up, followed by the extensive academy and seminary movement. With the establishment of the Central high school in Philadelphia in 1836, the history of the high-school movement in Pennsylvania is traced to the present day.


   Comparison of curricula and materials of instruction of the nineteenth century academy with present high schools in New York and United States. Findings: Academy influence is still potent in thinking and practice in New York state high school.

1025. **Evans, Evan E.** A comparison of the relations between activities and scholarship of high-school pupils in rural and urban communities. 1928. University of Chicago, Chicago, Ill. 93 p. ms.

   A study of the pupils of Winfield high school, Winfield, Kans. A marked relationship was found to exist. Rural pupils did not participate as widely as urban pupils.


   The purpose of this study was to investigate the degree of agreement in the programs of studies in the private high schools for boys in California and to hazard a conjecture as to the probable causes of the conditions discovered. Conclusions: It is probable that the accredited private high schools of the state differ less among themselves as to program of studies and its administration than they do from the state supported high schools. It is evident that the private high schools are not concerning themselves with the large problems of individual development and progress, which is the very marked trend of the public high school today.


   Correlation of I. Q., mental age, eighth grade elementary school marks, and educational age on Stanford achievement test with achievement in the first term high school. Pearson product moment coefficients of each of the following with first term high school achievement were: I. Q. -0.33; M. A. -0.36; eighth-grade marks -0.06; and E. A. -0.60.


1030 **Garinger, Truman Alvord.** Disposition of out-of-school time of students of Manhattan high school. 1928. Kansas state agricultural college, Manhattan.


   A study of 20 senior high schools.


A study of 167 school systems of 30,000 or more population.

1035. **Greene, Charles E.** Appraisal and curriculum testing program, June 1928. Senior high schools. Denver, Colo., Department of research, Public schools, 1928. 8 p. ms.

Findings: Denver was eight months above normal mentality, and had an achievement record equal to that of Iowa college freshmen.


A summary of Groton's secondary school enrollments and costs from 1913 to date. Conclusions: Groton should build a new high-school building at once. Cost would be less than present tuition and transportation plan.


Data of practice from 228 of the 267 accredited high schools of Washington as to whether "study" means "directing study," "supervised study," or recitation-study-hall procedure. Findings: 64 per cent of the schools use recitation-study-hall procedure, 20 per cent use supervised study, and 21 per cent use directing study. 98 per cent use miscellaneous methods. Large schools are using newer methods.


The schools accredited by the Southern association of colleges and secondary schools are compared with the schools accredited by the State high school accrediting commission, as to superintendents, teachers, instructional costs, holding power, and offerings in vocational subjects and graduates.


Find no significant difference in the amount of increase in the general school achievements of the two groups.


The study was made from the records kept by 530 high-school pupils for one week. The records covered all the expenditures made by the pupils and all direct expenditures made for them. Findings: Parental occupation determines to a high degree the population of the high school. The high-school pupil spends most of his money for nonessentials, and the amount spent is out of proportion to what the parent can spend for essentials.
Develops tables for distributing credits on basis of grade of work done.


The study included 400 pupils in two schools. Findings: Resident pupils are superior to nonresident pupils in mental ability and previous training, but not distinctly so in high-school studies.


1050. Lehr, Vergil C. Outstanding characteristics of honor pupils of University high school. 1928. University of Chicago, Chicago, Ill.


A study of all the high schools in Oklahoma from 1918 to 1927, inclusive. Results were compared with other studies from other schools and the United States at large. Findings: Oklahoma is holding the boys better than the girls. Taking the two together, the holding power has increased 2.2 per cent. The survival for the four years was 52.8 per cent.


The results of this survey show that the high schools of Lake County have an inadequate program of supervision; the schools should be consolidated whenever economic and educational conditions warrant; many high-school buildings were found deficient according to information based on the Strayer-Engelhardt score card; the teachers ranked fairly well in comparison with teachers of other counties in Florida; the quality of the pupils in the Tavares High School was below standard in intelligence, achievement, etc.


Discusses practices in Los Angeles high schools with recommendations.

79595—30—7

The increased holding power of the high schools is considered as an indication of increased efficiency of our public schools.


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. The report shows great lack of uniformity in mental ability in the various school years of different private schools.


The purpose of the study was: (1) To trace the development of the summer high school, and to show its place in the movement for a longer school year; (2) to study the quality of work done in two summer high schools; (3) to study the ability which summer high school pupils have to do advanced work during the succeeding academic year; (4) to study the pupil personnel in a large summer high school; and (5) to study the needs for establishing summer schools.


A comparative study of the costs and achievements of the four year and the junior-senior high schools of Vermont. Findings: The per pupil cost is not greater in towns having the junior-senior high school system; the achievements of the two systems are practically the same.


A detailed study of organization, teachers, supervisory officers, pupils, program of studies, curriculum tendenies, buildings and equipment, and policies of 844 secondary schools accredited by the Southern Association.


This is the first tabulation of data concerning the after-school history of high-school graduates. It is planned to follow each class for at least five years.


1075. Swanton, Frank Arvid. The organization and content of the curricula and programs of Kansas high schools. 1928. Kansas state agricultural college, Manhattan.


Considering the differences in conditions under which schools are operated, including administration, costs, and educational opportunity in the elementary schools from which pupils come, it is difficult if not impossible, to say definitely just what size school can provide the maximum of opportunity for its pupils at
a minimum per capita cost. After an analysis of the data contained within the scope of this study in the light of these variables, one may be justified in concluding that schools with enrollment ranging somewhere from 150 to 250, which may be called the medium-sized school, can be made just as effective as the larger schools with approximately the same per pupil cost.


This study was undertaken for the purpose of determining what type of college a graduate from the different types of high schools will best succeed in. Three types of high schools (consolidated, agricultural, and city), and three types of colleges (junior, teachers' colleges, and other colleges), were considered. Findings: The junior college is more nearly meeting the needs of the freshmen studied than any other type of college. While their scores are higher, the city school students are achieving less in college than students from the other types of high schools. City schools are more nearly meeting the requirements of the other standard colleges and are preparing their students better for entrance into these colleges than the other types of high schools.


This study showed that in junior high schools nonsmokers were more regular in their attendance than smokers; in all the high schools the average smoker made about 50 per cent more tardy marks than the average nonsmoker; in both junior and senior high schools the smokers as a group received lower marks than the nonsmokers; in all high schools there were four times as many failures among smokers as there were among nonsmokers; etc.


A general summary of conditions in secondary schools—changes in high-school population, persistency in school, professional training program, junior high schools, school costs, and pupil registration in different subjects. Conclusions: Up to the present time far too little attention has been given to major problems of curriculum construction.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


RESEARCH STUDIES IN EDUCATION


JUNIOR HIGH SCHOOLS


A summary of the results obtained in attempting to organize and administer a small junior high school according to the standards and principles set up for junior high schools by the Department of superintendence of the National education association and by Dr. Thomas H. Briggs. A total of 47 conclusions are listed in the final chapter. These conclusions as a whole show that the principles and standards set up for junior high schools can in a large degree be reached in a year’s time if the faculty is properly organized, if the students are properly classified, if the subject matter is adapted to the individual, if a diversity of extracurricular activities that are not made compulsory are offered to the students, if there is a remedial group for those students requiring additional instruction, and if there is an adequate system of pupil accounting.


A comparison of the junior high school organization with the previous 8-4 type. Shows that new organization has accomplished much more than the old, at slight increase in cost.

1097. Chauncey, M. B. The relation of home environment to scores of junior high school pupils on intelligence and achievement tests. 1928. Oklahoma agricultural and mechanical college, Stillwater.

Four factors are investigated: Achievement (Stanford), mental (Multimental), chronological age, and the home environment (SUM score card for socio-economic status). Partial and multiple correlations are presented for the factors for 115 eighth grade and 130 ninth grade students.


Schools were studied in six cities with population ranging from 40,000 to 200,000, five of them in Iowa and one in an adjoining state. Findings: According to the progress rates obtained from the data of the main portion of this study, the 6-3-3 type schools are more economical of the pupils’ time in grades 7, 8, and 9 than the 6-4 type schools. The gap between grades 8A and 9B is much smaller in the 6-3-3 schools than in the 6-4 schools. A large gap is found in the 6-3-3 schools between grades 9A and 10B. It appears that the 6-3-3 type of organization does not actually bridge the gap, but that it does postpone it one year.


Findings: The unique functions of the junior high school are being respected in their entirety by relatively few of the junior high schools of the state. This means that they are junior high schools in name only, with a few outstanding exceptions.
1102. Greene, Charles E. Appraisal and curriculum testing program, junior high school. Denver, Colo., Department of research, Public schools, 1928. 8 p. ms.

Appraisal of course of study in grade 9A. Findings: 9A Denver pupils were underage, seven months above normal mentality, and slightly above standard achievement.


Amount of absence from school was determined for a given semester. Remedial measures were applied for three succeeding semesters. Conclusions: By making chronic cases of absence subject of special study, much can be done to improve attendance.


The extent and present status of the junior high school movement in Massachusetts.


Conclusions: The junior high school is just in the formative stage, and it is too early yet to pass judgment upon its success.


Data were collected in the spring of 1928 from 1,100 junior high school pupils. Findings: The average pupil devotes one hour to play on school days; in 24 per cent of the boys' questionnaires and 30 per cent
of the girls' questionnaires no play was reported. The study reports facts regarding chores of junior high school pupils, their work for pay, their reading, their home study, their amusements, their membership in organizations, and the time they devote to sleep.


A study of the manner in which intracurricular activities are organized in the Herald junior high school. Outlines a working plan for such activities, indicating their purpose and scope.


The study includes: (1) Definition and functions; (2) psychological and sociological bases; (3) program of studies and activities; (4) organization and administration; (5) statistics of growth, size, cost, etc.


An attempt to develop techniques for caring for maladjusted pupils, overcoming delinquency, and promoting correct character development. Sums up the present situation and suggests better measuring devices.


The study is the result of interviews with 23 superintendents and others. A compilation is made of items used by these persons in describing good and poor student advisers. Four hundred and nine traits of a good student adviser are listed, grouped under 40 headings.


The study included 94 junior high schools in Ohio; 51 schools in 6-6 organizations, and 44 schools in 6-3-3 organizations. Particular references are made to constants, variables, and time allotments.


1125. Walklet, Joseph H. A statistical study of a group of ninth-grade pupils in view of determining the effect of time of entrance on general progress. 1927. Syracuse university, Syracuse, N. Y.


The outstanding practices in typical junior high schools in cities and larger villages of the State. Conclusions: The more recent educational philosophy has fortunately brought about a complete change in our approach to the problem of the adolescent.

From data secured by personal visitation, observation, and by an inspection of the records of enrollments, withdrawals, age distributions, and nonpromotions in the offices of the principals and superintendents, it was found that the amount of increase in retention of the junior high school after their reorganization was significant, and that the power of retention in the junior high schools appeared to be due to factors involved in reorganization and to the present administrative practices.


**JUNIOR COLLEGES**


This study is based on 42 replies to a questionnaire.


Covers the existing types of organization and administration and also lists types of organization and administration which those in executive positions think would be most desirable.


Comprehensive list of junior colleges in the United States, together with certain data.


Questionnaires were sent to all state universities, to the most important state colleges, to the state departments of public instruction, and to the various educational associations and church organizations that seemed likely to have junior college relationships. Gives the results of the investigation relative to the extent and trend of the junior college movement, junior college standards, legal status of the junior college, junior college costs and curricula.


Develops 14 criteria under the following headings: (1) Need for college opportunities; (2) cost of a public junior college; (3) ability to support a public junior college; (4) willingness to support a public junior college.


The study included all the public junior colleges in the United States. Findings: (1) Median size of junior college was 151; (2) total enrollment for those studied was 16,273; (3) majority were organized within last five years; (4) all but nine are accredited by some recognized agency; (5) only 25 colleges had separate buildings from the public high school; (6) median salary paid administrators was $3,704.1; (7) student-teacher ratio was 21 to 1; etc.


Comparison of curricular offerings in 113 junior colleges. In general, curricula and methods were found to correspond closely to curricula and methods in first two years of standard four-year colleges, but with added flexibility for those not pursuing further study.


Conclusions: Several of the standards theoretically applicable to the establishment and the administration of junior colleges are not supported in practice. This being the case with certain reservations, North Platte is justified in establishing a junior college.


Findings: The junior college is on a sound basis, and if organized as a unit by itself, it has a bright future.


An analytical study of the junior college movement. Gives detailed statements as to current practices, costs, feasibility of establishment, relationship to existing educational institutions, etc.


During a 5-year period 310 students have entered Stanford university by transfer from junior colleges. An extensive study has been made of the records of these students who entered with full upper division or junior year standing. Findings: Their average age is 20.52 years, two years greater than that of Stanford freshmen; their ability as measured by the Thorndike intelligence test is slightly superior to that of students from 4-year colleges, and markedly superior to that of students who were admitted as freshmen; where normally 15 per cent of seniors receive honors for superior scholastic records, 24 per cent of the junior college entrants have achieved this distinction; of the latest class to graduate 30 per cent of the junior college group have been thus honored; etc.


This study attempts to find the best location in Southwestern Pennsylvania for a branch of the University of Pittsburgh, offering the work of the freshman and sophomore years and a late afternoon and evening classes. Univer town is favored.


A brief discussion of the reasons for the founding of these schools and case studies of representative institutions gives an insight into the functions, conditions, and problems of the schools. This study deals with the problems of raising funds for the schools. Sources of revenue, methods of securing revenue, and types of campaigns are discussed.


Contains suggestive criteria for developing terminal courses in the junior college.


1149. ——— Significant data received to date in the junior college study, March 1928. Colorado state teachers college, Greeley. 53 p. ms.

See also Items, 1591, 2167, 2215.

TEACHER TRAINING

GENERAL

Tests were given to graduate students in education in order to find out the extent of the knowledge of these students concerning persons prominent in the educational world. In the first test given correct responses were given to 38 per cent of the items, and only 63 per cent of the total number were tried. In the second test, the tabulation shows that out of the total of 3,300 possible responses, only 615 were attempted and but 420 were correct.


The study covered four years, 1923 to 1927, inclusive. Conclusions: Cost of oversupply would furnish sufficient well-trained teachers; at least two years above high school for all teachers.


A study of trends in the work of the 71 institutions approved under the National vocational education act. An historical, descriptive, and analytical treatment of the home economics teacher-training work conducted under the administration of the Smith-Hughes act during the first decade.


Limited to the teachers who are college graduates, touching 407 teachers and covering the subjects of mathematics, English, foreign languages, social science, physical science, biology, and agriculture.


The purpose of the study was to discover the essential professional needs of teachers of English, and in the light of the findings to outline an appropriate curricular program for the training of such teachers.


Analysis of stenographic reports of class discussions in one undergraduate course in education. Conclusions: The Charters' Commonwealth list of teacher-activities is an adequate standard and basis for analyzing the content of courses in education when the material concerns the duties and activities of teachers. Other bases and techniques are necessary to evaluate content concerning school administration and organization, history of education, and traits of teachers.


An analysis of the operations in broadleaf tobacco production, with 50 growers. Gives outline of technical courses in broadleaf tobacco production for teachers, and indicated observation and practice.


An analysis of all teacher-activities found in the stenographic reports of all class exercises in a methods course. The technique developed is usable in analyzing a course where teacher-activities are stressed and the results may be used in curriculum construction.


1162. **Hall, Newell Pratt.** The training, the experience, and certain attitudes of teachers teaching seventh and eighth year subjects in the six-year high schools of Indiana. *Master's thesis, 1928. Indiana university, Bloomington.* 87 p. ms.


The author undertakes to determine what general subjects and which professional courses seem most effective in helping to produce the best teachers. Findings: From this study it appears that the subjects which are directly applicable to the work of the teachers in the first six grades have had a rather dominant influence in producing effective teachers in these grades.

1165. **Jones, J. W.** A brief study of the degree required of high-school teachers in Indiana high schools. 1928. *Indiana state normal school, Terre Haute.*

The study contains data compiled from requests sent to high schools for the following questions: What degree is required at the present time of your high-school teachers? are you contemplating a change in the degree requirements of your high-school teachers? In the change to be made what degree will be required?

1166. —— Elementary teacher-training students transferring to four-year college course. 1928. *Indiana state normal school, Terre Haute.*

This problem is a summarization of the data collected from permanent records of the beginning students from fall term of 1923 through the fall term of 1926, who later transferred to the four-year college course.


This report is based on the study of the following sources of information: The requirements for teacher training; a study of the catalogues of teacher-training institutions; opinions from heads of departments; published studies from Yearbook of American association of teachers colleges; opinions expressed and a report from 163 schools of the North central association of colleges and secondary schools.

1168. **Lo, Chillin Chin.** Teacher training. 1927. Syracuse university, Syracuse, N. Y.

1169. **Lockwood, Stephen R.** Preparation of rural teachers. 1927. *Syracuse-university; Syracuse, N. Y.*


1172. **Massachusetts. State department of education, Boston.** The training of teachers. *In its Annual report, 1927; p. 3-15. (Also in Bulletin, no. 5, 1928, p. 1-12)*

A review of teacher training in Massachusetts up to the present time.


A study of teachers of high-school mathematics, science, and foreign languages, having graduated from five Minnesota universities or colleges. Conclusions: Not enough specialisation in certain fields; teachers required to teach too many subjects.


Questionnaires were sent to the heads of normal schools and teachers colleges. Information was compiled showing the factors determining the evolution of teacher-training institutions. The data secured from normal schools and teachers were kept separate.


A detailed study of the professional and academic credits presented in application for high-school class A certificates. The transcripts studied were presented by teachers who received all their training at in-state institutions of higher learning. The study shows the need of more specific training, both academic and professional. The teaching load of high-school teachers is analyzed. Appendices contain individual case studies of specific preparation possessed by high-school English, history, and French teachers.


The history and present status of teacher training and certification in Alabama are studied and the needs found serve as the basis for recommendations. The present conditions are compared with standards from expert opinion, practice, state laws, and regulations of accrediting associations.


An analysis of courses into 814 topics, the determination of the extent of treatment of each, the evaluation of topic treatments by alumni teachers, the final selection of content most worth while. Findings: (1) Training program is most adequate in academic subject matter, less adequate in educational theory, and least adequate in technique of teaching; (2) teachers must be trained in more than one field of specialization, since a large portion of their load is in nonmajor subjects; (3) practice teaching, special methods, and educational psychology are most outstanding in training value; these with general methods and the high school are set up as a basic professional curriculum in education to be supplemented by electives; etc.


This study includes a brief historical background, the training in a few states and cities compared with Ohio, and then the training of teachers in 19 Ohio cities studied in detail.


A survey of license requirements in all states, with suggestions as to a course of study. Findings: College degree (four years) and commercial major required.


A study of teacher-training institutions of the Rocky Mountain region, including Nevada, Wyoming, Utah, Montana, Idaho, New Mexico, Colorado, and Arizona. Findings: Directors of practice are not satisfied with conditions of training critics. Many critics, dissatisfied, are leaving the field. The status of critics is low to start with, the opportunity for advancement uncertain or limited, and the amount of advancement rarely on a par with that of other college instructors. Critics in this area are as heavily overloaded as their colleagues elsewhere, are slightly better trained, about equal in experience, and equally limited in academic status, salary and general professional rank or advancement.


Advance sheets from the Biennial survey of education, 1924–1926.

The purpose of this study was to develop a general technique for the scientific construction of professional content courses for the training of teachers, and to exemplify this technique by applying it to the field of junior high school mathematics.


A comparative study of the professional preparation of teachers in the public and Catholic elementary and secondary schools in the United States, with a proposed plan for the training of teachers for American Catholic schools.


Data for this study were collected from the state of Virginia covering a period of five years. Eight hundred and sixty-one students and 256 teachers were included in the investigation which was undertaken to determine whether or not the amount of training and preparation of the physics teacher in the high school has any direct bearing upon the grade of work done by his or her students when they enter college. The results indicated that the training of the teacher has very little effect upon the work done by those students who rank above the average in all their college work; but for students whose rating was average or below, the amount of training of the teacher seemed to have a bearing upon the grade of work done.


This study is an attempt to measure the general value of courses in tests and measurements in so far as such instruction enters into the direct preservation training of teachers during the student teaching period. Findings: The number of instances in which the gains of the experimental group exceed those of the control group is indicative of some value in training student teachers to use the results of general and diagnostic tests in their instruction of children.


Four hundred and sixty teachers, supervisors, and college teachers of the industrial arts, in 37 states, gave personal information regarding their own training and experience, and their reactions to a detailed topical analysis of subject matter. Findings: The training of industrial arts teachers is constantly improving, but for the majority it is still much below that of the best trained teachers. The average salary for teachers of industrial arts is $2,109, college teachers, $3,179, and supervisors, $2,293.


A comparative study of universities, teachers colleges, normal schools, and private business colleges to ascertain the commercial teacher curricula they offer. The comparison is to be made in terms of the years in which courses are given, credit given for various kinds of courses in the different kinds of schools, specialized and technical work required, etc.


An historical study covering the years from 1827 to the present time. Conclusions: While teacher training in the secondary schools has rendered good service to the rural schools, it seems to have many limitations which make it difficult of further application.


This study is limited to the problems of preparing teachers for junior high school industrial art work. The findings suggest certain program essentials: Technical, professional, and academic courses. Techniques are suggested for making the study applicable to the existing problems of industrial arts education.


Findings: There is no appreciable difference in the efficiency of the two types of schools.


A comprehensive examination of teacher-training theory and practice from its earliest beginnings up to the present time, to discover whether present teacher training is so functioning on its own level as to prepare teachers for service in modern schools. Conclusions: (1) Present day teacher training is to a large extent traditional and conservative; (2) it operates, with few exceptions, on a passive basis; (3) it produces a teacher ill-equipped to function in present-day schools, and therefore defeats its own purpose; (4) teacher training needs reorganization or reconstruction based upon a new philosophical and psychological viewpoint.

See also Items 7, 13, 643, 770, 1008, 1043, 1347, 1640, 2051, 2372.

NORMAL SCHOOLS


A comparison of the trend of normal school and college entrance requirements since 1913.

1202. Crabtree, Eunice K. Problems of the normal schools as revealed by the surveys. 1928. Johns Hopkins university, Baltimore, Md.


Duties and functions of each faculty member in each school. Findings: Little relation to budget classification; no organized uniformity.


A policy regarding scholastic preparation was made effective October 1925. This study shows what progress has been made. Findings: A notable improvement in all schools in terms of grades; some measure of ability is needed to supplement degrees.
A study of the size of classes in relation to service load. MacMullen's technique was used. Findings: Direct relation between number of faculty members and student enrollment.

Residence location of all students by counties and placement of graduates first year after graduation in New York state. Findings: (1) Students in regular courses are drawn mainly from local area; (2) contrary is true for students in special courses; (3) an Inconsiderable number placed outside of New York state the first year after graduation.

A study of available space, present use of it, training school facilities, and teachers' needs. Findings: (1) Nearly all New York state normal schools can increase enrollment; (2) available practice facilities limit some; (3) local drawing power of schools a factor; (4) more teachers of extended training needed in New York.

Two and one-half years of study of elementary teacher needs to find out whether or not the curriculum of the average normal school gives teachers the training they need. Findings: Normal school curricula inadequate in that teachers do not have the scientific attitude. They are unable to carry on diagnostic and remedial work with their pupils.

A study of the use of Thorndike examination in predicting success in subjects. Conclusions: The Thorndike examination was found to have significant predictive value.

A summarization of factors used in the grading systems of the faculty of Indiana state normal school as indicated by the factors checked on the list of items submitted at a faculty meeting.

1211. ——— A proposed numbering scheme. 1928. Indiana state normal school, Terre Haute.
This proposed numbering scheme is applicable to all departments of the Indiana state normal school.

A study of enrollment in the Indiana state normal school as to those students "in grade" and those "out of grade," according to the junior-senior college plan of classification of colleges. Junior-senior college plan of classification was found advisable in the Indiana state normal school.


The principles and the assumption of the place of personnel service in the state normal school and the analysis of the present status of personnel service in 80 state normal schools of the United States. Findings: (1) Those who are directing and advising the students are doing so only incidentally to the main duties required of them; (2) there is no unit program or system holding the various agencies to a definite plan or objective; (3) no effort is made to find the student in need. The emphasis made by these agencies is upon remedial rather than preventative or anticipatory effort; (4) the state normal school is very much institutionalized. Its organization and activities are built up in a formal way, with the student's problems considered only from the administrator's point of view.

An historical account of the establishment and early history of Connecticut's four state normal schools; a cooperative survey and reorganization of the teacher-training program in Connecticut; statistical studies...
210. RESEARCH STUDIES IN EDUCATION


New Hampshire is used here as a type study. The study has been made in such a manner that teachers may actually use the results in the schoolroom.


A comparison of the average weekly time devoted to study and the average time spent in preparation for a recitation in each subject by 80 first-year normal school students and the time expected by the teachers. Findings: The average first-year student spends 2 hours and 14 minutes less per week than the time estimated by the teachers. Students in general spend less time in preparation than the teachers expect. Wide variation in preparation time in subjects for both students and teachers was found.

See also Items 1229, 1234, 1253, 1303, 1811.

TEACHERS COLLEGES


Covers the four-year professional curricula in 67 state teachers colleges. Findings: Of the institutions offering one or more four-year curricula, more than 90 per cent offer training for high-school teachers; training for early elementary, intermediate, and junior high school teachers through four-year curricula is offered in upwards of half of the institutions. Basic courses of a cultural nature comprise an average of approximately 25 per cent of each four-year curriculum, and an average of approximately 10 per cent is devoted to basic courses of a professional nature.


Analysis and description of courses in administration and supervision in colleges of education of state universities and other colleges of education.


A study of teachers' positions, classroom duties, and extraclassroom duties, and an evaluation of their undergraduate preparation in relation to such positions and duties.


The investigations indicate that there is a lack of agreement of practice and the opinion of leading teachers in the field under consideration concerning the relation of the important factors bearing upon the function of psychology and tests and measurements in the general problem of teacher training. When teachers of psychology and tests and measurements have the training indicated by such a study and courses are organized and coordinated on basis of such a study and courses are organized and coordinated on basis of such a study, similar procedures, it will be logical for other improvements to follow.


This is a quantitative study dealing with tenure as it is affected by sex, type of institution, etc.


Conclusions: If the schools studied represent general practice, it may be concluded that the general policy throughout the country is to place practice teaching late in the curriculum. In only a few schools are students admitted to practice work in the first year. In about 65 per cent of the two-year curricula, the practice teaching is confined to the second year. The amount of practice teaching varies considerably from school to school, but the average is 5 semester hours for two-year curricula, 6 for three-year curricula, and 8 for four-year curricula.


This study involves between 1,500 and 1,700 students who entered Detroit teachers college from September 1920, to January 1924, and contains information concerning elimination, sources of students, scholarship, teaching success, teaching tenure, etc.


Findings: All the teachers of composition agree on one objective—the teaching of the fundamentals. "Weakness in composition" is given by 60 per cent of the teachers, and "poor entrance preparation" is given by 42 per cent of the teachers as the chief difficulties they encounter in teaching composition. Seventy-two per cent of the colleges require a noncredit course of entering freshmen who fall below a certain standard in English composition. To improve the work in English composition, the mass-library-conference plan is suggested.


A study of the achievement in elementary subjects as evidenced by Stanford achievement test given to 365 freshmen.


The problem of this study is to take cases on factors, namely, entrance units of Latin, quartile rank in secondary school, Army alpha, Terman group test at entrance of first year, and try to describe and predict what one may expect to find in terms of practice-teaching scores, scholarship, and persistence in school.


A study of factors which have conditioned the academic success of the freshman students of two successive years at Ball teachers college. Conclusions: Four factors are shown to have a close relationship to academic success: (1) intelligence; (2) immediacy of the need for scholastic success; (3) faculty standards of grading; (4) the introduction of a system of warnings and counsel for potential failures.


Advance sheets from the Biennial survey of education in the United States, 1924–1926.


An historical study of establishment, growth, change in scope, costs, etc., of teachers colleges. Conclusions: They are developing to meet the needs of South Dakota and do not cost more than their service warrants.

See also Items 476, 509, 539, 550, 1199, 1237, 1266, 1305, 1339, 1721, 1965, 2162, 2195, 2395.

PRACTICE TEACHING


A study of over 200 grade pupils, some under practice teachers, others not under practice teachers. Findings: Pupils under practice teachers were ahead of those under regular teachers all the time.


The ratings and comments of the high-school critic teacher, as well as the ratings of the college professor and of student teachers (high school) for three successive quarters were analyzed. The virtues and faults were classified and ranked. Concludes that the virtues of practice teachers are largely those of personality.


1245. Wade, N. A. Comparison and distribution of student teachers’ time. 1928. State normal school, Frostburg, Md. 8 p. ms.

This study shows the percentages of time devoted by 65 students to student-teaching activities. It shows that the average student teacher devotes 41.7 per cent of his time to preparation of lesson plans and seatwork; 10.8 per cent to teaching; 30.1 per cent to observation of student teachers; 9 per cent to group conference with the training teacher; 8.5 per cent to observation of training teacher; 8.5 per cent to supervision of study and seatwork; 5.4 per cent to grading papers.

See also Items 193, 237.
PROFESSIONAL STATUS OF TEACHERS

GENERAL


A summary of legal principles affecting the teacher's contract for the guidance of state and city superintendents, boards of education, teachers, and attorneys.


The purpose of this study was to find trends in the per cent of men teachers, why men leave teaching, why they continue in teaching, need for men teachers, comparison of men and women, etc. Findings: There is a distinct upward trend in the percentage of men teachers since 1920. Men leave teaching for economic and social reasons. They continue in teaching because they like the work. Educators desire more men in the schools. There is very little measurable difference between men and women in the factors studied.


A survey of the preparation, experience, salary, teaching load, and teaching programs of newly appointed teachers in public high schools of Pennsylvania in communities having less than 500,000 population.


This study is based on the records of 3,000 teachers in Baltimore public schools. It analyzes causes and amounts of teacher absence in each school.


A study of 518 teachers in universities, colleges, and normal schools to determine significant facts regarding age, physical measurements, education, professional experience, past and present salaries, changes of positions, etc.


The data presented were obtained from a questionnaire received from 148 superintendents of South Carolina accredited high schools. It was found that the educational training of the superintendents reporting was primarily academic, and therefore general rather than professional. The median years of educational experience was 8.66 years, and the median number of teachers under their supervision was 14.46 teachers.


A study of the training, experience, tenure, and salary of all teachers in the accredited high schools in Oklahoma for the school year 1927-28. The data were secured from the office of the state high-school inspectors of Oklahoma.

An investigation of salaries, ages, tenure, educational training, and experience of 226 superintendents in Michigan. Findings: Michigan ranks above the average for the country. Much improvement has been made in the last 12 years.


 Replies to a questionnaire from 203 teachers in the public schools of Wichita, Kans. Of the teachers questioned, 87 were found to be psychopathic; 51 with strong psychopathic tendencies; and 66 practically normal.


Data given in this study show that the membership of the California teachers association has increased from 35 per cent in 1918 to 79.5 per cent in 1927.


A comparative study of 424 commercial, English, mathematics, and science teachers of 1912-13 with the same groups of teachers of 1924-25 in terms of (1) size of schools in which teachers are employed, (2) educational qualifications, (3) salaries, (4) length of teaching experience, (5) subjects taught to note subject combinations and degree of specialization.


Conclusions: (1) The difference between the training and preparation of instructors in the small and in the larger schools of Iowa is not outstanding, but tends to favor the larger school systems; (2) considering six years of preparation above the eighth grade and five or more years of teaching experience as ideal, the teachers of Iowa in the majority of cases measure up to desirable standards, though there is considerable room for improvement; (3) home-talent teachers are not generally employed, but there is no outstanding difference between the qualifications of home-talent and nonresident teachers; (4) married-women teachers are not generally employed, but their qualifications are slightly higher than those of the unmarried teachers.


A study made of two years of teaching work covering those teachers who were either doing better or poorer work than predicted by the teachers college from which they were graduated.


Findings: The majority of high-school teachers appointed in New York city have had previous teaching experience; the total number of graduates majoring or minoring in commercial education, graduating from schools certified by the State Department of education, for the year March 1926, to March 1927, was 165, compared with appointments of 70 for the same period in the city of New York alone; about one-half of the
academic appointees have had previous experience outside the city, and only one-sixth of the commercial group have had experience in teaching outside the city; a greater number of commercial teachers were appointed without previous teaching experience than in the academic group, due evidently to inadequate supply; etc.


A history of the association with considerable data to prove the effectiveness of this teachers group.


Findings: (1) Teachers meetings are being held now for the purposes of supervision rather than administration, such as making announcements and adjustments; (2) the trend in these schools seems to be toward the conference method of supervision rather than an open meeting.


A comparison of factors in efficiency as found in work of married and single women teachers. Findings: Neither class was found to be superior.


A study of the teachers of Oregon, their training, tenure, salaries, growth in service, living conditions, organizations, and financial status.


The state files were used from which compilations were made of the mathematics teachers in the state approved high schools. Of the 478 mathematics teachers, 67.56 per cent were men; of all the mathematics teachers 21.13 per cent were teaching mathematics only; history, English, and Latin were combined with mathematics more than other subjects; the minimum number of classes taught by any full-time teacher was four; the maximum number, seven. Of all the teachers 80.75 percent had degrees; the highest mean salary was $2,038, the lowest $1,061. The mean tenure for the entire group was 3.45 years, the median tenure was 1.50 years, and the standard deviation was 3.53.


This investigation related to 600 teacher applications for positions which were filed in the superintendent’s office at San Diego. Findings: All things considered, the comparison is about equal between the teachers already in service and the teacher applicants. The odds are possibly in favor of the applicant teachers.

See also Items 2, 2269.

APPOINTMENT AND TENURE


The aim of this study was to find the various ways in which states organize, operate, and finance teacher-placement bureaus, and to evolve from them a state teacher-placement bureau with the logical machinery. Letters were mailed to the commissioner of education in all the states, asking for information on the subject. It was found that 18 states have legalized teacher-placement bureaus; three of these have suspended operations because of the failure of their legislatures to appropriate funds for their operation.


An investigation of the average length of service rendered by those entering teaching, relationships of tenure, and amount of training, etc. Findings: For Wisconsin 30 per cent of entrants teach three years or less; the mean average service rendered by all entrants is nine years; differential tenure is very marked and significant. Nearly one-third of the entrants teach on the average over 20 years.


A study of the teachers who have left the teaching profession in Ohio since 1923, taken up by years. Findings: About 13.7 per cent of the women employed, and 17 per cent of the men employed, are leaving the profession each year.


An investigation of 10 teacher-placing bureaus organized in nine of the educational institutions of Oklahoma and the state department of education. Findings: Great lack of uniformity in blank forms used in administration. Number of items on the various information blanks varies from 39 to 303. Teacher-training institutions and departments of education are not giving sufficient emphasis to those things which superintendents, school boards, and communities want to know about teachers.


An analysis of the causes of teacher turnover as basis for its control. The study covered all cities and villages under superintendents in the state of New York. Findings: Average turnover was 10.90 per cent, with range from 1.37 per cent to 42.38 per cent; 51 per cent of turnover was avoidable. The chief causes of turnover were leaving for better position, marriage, and dismissal.


The results of this study show that superintendents and board members agreed that the main causes which affect length of office tenure are: (1) Desire for promotion, (2) insufficient salary, (3) destructive and unwarranted criticism, (4) failure of the superintendent to possess the qualities of a good executive.


Persons who actually hire teachers were asked to judge photographs of school teachers and school administrators whose relative success had been demonstrated by three or more years of experience. The judgments of the photographs were unreliable.


Teachers were traced from high schools to institutions of higher learning and then to actual teaching positions. The data show that 40 per cent of the North Carolina teachers begin teaching in the same county in which they received their own high-school training.


This study shows teacher supply and demand during the period 1900-1925 with predictions as to supply and demand figures for the period 1925-1950.


From questionnaires sent to 2,404 graduates, replies were received from 2,002. Findings: Most of the service years of all graduates were rendered in rural schools. The largest number of graduates taught grade subjects, while the second largest number served as school principals, the third as high-school teachers, and the fourth as school superintendents.

Findings: Supply of trained teachers in Minnesota is adequate for the demand. The turnover per cent is greater in rural schools.

1289. Utah education association. A beginning study of teacher tenure in Utah. Salt Lake City, Utah education association, November 30, 1927. 20 p. (Bulletin, no. 5)


See also Items 242, 1817.

CERTIFICATION OF TEACHERS


Findings: There is no agreement as to the minimum amount of professional training which the high-school teacher should have. California, which requires graduate preparation of the high-school teacher, presents the outstanding example of high certification standards.


A comparative study of the centralization of certificating authority in the states of the Union, principally California. Findings: California, like other states of the Union, is steadily progressing towards a centralized state system of granting teachers’ certificates.


Abstract of the laws or regulations governing the issuance of life diplomas in the United States with special reference to persistence and experience required to obtain them. Findings: Wide variation of requirements. Average requirements for the 48 states are given. Twenty-nine months’ experience is minimum average for 48 states; 32 months for the 44 states which grant diplomas; 42 months for the 38 states which require some experience. This applies to elementary schools only.


Shows present standards of qualifications of teachers in Illinois with comparative data for many states; shows other educational problems related to that of better preparation of teachers; argues for progressive standards in certification over a term of years.


See also Item 1178.
RESEARCH STUDIES IN EDUCATION

IMPROVEMENT OF TEACHERS IN SERVICE


Records of 8,222 elementary and junior high school teachers concerning efficiency rating, length of teaching experience, and amount of college work. Findings: Low but positive correlation between experience and efficiency, and credits and efficiency.


The aim of this study was to keep teachers in the Dunn high school, the Dunn elementary schools, and Hamilton county training school, abreast of educational projects. Results: Teachers have become more experimental, more open to conviction, and more progressive in work.


The purpose of this study was to ascertain the improvable factors in teaching ability that go to make the difference between "superior" and "just satisfactory" teaching; to put before both principals and teachers definite objectives, to which "just satisfactory" teachers should aspire in their efforts to do "superior" teaching. The study resulted in the location of several important factors contributing to the difference between "superior" and "just satisfactory" teachers. Gives a list of 25 characteristics that are important, to which are added two additional characteristics, i.e., continuation of formal study while in service, and the regular use of time outside of school hours for preparing school work. These 27 characteristics are deemed worthy objectives for training teachers in service.


This study is an analysis of the practices and policies prevailing in state teachers colleges with reference to securing competent members for their staffs, improving them in service, and retaining desirable teachers for relatively long periods. Fifty-five presidents have furnished detailed information with reference to their institutions.


Contains a compilation of the professional reading selected by supervisors in one year's time, a list of educational publications in magazine or bulletin form, and a selected list of books dealing with the various phases of elementary school work.


A study of the practices in the Montana city schools, with very definite suggestions.


A study of the obstacles in the way of putting theory into practice discovered through half-day visits to 230 graduates. The obstacles discovered are: (1) Ineffective teaching methods during training course; (2) superintendents' requirements such as, set courses of study and term examinations; and (3) attitude of patrons.


RATING OF TEACHERS


The study involved 200 teachers from the first grade. The purpose was to show the correlation between their general rating as teachers and ratings on personality, vitality, etc., and their success as measured by the growth of their pupils in reading ability. Findings: Zero correlation between general teachers' ratings and growth of pupils.


An experimental study for the purpose of developing a checking form to be used in evaluating teaching. Conclusions: A form can be devised which will give results which are more objective than can be obtained without the use of a form.


Preparation and experimental investigation of a scale by means of which students rate the instructors on ten traits for the purpose of self-improvement of the teacher.


Replies from 120 cities indicate that: (1) Teacher-rating plans have been in use from one to 25 years; (2) the scales in use are proving satisfactory in most cases; (3) teachers, except in a very few instances, have no part in the rating procedure; (4) rating in a large percentage of cases is used to determine salary increases and promotions; (5) the tendency is to rate teachers once a year; (6) ratings to some extent are based on pupil accomplishment as determined by the use of standard tests; (7) high rating for experienced teachers is the rule; and (8) there is a tendency to rate teachers on broad, general traits rather than on a large number of specific traits.


One hundred and nine college freshmen were asked to list what they considered the six most desirable qualities that teachers under whom they studied should possess. Sixty-eight different qualities were mentioned, scholarship ranking first, personality next, and sympathy last.


The study summarizes the ratings of the entire student body of the 88 members of the college faculty of the institution and shows the correlation of student ratings between president's estimate and faculty member's rating through questionnaire. Findings: Student rating is a quick, economical means of evaluating college teaching and valuable to the professor in improving his technique of teaching. Student rating shows high correlation with president's rating.


A study of differences in class achievement in arithmetic and reading within each of grades 4 to 8, inclusive, for nine different schools in a medium-sized city. The assumption that "estimates of teaching ability are measures of the merit of a teacher because they are indirectly measures of the proficiency of pupils traceable to differences in teacher influence on achievement" is to a considerable extent justified with reference to reading achievement, but only slightly with reference to achievement in arithmetic computation.

TEACHERS' PENSIONS


This study aims to give a better understanding of the legal and financial provisions of the retirement law and of the service, mortality, and annuity tables employed in its administration.


A discussion of the actual financial situation of single men, married men, single women, and married women. Conclusions: Argument that more desirable teachers will be kept in schools by pension system, not borne out by facts.


Actuarial and economic inquiry leading to the framing of a sound teachers retirement plan for the public schools of Colorado.


Gives a brief summary of the principal features of the teachers retirement systems in 21 states and 7 cities as revealed by the study made in 1927 by the United States Bureau of labor statistics.

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**TEACHERS' PERSONALITY**


The author tries to discover and measure significant traits of teachers' personalities. A trait index was constructed as a tentative measure of the complex blend of qualities often referred to under the term "leadership." Findings: In general, this study emphasizes the conception that probable success in teaching is a matter of favorable proportions of the several measured characteristics which are common to all the students, rather than a matter of a particular combination of certain qualities possessed by only some students.


An historical study of outstanding teachers, showing the importance attached to personal qualities in early schoolmasters in the United States. Reviews recent studies of personality traits in teachers; reports an investigation of 53 teacher-rating schemes. Findings: In spite of verbosity in describing teacher personality, this factor is fairly well identified and generally appreciated. Further study is useful in order to clarify conceptions and to assist teachers in achieving desirable personal equipment.


A study of 357 teachers of eight Alabama cities. Conclusion: Personality has a consistent use in education, but there seems to be nothing definite in its use.

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**TEACHERS' SALARIES**


The purpose of this study was to present a statistical treatment of the readily measurable factors that are usually considered as influencing salaries. Findings: In all types of school positions and for both sexes, except for men in one-room schools, there is a relatively high correlation between salary and experience. In all types of schools, and for both sexes, there is a relatively low correlation between salary and training. The correlations between salary and teaching load are low in nearly every case. Men receive higher salaries than women both as to type of position and, in most cases, as to subjects within the type of school.


The study included selected districts and independent districts in West Virginia schools and covered the years 1913-14, 1921-22, 1925-26, and 1927-28. Findings: Fair increase in median salaries for all groups studied except county superintendents and elementary principals, but medians rather low at beginning. Great variation in salaries paid for apparently the same sort of service except for county superintendents whose salaries are set by law.


An attempt to furnish students of teachers' salaries, teachers' salary committees, parent-teachers associations, and similar groups an introduction to the various aspects of the problem of salaries.


Findings: All institutions studied, whether they have been four-year colleges for the past 20 years or have grown from two-year institutions to four-year colleges, or are still in the two-year class, have on their staff those with no degrees. The per cent of A. B. degrees ranges from 23 to 57 per cent; A. M. degrees from 12 to 63 per cent, and Ph. D. degrees from 0 to 36.1 per cent.


A statistical study of the relationships between college teachers' salaries and the age, teaching experience, scholarship, graduate work, and degree of newly appointed teachers in seven New England colleges.


Findings: The best type of salary schedule is the "preparation-development-merit" type. Merit rating should be made by use of achievement tests and by competent judges.


A study showing how Alabama city salaries of teachers compare with those of cities of similar size as presented in the National education association research bulletin for March 1927.

1345. Sawyer, Guy E. Pupil credit costs in the high schools of Milwaukee, Wis. Master's thesis, 1928. University of Chicago, Chicago, Ill. 95 p. ms. An investigation into teachers' salary costs by subjects, departments, and schools, to discover simple method for principal's use in determining same and comparative importance of factors involved. Findings: Factors influencing teachers' salary costs per pupil credit in order of importance were: (1) Amount of credit granted for year's work in subject at rate of period per day; (2) size of class; (3) cost per class; (4) per cent of pupils passed. Cost per class is function of teacher's salary and number of classes taught per day. Size of class is most important factor; usually under direct control of principal.

1346. United States. Bureau of education. Salaries of elementary, junior high, and high-school men and women teachers in cities having a population of 10,000 and more. Washington, D. C., 1928. 21 p. ms. (City school circular, no. 5, May 1928)


1349. Witham, Ernest C. A study in administration and supervision of salaries paid in 1926-27. Wilmington, Del., Department of research, Public schools, 1928. 12 p. ms. A study of salaries paid in 49 cities with more than 100,000 population.

HIGHER EDUCATION

1350. Allen, J. Edward. Freshman mortality. A symptom of remediable weakness. Warrenton, N. C., Public schools, 1928. 16 p. ms. This study points out several causes of freshman failures in colleges and suggests means whereby the conditions complained of may be remedied.


1352. Arnold, Henry J. An analytical study of certain factors of previous schooling possessed by college students and the relations of these factors to college standing. Doctor's thesis, 1928. Ohio state university, Columbus. This study attempts to determine: (1) The nature and extent of the special disabilities of college students in the "tool subjects" (reading, arithmetic, English composition, etc.) as revealed by standard diagnostic tests; and (2) the possible relation of such disabilities to academic success. It gives a suggested plan of diagnosis and remedial instruction as a means of rehabilitating students having specific disabilities, with a view to maintaining higher standards of scholarship.


Boyer, Carl W. The psychology of college delinquents. [1928]
New York university, New York, N. Y.


The data for this study were obtained from questionnaires sent to 4,000 high-school principals in every state and territory, inquiries sent to 600 college registrars, college catalogues, and general literature on college admissions. Findings: A uniform national plan of admissions, if not entirely impracticable, would at least be very difficult to put into effect; there has been a slight tendency toward liberalization of entrance requirements in the period from 1921 to 1926; there is need for improvement in the standardizing and construction of intelligence or college aptitude tests; the entrance examinations, whether "old plan," "new plan," or "latest plan," are considered by a large majority of both high-school principals and college officials to be undesirable as a chief means of college admissions.


This study shows that fraternity men hold a slight advantage.


The findings of this study are based on replies from 443 Albion college students. There is wide variation in the opinion of college students as to the reasons for cheating.


An experiment in giving intelligence tests to the freshmen of Colorado state teachers college.


The value of a comprehensive examination at the end of the sophomore year of college for predicting academic success in the junior-senior years. 1928. Johns Hopkins university, Baltimore, Md.


A follow-up study of entering freshmen of autumn quarters 1923, 1924, and 1925. Findings: A higher prediction (r greater than 0.85) was obtained by using scholarship to predict scholarship.


This study was limited to students from one high school who have entered the University of California during the years 1921 to 1926. It was further limited to those on whom complete data for the study could be obtained, a total of 184 cases. The problem was to determine the relation between college success as measured by the average grade for the first semester in college and various available high-school measures and combinations of these.


RESEARCH STUDIES IN EDUCATION


Questionnaires were sent to 300 institutions of higher education in the United States. On the basis of an analysis of these replies, supplemented by a study of catalogues, outlines, and syllabi of orientation courses furnished by directors and other officials, an endeavor has been made to formulate the problems involved in the construction of orientation courses for college freshmen. The study traces first the historical development of orientation courses in institutions of higher education.


A study of the relation of college scholarship to success in the Bell system. Of 3,806 men studied, 408 had graduated in the first tenth of their respective classes. By about the fifth year of their employment this group began to earn more than the other college men. They continued to increase their advantage little by little until they were 23 years out of college. Then they began to go ahead still more rapidly.


An effort was made to select and annotate the best references on college training from the educational literature of the past ten years. Preference was given to two types of material: (1) Experimental investigations or factual reports, and (2) Authoritative analyses or discussions of college teaching. A topical index accompanies the bibliography. Two hundred and forty-five references are included in the list.


The constitutions of Tennessee, the laws enacted by the national government and by the State legislatures were examined and a careful study was made of the catalogues of the various state higher institutions to ascertain whether or not Tennessee has borne out in practice the theory of higher public education. The writer reaches the conclusion that Tennessee has not borne out in practice its theory of higher education.


Six thousand students in 11 departments in four colleges in 21 courses under 27 instructors were the subjects of this study. Experiments were carried on for four years. Findings: Measured in terms of student achievement, as determined by marks, essay examinations, or objective tests, class size is not a determining factor in the courses and with the students and teachers involved in these experiments.


Comparison of fraternity scholarship with special reference to standing of selected groups. Findings: Need for more careful selection of members and training after selection.


A study of the contributions made by the colleges of Minnesota to the public life of the state and the nation. Findings: The colleges of Minnesota may fairly be referred to as denominational colleges. They are carrying out with a commendable degree of fidelity the commission which has been given them by the churches. On the academic side they all make the teaching of the liberal arts and sciences their objective. They all officially recognize religion as a racial inheritance of primal importance. These two dominant purposes of the colleges may be brought together in the phrase Christian culture. It is through this culture they strive to render service to the State and the world.


An effort was made to get a picture and catch the spirit of the institutions and agencies of higher education in California, particularly in the liberal undergraduate field. These institutions include not only colleges and universities, but libraries, laboratories, museums, observatories, and the like. The problem is considered under seven heads: (1) The field and constituency; (2) space utilization; (3) the distribution of administrative functions; (4) the present living conditions; (5) present financial procedure; (6) present educational program and equipment; and (7) problems presented by the program of expansion.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


Two hundred and fifty students listed uses of time. Various time items were correlated with the average grade made and with intelligence scores. Findings: The amount and distribution of time given to study and other activities have no demonstrated relation to success in college where this study was made.


Findings: Those who plan from early ages to go to college do better work than those whose decisions to pursue a higher education are made later. Such factors as home encouragement, presence of encyclopedias in home, also seemed to auger success.


This study found that decided advantage to pupils may result from the selection of guiding principles such as "Learning results from the pupil's own efforts" and adapting routine procedures to every pupil's needs in reference to each principle. On the basis of this and similar studies it is argued that one of the most profitable ways to improve college methods of teaching is to experiment in this way and to report results.


Conclusions: The responsibility for the training of teachers for the public schools rests upon the state. Until the state teachers colleges increase in size and number to the point where they can train an adequate supply of elementary and secondary school teachers the state university with its school of education must aid in the training of public-school teachers for the state. Since more than three-fourths of the graduates of the graduate school enter the teaching profession a strong graduate school in the University is demanded by every consideration of public policy. An adequate research department studying the development of the resources of the state and the prevention of waste would be a most desirable agency for public good. The university should not only aid a few thousand resident students, but everyone who earnestly desires to increase his skill and capacity for individual service.


1398. Moores, Maple. Tabulated reports on operation costs of the registrar's office. 1928. American association of collegiate registrars; Cleveland, Ohio. 18 p. ms.


A comparison of enrollments of each of the Minnesota colleges with those of North Central colleges, public, private, and technical, and the regional accrediting agencies.


This includes a study of all the colleges and universities in the United States, legally authorized to give the nonprofessional bachelor's degree based upon four years of academic work. Conclusions: The final conclusion is that yet the securing of personal data about applicants for admission is attempted in a definite and systematic way by comparatively few institutions.


The report shows the accomplishment of the New Trier students in the major departments of their work, and a comparison of each student's work at New Trier with that at Northwestern.


Compares the achievement of freshmen, sophomores, and upperclassmen, in a course (Introductory) in educational psychology.


This study deals with the effectiveness of certain methods of selecting high-school graduates for admission to the University of Illinois. Findings: High-school average and psychological score need to be supplemented by analyses of facts for individual applicants for admission. Valuable supplementary evidence includes a consideration of the applicant's earlier school history and of certain home or family influences.


An investigation of the costs in 29 colleges of the North central association of colleges and secondary schools. Findings: Cost per student in senior college division of four-year colleges is 70 per cent greater than in the junior college division of four-year colleges.


Thirty-nine colleges were included in the detailed study of the application of financial standards. Findings: Cost per student in senior college division of four-year colleges is 70 per cent greater than in the junior college division of four-year colleges; cost per student is 50 per cent greater in institutions with enrollments below 350 than in institutions with enrollments above 500; cost in small unaccredited colleges approximately two-thirds as great as in accredited colleges of the same size.


Thirty-two accredited colleges were included in a detailed study of the application of financial standards, showing relationship between sources of income and cost per student and between sources of income and salary of teachers. Findings: Little relationship exists between particular sources of income and either teachers' salaries or cost per student.


The purpose of this study was to test the efficiency of secondary schools by the way their graduates succeed in their freshman year in college. Findings: There is a wide range of difference in the percentage of failures occurring in the various southern higher institutions; there is a wide range of difference in the percentage of freshmen failing in the various subjects in any one institution; failures are fewer among teacher-training institutions than among the other four groups of higher institutions; the percentage of freshmen failures is greater among the state universities than among the other four types of higher institutions; practically one-half of the students in state universities, one-third in colleges, and one-fourth in teacher-training institutions fail one or more courses during the first quarter or first semester of their freshman year; etc.


A general view of the freshman problem is presented together with a description and evaluation of the current administrative and curricular attempts at its solution.


This study gives the results of a questionnaire sent to 72 universities and colleges for men and women.


A study of the origin, development, and present status of nine municipal universities in the United States and their European counterparts.

1414. Shuttleworth, Frank K. The measurement of the character and environmental factors involved in scholastic success. 1927. Institute of character research, State university of Iowa, Iowa City. Iowa City, Iowa, Pub. by the University, 1927. 80 p. (University of Iowa studies, vol. 1, no. 2, October 1, 1927.)

A test was given in January, 1926, to the freshman class entering the State university of Iowa in the fall of 1925. This test consisted of three parts: A test of attitudes and interests, a point-scale self-evaluation device, and a questionnaire. The whole test contained a total of 396 test items and required from 30 to 35 minutes.
testing time. Four hundred and ninety-four men and 209 women for whom first semester grades and the four entrance examinations were available were selected for intensive study. The study is concerned with the problem of scholastic maladjustment. It deals with the measurement of the nonintellectual factors associated with scholastic success and failure. The study has resulted in a test that measures independent factors and yields predictions of first semester grades which compare favorably with predictions from the best mental-educational tests available.


Shows the various activities of the dean of men in different institutions.


This study included 900 white male freshman entering Ohio state university in September, 1924, with reference to 42 different items of personnel information in an effort to find out which, added to intelligence test rating, will most materially improve the prediction of first quarter's scholarship. Most of the findings were negative. The only item found to have any significance was the one representing the difference between the number of hours the student expects to enroll for in second quarter and the number he actually enrolls for. Those who overestimate their ability tend to be low in scholarship while those who underestimate their ability tend to be high in scholarship.


Questionnaires were sent to 62 schools. Replies from 32 schools, with enrollments not exceeding 500, were used in this study. Findings: (1) The typical person performing the duties of the registrar bears the title of registrar; (2) the median registrar holds a master's degree; (3) the median registrar has had 12½ years' experience in educational work and three years' experience as registrar; (4) the median registrar teaches six hours per week; (5) the median registrar is a member of three committees; (6) the typical registrar is considered a member of the faculty and attends faculty meetings regularly; (7) the typical registrar does not handle financial records of the college; (8) there is no apparent relation between the number of persons in the registrar's office and the number of students enrolled; etc.


An evaluation of previous preparation, in fundamental subjects, and in note-taking ability with the effect the factors have on course marks. Also a comparison of the course marks of those students who appeared for freshman week with those who did not. Conclusions: Note taking gives some prediction of success. A great deal of difference was found in make up of probation groups depending on appearance at freshman week.

1421. Toops, Herbert A. Testing college students. Vocational guidance magazine, 6: 54-56, November 1927.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.

A statistical study of grades of liberal arts college freshmen (2,970), 1923-1927, at Ohio state university. Conclusions: Distribution of grades within a course makes for greatest differences in scholarship rating of a student. Difficulty of a course is second in importance of the factors studied. Design for a drum-type correlation tabulator used in this study is included. Technique for the determination of relative difficulty of college courses is described.


See also Items 6-7, 9, 18, 28, 46, 486, 494, 507, 554, 562, 583, 603, 606, 745, 783, 792, 796, 809, 814, 823, 889, 904, 1009, 1013, 1032, 1043, 1086, 1109, 1127, 1143, 1153, 1166, 1178, 1186, 1219, 1239, 1253, 1265, 1300, 1316, 1322, 1340, 1516, 1633, 1647, 1655, 1667, 1669-1670, 1688, 1842, 1850, 1869, 2039-2040, 2043-2044, 2046, 2052, 2061-2063, 2067, 2078, 2118, 2121, 2128, 2131, 2154, 2191, 2260-2261, 2264, 2209, 2271, 2274, 2277, 2338, 2364-2375.

SCHOOL ADMINISTRATION


This study includes: (1) The policies of the state regarding education; (2) the agencies set up by the state to carry out these policies; and (3) discussion of administrative problems that have arisen in their execution, so far as contained in constitutional laws and decisions of Supreme Court.


Analyzes the specific objections to attendance laws as made by school administrators in all parts of the United States. Findings: Remedial legislation on six specified points is necessary to guarantee a satisfactory education to every child in every state.


The purpose of this study was to discover from printed reports of school executives how satisfactorily school attendance laws are enforced. Local officials are not successful in this; ultimate recourse to state officials should be provided.


A study of the provisions made in the state school laws concerning the purchasing of supplies, court decisions, and prevalent purchasing policies. Findings: Very little uniformity in the state school laws concerning the purchasing of supplies or in the policy employed by local systems.


Legislation affecting the curriculum in Ohio from 1833 to 1828. Conclusions: There have been too many requirements passed by the Ohio Legislature requiring specific time to be used in the teaching of certain subjects.


A study of the present plan of organization and financing and existing school conditions. Given recommendations for reorganization, financial changes, five central high schools, and many improvements!


The study covered city and rural areas in Ohio, from educational, social, and economic points of view. Conclusions: Territory contiguous should be generally transferred to city districts; the county should be the unit for taxation.


An historical study of the growth of federal interest in, and encouragement of, aid to education.


Decisions were analyzed only in case they established common law principles or interpreted present-day statutes. Findings: The Supreme Court of Oklahoma gives great weight to the precedents established in other jurisdictions and to considerations of legislative intent. It permits great discretion on the part of local school officials and will review their acts only when they are clearly of a nonjudicial nature.


Decisions of the appellate courts of the various states and of the District of Columbia were analyzed and a body of common law principles relating to the extent of the power of boards of education to make rules concerning pupils and teachers was evolved. Findings: Boards of education may make and enforce any rules concerning pupils at school which are reasonable, necessary to the successful operation of the school,
and not contrary to the statutes. They may regulate the conduct of pupils off the school grounds if the conduct is such that it affects discipline and well-being of the school. They may make and enforce rules concerning the conduct and procedure of teachers so long as such rules are not contrary to the statutes and are reasonably necessary to the welfare of the school.


The problem was to find out what would be the form and content of the superintendent’s annual report if it were patterned after a combination of the public utilities report and yearbook. Findings: A 6 by 9 inch book of either 32 or 36 pages would be required to hold material going into the report. Half of the pages would be given over to the report proper, the rest of the pages would consist of one page of directory, 3.5 pages of illustrations, and statistical tables to the extent of 7.4 pages at the end of the report. The use of maps and charts would be optional.


Cases involving school laws were briefed as to facts of the case and the decisions of the court.


This study includes first, a brief history of the development of Kansas schools; second, certain court decisions, showing that education is a function of the State; and third, fundamental statements that seem to have been accepted in the minds of the people of Kansas relative to their schools.


An analysis of subjects reported and methods used in all school districts of Michigan having population of 2,000 and up. Findings: Finances and building problems given more consideration than educational results. Educational results are well presented.


Actual practices were determined from returns from 372 cities and counties in the United States. A comparison was made with school codes. Conclusions: The practices in some states differ somewhat from the state laws—most of them conform to law. Some of the better practices are suggested. The various phases of the school census that have been considered are: Who makes the canvas; the pay received per child; date of canvas and time of correction; filing of the census; and who has direct charge of the census.


The aim was to secure a list of what appeared to be the most useful books for a public school administrative officer; the books to be included were decided upon by combining the weighted judgments of over 80 school administrators. The bibliography as here given includes only 46 books, and is arranged in alphabetic order, rather than in the order of evaluation.

1458. Marberry, James O. The administration of public education in centralized and coordinated schools. 1928. Bureau of school inquiry, University of Texas, Austin. Austin, University of Texas, 1928. 123 p. (University of Texas. Bulletin. no. 2810.)

The specific problem of this study concerns itself with the organization of public school administration as it relates to the office of superintendent of schools. In order to determine the differences of efficiency in the two types of administration two measures were used: First, an index number was made up of data that are the corollaries of educational efficiency; second, another measure was made up of the functions of public-school administration.

A comparative study of the duties of superintendents in school districts of 5,000 to 10,000 population.


A comparison of the powers and duties of boards of education and a determination of the common practice in the states studied. Powers and duties of boards of education are usually prescribed by statute and common practices are not applicable to all districts in the same state or in various states.


This study deals with state statutes regarding textbooks and also case decisions pertaining to interpretation of the statutes.


Includes decisions by the Supreme Court of Kansas from 1862 to 1928 on school matters.


Findings: State aid is in popular favor. There is no apparent relationship between the number of projects subsidized by a state and that of expenditure, wealth or educational rank. The influence of state aid on consolidation has been too feeble to cause any additional acceleration in consolidation in those states giving aid.


A compilation of philosophical and statistical data pertaining to the subject is given.


A legal study of the State statutes and Supreme Court decisions on compulsory attendance.


Tendencies of school legislation regarding the city superintendent are pointed out, after a study of school legislation in force since 1920, and a comparison of findings with studies of earlier years.


A study of laws and Supreme Court decisions and how they affect the administration and organization of the public schools. The trend has been toward centralization of powers.


A treatment of the rights of the state in education with special emphasis upon moral and religious instruction in the public school and the relations of church and state in the Catholic elementary school.


This study includes information on 1,196 members on the following items: Age, education, occupation, tenure, parental relationship, wealth, sex, church membership, civic club, and fraternal order membership.

Findings: Oklahoma school board members come from three occupational classes for the most part, farming,
proprietors, and professional men; the median age is 48.92 years; median wealth is $5,410; 27 per cent were women; 82 per cent have children in school; 76 per cent belong to some church.


This study compares the county superintendents of Tennessee selected by the county courts and by the people with the qualifications of the county superintendents in Arkansas, and in North Carolina, selected by the county boards of education. Findings: (1) The chances are two to one that the Arkansas group of county superintendents have had more academic training than the Tennessee group; (2) the chances are 7 to 1 that the North Carolina group of county superintendents have had more academic training than the Tennessee group; (3) Arkansas has better professionally trained county superintendents than Tennessee as shown by an experimental coefficient of two meaning that there is double certainty that there is a significant difference in the mean professional training of the two groups of county superintendents compared; etc.


The study includes a discussion of the essential features of the free textbook law of Texas as it has developed out of the previous policy of state uniformity; a comparison of the Texas law with textbook laws of other states, the essential facts with references to state and local administration of the law; an analysis of textbook expenditures; problems incidental to the administration of the law; etc.


A treatise on the relations of the state and of the family in regard to education. Recent developments in state activities are considered in relation to private schools.


The author presents a collection of legal opinion, showing that in the majority of cases the courts have consistently kept in mind one great underlying truth that the public school was established for a public purpose, and that even though it be locally administered, it is a state institution.


A study of 50 sets of rules and regulations from cities of 5,000 to 500,000 population in 48 states. Findings: Changed conception of the relation of a superintendent to his board of education; better internal organization of the board; tendency to eliminate standing committees; the recognition of the superintendent as an educational expert with greater administrative authority; a higher sense of duty on the part of boards of education as to their responsibility.


A study of school laws, reports of the commissioner of common schools, history of Ohio, etc. Findings: There has been a distinct growth in centralization of school administration in Ohio.


A study of the character of Utah public school lands; the effect of the grants on the development of tax-supported schools in Utah; federal and state controversies as to the character of land included in the grant; state policies of sale and administration of lands and funds. Findings: Grants of public lands for the schools of the state probably retarded the development of tax-supported schools; saline lands, though apparently given to the University of Utah in a somewhat ambiguous form did not pass to the state; through ignorance or carelessness of the state officers the government was defrauded of some valuable mineral land, some of which may be recovered. On the whole, the public school lands of the state have been conscientiously and honestly managed.


A study of cases reaching the state supreme court and the United States Supreme Court, supplemented by a few unversed decisions of inferior courts. About 2,000 cases were examined.

The method of procedure in this study was largely historical. The acts of Tennessee from 1873 to 1927 were studied and every mention of the county court in connection with public education was noted. Findings: The county court, in the administration of the public schools in the state of Tennessee, has more powers and duties at the present time, because of the fact, that these powers and duties are cumulative from time to time. The chief duties of the county court in public education are: (1) To elect a county board of education, to fix the compensation of its members; (2) to elect a county superintendent of schools, to fix his salary, etc.; (3) to fix the tax rate, to provide all local money, and to approve the expenditures of all public school funds.


Findings: Early aid was improperly used; later aid more carefully used; tendency toward aid for vocations more than for equalization.

1484. Van Campen, Merritt S. A study of the organization meetings of school boards in the 58 cities of New York state. 1927. Syracuse university, Syracuse, N. Y.


A study of all the Judicial decisions relative to school matters in West Virginia, Virginia, and Maryland. See also under County unit, and Items 1, 25, 65-66, 342, 988, 1055, 1095, 1129 1131, 1136, 1150, 1219, 1335, 1338, 1349, 1617, 1954, 2100, 2353.

EDUCATIONAL FINANCE


A critical analysis of income and expenditures for the public schools of Tift county. Comparisons are made with national and other groups.


A study of terminal costs, both operating and capital.


A complete statement of the sources and legal handling of California schools funds, with chart.

1491. ———— Twenty-five years of California school costs. 1928. Division of research, California teachers association, San Francisco. Sierra educational news, 24: 16-20, May 1928.

A comparison of elementary and secondary school costs in California in 1901 and 1926. The writer attempts to show what portions of increased cost are due to decreased purchasing power of dollar, to increased enrollment, to longer school term, and to increased school services.


A study preliminary to launching a new program of cost accounting in the department of education. Includes also the evaluation of cost in terms of feasibility and utility.


1501. Fields, Arbor D. A critical analysis of the marketing of school bonds in Ohio cities of 10,000 or more population. Master's thesis, 1928. Ohio state university, Columbus. 54 p. ms.


1504. Goetch, E. W. Sources of school support in Massachusetts during the Colonial period. [1928] Iowa state teachers' college, Cedar Falls. 3 p. ms.


1508. Hood, J. Turner, jr. Instruction costs in the smaller Massachusetts high schools. Master's thesis, 1928. Boston university, Boston, Mass. The conclusions drawn in this study are that the salaries paid do not depend upon the size of the school as much as upon the desire of the community to retain good instructors. Communities maintaining a four-year school for less than 50 pupils should consolidate with a near-by school to lessen the cost of upkeep.

A study of first-class cities, mining districts, agricultural districts, railroad districts, manufacturing districts, and suburban and summer resorts; their ability to support schools. Findings: Agricultural districts are wealthier per pupil, some districts suffer from industrial growth, others prosperous. Change in valuation is suggested.


The actual commitments of the district were placed over against available resources. It was concluded the city could not support its schools if all commitments were met, without seriously injuring the tax base.


Part I of this study consists of an examination of school laws of the various States in order to find those factors contained therein that affect the accounting procedure in public-school moneys, and that should be reflected in an accounting plan. Part II is given over to the development of a constructive accounting procedure based on the factors found in the school statutes, and the principles of accounting and educational administration.


A study of the character of the resources, inequalities in ability and effort, and relation of income to educational expenditures. Findings: Gross inequalities in support; increasing expenditures for education; expenditures take large portion of income.


Analyses the constitutional and statutory provisions for the support of public, elementary, and high schools; presents and interprets data showing the present inequalities in taxation and distribution; presents a plan for distribution of state school funds that will be more equitable; applies the proposed plan to Oregon situation.

1516. LaPoe, James L. Ohio's support of higher education. Educational research bulletin (Ohio State University), 7: 177-84, May 2, 1928.

1517. Lewis, Russell Austin. A study of school finances in the independent districts of San Patricio county, Texas. Master's thesis (1928) University of Texas, Austin. 89 p. ms.


A complete detailed analysis of the finance procedures for the Hamtramck public schools.


The study includes only those cases in elementary and secondary education in Ohio. Findings: Philanthropy has been an important source of school revenue and is increasing in importance. Dangers to public education are apparent from this source.


A study of 66 elementary schools. Maximum enrollment was 52.21 pupils, minimum, 2.75, and average enrollment, 16.16 pupils. For all schools studied, the average length of school year was 7.44 months. The maximum salary paid to teachers was $105.66 per month, the minimum, $50. The average per capita cost for 1927-28 was $10.56, while the state standard is $101.45.


1524. Ohio institute, Columbus. State reporting of the financial statistics of public schools in Ohio. 1928. Ohio state teachers association, Columbus. 35 p. This study deals with form and content of financial reports submitted to State by local districts, the reporting procedure, and the presentation of financial material in annual State reports. Findings: The present system of reporting is needlessly complicated and does not present financial material in most significant form.

1525. —— State subsidies for special education, in Ohio. 1928. Ohio state teachers association, Columbus. 72 p. Deals chiefly with the cost of special classes for blind, deaf, and crippled, state subsidies and standards for such classes. Also presents problem of special education of mentally handicapped. Conclusions: Proper state encouragement of special education of both mentally and physically handicapped is essential. The present system of state aid is administratively impracticable.


1531. Smith, Bert B. Sources of revenue to equalize educational opportunity in Kentucky. 1927. Western Kentucky state teachers college, Bowling Green. Kentucky education association journal, January 1928. This investigation revealed the potential sources of revenue, the amount of each source, and the advantages and disadvantages of each. Findings: Kentucky has abundant sources to be taxed; the sources suggested, not now taxed for public schools, will provide all money needed to equalize educational opportunities.


1533. Smith, Charles Alonzo. Some causes of variation in school expenditures among Florida counties. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y. (To be published) This study attempts to ascertain the existing degree of variation in expenditures per pupil in average daily attendance among Florida counties and to determine the causes of this variation. It was found that...
current expense per pupil varies widely among Florida counties. The high paying county pays eight times as much for this purpose as does the low paying county. The medium county pays only one-third as much as the high county. It pays three times as much as the low county. There is wider variation among schools for negroes than among schools for white children.

130. RESEARCH STUDIES IN EDUCATION


By a study of the attendance in selected states before and after the passage of laws making school attendance one of the bases of distributing school funds, it was found that such laws cause increased effort in getting more children enrolled, and secure more regular attendance of pupils enrolled.


The purpose of the study was to determine wealth inequalities existing in the several school districts, sources of revenue, total expenditures, indebtedness, the effect on each district were the indebtedness to be pooled, etc. Findings: Effort should be made the basis for a district's participation in the state educational equalization fund; there should be a pooling of bonded indebtedness and either a county-wide levy made for redemption of same, or the state should assume responsibility for indebtedness, giving debt service first lien upon equalization funds.


Deals with budgetary practices in Oregon schools, theoretically correct budget, high school allowances, financial support and comparative costs.


A study of receipts, true valuations, and expenditures distributed.


Investigation of the ability and effort of the school district to finance its schools. Findings: The district can put forth 33 1/3 per cent greater effort.

1313. Wilmington, Del. Board of public education. Increase in the cost of public schools in Wilmington, Del., and proof of its justification. [1928]


The financial condition of the Burkburnett school district. Conclusions: A typical oil-field school district is susceptible of being put in fair financial condition.


See also Items 66, 71, 123, 419, 1053, 1069, 1151, 1229, 1345, 1384, 1398, 1406-1408, 1431, 1435, 1440, 1908, 1940-1947, 1955, 1958, 2069.
SCHOOL SUPERVISION

1547. Barr, A. B. A study of the validity, objectivity, and reliability of the items observed by supervisors in classroom supervision. 1928. Bureau of research, University of Wisconsin, Madison.

Objective studies of classroom teaching; personal visits of two observers to 103 teachers.


A study based upon 350 questionnaire returns from teachers of different types of training, experience, etc.


One hundred and thirty state constitutions were studied. Findings: There has been a definite growth in constitutional mention of education from general to specific and inclusive mention so that at least 47 state constitutions provide for systems of free public education. There has been a parallel increase in mention of supervision with even greater practice. The makers of constitutions have imposed upon supervisory officers the responsibility of organizing systems of free public education.


This study lists the functions of a superintendent, and shows the extent of responsibility of the superintendent for each function.


Suggests plans dealing with the administrative phases of supervision, prepared as a tentative program by the administrative-supervisory staff of East Chicago public schools.


A study based on data collected from all states of the Union, summarizing the extent to which state departments exercise a true supervisory function.


At the request of the state board of education, a study was made to determine just what were some of the results of district supervision in Virginia where two districts had been so served for several years, comparing them with the area of the state not so covered. Nearly all features of a good state program had materially increased in the districts having supervision.


This bibliography covers a period from January, 1915, to March, 1928, and contains 475 different annotations, classified under 18 different headings.


Findings: Teachers do have rather definite objectives and plan their work with these in mind.


Gives suggestions to the new supervisor, as to the procedure for formulating a tentative workable program of supervision. By means of quotations given together with the bibliography a supervisor may conduct a study of making supervisory programs which will enable her to formulate such forms and programs for use in her situation that will be scientifically constructed and based upon the most successful experience of leaders in the field of supervision.

This study is based upon analysis of data from the annual reports of principals of union free schools in villages having a population of 2,500 to 4,500. Conclusions: (1) The district superintendent should have a higher professional preparation; (2) the functions of a supervising principal should be defined; (3) the relationships of the principal and superintendent should be defined.
1574. National education association. The principal studies his job. Research bulletin of the National education association, 6:82-147, March 1928. Suggests types of activities being carried on by elementary school principals who have entered upon the thrilling experience of studying their problems.

1575. Scheuerman, A. A. Survey of the duties of the assistant principal of the elementary school as they are related to those of the principal and of the teacher in Cincinnati. Master's thesis, 1928. University of Cincinnati, Cincinnati, Ohio.

1576. Stullman, Edward H. The school principal as revealed by school surveys. Master's thesis [1928] University of Chicago, Chicago, Ill. 83 p. ms. An analysis of all the material in 100 surveys to determine the nature and scope of the principal's work. Conclusion: There is a great difference between what surveyors found and what they recommended.


SCHOOL MANAGEMENT

GENERAL

1579. Bates, Daniel A. The relation of class-size to teaching efficiency. Master's thesis, 1928. University of Chicago, Chicago, Ill. 44 p. ms. A study of marks obtained by pupils of 94 classes, grades IV-VII, under 21 teachers for seven half years, and observation of pupils and teachers at work for two half years. Finding: A class of 40 to 45 is a better unit than classes of 30 or 21. This seems to be due to decrease in maternalism in the large classes.


1583. Dawson, Charles D. Special report on spring vacation. Grand Rapids, Mich., Public schools, 1928. 6 p. ms. A questionnaire was sent to 184 schools of Michigan having a school enrollment of 800 pupils and over, for the purpose of establishing a permanent time for the spring vacation.


1585. Fort, M. K. A quantitative study of pupil activity during the recitation period. Master's thesis, 1927. George Peabody college for teachers, Nashville, Tenn. Six units of study were observed in the Peabody demonstration school for a total of 58 periods. The pupil activity during the recitation period was checked and compared with their test grades and their intelligence quotients. Also the amount of activity when a large number of visitors were present was noted. A higher correlation was found between activity scores and intelligence quotients. There was more pupil activity when a large number of visitors were present.


From the findings of this study it is evident that standardization in time allotment practice in school systems of the United States is entirely lacking as far as the elementary schools are concerned. For example, some cities give 144 times as much time to nature study or elementary science in grades 1 to 6 as do others. A comparison of state-recommended allotments with actual practice of cities shows considerable disagreement. The states recommend less time to the three R's and more time to the content subjects than is given by the cities. Considering specific subjects, cities give more time to physical training, arithmetic, and spelling, and less time to nature study or elementary science, household and manual arts, history, and art and drawing than the average recommendation of the states.


A study of the work done in the Kansas City school system through the junior college work. Findings: The plan economizes the time of the average pupil; it provides for work of good quality while it saves time for the average pupil.


After a study of the statutes, legal machinery, attitude of professional men and organizations, and of the results, the writer concludes that under the actual operations of the state uniform textbook law in Tennessee, there is a strongly warranted implication that the people have not secured textbooks cheaper, but that they have secured cheaper textbooks at an increased cost, and that professional opinion has been largely disregarded in the selection of the textbooks.


See also Items 5, 367.

CHILD ACCOUNTING


Findings: (1) Too many superintendents buy what agents have to sell and add to, but do not build up adequate, usable systems; (2) too few administrators now at work in Oklahoma understand the value of adequate records and reports; (3) every teacher-training institution should include in its curriculum courses in proper methods of child accounting; and (4) proposed model forms.


By evaluation of 804 items of child accounting records by 129 judges, items of information are discovered which are considered necessary by schoolmen, and these are incorporated into a card record. Some suggestions are made concerning other desirable records.


Analysis of record cards now in use, with recommendations by high-school principals and specialists in secondary education teaching in institutions of higher education. Gives items concerning personal character traits, extracurriculum work, achievement, and intelligence tests, marks and credit information, data regarding entrance considered essential.


An examination of 648 report cards, 140 questionnaires, and a large number of letters. Conclusion: A report card for each subject is very satisfactory.


A description of the Baltimore packet record system of individual record keeping for pupils, the Baltimore research bureau's class analysis chart for every class tested, and the method of providing city-wide summaries quickly and adequately.


Contains studies of attendance, age-grade, distribution of marks, testing and guidance, objective tests, and elimination from high schools.

See also Item 1114.

CLASSIFICATION, GRADING, AND PROMOTION


A summary of promotions by schools and by grades for pupils in grades one to six.


1606. Hellman, J. D. Factors determining achievement and grade location. 1928. Colorado state teachers college, Greeley.


A study of various statistical procedures for comparing and combining test score when on incommensurable scales. Findings: There is no significant difference in results obtained by the use of the various procedures.


This is a manual for teachers describing the techniques of the TOBF scale.


Thirteen thousand five hundred pupils advanced on basis of 100 per cent advancement for six weeks probation and all who did as well as in the preceding grade or sufficiently well in the judgment of the receiving teacher to be retained in the advance grade were regarded as promoted. The experiment was continued three successive semesters and the general average of scholarship for all subjects by all pupils for each semester was 80.7, 81.2, and 81.4, showing that the scholastic standards were not lowered. The number in each semester which would have been required by the traditional procedure to repeat was determined by the investigator from the respective teachers and those prospectively retarded were instructed in the regular classes during the probationary period. This method of advancing pupils showed a saving of about 3 out of 4 repeaters.


Findings: The rate of promotion for all elementary grades in January, 1928, was higher than that of any previous period for which there is a record (77.6 per cent). Much of this increased promotion rate is due to increasing attention to the individual needs of pupils within regular class organizations, or in special groups of pupils taught by supplementary teachers.


1615. Townsend, Marjorie. The effect of grouping pupils into bright, normal and slow classes in elementary school. 1927. Syracuse University, Syracuse, N. Y.

See also under Individual differences, and Items 68, 1210, 1368.

CURRICULUM MAKING


In addition to a careful study and evaluation of the writings on the administration of curriculum programs of public schools, a detailed analysis has been made of the administration of the curriculum programs of certain progressive cities which have been carrying on comprehensive programs of curriculum making. The cities studied were Denver, Houston, Long Beach, Madison, Minneapolis, Oakland, Oklahoma City, Port Arthur, Rochester, San Antonio, Sioux City, and St. Louis. The practices in these cities were analyzed in the light of the principles of sound administration. The results of this study should guide those responsible for curriculum making in public schools in the formulation and administration of their programs.


A study of 416 alumni of the Ames (Iowa) high school, arranged in four groups on basis of scholarship, to determine the percentage of each group subsequently attending college, the courses chosen, their success in college studies and their final occupational distribution. Findings: (1) A larger percentage of the two higher groups chose professional courses than did the two lower groups; (2) a close correlation was found between high school and college grades; (3) approximately twice as great a percentage of the two higher groups who entered college remained until graduation as did the two lower groups.

This monograph contains a brief history of the Denver program of curriculum revision, the philosophy of the program, the organization and administration, typical procedures used by curriculum revision committees, construction and use of curriculum tests in Denver, etc.


Analysis of curriculum data secured from 30 towns and counties, and from state course, by questionnaire and syllabi. Findings: Wide diversity in time, emphasis, range, and administrative organization in connection with the schools studied.


An attempt to identify and interpret the trends in the secondary school curriculum since about 1890.


This study is concerned chiefly with New York City.


The aim of the study is to show how the curriculum may be organized around larger units.


A course of study for use in developing certain concepts, habits, skills, and attitudes, in order that the pupils may grow in power and ability, as well as become masters of certain information.


Changes in educational thinking relative to secondary education which have occurred since the Report of the Committee of Ten in 1893, are here set forth. The changes in objectives show the conflict that has been going on between the finishing and the fitting functions. Recognition and determination of more specific objectives have been accompanied by the tendency to make them the criteria for the selection of materials of instruction.


This bulletin reports in a somewhat summary form the application of a general procedure of curriculum construction to two fields of instruction on the high-school level, one physical education, the other horticulture.


Edwin C. Broome, chairman.


Findings: Most communities do not spend enough time in educating the public, the board, and the teaching staff to the idea of curriculum revision; revising the curriculum has become a fad lightly and hastily entered into and the results give evidence of the lack of organization and lack of knowledge of curriculum revision.
RESEARCH STUDIES IN EDUCATION


The data presented were gathered by questionnaires, formulated by William Martin Proctor and Edwin J. Brown, sent out to high-school principals through the U. S. Bureau of education, and tabulated and analyzed by the research division of the National education association, in cooperation with Doctor Proctor.


The city in which this curriculum reorganization took place is representative of any city operating under special charter. The first effort is to show the changes that science, through tested thought, has brought about in our modern civilization; the second is to show how our education has had to change in order to meet the demands made upon it by modern civilization; the third is to show how one city system has reorganized its curriculum in order to meet the demands of modern civilization; and the fourth, to suggest some views by which parents, patrons of schools, and others, may recognize in the project method of teaching a theory of education that calls for a fuller and better purposing than could ever be hoped for under the routine regime.


See also under Special subjects of curriculum, and items 6, 126, 969, 980, 983, 990, 994, 998, 1015, 1031-1035, 1060, 1102, 1123, 1137, 1139, 1208, 1215, 1226, 1389, 1436, 1468, 1794, 1811, 2004-2005, 2024, 2031, 2045, 2047, 2085, 2102-2103, 2106, 2181, 2207-2208, 2215, 2219-2220, 2229, 2233, 2347.

EXAMINATIONS


Three tests were given to classes in freshmen English in Childress, Tex., high school. Findings: No striking differences were shown in the reliabilities of the three forms, yet the results warrant the conclusion that the highest degree of reliability is given by the equal length blanks; the next highest by the dotted blanks (one dot for each letter of the missing word); and the lowest reliability on the three forms is given by the blanks varying in length according to length of missing words.


Six hundred and twenty-two pupils, representing grades four to eight were studied. Findings: The examination system has a much greater effect on achievement than does the exemption system; required examinations have the greatest effect on achievement in the upper quartile, and the least effect in the lower quartile. The effect of examinations on achievement in the middle group is considerable, and is greater for the upper half of the group than for the lower half.


One hundred freshmen, 65 sophomores, 50 juniors, and 40 seniors in high-school English were studied. Findings: In a true-false examination, negative statements were more difficult than positive statements; about two-thirds of the students found the negative statements more difficult, while one-third found positive statements more difficult. Sex is not an important element in the responses of students to a true-false examination.


Findings: Objective examinations are preferable as necessary means for measuring school progress of pupils and for diagnosis of pupils and teachers and products and methods of teaching.


Presents the results of the Indiana achievement tests in eight subjects given to 274 pupils of the eighth grade in Clay county, Ind., in 1927. Findings: The reliability of each of the tests was significant (ranged from 0.81 to 0.82). The reliabilities of the American history, Indiana history, geography, language, and reading tests were high. The reliability of the civics and physiology test could probably be increased by increasing the number of exercises.


True-false, completion, and multiple choice examinations were given to 378 pupils. Findings: True-false examinations are best suited to the content of plane geometry. True-false and multiple choice tests are very nearly equal in value as measures of achievement in plane geometry. True-false and multiple choice examinations are more reliable measures in the content of plane geometry than completion examinations.


The study included questions classified as subjective and objective, recall, and various types of thought questions. Findings: Few objective questions used, recall overemphasized, prevailing practice not in harmony with type of work recommended by authorities.


A study of 182 fully accredited four-year high schools, enrolling about 122,000 pupils and 6,288 teachers. Findings: 180 schools conduct final examinations; 22 do not.


Findings: Reliability was slightly in favor of essay type.


A study of 110 freshmen in education at Trinity college, Waxahachie, Tex. Findings: New type tests were more reliable than the essay type, and also showed higher correlation with intelligence quotients. The multiple-choice ranked highest for first-year college students of education; the completion, second; the true-false, third; and the essay, fourth. New type tests were better fitted for the upper 50 percentile, but ranked about the same as the essay for the lower 50 percentile. The essay test has its values and should not be discarded.


An investigation of state examinations in Minnesota public schools. Findings: More use should be made of objective tests as time savers. Greater care is suggested in preparing and grading examinations.


See also Items 111, 483, 721, 1209, 1362, 1365, 1972, 2228.
   This study is based upon 2,000 students of the Joliet, Ill., township high school, 300 of whom are employed. Findings: Employment outside of school hours under normal and average conditions does not affect school grades. Extremely long hours or exceptionally heavy work will, however, act to lower grades. Extracurricular activities (clubs, athletics, band, etc.) are very decidedly interfered with even by very easy and short-hour positions.


1652. **Bowman, B. P.** Extracurricular activities in rural high schools, 1928. Kansas state agricultural college, Manhattan. 75 p. ms.
   A study of methods of control, financing and supervision of extracurricular activities in 72 rural high schools in Kansas.

   Questionnaires were sent to a representative group of superintendents in whose schools Hi-Y clubs had been organized and to a representative group of Hi-Y club advisers; an investigation was made of the records, reports and publications found in the office of the state Y. M. C. A. secretary; and the contents of two volumes of the Hi-Y news bulletin were studied. Findings: The Hi-Y clubs and the individual members composing the clubs engage in many activities that contribute definitely to the welfare of the school and of the boys who are members of the clubs; the activities of the Hi-Y comply with the underlying principles set up as criteria for a legitimate extracurricular activity; the Hi-Y club conducted in the high schools of Mississippi has definite value as an extracurricular activity and is justifiable on this basis.

   A study of the character, control, and administration of extraclass activities in Kentucky based upon data from 335 high schools.

   Findings: There is no agreement in the program of nonathletic extracurricular activities. The needs of the college and students disagree and show a lack of understanding in the development of the college social life. Ten constructive suggestions are offered.

   A study of principles, current procedures and practice in organizing the students of the various schools of the county for participation in county school affairs. Includes several typical constitutions for councils with general discussion of participation.

   A study of the 4-H club activities of Ohio as evaluated by four different groups of persons interested in such activities in the state.

   A study of 72 schools with enrollments from 60 to 2,000 pupils. Includes subscription campaigns, advertising, special methods of assessments—all expenses analyzed.

1659. **Eberhardt, Fannie.** The extraclass education of intermediate grade children. 1928. University of Chicago, Chicago, Ill. 120 p. ms.
   An investigation concerning the out-of-school activities of intermediate grade children during a week of spring vacation. Conclusions: School life should impel children to high-grade activities outside of school.

A questionnaire study of 57 high schools, a review of literature on school assemblies, and examples of assembly programs. Findings: (1) The assembly is the principal's period; (2) assemblies should be scheduled at least weekly and be at least a weekly full standard period in length; (3) assembly programs should accord with adolescent psychology; (4) assembly programs are best put on by clubs and organizations; and (5) care should be taken to make the programs predominantly interesting and recreational rather than too much of the instructive type.


A study of the organization, administration, supervision and obstacles to realization of values.


Reflective thinking as criteria for judging county contests in Ohio by readings and questionnaires. Conclusions: Purpose, administration, and outcomes of contests violate in many respects the criteria of reflective thinking.


Covers one year of extracurricular activities in grades 9-10-11-12. Findings: (1) Desirable; (2) must be handled properly; (3) activities must be definitely scheduled at the school building; (4) number of clubs should be restricted to the number of available teachers; (5) activities should contribute to mental, physical, and moral welfare of pupils; (6) a record of participation should be kept to prevent over-participation; (7) there is an increase of participation as students progress through school; (8) when participation is not overdone there is no evil effect upon scholarship; and (9) there must be definite objectives and students as well as teacher must have these objectives definitely in mind.


This thesis points out that extracurricular activities are founded on a sound educational basis, that the English activities are an integral part of the English department, and that they correlate with the English work in all cases.


A study of 854 students who participated in extracurricular activities at the University of Colorado, 1927-28. Findings: Those taking part in extracurricular activities ranked higher in scholarship than those not taking part; the women in activities had a much higher scholastic standing than the men in activities; students ranked highest who were engaged in activities similar to academic work; for women the number of activities had little effect on scholarship; for men, participating in three or more activities had a deleterious effect on scholarship; for both men and women those who participated in two activities ranked higher scholastically than those who participated in more or fewer activities.


A study of 126 students, measuring relationship between extracurricular activities and success in college by computing correlation between activities and academic marks. Findings: Extracurricular activities are not a factor in lowering the scholarship of college students.
RESEARCH STUDIES IN EDUCATION


Questionnaires were sent to 1,000 alumni. Four hundred and eight questionnaires were returned. 68.6 per cent of those answering considered the extracurricular activities of equal or more value than regular classroom work requiring the same amount of time. According to the replies received, the chief value of extracurricular activities seemed to lie in the fact that they offered direct face-to-face contacts with people instead of the formal contacts of the classroom and that they helped to develop enduring friendship and brought about a sense of loyalty to their fellowmen.


This study deals with 4,000 men students registered in the University of California at Los Angeles, during the two years of 1925-26 and 1926-27. Findings: Men students engaged in extracurricular activities made slightly higher grades, on the average, than men not engaged in extracurricular activities. All men engaged in competitive athletics made the same average grade as was made by men not engaged in extracurricular activities. Fraternity men made a slightly lower average than that of nonfraternity men, but the difference was too slight to be significant; etc.


The investigation was conducted in six high schools having an enrollment of 400 to 4,500. The study included 200 successful and 198 failing pupils.


A report of the activities in 132 high schools of North Dakota, showing frequency of various activities, financial support and suggestions for improvement.


Statistical study of number, kind, cost, how handled, amount of time devoted to, and estimated value of extracurricular activities in the high schools of Oklahoma.


A tabulated statement of data received from 375 replies to a questionnaire on state contests, giving the reasons mentioned for and against state contests and quoting a few typical statements of reasons given by superintendents and principals for their attitudes on the question.

See also under Athletics, School journalism, and Item 937.

FAILURES OF PUPILS


The purpose of this study was to survey among the articles on pupil failure those which had been based on statistics. Findings: The chief causes of school failure may be grouped under these headings: Emotional, mental, instructional, physical, and sociological.
1681. **Dawson, Charles D.** Special report on city failures of pupils, exclusive of special rooms, for the past 10 years. Grand Rapids, Mich., Public schools, 1928. 4 p. ms.

Findings: The greatest per cent of failures was in the 1-1 grade. There were slightly more failures in June than in January. The average failure for January was approximately 23.7 per cent and for June, 25.8 per cent.

1682. **Doylestown, Pa., High school.** Failures in high school. 1927. 8 p.

Reports on method used in the study, extent and nature of failures, causes of failures as given by teachers, causes of failures as stated by pupils, and final summary.


The measure of the persistency of the extraclassroom interests of Summit high school students after these students have completed secondary school life.

*See also Items 366, 573, 576, 629-630, 666, 728, 815, 1061, 1266, 1350.*

**MARKS AND MARKING**

1687. **Benefiel, James Harvey.** A study of the respects in which pupils whose school marks are below average vary from those whose school marks are average. Master's thesis, 1927. University of Chicago, Chicago, Ill.

1688. **Bennett, Raymond D.** Policies of state universities in reporting students' marks. Educational research bulletin (Ohio state university), 7: 155-58, April 18, 1928.

This study contains a table showing the procedure followed in 25 state universities in reporting marks.


A statistical study made semiannually for the past five years in an effort to induce thoughtful grading. Comparisons show that education of teachers brings marks assigned throughout system close to norm.

1690. **Branson, Ernest P.** Distribution of high-school marks. Long Beach, Calif., Department of research, City schools, 1928. 21 p. ms.

Tabulation and discussion of junior and senior high and junior college marks by departments and schools. Discusses articulation of sex differences. Recommends better articulation, a flexible curve, objective tests, better midsemester marks, better definition of meaning of marks.

1691. ——— Report of elementary marks. Long Beach, Calif., Department of research, City schools [1928] 8 p. ms.

Percentage distribution and average marks by grade, subjects, and platoon and nonplatoon elementary schools. Findings: Spelling was marked highest, arithmetical reasoning lowest. Girls receive higher marks than boys. Recommends a study of marking theory, regulation of home study in departmentalized and platoon schools, changes in spelling course of study, a conscious effort to motivate study for boys, and discusses the lack of articulation between segments of the system.


An analysis of the distribution of teachers' marks in all white schools of Volusia county for the year 1926-27, grades 2 to 12. Conclusions: Heterogeneous practice of distribution.


Gives a summary of marks by subjects for all pupils completing their first semester in junior high school.


A study of marks and marking systems. Gives a suggested system based on per cents of pupils receiving A's, B's, C's, etc., for the past five years in a given school expressed in standard deviation units.


A survey of marks given over a period of five years by various teachers and in various subjects. The author emphasizes the outstanding lack of uniformity in standards of marking.


Correlations among study-time in four subjects, intelligence, and marks in four subjects for the first year of high school. Findings: (1) L. Q. yields low correlations, ranging from -0.23 to 0.39 with one term mark in school subjects.

See also Items 114, 257, 302, 452, 558, 867, 1076, 1579, 1586, 1601, 1640, 1849, 1866, 2110.

RETARDATION AND ELIMINATION


In the 1925 eighth-grade class of Carroll county, Tenn., there were 206 pupils certificated for high school. From this group there were 21 who did not enter high school. The scope of this study is limited to this group. Findings: Eliminations are over three times as frequent among boys as among girls; the older the student is at the time of finishing grammar school, the greater is the probability of that pupil being eliminated; economic conditions were responsible for only 9.52 per cent of the eliminations; heads of the family were responsible for 42.85 per cent of the elimination; etc.


This study includes the elementary, junior, and senior high schools in Philadelphia.


An age-grade survey of 8,114 pupils of grades 1 to 12. Twelve tables presented on (1) enrollments by grades, schools, and ages; (2) acceleration and retardation by grades and schools. Reports show that the age-grade distribution throughout the school system is very satisfactory. The general situation in this regard has not changed greatly during the year.


The study gives the age-grade progress situation from the kindergarten through the twelfth grade.


A study of the mental ability, will temperament, characteristics, and school grades of 200 pupils of grades 10 and 11. Findings: Very little correlation between mental ability and school marks, or will-temperament scores.

A summary of practical information on observing, testing, and remediying cases of normal children educationally retarded. Primarily for use of less experienced teachers. Findings: Many such cases are not adequately cared for, through lack of initiative on the part of the teacher.


A series of studies giving personal and school histories, diagnosis, remedy, and results. All are cases of educational retardation in given subject. Study contains some general material pertinent to cases studied. Findings: Extreme retardation among normal children. Certain effective treatment noted.


This study considers the age-grade distribution as found in the kindergarten and 12 years of elementary and high-school work in cities and towns. Findings: 26.1 per cent of the boys were underage; 61.9 per cent were normal; and 12 per cent were overage. Among the girls 30.3 per cent were underage; 61 per cent were normal; and 8.7 per cent were overage. For both boys and girls the percentages were 27.2 underage; 62 per cent normal; and 10.3 per cent overage. The percentage of underage girls is greater than in the case of boys, and the percentage of average boys is greater than in the case of girls.


Considers several means of testing and measuring counties according to age-grade distribution.


The tests used in this investigation included the Stanford achievement primary, Form A, and the Advanced examination, Form B, the National intelligence test, Scale A, Form I, and the Pintner-Cunningham primary mental examination, Form A. Findings: The percentage of retardation was high; it was highest in the second grade and lowest in the fifth grade; the percentage of retardation was higher for boys than for girls; low intelligence was the predominating cause of retardation. Other contributing causes were physical defects, irregular attendance, shifting population, and late entry.


In this investigation, the white children of the first six elementary grades of the Pineville, Ky., city schools, were studied. Intelligence tests were given to all children; the Stanford achievement test was given to the children of grades two to six, inclusive. Of the 507 children in this study, 4 per cent were accelerated, 43 per cent were found to have made normal progress, and 50 per cent of them were retarded. The causes of retardation were found to be shifting population, poor attendance, bad health, bad home conditions, withdrawals of 0-year old children in the first grade, dullness, crowded conditions in the first grade, physical defects, laziness, late entrance, lack of a more liberal plan of promotion, and accidents. The first six named factors are those which seemed to be the greatest contributors to the retarded condition.

See also Items 89, 1054, 1059.

STUDENT SELF-GOVERNMENT


One thousand requests were sent to 46 states; 504 replies were received; 221 constitutions were received and analyzed. Findings: Great variability. Principal retains the veto power usually. Discipline and financial matters not delegated to pupils.


Extent of practice, forms of organization used and their powers, and the success of various undertakings together with report of experiment. Findings: Elaborate plans too cumbersome for immature students; most difficulties arise with use of disciplinary powers by these organizations.


A questionnaire study on student councils in 159 representative high schools. Reports information concerning organization, achievements, success, and dangers of student councils.

**SCHOOL BUILDINGS AND EQUIPMENT**


A cooperative project on the part of science teachers and supervisors to construct minimum lists of apparatus for instruction in high-school sciences.


Physiological bases; measurement of pupils, posture observations, conclusions as to design and dimensions of seats and desks for all grades, arrangement with reference to light, proper adjustment and movement, types of seating and practical points related to selection and use of seating equipment. Findings: Seats generally are too high, many are too deep in seat.


A study of precise dimensions of every seat and desk and relation to segmental proportions and posture of each occupant, also mechanical condition in detail and various general facts. All data regarding suitability, serviceability, durability, physical condition, comfort and postural effects of all types of seating and lighting conditions have been collected.


A scientific study of building needs for Teachers college based on curricula and various numbers of students.


Recommend reorganization on 6-3-3 plan, with two new junior high school buildings.


A summary of the public-school building program which has been recently completed in Denver, showing the organization for carrying out the building program, school building policies and standards, characteristics of the Denver school-building program, furnishing the buildings, etc.


A study of Mississippi's needs for a school building service and the school building service in the other states and a suggested program to meet Mississippi's needs.


Recommends the consolidation of the school districts of Aurora, placing them under one board of education. Also recommends that a research director be part of the organization.


1732. **Hull, Osman E., and Ford, Willard S.** Santa Ana school housing survey. 1928. University of Southern California, Los Angeles. Los Angeles, University of Southern California, 1928. 88 p. (University of Southern California studies, 2d series, no. 6)

A study of the growth and development of the Santa Ana city high-school district, evaluation of the present school buildings, financial status of Santa Ana with respect to the support of an educational program, etc.


A partial list of equipment as furniture, apparatus, toys, materials for handwork and the like for nursery schools, kindergartens, and primary grades.


1736. **MacNaughton, Davis Victor.** A tentative school building code for Texas. Master's thesis [1928]. University of Texas, Austin. 131 p. ms.

1737. **Matzen, John.** Codification of school supplies. 1928. University of Nebraska, Lincoln. 75 p.


A study of current literature and experiments in order to develop a safe technique for seating children. Current types of seats and desks are criticized and compared. It was found that percentage distribution tables are not reliable for use in seating classrooms, and that they are of real help only when purchasing a large number of desks.

1741. Morrison, J. Cayce. Mamaroneck school building survey. 1926-27. New York state education department, Albany. Mamaroneck, N. Y., Board of education, 1927. 32 p. An analysis of the problems confronting the board of education, the historical background of the present school system, the present school plant, playgrounds, rapid growth of the school district, future growth, capacity of the present school plant, school organization, proposed extensions, ability to pay for increased school facilities; conclusions and recommendations.

1742. Murray, Roscoe Lee. Improvement of janitorial service through instruction and supervision. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. A score card of 21 items was set up for this study. The results of the experiment showed: (1) An improvement was made in each item except one and that ranked high at the first scoring; (2) the improvement was uniform in practically every item; and (3) the janitorial service improved when the janitors were instructed in their duties and supervised in their work.

1743. Pugh, Jesse J. Efficiency in the use of a school building. Master's thesis, 1928. Ohio state university, Columbus. 100 p. ms. This study covers a number of features in the utilization of a certain school building. Findings: The school building studied was found to be operating at an efficiency of 37 per cent, to have a per pupil cost of $460, and to be able to meet the needs of the community until the year 1940. In comparison with similar studies the building as a whole, and by separate rooms, was found to have a low efficiency of utilization.

1744. Bader, Glen E. Some factors affecting the efficient use of high-school buildings of Columbus, Ohio. Master's thesis, 1928. Ohio state university, Columbus. 130 p. ms. Findings: There were great variations in the amount of space per pupil in the different subjects.

1745. Sauer, Charles A. School office equipment and management. Master's thesis, 1928. Ohio state university, Columbus. 137 p. ms. An attempt to summarize school standards as to office equipment and management in such a way as to serve as a handbook for the superintendent or principal. Deals with administrative office suite, general clerical office, private offices, the one-room office in smaller schools, auxiliary administrative rooms, systems of intercommunication, and filing systems.

1746. Smith, Henry Lester, and Chamberlain, Leo Martin. A bibliography of school buildings, grounds, and equipment. 1928. Indiana university, Bloomington. Bloomington, Ind., Bureau of cooperative research, 1928. 326 p. (Bulletin of the School of education, Indiana university, vol. IV, no. 3, January 1928) Books or portions of books devoted to the subject of school buildings, grounds, and equipment, have, when available, been included regardless of the date of publication. Bulletins and periodical references have been limited to the period beginning January 1, 1906, and closing September 1, 1927. This is a classified bibliography of 2,263 titles, to which an index is appended.

1747. Smith, Homer J. Teaching aids for the asking. 1928. University of Minnesota, Minneapolis. University of Minnesota press, 1928. 60 p. A list of more than 500 informational booklets, job sheets, wall charts, etc., offered free or at small cost by manufacturing and sales organizations, selected on basis of educational value, classified and annotated. Most useful to teachers of science, geography, and industrial arts.


This study attempts to bring together and present in a clear, thorough, and concise manner criteria to determine standards for plumbing equipment in terms of the needs of the modern school. Presents a list of recommended standards representing the best standards yet worked out in conformity with the criteria. Only those standards are suggested for which there is some evidence to support them either from experimentation or from experience.


An experiment in beautifying the school grounds of Belvin union school. Fifty foundation shrubs, 1,000 hedge plants, 30 native plants, and 20 trees were set out. Rye was sown in front of the building. The attractive school grounds have resulted in permeating the entire community. Interior of school is attractive and teachers and pupils are more enthusiastic over school work.


See also Items 112, 1103, 1124, 1130, 1241, 2099.

HEALTH EDUCATION AND SUPERVISION


The purpose of this study was to improve the health habits of children.

1758. Bost, Mrs. L. E., and others. Willie’s cold. An original play showing how to prevent the common cold. Salisbury, N. C., Rowan county public schools, 1928.

Results: Better attendance; happy, well children; children interested in health of entire community.


The aim of this study was to improve lunches of children and induce them to practice good habits during lunch period. Results: 75 per cent of children are bringing milk and fresh or canned fruit. Morale of school is greatly improved.


More than 2,000 antero-posterior posture silhouettes of first-year high-school boys were collected, from which a random sampling of 100 silhouettes was chosen. The silhouettes in the random sampling were arranged in order of merit by 100 competent judges of posture. The scale is composed of 13 silhouettes arranged in progressive steps of general posture quality.


Physical education programs of high schools of North Dakota.

The development of a scale for measuring dental age in school children and the relation of dental age to other phases of growth. Findings: Dental development can be measured. The relation of dentition to other phases of growth is positive but not high.


The results of interviews with more than 1,600 teachers, from kindergarten teachers to college presidents, on phases of health education. Findings: Teachers generally have no adequate knowledge of health or methods of teaching health.


Data regarding present practices were obtained from a questionnaire sent to school administrators through the offices of the superintendents of education of the various counties of South Carolina. Findings: The public schools of the state are not making adequate provisions for safeguarding and developing the health of the children. An analysis of present practices clearly shows that there is a definite need for improvement regarding medical care, health instruction, play and physical training, sanitary conditions, and nutrition.


A study of seasonal variation in growth in height and weight of 112 children from the Peabody demonstration school, Nashville, Tenn., and 211 children of the Harriman city school, Harriman, Tenn. Findings: A seasonal variation existed in the growth of the children studied. The greater gains in weight occurred in the fall and winter months—September, October, November, December, January, and February. The smaller gains were made in the spring months—March, April, and May. The gain in height was practically regular throughout the year.


One of the purposes of this study is to organize a few vitally important health topics into a rich, full, concrete life unit with the belief and hope that it will be more teachable, interesting, and fascinating to children than the abstractions and fragmentary subject matter usually found in most textbooks. The subject matter presented is designed for instructional purposes in the junior high school.


A project worked out in three general science classes in a county high school. There were 85 students in the three classes, one-third more boys than girls. The aims in teaching this project were as follows: (1) To determine whether it is possible to interest children in a practical health program; (2) to see whether it is possible to replace poor health habits with good ones; and (3) to build up desirable habits and attitudes toward food, its care and use.


Findings: Health work is more fully organized in the larger schools where special health workers are employed; health work is still greatly neglected in the high schools of Minnesota; in the counties where county nurses are employed, more health work is done in the smaller high schools than in counties where there is no county nurse; the Minnesota public health association and similar organizations are doing a great deal in the smaller high schools which can not afford a nurse; health education is being carried on through sciences.


A study of a group of 343 elementary school children in Joliet, Ill. Findings: (1) A consistent tendency for children in better physical condition to have higher rates in intelligence and educational achievements; (2) a comparison of the final amount of gain of the final I. Q. over the initial I. Q. showed that the larger gains were consistently found with the better physical condition; (3) no apparent effect of the condition of tonsils was noted on intelligence but children who showed improvement on condition of tonsils had the highest rate in school improvement; (4) there was a definite superiority in the intelligence of noncoffee drinkers over coffee drinkers as evidenced by statistical reliability.


A study of the relationship of motor ability to age, weight, height, grip, and lung capacity.


The results of visual tests given to 1,600 school children of Washington, D. C., show that: (1) The simple Snellen test reveals but a small percentage of the actual number of refractive errors in children; (2) the myopic eye is nearly always discovered with the use of simple Snellen test; (3) the hyperopic eye is rarely found with the simple Snellen test, and then only the very severe types are revealed; (4) the astigmatic eye may be found with the simple Snellen test; (5) the frequency of myopia tends to increase between the seventh and twelfth years; etc.


Environmental factors in the classroom and home of each child were studied, as well as the results of the physical examinations and a careful survey of his diet. The only direct correlations obtained were between absences due to respiratory disease and the presence of abnormal conditions in the upper respiratory tract and between absences due to respiratory disease and the amount of carbohydrate in the daily diet of the child.


Arranged by Nellie W. Gordon and Paul A. Thomas.


The results of this test show the degree to which pupils retain, for some months after the completion of the 8B term, the health knowledge taught in the grade. The general city median for all pupils tested is 25.9 questions correct, indicating that half of the pupils tested answered correctly more than 65 per cent of the questions of the test.


A series of tests covering all grades from kindergarten through high school.


1802. Ruger, Mabel E. Problem of health supervision in boys' club study of local area in New York city. [1928] New York university, New York, N. Y. Health supervision and protection activities carried on by schools in area, and by hospitals, health centers, settlements, and other social institutions in the local area.


The data for this study were gathered from one school of the city of Manitowoc, Wis., during the year 1926-27. Four hundred and four children of the second, third, fourth, fifth, sixth, seventh, and eighth grades were studied. The findings lead the investigator to doubt the assertion of other investigators that ordinary physical handicaps in the present sense are a retarding influence intellectually and scholastically.

It seems that the influence of defects upon academic performance and intelligence has been somewhat exaggerated in the past.

See also Items 797, 959, 1869, 1870, 2244.

MENTAL HYGIENE


An examination of the general theoretical position of mental hygiene. Conclusion: Mental hygiene, both generally and specially, is in need of a guiding theory.

PHYSICAL TRAINING

GENERAL


This study gives teachers' opinions of the value in the teaching field of courses of study usually included in the curriculum of normal schools of physical education. Findings: The primary, positive value of the
activity courses, principles and methods of teaching these; the value of the foundation sciences; the need of more general education; the doubtful value of such courses as anthropometry and pathology; the need of a three-and four-year curriculum in physical education and health.


The study involved the personal inspection of 31 schools, and written reports of four schools. Survey included representative schools of superior, medium, and inferior departments of physical education; about half the schools had moderately adequate provisions in most respects. The scope of the survey was too limited to extend the conclusions to other schools.


Data accumulated in the Laboratory schools of the University of Chicago during a period of seven years were used in this study. Conclusions: (1) Anatomical development, as expressed by the ossification ratio, does not show any significant relationship to mental development as expressed either by the composite mental scores or by the I. Q.; (2) the relationship between general physical robustness and mental development seems to be no more significant than the relationship between anatomical development and mental development; etc.


This study attempts to collect and organize the material found in books on physical education listed in the Encyclopaedia Britannica. Nine of these books have been chosen and studied.


This study is limited to terminology dealing with department names, course names, and classification of course names. It is not to include nomenclature used in gymnasiums, to facilitate the movement and teaching of classes. The recommendations suggest that the terms "physical education" and "health education" should be used for their respective departments. One term should never include the other. If it is necessary to coordinate the two departments, the term "department of health and physical education" should be employed. The term "physical training" is not to be used as a name for a department, but under "physical education" it contains what are known as laboratory courses.


The purpose of this physical training manual is to give a new stimulus and serve as a practical guide to the teachers of physical education in the state of Tennessee.


Questionnaires were sent to 237 directors of physical education in colleges. Replies reveal many facts about the profession concerning the duties of directors of physical education, salaries, and vocational progress, academic status and training of directors, personal and social relationships, etc. It was found that 96.2 per cent of present day directors hold a baccalaureate degree.


Shows the personnel, organization, educational programs and methods used in the 15 accredited high schools for girls in the District of Columbia.


A study of the origin and history of dancing, which, it is hoped, will lead to a more intelligent presentation of the dance in physical education.

1831. **Weidemann, Charles C.** Characteristics and duties of high-school directors of physical education and athletics. [1928] University of Nebraska, Lincoln. 30 p.

1832. —— Present status of physical education in Nebraska high schools. [1928] University of Nebraska, Lincoln. 30 p.

1833. —— Why physical directors fail and why they succeed. [1928] University of Nebraska, Lincoln. 10 p.

1834. **Whitney, F. L.** Assigning grades to individual students of large physical education exercise classes. 1927. Colorado state teachers college, Greeley. 5 p. ms.


See also Items 1781, 1794, 1869, 2271.

**ATHLETICS**


Findings: Selecting as a criterion of general athletic ability a battery of four tests measuring fundamental bodily skills; the Sargent test (best jump) offers a possibility of predicting general athletic ability.

Data were gathered over a five-year period, 1922-1927. Athletes make as high scholastic averages when competing in sports as when not competing. Scholastic standing of athletes is slightly lower than non-athletic men, but the difference is negligible.

The literature studied ranges from the Iliad and Odyssey of Homer to the books of the present day. Three hundred and seventy-two books were examined, 29 of which contained material for this study. Findings: This study shows a gradual development of primitive ethics and chivalry into sportsmanship and that there is a relationship between physical education and English.


Press association and association development of football in Texas. Shows the influence of football on the players and the institutions.

1843. Freyd, Max, and Bingham, W. V. Athletics and scholarship. 1928. Personnel research federation, New York, N. Y.
A study of method, to determine best ways of reaching reliable conclusions as to effects of athletic participation on scholarship. Data from Columbia college, Class of 1925.


Weight measurements show that all but two members gained an average of 5.97 pounds between the time of the first game and last game.

The chief aim of this study was to determine the aims, purposes, and ideals of the several state athletic associations, the requirements for membership, the general organization and powers of the boards of control, and several eligible regulations. Findings: Only five eligibility rules were found to be common to the 46 states having state organizations. It is evident from the study that there is a need of more uniformity, because of the many interstate and national tournaments. Girls' athletics were found to be very poorly organized.


Findings: The League's effects have been good as far as its influence has extended, but since only a little more than 33 per cent of the students actually take part in the contests it has failed to reach its objective. The great defect of the League is its failure to enlist the majority of the high-school students.

The study includes the development of organized athletics in American high schools, the history of bodies exercising control of athletics, specific problems involved in interscholastic relations, specific problems of control within the schools. Findings: Without organized interscholastic control of athletics, certain objectionable and unsportsmanlike practices appear; state interscholastic organizations should be democratic but power strongly centralized; gate fees not sound basis of financing high-school athletics.

See also Items 1822, 1831, 2357.

PLAY AND RECREATION


The study included the size of the playground and its surface; its apparatus, equipment and supplies; enclosed play space; leadership; times for recreational activity; and finally recreational reading. Actual status of schools is presented and conclusions reached regarding the merit of the facilities of the respective schools by applying recognized objective standards.


The value of play apparatus in developing motor control in preschool children was studied by means of observations of the spontaneous use of five types of play apparatus during a 30-minute play period each morning for 30 mornings and by means of four objective tests of motor control given twice with an interval of two months.


This investigation was undertaken to determine the choices and uses of play materials by 4-year-old children when as little direction and stimulation toward activity as possible were given aside from that provided by the materials. The number of times the material was chosen in relation to other materials, the time spent, the day to day persistence of the child’s interest, and the social value of the material were determined.


Material for this study was gained from books of travel, accounts by missionaries, and reports from those people who have lived in the various countries and made special studies of the play of the people. The chapters are arranged according to countries. The games listed range from the simplest of child plays to athletic sports of adults.


See also Items 214, 967.

SOCIAL ASPECTS OF EDUCATION


- Report I. Suggested outlines for a nondepartmental synthetic course of exercises for undergraduates.
- Report II. Departmental syllabi—A. Biology and zoology; B. Physiology and hygiene; C. Psychology; D. Sociology and social psychology; E. Physical education; F. Home economics; G. Education and educational psychology.


- The aim of the study was to supply needed healthful program for the home. Results: Improved home and school habits; better understanding and cooperation between home and school.


1872. Branson, Ernest P., and Stoker, Dora D. Report of test on pleasure in the home and the needs of the body—Junior high school general science—8B. Long Beach, Calif., Department of research, City schools, 1928. 7 p. ms.

- In this test the multiple choice questions were missed on the average by 38.7 per cent of the pupils; the true-false questions were missed on the average by 41.4 per cent of the pupils.


- A study of activities, objectives, and organization of 787 local associations in nine states. Findings: More definite objectives need to be set up; programs and activities should be based upon local education needs; associations should analyze their activities in order to redirect them more intelligently.


- Findings: Sex teaching must be done by teachers; sex must be studied just as other courses such as mathematics and English.
1876. Case, Charles. A study showing the relation between the educational training of parents and the intelligence and school rating of their children. 1928. Ohio state university, Columbus. 50 p. ms.

The study covered 204 subjects in nine and ten grades—parental education ranging from 5 to 17 years. Subjects ranged according to I. Q. from 60 to 123. Findings: The better trained parents have more intelligent children who make better grades in school, have better attitude toward school work and have greater desire for higher education than children of parents with less educational training.


The educational, religious, and social aspects of scouting are considered.


The purpose of this study was to learn the topics of interest that may be made the subject of educational publicity. The study demonstrated the application of an interest measuring technique used in commercial publicity research to the field of educational publicity.


The evidence indicates beyond question that so far as intelligence can be measured by our intelligence tests it is affected to an important degree by those intellectual and social factors which are bound up with the home.


Given the results of three years of study by means of consecutive educational, physical, and intellectual measurements of school children with the hope of finding a line on the environmental influences in these matters.


The purpose of this study was to study, in American educators, certain social beliefs and attitudes as integrated in the aspect of conservatism, liberalism, radicalism; and to develop a conveniently practical scale for the measurement of this aspect of social beliefs and attitudes in their relation to some of the more urgent phases of our unsolved problems.


The aim of this study was to ascertain the relationship between sociability and the social, emotional, and intellectual characteristics of elementary school children. The criterion of sociability is a composite score of teachers’ ratings and pupils’ voting invitations. The teachers were asked to rate their pupils
on the ability to get along with others on a scale of five steps; the pupils were instructed to vote the most popular boys and girls of their own classes. They were also instructed to write the names of four of their classmates whom they would like to invite to a party if they had the opportunity.


Describes types of mothers and reaction to retardation in their children. Findings: Cooperation at home great factor in determining progress.


A study of community interests of all school patrons of Lorain county, Ohio. Conclusion: There should be fewer and larger high schools in the county.


Contains a statement as to the need for school publicity, organized plans for county-wide program of school publicity, agencies for the promotion of school publicity, and a selected bibliography.


An addition to the case-conference manual by Paul McK. Reading, of Toledo, Ohio, under the direction of R. D. Allen.


That differences among homes exist is evident. That these differences play a large rôle in the development of the habits and ideals, the character and personality of the child is also evident. This study is a description of the procedure involved in constructing an instrument for measuring certain aspects of home background.


Findings: The relations between occupational groups and intelligence quotients is discovered to be of particular significance. In the lowest group (unskilled labor) none of the children examined had an intelligence quotient above 110; in the highest group three-fifths of the children were discovered to be above the norm established for the average; while lower correlations are established between occupational groups and physical development, the advantage of the child born of parents in the higher occupational group is significant.


An attempt to interpret the meaning of sex education in the high school in terms of the pragmatic philosophy. Findings: There is a place for sex education in the high school not only in connection with appropriate courses of study where it has a logical place but in pupil-guidance programs and in extracurricular activities. It is not wise to provide for sex education as a separate course but rather it should be made an integral part of a broad school program.


A study of 73 boys classified by the general criteria of social adjustment and scored by the behavior score card. The results indicate that measurement of social behavior is possible by means of the behavior score card technique.

See also Items 1624, 2074, 2255, 2270.

CHILD WELFARE


1907. —— and Tuttle, Harvey N. School or work in Indiana? New York, National child labor committee, 1927. 30 p.

The purpose of this study was to measure within certain definite limitations the efficiency of the compulsory school attendance law and the child labor law in Indiana. Findings: Nearly 97 per cent of the 14 and 15 year old children were in school, and of the remainder, the majority were out for reasons that would make school attendance impossible. Of the 16 and 17 year olds, two-thirds were in school, etc.

See also Item 2197.

RURAL EDUCATION


A study of the early environment, training, age, experience, work, etc., of 150 of the 265 Michigan superintendents of schools with six or more teachers and 500 or less school census population. Evaluates training in the light of recent practices, standards, legal requirements, and present day literature.

1914. Black, Percy Harold. How can the daily program of the rural school be modified in such a way as to provide better opportunities for teaching? Master's thesis, 1928. University of Vermont, Burlington. 61 p. ms.

An experiment conducted during the school year 1927-28 in nine rural schools in Vermont to determine the effect of using a modified daily program. Conclusions: (1) The attainment of pupils under the modified program (alternating some classes and giving double assignments) was equal to or better than that under the traditional program; (2) the planning of relaxation and study periods is of great importance under the modified program; (3) survey periods giving the teacher an opportunity to know what pupils are doing in their work when they are not having definite recitations and making assignments are of great importance also.


A study of the county superintendents of Florida compared with other states. It is recommended that state law require a minimum of training, this minimum being the bachelor's degree, with 18 semester hours in education and that the county superintendents be selected by a county board of education.

1916. Bost, Mrs. L. R. "Rowan": our home county. Salisbury, N. C., Rowan county public schools, 1928.

A study of the Zeb elementary school in order to trace the growth and development of Rowan county up to today.


Organization, teaching, supervision, and administration of education in the counties of Virginia.

1919. Carpenter, James M. Circumstances attending 1,135 pupils enrolled in one-room rural schools in eastern Kansas and to what extent these circumstances are related to the normal age-grade, the underage-grade and the overage-grade of the pupils. Master's thesis, 1927. University of Kansas, Lawrence.


The county board of education of the southern states with respect to membership, length of term, territory of representation, method of selection, organization, compensation, powers, and duties. The tendency in regard to same is determined by noting the changes in legislation for the period between 1915 and 1926.


The progress made in rural white education in Mississippi since 1908, as found from annual reports of state superintendents and bulletins of the state department of education.


Historical review of work in this field as a development since the passage of the Educational act of 1924.


The community surveyed and its progress during five years measured. A study of the program and work of the high school showing its influence upon this progress.


An analysis of attendance, promotion, age-grade distribution, scholarship of teachers, and academic achievement in the rural schools of Guilford county, N. C.

Selected towns (population 300 to 2,500) and systems are compared by such criteria as tenure of service of teachers, expenditure per pupil enrolled, value of buildings and grounds, the percentage of total enrollment in high schools, etc. Conclusions: In towns and school districts of the sizes mentioned, an elected family independent school board functions to better advantage, on the whole, than a school board that is appointed by, and dependent on, the town board of aldermen.


Certain counties with the compulsory attendance law were compared with like counties without the compulsory attendance law, as to percentage of census enumeration in average daily attendance during the period from 1913 to 1927, covering seven years before and seven years after the law went into effect. It was found that the law did not influence attendance as greatly as other factors not included in the study.


A study of the results of a questionnaire shows that the time distribution of the average county superintendent does not compare favorably with the consensus of expert opinion on office, supervisory, general professional activities, but does in civic activities.


If the results of this study in seven counties of the state are representative of the state the following estimates may be made: 74 pupils out of every 100 examined in rural Pennsylvania are admitted to high school, and 26 are rejected; the average age of those admitted is from 13 years, 9 months, to 14 years at the time of the eighth grade or high school entrance examination; teachers' averages as a basis for admission have a tendency to be from 10 to 15 per cent higher than examination averages; etc.


A check list of 112 items, which seemed to be unique to the teacher of the one-teacher school, was sent to 1,100 teachers in one-teacher schools and 400 grade teachers in cities. At least 80 of the 112 items in the check list are performed by half or more of the teachers in the one-teacher school and by few or none of the grade teachers.


Two equivalent groups of classes, 52 pairs of pupils, measured for improvement during one year's supervision of the experimental group. Stanford achievement and eighth grade state examinations were used as measures. Findings: Slight superiority was shown for supervised group. Time and numbers were too limited for conclusive results.


1940. Nebraska. Department of public instruction, Lincoln. Requirements for standardization of rural schools. 1927. 64 p. (Supplementary normal training bulletin, no. 2)


Contains the official rating card for Iowa standard schools and detailed specifications for rating schools.


Of the 22 communities reported in the survey to November 1927, 19 are clearly in favor of graded schools.


The influence of age, sex, distance from school, wealth of parents on high-school attendance.


CONSOLIDATION AND TRANSPORTATION


The author presents a technique for measuring transportation needs. The technique is used now in New Jersey but may be applied in any state. Only the following measures are required: (1) Average daily attendance, (2) number of pupils transported to school, (3) area of school unit, and (4) number of school buildings of the unit.


RESEARCH STUDIES IN EDUCATION


Outlines factors which are setting up a trend toward larger district units; also points out the main factors in opposition to the larger district unit; contains means and methods of encouraging consolidation found in other states.


This investigation presents a comparative study of the educational achievement of pupils of one-room and consolidated schools, when intelligence is taken into account. The educational achievement of the pupils was measured by the Stanford achievement test; intelligence was measured by the Stanford revision of the Binet-Simon test of intelligence. The records of 468 pupils from the second to the eighth grades in one-room and two consolidated schools in Iowa were studied.


The first part of this study is devoted to the development of a new technique for the measurement of transportation need and the administering of state aid for transportation; the second part is concerned with the development of a set-up for efficient local administration of school transportation.


A study of costs of transporting children to schools under different methods of administration existing in Oklahoma, and comparison with other states. Findings: District owned transportation systems are more economical and as efficient as transportation by contract.


A study of all consolidated schools in Iowa to determine important cost factors involved in their establishment and maintenance which might prove a basis of recommendations relating to consolidated school financing. Findings: (1) There should be provision for the retirement of bonds serially and in accordance with a schedule adopted at time of issue; (2) cost of transportation of rural children represented nearly 25 per cent of the general fund levy; (3) inequality in the cost of operating consolidated and nonconsolidated schools in Iowa is roughly represented by the cost of transportation, which amounts to approximately $36 per child, per year; and (4) state aid, if given to consolidated schools, should be in proportion to the respective amounts paid for transportation of rural children.


A recommended system of accounting together with sample forms applicable to California public school transportation problems.

See also Items 1909, 2197.

COUNTY UNIT


A study of the various units used in elementary and secondary education in all American states. A special study was made of states using the county unit method of control. Conclusions: The county unit system would be feasible and desirable for California.

A study to find out the effect of the county unit on tax rates, housing, educational offerings, etc. Findings: The county unit has done a great deal to improve the efficiency and economy of Utah's schools.


MORAL EDUCATION


The purpose of the study was to discover the amount of dishonesty manifested in the self-correction of tests and the effect of education in honesty on college students. Findings: Dishonesty was discovered in teachers, but not more than in other students. Increase of 3.7 per cent in measure of honesty due to 30 minutes of instruction in honesty.


This study seeks to answer two questions: (1) "What sort of result do educators wish their training to produce?" and (2) "What are the means by which the desired results may be produced?"


A method is indicated wherein a synthesis is effected between the lessons of the liturgy and systematic character building. Concrete applications of the Lenten liturgy to the life of the school child are presented.


The purpose of this study was to determine the actual appeal to ideals of the good, the beautiful, and the true to high-school pupils. Findings: Youth most susceptible to ideals are gripped tighter and held longer.


The purpose of this report is to submit certain principles and illustrative material of practical value in shaping and conducting a program of character education in the secondary schools of Boston.


Forty episodes were prepared, a method of using them devised, and three experiment studies based on material and plan presented. Findings: Episodes from biography used as points of departure for free discussion in seventh and eighth grades affect the answers of children on test of ethical choices.


A study by questionnaire and diary of 74 Texas schools to ascertain what is being done in the teaching of morals, and what use, if any, is made of the Bible to this end.


In this study a number of specific cases are presented. The cases reveal that: (1) A new value is placed upon securing intelligent cooperation between the school and the home; (2) the schools must often tear down certain misconceptions of conduct gained in preschool experiences and must build up definite conduct concepts, just as they develop concepts in the school subjects; (3) a child's behavior is to a great extent the result of some teacher's influence and not an expression of some undesirable spirit within him; etc.


This essay is an outline of the parental role in character education; its purpose is to point out the gaps in our present knowledge rather than to make any positive contribution towards filling them.


From 356 pupils, 70 were selected who consistently lied and 70 who consistently told the truth. Twenty-three tests were given either individually or by group method to these children. The results show, among other things, that there is a close relationship between unfavorable home surroundings and untruthfulness.

79595—30—12

Tests were applied to pupils in each year of high school and analysis made to determine the relation of deceitful behavior to intelligence, year in school, social status, etc.

1990. **Speer, Dorothy.** Conduct drives used by teachers in the schoolrooms of Baltimore based upon personal observation. 1928. Johns Hopkins university, Baltimore, Md.


A study of 84 members of a tenth grade in a mid-western six-year high school. Findings: The direct method was more satisfactory in teaching honesty than the indirect method. The great number of variable factors that enter into character testing make it impossible, with our present methods of control, to determine behavior. Cheating, generally speaking, is more prevalent with the lower I. Q. people, because of the greater pressure put upon them.


*See also Items 714, 1677.*

**TESTS**


Verified list and description of the nuclei characteristics desirable in a person who is well fitted in character to live successfully in modern civilization, and a rating card for use in schools and colleges and industries.


The material under consideration in this monograph deals with the perfecting of the scale for measuring moral knowledge with the age groups from the six-year group through the super-adult group. The method of scoring used in the tests for moral knowledge is that of the Stanford revision of the Binet-Simon tests. The appendix contains a revised scale for testing the moral knowledge of children.


1998. **Basey, M. I., and Donnerline, June.** Comparative moral judgments test. 1928. Detroit teachers college, Detroit, Mich. 3 p. (Published in Zeitschrift der individual psychologie (Vienna), August, 1928.)

Formulation and experimentation with test with 2,000 children. Conclusions: Type of judgment and skill in making such judgments similar for children over 14 and adults. Some marked sex differences were found.


Analysis and classification of 4,000 descriptions of problem experiences furnished by Boy scouts of Illinois, Wisconsin, Michigan, and Indiana. One hundred and fifty one categories of classification (character checking points) were needed to classify the returns.
RESEARCH STUDIES IN EDUCATION


The study involved a critical examination and revision of the Y. M. C. A. personal attitudes test for younger boys (12-14 years); the checking of this revised test for reliability and for validity. The general conclusions are that the test is as reliable as the average test used in the schoolroom and reliable as the test of character. In understanding hands the test should be able to play its part in broadening and deepening the knowledge of boy life which is necessary before constructive moral and religious education can be put into effect.


**RELIGIOUS AND CHURCH EDUCATION**


The purpose of this study was to analyze courses of study published since 1924 for the third-year juniors, children about 11 years of age, to see the extent to which they represent the objectives of liberal Christianity; to study a group of third-year juniors to discover their specific needs in relation to the general objectives proposed by liberal Christianity; and in the light of the findings about junior needs and the extent to which the present material is meeting them, to suggest some immediate next steps for junior curricula.


A study of the present scope of religious education in public-school time in Ohio. Findings: Religious education has come to stay, is well administered, and is increasing year by year.


A study of the methods employed in the religious education of the children in the primary schools of the Province of Quebec. An evaluation of the new "Règlements du Comité Catholique du Conseil d'Instruction Publique de la Province de Québec."


170  RESEARCH STUDIES IN EDUCATION


The aim of the study was to discover work and responsibility of the Presbyterian church in the United States in the field of education.


A summary of 94 replies received from a request for information concerning current chapel practices in teacher-training institutions which was sent to 100 schools in 31 states.


Study of faculty, curriculum, finances, administration, etc.


A study of religious education in American public schools and a procedure of religious chapel in the high school. A detailed outline of a religious chapel in the Findlay high school.


Questionnaires were tabulated from 80 student centers, 458 students, and 7 denominational secretaries. The minutes of the Board of education, official publications of the University department, reports of conventions and Synod meetings, and general literature in this field were read and studied. Findings: Before the merger of 1928, student work was officially promoted in only one of the three merging Lutheran bodies, the General Council. Recommendations are made for guiding the church in developing student work.


This study provides important data for a study of higher education in the United States during the last century. It aids in an understanding of the attitudes of eight Protestant denominations toward higher education. It gives a basis for suggesting the lines along which denominational boards of education must work in the immediate future if their programs are to be effective.


A discussion of Church history as a subject in the Catholic elementary school curriculum and a study of the courses of study and syllabi of a number of dioceses throughout the country in order to determine the present condition and tendencies of Church history teaching in the grades.


A critical examination of all available diocesan courses of study for elementary schools and an evaluation according to definite criteria. The conclusion is reached that the present state of Catholic elementary curricula and courses of study is very unsatisfactory.


A study of the development of the Central Catholic high school, its general features, methods of financing, building and equipment, administration and instruction, curriculum and extracurricular activities, religious instruction, etc.


The study of the present curricula of state universities shows that there has been a significant beginning in the study of religion in a large majority of the state universities of the United States.


The effect of intelligence and religious training on seventh-grade children. Findings: According to the tests used intelligence plays a greater part than religious training.


See also Items 127, 1145, 1411, 1655, 1677, 1984, 2122.
RESEARCH STUDIES IN EDUCATION

MANUAL AND VOCATIONAL TRAINING

This study contains the Alabama plan of administering the Smith-Hughes vocational education act, including instruction in agricultural education, trades and industrial education, home economics education, and teacher training.

2080. Bennett, Howard S. A study of the correspondence of a boy's progress in trade school with his progress in industry. 1927. Syracuse university, Syracuse, N. Y.

This study compares Boston with other cities in opportunities and costs. This survey has been merged into a more comprehensive study now under way.


A study of 60 college freshmen who were given mental and mechanical tests. Findings: Zero relationship.

A research problem on intelligence as a factor in shop progress.
2096. Greene, Charles E. Survey of vocational education conducted in buildings furnished and equipped by commercial concerns in cities over 50,000. 1928. Denver public schools, Denver, Colo. 7 p. ms.


A study of a group of 377 junior high school students, 211 part-time students, and 98 university engineering students. Findings: Bad measuring habits hated among junior high students are common to the groups examined. These habits are formed early in their laboratory careers, etc.


A study of 37 mining schools with charts showing the per cent of time devoted to different subjects. The findings reveal an absolute lack of uniformity.


A study of pupil activities in the University of Chicago high school and the technical high school of Chicago.


The purpose of the study was to set up a valid list of concrete objectives for junior high school industrial arts and to secure a consensus of the amount of time on a 100 per cent basis which should be allotted to each of the objectives. The results of the study show the following time distribution: "Handyman" abilities, 25 per cent; exploratory experience, 25 per cent; vocational training, 12½ per cent; technical information, 12½ per cent; related information, 12½ per cent; occupational information, 12½ per cent.


The purpose of this study was to ascertain what activities boys and men engage in about the home that may serve as activities for the school shop. One thousand two hundred and eighty activities were listed, many of which occur often enough to make inclusion in a course of study essential.


For teachers of children from kindergarten through the third grade. This study deals with educational uses that may be made of handwork and industrial education, with some emphasis on method, values, and administration of manual activities.


See also Items 1189, 1196, 1238, 1262, 1618, 1784.

EDUCATIONAL AND VOCATIONAL GUIDANCE


Division bulletin, no. 21, of the Division of vocational education of the University of California and of the State board of education.


This study made in collaboration with Mr. D. H. Wise, includes a survey of principles governing vocational guidance in colleges, study of forms used, permanence of vocational choices among college students, reasons for making these choices, influence of lack of vocational choice upon length of time a student stays in college, tabulation of vocational literature available for college students, etc.


A survey of the duties, salaries, promotions, and education of women in secretarial work, made by the Bureau of vocational information from records received from 2,518 women in the United States who had had experience in secretarial work.


A study showing the occupational distribution of living male and female graduates of the Oberlin College of arts and sciences for the period 1877-1926. Findings: From the average for the entire group studied, it takes the men 1.77 years and the women 1.4 years, to find their vocations. Half of the men and two-thirds of the women make no change in vocation, etc.


A study of 753 freshmen of the University of Colorado, 1927-28. Findings: 60 per cent of the women had chosen 14 vocations; 40 per cent had chosen no vocation; 73 per cent of the Arts men had chosen 19 vocations; while 27 per cent had not selected vocations.


A study of the interests of junior high school boys.


Analysis of causes for release; correlations with education, time in service, age, and salary. Findings: Closer contact needed with department heads; more instructions to be given to new workers; reasons for release to be closely regarded in placements, etc.


A nonstatistical consideration of educational guidance in the high school.


Historical review of the factors and movements leading up to the present concept of personnel service in education.


2144. Milwaukee vocational school, Milwaukee, Wis. Division of vocational teacher training and research. My life work. (A series of monographs)

This series consists of 40 separate monographs, published from 1924 to 1928.

2145. ——— The placement problem in the part-time vocational school. [1928]

The purpose of the survey was to discover, among other things, the educational background of the students, their reasons for desiring work and for leaving the full-time school, the size of the families, the number working in each family and whether they were contributing to the support of their families. Information as to the type of jobs held, the concerns worked for, the method of payment of wages, the reasons for being out of work, how jobs were obtained, and the number of jobs held was also sought by means of the questionnaires.


This paper shows the importance of intelligence and interest in a teacher-counselor and in a program of guidance. Through attention to these principles, problem cases are called to the attention of the counselor, and contact between the counselor and pupil becomes intelligent and vital.


The purpose of this study is to describe the activities and analyze the effectiveness of the guidance program as carried on in the Los Angeles high schools. The data gathered from individual counselors make up a large proportion of the material used in this study.


The purpose of this study is to give a description of the work of a waitress in a private food dispensary, the things she does, the things she must do, and appreciations which help her to become a more expert waitress. On the basis of such an analysis a plan for the training of waitresses by the public school system is recommended.


Interview study of 345 young printers of New York city with a view to determining their problems as they see them, their evaluation of social and educational agencies with which they have come in contact, their further educational and vocational ambitions, etc.


A summary of follow-up reports for four Providence high schools presents the following information: About 600 pupils received their diplomas in June 1928, and 60 percent of them continued their education in other institutions of learning. Among the graduates who went to work, clerical occupations received 20 percent of the boys and 87 percent of the girls.

For the purpose of this study the following groups were chosen: All B. S. graduates of 1916, 1921, and 1926, all M. A. graduates of 1916, 1921, and 1926, all Ph. D. graduates up to and including those of 1927. The conclusions are based on the findings in 552 cases. Findings: All but 15 per cent of the graduates are engaged in technical educational work; of these 53 per cent are in public school work, 27 per cent are in teachers colleges, and 20 per cent are in other colleges and universities.


A survey was made of 80 typical farms in 1924 and of 56 in 1926, to determine the influence of agricultural instruction under the Smith-Hughes act upon the agriculture of the community.


Statistics, etc., of the scope, values, and uses of projects carried on in North Carolina in the all-day, part-time, day-unil, and evening classes.


A general study of the condition in Ohio and a detailed study of supervisory district 11 in Ohio. Findings: A reasonable percentage of those who are enrolled in vocational agriculture make subsequent use of the training.


This study consists of 36 lessons in poultry and 15 lessons in potatoes to assist the rural teacher in the presentation of agriculture.


The data presented were received from three sources: (1) Questionnaires sent to the presidents of all state teachers colleges; (2) catalogues of the above colleges; and (3) questionnaires sent to the 48 state superintendents of public instruction. Findings: Agriculture plays an important part in the curriculum of the state teachers college; good laboratory equipment is essential to the proper teaching of agriculture; more courses are offered in animal husbandry than in any other branch of agriculture; general agriculture is offered by a larger percentage of the colleges giving agriculture than any other course, etc.


The aim of this study is to trace the development of secondary agricultural education in the United States to the present time with special reference to the courses of study; to study the methods of organizing the courses of study in agriculture; etc.

Various phases of graduate work were studied. Conclusions: Emphasis must be placed on the need for more research not dependent on graduate work. Only four departments had programs in 1926-27, but every one had work under way or definite plans worked out for it in 1927-28.


The purposes of this study are to determine what semi-professional vocations related to agriculture exist in the Great Valley of California, and to determine what relation should exist between these vocations and the junior colleges of California.


This volume sets up 16 standards characterizing an effective program in vocational education, and discusses the application of these standards to any training course in vocational agriculture. The volume contains rating charts and minute directions for estimating the operating efficiency of any program in vocational education in agriculture on the basis of these 16 standards.


The opinions of 500 Iowa farmers were secured as to the proper content of the course in farm mechanics in high schools having departments of vocational agriculture. Findings: (1) Furniture and cabinet making should, in the judgment of these farmers, be eliminated from courses in farm mechanics; (2) repair work is regarded as more important than construction work; (3) the course should include only genuinely practical projects in concrete work, harness repair, forge work, plumbing, painting, woodworking, ropework, soldering, tool sharpening, adjustment of gasoline engines, and repair of farm machinery.


This is a study with recommendations for teaching farm engineering jobs to vocational students in agriculture in Virginia high schools.


A study of correlation between courses of study and live stock and crop values in Colorado high schools. Findings: As a whole crops with greatest monetary value are given greatest attention. This is not true in regard to live stock.

See also Items 368, 796, 1155, 1158.

HOME ECONOMICS


Comparison of objectives, organization, content, methods found by analysis of 50 state courses of study and review of articles relative to the development of home economics in the secondary schools during 1917 to 1927. Findings: Statements of objectives are more specific; emphasis on problem solving and appreciational objectives has increased; skill and information is decreasing. Subject matter of real social worth is being offered, as well as cooking and sewing.

2176. ——— Test on shelter and home lighting and heating. Long Beach, Calif., Department of research, City schools, 1928. 19 p. ms.


The purpose of this study was to determine the place of character education in home economics classes.

Twenty-nine traits were agreed upon as desirable for high-school daughters.


A study of three women's magazines, two rural periodicals, and a metropolitan newspaper with the largest circulation among homemakers to determine the range of topics being presented, the emphasis of topics, the technical terms used, and the contrast in amount of material offered in 1927 to that offered in 1919.

Findings: There is a universal demand for home economics information covering various phases of the subject and there is a need for adult education in these subjects.


The purpose of this study was to prepare a test suitable to use in beginning clothing courses in college based on abilities set up in recent high school state and city clothing courses.


A survey of schools and colleges.


A study of home economics textbooks most used in high schools, with opinions of teachers and supervisors.


A survey of instruction in food selection and diet, sewing and textile studies in 42 divisions. Findings: There was an improvement in 1928 over the results in 1927 in the medians.


Findings: The results of this study show: (1) That some form of home economics was offered in 1900; all the normal schools had introduced courses by 1908; the work offered was principally sewing and cooking; (2) the state normal schools were changed to state teachers colleges in 1919, at which time the courses in home economics were increased in number and changed in variety and content to meet the requirements of a standard senior college; and (3) the courses offered at the present time include practically every phase of home economics work, meet the requirements for training teachers of vocational home economics, and are planned according to the newer trend in home economics.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


The purpose of this study was to determine the practices and needs of girls in rural Mississippi, especially in the use of time and energy in their homemaking activities.

See also Items 1152, 1768, 1869.

COMMERCIAL EDUCATION


The graduating classes of two of the New York city high schools were studied. Both groups were prepared for business, one with traditional commercial course and the other with the cooperative plan.


Gives specimen tests on Lesson XII of the Gregg manual. A new group test for reading ability is needed. Further experimentation with improvised achievement tests is highly desirable.


This is an investigation of the following problems: (1) How much general education should a stenographer have? (2) What are the promotional opportunities for stenographers? And what is the related promotional training? (3) What qualities and traits do employers desire in stenographers? Conclusions: A stenographer should have at least 4 years of high-school work. The positions of private secretary, head or supervising stenographer, office manager, and bookkeeper are the positions to which stenographers are most likely to be promoted.


Advance sheets from the Biennial survey of education in the United States, 1924-1926.


The purpose of this study was to show the need for revision of the Gregg shorthand manual when used in senior high schools and to suggest revisions. Factors needing revision are general plan and arrangement of text, age, previous training, and mentality requirements of pupils that undertake the study of shorthand.
A study of forms in representative textbooks, forms submitted by 350 teachers, accountants, etc.


A study of the growth and development of advertising, teaching methods used in advertising, educational contributions of advertising, extent and effectiveness of advertising as educational factor. Findings: Commercial advertising is valuable in promoting better health and moral education, in advancing civic life and the appreciation of art.


This study involved an analysis of present courses of study and an analysis of pupils in general continuation schools.

A survey of commercial curricula in the secondary schools of Indiana.


A study of the bookkeeping needs of the parents of commercial curriculum students in a junior high school to determine, if possible, what elements of bookkeeping, and what emphasis should be given in teaching bookkeeping. Findings: The bookkeeping being taught at present does not appear satisfactory in terms of the needs of pupils.

A study of the prediction value of Monroe reading, Downey will-temperament (and Downey subtest), Hoke prognostic tests, and Terman group mental tests, tried with two groups in succeeding years. Findings: Little prediction value discovered. Hoke and Terman scores show slight relationship with grades secured. Only zero order coefficient computed.


See also Items 662, 672, 1181, 1191, 1263, 1267, 2119, 2134.

PROFESSIONAL EDUCATION

A review of the data and opinions regarding medical education in the United States and Canada indicates that a large majority of physicians and educators who are familiar with the problem are evidently of the opinion that the general features of present medical training compare favorably with those in other fields of education and that very great improvement has occurred in recent years. It is true that only a few medical schools have been able to approximate the highest standards in every detail.

A general survey of dentistry, the education and professional training of dentists, and conditions at dental schools. Findings: Dental is a division of health service, which, continued as a separately organized profession, should be made the service equivalent of an oral specialty of medical practice, by an improved system of education that would be intimately associated with medical education.


The purpose of this study was to test the usefulness of the Iowa placement examinations in engineering colleges. These examinations constitute a series of educational tests designed to measure the training and aptitude of students for subjects commonly included in the first year of engineering curricula.


This bulletin deals with the function and work of present-day law schools in the United States and the Dominion of Canada so far as that relation can be interpreted through the curricula, conditions of administration, methods of teaching, and the relations of these law schools to practitioners of law.

2231. —— Review of legal education in the United States and Canada for the years 1926 and 1927. New York City, Carnegie foundation for the advancement of teaching, 1928. 41 p.

The review contains only what is characterized as routine or reference material, relating chiefly to the standards that are promulgated by the associations, and to the corresponding requirements that are actually announced by bar admission authorities and by law schools.


Survey of theological training of the Presbyterian church in the United States.


See also Item 1424.

CIVIC EDUCATION


The writer aims to give in sufficient detail the fundamental principles underlying a citizenship program and the essential steps in carrying out such an undertaking.


A survey of civic information possessed by children of the sixth-grade level of 21 school systems in a rural state. Findings: Systematic instruction in community civics is necessary. One cannot depend upon the child acquiring what he should know through home discussions, reading, and social contacts. The Burton inventory was used as the basis of the study.


Through socialized work in the Woodleaf union school, better citizens were made. There was a marked influence on discipline and habits of cooperation were promoted.


The purpose of this study was to determine some of the duties, difficulties, and traits of citizenship and to determine the extent to which the schools are now providing for the teaching of such duties, etc. Conclusions: The existing civics texts do not meet the needs shown by an analysis of duties, difficulties, and qualities of citizenship which representative citizens report as most important; civics courses as now organized do not train pupils for these duties, etc.


Analysis of citizenship, social and industrial democracy into about 300 items. Objective methods were used in the analysis.


See also Items 137, 855, 955, 2255.
EDUCATION OF WOMEN


2260. Jones, Jane Louise. A personnel study of the work of women deans in colleges and universities. Doctor’s thesis, 1928. Teachers college, Columbia university, New York, N. Y. (To be published) Findings: A woman is found performing the function of dean in 394, or 91 per cent, of the institutions investigated. The title of Dean of women is usual in coeducational institutions. Ninety-one per cent of the women deans have taken the bachelor’s degree, 57 per cent have the master’s degree, and 15 per cent the doctor’s degree. Fifty per cent of the deans are receiving between $2,096 and $3,531, annually.

2261. Leatherman, Zoe Emily. A further study of the maladjusted college student: Results. Master’s thesis, 1928. Ohio state university, Columbus. 263 p. ms. Conclusions: Application of mental hygiene methods to the problems of college women is one of the greatest needs of the present day and the most hopeful of beneficial results.


In this study the following subjects were investigated: Average income of the working girls attending the school; average expenditure for clothing; apportionment of money earned; number and kinds of articles of clothing purchased; average prices paid; length of service for the various articles of clothing; and practical suggestions for a usable budget.


Study and criticism of the part women have played constructively in American education. Conclusions: Contribution considerable in amount, but not commensurate with numbers of women in education.


A comparison of the typical freshman in 1923-1927 with the typical freshman in 1891-1895, shows that Miss 1927 is almost two inches taller than Miss 1895 and is over a half year younger; Miss 1927 is about seven pounds heavier, and her waist is a little over an inch larger. Miss 1927 is very athletic, and claims to be somewhat proficient in 10 sports, while Miss 1895 thinks she might try one.


See also Items 1677, 1810, 1813, 1829, 1885, 1905, 2039, 2123, 2182, 2188, 2200, 2357, 2372.

NEGRO EDUCATION


A statistical study of the relative amount of money spent for negro education in proportion to negro school population, including description of approximately 30 negro schools in the states of Mississippi, Georgia, North Carolina and South Carolina, giving training and salary of teachers. Findings: Inadequacy of present negro education and discrimination against the negro child.


The development of negro education in North Carolina; legislative activities, philanthropic agencies, trends, etc.


An account of the history of two negro colleges at Marshall, Tex., Wiley college and Bishop college, recognized as standard southern negro colleges, also an account of public education among the negroes at the same city, being chiefly the life work of H. B. Pemberton, Principal of the negro high school. Findings: 95 per cent of the negroes in the better district of Marshall, Tex., own their own homes. Home ownership is directly due to the influence of negro teachers.


A general survey of the activities and problems of Jeanes supervising teachers. Findings: Jeanes supervising teachers are largely performing the duties of an assistant county superintendent.


A study of the teaching situation among negro teachers in the Piedmont section of North Carolina, to determine the extent to which they adapt their instructions to the experience, interests, and needs of pupils, and the extent to which they make use of local resources.


A general survey, including organization, plant equipment, curricula, enrollment, faculty preparation, endowment, etc.

See also Items 42, 270, 285, 334, 904, 1188.

EDUCATION OF BLIND AND DEAF


Published originally in the American annals of the deaf.


EXCEPTIONAL CHILDREN


This study deals with the language handicaps among foreign children. Shows conditions revealed by a psychological study within the school, a sociological study of the community, and a study of method and content in English in classroom.


Gives scores secured from standardized tests in a school system with 536 pupils: 231 from homes in which English is spoken; 283 from homes speaking German. Findings: The foreign language group was retarded approximately one year in reading, language, history, literature, nature study, and somewhat in music, but is practically the equal of the English group in arithmetic, form, completion, capitalization, and punctuation. One additional school year is usually sufficient to bring the foreign language group up to the level of the English speaking group.


Historical and experimental. A study of 111 cases. Findings: 62.1 per cent were below average mentally according to Stanford-Binet rating. Prime factor probably heredity, with environment as an important contributing factor. Physical condition approximates average.


Twenty-five case studies of bright children over 120 i. q. who were maladjusted in school.


This study included scores in various standardized tests together with the performance tests. These scores correlated with case history and school history of each case.


The extent of special education (subnormal, deaf, etc.) in cities of the United States whose population is 10,000 or more. Reports from 649 cities were received.


2335. Wallin, J. E. Wallace. Differences in chronological age, mental capacity, and sex ratios of children referred from many school systems as candidates for special classes. 1928. Miami university, Oxford, Ohio.

Six hundred and thirteen cases were studied. Findings: 275 cases manifested no unsocial behavior; little, if any, connection was found between behavior and intelligence.

See also Item 588.

EDUCATION EXTENSION


2342. Balfry, Daisy F. A history of the continuation school movement, with a diagnosis of the continuation school situation in Syracuse. 1927. Syracuse university, Syracuse, N. Y.

2343. Bixler, H. H. Follow-up of summer school work of high-school students. [1928] Board of education, Atlanta, Ga. 8 p. ms.

A study of the marks made by students during the semester following work taken in summer session. Findings: It seems to be desirable to recommend capable pupils to take advanced studies in summer school. With regard to pupils repeating work, no final conclusion was possible with the data at hand.


A controlled experiment was arranged in which the same teacher taught three groups of students—one group by correspondence, one by class extension, and one by residence methods. Results on final examinations indicated that one method of instruction gives as good results as another.


This study finds that little can be accomplished in vocational training in the time given to it; that boys and girls in school from 4 to 48 hours can not be trained in a skilled occupation.


This study aims to show the historical background of the general continuation school, its growth since its introduction in the United States, and its present practices in organization and administration. The study reveals the need for more efficient teachers, more definite location of administrative control, more publicity for public cooperation and uniformity of organization, better methods of subject matter presentation, more adaptable subject matter content, and more systematic and effective tryout courses.


Findings: The summer school is evidently meeting the needs of a large group of students and the same care and supervision should be given to it as to any other part of the school system. The right of pupils to free public secondary education has been so long established that the charging of tuition for summer school work should be discouraged. The summer school administrators should take care to keep the same standards of work and time as are maintained in the regular year.


The program suggested is based upon: (1) The needs as found by the writer during five years' experience as director of adult education, (2) upon other state programs, and (3) upon requests from state and local directors elsewhere. The program itself consists of suggestions concerning underlying principles, legislation, administration, organization, finance, teacher training, and curriculum.


In this discussion of immigration a picture of life in San Fernando, Mexico, is contrasted with the Mexican section of Harlingen, Tex. San Fernando shows the life of the Mexican at home, while Harlingen pictures the conditions of the Mexicans in the United States. The differences between the two show the effectiveness of Americanization.


A brief treatment of the development of evening schools, from the standpoint of the law, down to 1900, and an exhaustive study of the laws in the 48 states since that time. Findings: There is a growing tendency to provide free public education for everyone and legislation permitting or creating evening and adult schools has usually been followed by stimulation in their growth. Evening schools existed in most states before any legislative action therefor. Only four states remain which have, as yet, passed no legislation of this type.


The result of an extended series of experiments to determine the ability of adults to learn at various age levels. The facts reported make it certain that adults can learn rather easily and rapidly, and probably would learn much more than they do.


This report is the result of studies and investigations carried on by several committees over a period of more than two years. The Committee on formal adult education took as its problem these forms of after-school education: "offered in organized sequences and curricula which may lead to examinations or credits."

The Committee on informal adult education confined its work to such unorganized and loosely organized efforts as lie outside the formal field.


Thirty-three and seven-tenths per cent of the institutions of higher learning in the North central association give extension work; 83.7 per cent of teacher-training institutions give extension work; and 8.8 per cent of junior colleges give extension work.

See also Items 2135, 2145, 2219, 2247.

LIBRARIES AND READING


Findings: Out of 33 full-time librarians reported in Indiana high schools only six were graduates of library schools. Many states recommend a minimum of 500 books for a high-school library. The certified high-schools of Indiana average 388 books per school in their libraries. Indiana high-school libraries seem best equipped in the field of literature, about 35 per cent of all books being in this department.


Five thousand one-hundred and twenty-nine students in 13 high schools of varying size, in different types of communities, and in different parts of the state responded to a questionnaire asking for their three favorite books read during the current school year. The book choices were tabulated so as to indicate the age, grade, and sex of the students. Findings: As the students advance in high school, the reading tastes of the boys and girls become more nearly the same; a strong maternal home and love element predominates in girls' favorites; while war, strenuous adventure, scouting and sports predominate in boys' favorites; the three most popular authors are Gene Stratton Porter, Zane Grey, and Charles Dickens.

2367. Baldwin, Bird T. The young child. Readings for parents. Reading with a purpose series. Chicago, American library association, 1928. 34 p. (Research studies, Iowa child welfare research station, State university of Iowa, Iowa City)

This course is a brief introduction to the study of the preschool child, with a list of a few of the best books for parents who wish an understanding of the significance of the early years of child life.


This study gives an account of a supervisory campaign in reading in Birmingham, Ala., and draws some conclusions as to its value in improving the reading abilities of the pupils and in stimulating the professional growth of the teachers. The data used have been obtained from the regular and special reports from the principals of the Birmingham public schools and, in one case, from personal investigation at the Birmingham public library.


This study is based on information received from 55 answers to questionnaires sent to the teacher-training institutions in the United States. Contains a reading list compiled from answers to questionnaires. The study reveals the small number of hours that the average dean is able to spend on leisure reading.


2374. Branson, Ernest P. An experiment in substituting library reading for class instruction in the sixth grade. Long Beach, Calif., Department of research, City schools, 1928. 3 p. ms.

Four classes of six pupils were compared under the library reading and class instruction plans. For a period of one semester, the sixth-grade amount of reading instruction can be decreased without detriment provided the pupils utilize the time saved by reading under the guidance of a librarian. The time devoted to classroom instruction under these circumstances needs to be directed especially toward practice in following precise directions, an outcome which is not realized by the library method. With this modification of method the library group may be expected to profit more than the nonlibrary group.


This study is limited to comparisons between silent and oral reading, between different kinds of material, and between reading with and without punctuation. Chinese students in America were used as subjects. Findings: Reading silently is more economical than orally. Reading fiction is easier than prose, reading prose is easier than poetry. Punctuation has a facilitating influence on reading. Adult reading habits in Chinese are comparable to those in English.


Selections from children's literature were presented to groups of children of different levels of intelligence under experimental conditions, and comparisons were made of their reactions and preferences. The means of procedure and the results constitute the study. Findings: Marked preferences in different kinds of reading material are shown by dull, average, and bright children. They are discriminative and express consistent preferences.
2381. Jennings, Joe. Leisure reading of junior high school boys and girls. Knoxville, Tenn., Department of research, City schools, 1928. 14 p. ms. (Bulletin, no. 10, June 1, 1928)
This study covers reading of 890 junior school children for one week in newspapers, periodicals, books, outside of school assignments.

2382. Klene, Vivian. Experiment in library and remedial reading in grades four, five, and six, John Muir school. Long Beach, Calif., Department of research, City schools, 1928. 3 p. ms.
Experiment in releasing pupils from class reading for library reading if they score high on tests. Special drill for those remaining in reading classes. Findings: Marked gain for both groups. Most profitable in fifth and sixth grades. Average and superior pupils profit more than dull. Reading greatly stimulated.

The report of the study is an account of how the "Cubby Bears in California" was developed by means of research and experimentation as a pioneering effort in constructing children's books through techniques which will insure that the book is interesting to children, includes the content they should read, and is of predetermined reading difficulty in keeping with the age and grade of the children for whom it is intended.


Definition of county library, its development in the United States, legislation in Texas compared with legislation in other states. Findings: County library laws analyzed, development of libraries in Dallas, Cooke, Harris, Potter, Tarrant, Wilbarger, Lubbock, and Denton counties in Texas.

The purpose of the study was to find out the number of pupils reading library books, the books read, and the relation that one year bears to another year.

A thorough survey of all schools in the two counties. Conclusions: Library facilities very inadequate.


Some traits and tendencies in children's literature as represented by the short stories in the St. Nicholas magazine since its beginning in 1873. Five hundred thirty-eight stories in these volumes were read.


Answers to questionnaires by 100 high-school students, results of tests on current news, opinions of teachers and superintendents. Findings: Pupils retain a knowledge of national politics better than they do of sporting events. They have little knowledge of local political matters, think much about industry, perform on tests in current news with no relation to time spent on reading newspapers, or to number of papers available.


Two hundred forty teachers representing 20 states and the District of Columbia were included in this study of reading from September 1, 1927, to June 1, 1928. Findings: Teachers read first for recreation and second as an aid to teaching. More than 90 per cent of the teachers studied read less than five hours per week in any type. As to value placed upon their reading, the teachers gave highest rating to professional value. More women assign cultural value to their reading than men.


Survey of present status of teachers college and normal school libraries as to number and classification of certain books and periodicals, and the extent to which the needs of these libraries are recognized in the budgets, with the purpose of proposing certain standards governing such libraries and suggesting means whereby these standards might be attained.


This list contains books which will be of help in giving children a clear conception of the people and the customs of the periods studied.


The period covered is from 1908 to 1927, inclusive.


This investigation was undertaken: (1) To determine what books were read by the children in the elementary grades of the rural schools of Okmulgee county, Okla., for the school year 1927-28; (2) to determine how the list of books read by these children compared with the well-known lists of books recommended by the various grades of the elementary schools; (3) to find the comparison of training and experience of teachers with number and selection of books read; (4) to show relation between the books read and the books in the respective libraries; and (5) to find the reason of the children to all the books read in terms of their approval or disapproval.

See also Items 139, 203, 417, 587, 1306.
## AUTHOR AND SUBJECT INDEX

[The numbers refer to item, not to page. Subject entries are printed in small capitals.]

### A

<table>
<thead>
<tr>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability Growing</td>
<td>1925</td>
</tr>
<tr>
<td>Abraham, Richard Iams</td>
<td>1246</td>
</tr>
<tr>
<td>Abbot, Andrew B.</td>
<td>1852</td>
</tr>
</tbody>
</table>

### Absences

See School Attendance.

### Achievement Tests


### Adams, A. W.

1637.

### Adams, Edward

2005.

### Adams, Lucy Hutt

2253.

### Adams, Romanzo

19.

### Administration, school

1427-1578.

### Adolescence


### Adult Education

See Education Extension.

### Advertising

See Commercial Education.

### Age-Grade Studies

1919, 2304. See also Child Accounting; Retardation and Elimination.

### Agricultural Education

2155–2173.

### Agunod, Nomesio

481.

### Ahern, William F.

196.

### Ahlstedt, Elmer

1908.

### Alabama, Department of Education

2079.

### Alderman, L. R.

2338–2340.

### Ale, Ida G.

2297.

### Alexander, E. W.

23.

### Algebra, teaching

646-683; tests, 684-701.

### Alpert, Augusta

958.

### Anspaugh, G. E.

684.

### Anthony, Ann

1351.

### Anthony, J. D.

1487.

### Apprenticeship Education

See Education Extension; Vocational Training.

### Aptitude Tests

241.

### Arithmetic, teaching

646-683; tests, 684-701.

### Armentrout, W. D.

985, 1237.

### Armstrong, Paul Revere

683.

### Arnett, Trevor

1332.

### Arnold, Frank J.

2201.

### Arnold, Henry J.

1952.

### Arnold, James Shailer

853.

### Art Education

915-925; tests, 928-931.

### Articulation, rate

167, 223.

### Ashbaugh, Ernest J.

1150.

### Ashburn, Emma G.

959.

### Ashton, Minnie Bennett

1755.

### Assembly, School

See School Assembly.

### Atheil, W. J.

160.

### Athletics

1836-1851.

### Atkins, Blanche E.

196.

### Atkinson, Earl Wesley

2202.

### Atkinson, Ruth

1807.

### Attention

275.

### Augsburger, Fred D.

2.

### Augustine, Brother Dominic

1966.

### Augustine, Sister M.

1353.

### Ault, H. M.

2237.

### Austin, Richard Cannon

1699.

### Austria, Education

131.

### Avery, Hazel

960.

### Avxelle, George E.

1967.

### Ayer, Fred C.

49.

### Backward Children

See Exceptional Children.

### Bear, C. E.

1716.

### Bear, J. A.

1086, 1246, 1328.

### Bagley, Grace

100.

### Bailey, Donald W.

1938.

### Bailey, Frances

2174.

### Bain, Winifred Elma

961.

### Baird, Harry D.

1980.

### Baird, James

1312.

### Baker, Elizabeth W.

475.

### Baker, Harold William

817.

### Baker, Harry Leigh

1009.

### Baker, Horace Henderson

1909.

### Baldwin, Bird T.

197-198, 2367.
Balfry, Daisy F., 2342.
Ball, Amer Mileham, 790.
Ballinger, Maurus, 112.
Bamberger, Florence E., 2388.
Bamberger, Velda Christena, 840.
Banks, Lee Frazier, 2369.
Bannerman, Jessie Shepherd, 2370.
Bannerman, Helen, 1.2.
Banta, Nola Kathryn, 2371.
Barber, Fred H., 147.
Barbour, Elizabeth, 1756.
Barnes, Richard Allen, 118.
Barnett, Arden, 1638.
Barnes, "C. C., 239.
Barbour, Elizabeth, 161.
Barber, Fred E., 239.
Bartley, Mary Ellen, 1910.
Barthelmess, Harriet B., 239.
Bartels, Frances, 239.
Barr, Eugene O., 239.
Barron, Alice, 242.
Barr, Daniel J., 161.
Barfield, Frances D., 704.
Bartelmes, Harriet M., 300, 1300.
Bartley, Mary Ellen, 1910.
Bartrum, C. M., 239.
Bass, Hyman, 239.
Bassett, S. Janet, 849.
Bates, Elizabeth, 986.
Bates, Guy, 1312.
Bates, Elizabeth, 989.
Bauch, Elizabeth, 897.
Baum, Kathryn Eleanor, 721.
Baumgartner, Ira, 50.
Baxter, Richard, 2079.
Bayles, Lucy, 452.
Basalt, E. C., 1839.
Bass, Mary, 1249.
Bass, W. E., 239.
Bear, George E., 453.
Bear, Mata Virginia, 402.
Bassley, Nathaniel Craig, 1911.
Beatty, Bancroft, 1011.
Beau, Amanda Lee, 2372.
Beck, E. C., 476.
Becker, Harvey Jacob, 1554.
Bednar, Christine, 2290.
Becher, Edith E., 2238.
Benson, Frances Hunt, 598.
Berger, Carey Kingsbury, 2298.
Bernardine, Sister Mary, 2009.
Berry, Albert LeRoy, 2155.
Bettinger, George E., 1356.
Bixler, Nellie Elizabeth, 52.
Bible, W. B., 477.
Bible and Church Education.
Billett, R. O., 331.
Billings, Neal, 844.
Bingham, W. V., 1843.
Biography. See Educational Biography.
Biology and Botany, 790-802.
Birkel, Carl P., 1102.
Bishop, Herman Davis, 1012.
Bishop, Merril, 2373.
Bixler, H. H., 340, 573, 830, 1610, 2343.
Bolick, Edith, 340, 573, 830, 1610, 2343.
Black, Ellen Engelmatt, 1913.
Blackburn, J. Albert, 1249.
Blackhurst, Dorothy Jean, 1854.
Blackstock, Mary, 772, 1757, 1870-1871.
Blair, John, 199.
Blair, Robert, 2010.
Blake, Percy Harold, 1914.
Blakeway, Herbert Norris, 2011.
Black, Irene Rose, 33.
Blevins, E. M., 2299.
Blind, education, 2292-2294.
Bloominger, Stella Mae, 533.
Bloss, Sallie Hopkins, 702.
Boardman, Charles W., 240.
Boardman, Philip L., 591.
Boettcher, Walter Albert, 648.
Bogardus, Frank S., 1200.
Boile, Alexander Patrick, 2116.
Bohnhoff, Lawrence, 625.
Bolton, Frederick S., 641.
Bones, C. D., 1915.
Bonham, Martha A., 230.
Bookkeeping. See Commercial Education.
Boone, Frank D., 1651.
Boren, Mrs. Irene S., 625.
Bormann, Henry H., 1321.
Bose, Roy George, 2012.
Bost, Mrs. L. R., 1758, 1916.
Boston, Mass. Public schools, 2061.
Botkin, Alva Earl, 556.
Botany. See Biology and Botany.
Bouvard, Germaine B., 608.
Bowd, John F., 1837.
Bow, W. E., 1271.
Bowden, Aberdeen Orlando, 649.
Bowen, Cornelia O., 574.
Bowen, J. W., 1334.
Bowes, Mrs. Stella Martin, 2300.
Bowie, Lola, 1117.
Bowman, Earl C., 1318.
Bowman, Philip L., 591.
Bowman, Leonard Leon, 2301.
Boy Scouts, 1879.
Boyce, W. T., 1130.
Boyd, R. E., 1769.
<table>
<thead>
<tr>
<th>Author/Subject</th>
<th>Page Numbers</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyer, Beatrice Violet</td>
<td>307</td>
<td></td>
</tr>
<tr>
<td>Boyer, Carl W.</td>
<td>1357</td>
<td></td>
</tr>
<tr>
<td>Boyer, Mary Palmer</td>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>Boyer, Philip A.</td>
<td>341, 1300, 1700</td>
<td></td>
</tr>
<tr>
<td>Bradbury, Weldon Earl</td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Bradley, Frederick Arthur</td>
<td>1333</td>
<td></td>
</tr>
<tr>
<td>Brady, Mary B.</td>
<td>1890</td>
<td></td>
</tr>
<tr>
<td>Bainer, Margaret S.</td>
<td>478, 1889</td>
<td></td>
</tr>
<tr>
<td>Brandenburg, G. O.</td>
<td>1214</td>
<td></td>
</tr>
<tr>
<td>Brandon, Frederick</td>
<td>1722</td>
<td></td>
</tr>
<tr>
<td>Brase, Gladys Alee</td>
<td>1152</td>
<td></td>
</tr>
<tr>
<td>Branson, Ernest P.</td>
<td>557, 510, 1690-1691, 1872, 2175-2176, 2374</td>
<td></td>
</tr>
<tr>
<td>Branson, Nina Irene</td>
<td>2375</td>
<td></td>
</tr>
<tr>
<td>Breed, Martin Edward</td>
<td>614</td>
<td></td>
</tr>
<tr>
<td>Breck, Eleanor D.</td>
<td>479</td>
<td></td>
</tr>
<tr>
<td>Breed, Frederick S.</td>
<td>626</td>
<td></td>
</tr>
<tr>
<td>Brenizer, Harold B.</td>
<td>1873</td>
<td></td>
</tr>
<tr>
<td>Brewer, Alba Lee</td>
<td>1013</td>
<td></td>
</tr>
<tr>
<td>Bridges, Joseph G.</td>
<td>1653</td>
<td></td>
</tr>
<tr>
<td>Bridges, O. R.</td>
<td>1594</td>
<td></td>
</tr>
<tr>
<td>Briggs Form Test</td>
<td>565</td>
<td></td>
</tr>
<tr>
<td>Brigham, Carl C.</td>
<td>241</td>
<td></td>
</tr>
<tr>
<td>Brink, William G.</td>
<td>1308</td>
<td></td>
</tr>
<tr>
<td>Brinkley, S. G.</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Briscoe, William Steven</td>
<td>1488</td>
<td></td>
</tr>
<tr>
<td>Brister, Robert H.</td>
<td>1074</td>
<td></td>
</tr>
<tr>
<td>Broderick, S. M.</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Brodburg, Marvin</td>
<td>1399</td>
<td></td>
</tr>
<tr>
<td>Browning, Angela M.</td>
<td>788</td>
<td></td>
</tr>
<tr>
<td>Brown, Nettie E.</td>
<td>1925</td>
<td></td>
</tr>
<tr>
<td>Brown, W. F.</td>
<td>920</td>
<td></td>
</tr>
<tr>
<td>Brown, Knox McLeod</td>
<td>1490</td>
<td></td>
</tr>
<tr>
<td>Brown, M. E.</td>
<td>627</td>
<td></td>
</tr>
<tr>
<td>Broua, Kate</td>
<td>2302</td>
<td></td>
</tr>
<tr>
<td>Brothers, E. Q.</td>
<td>1131</td>
<td></td>
</tr>
<tr>
<td>Brown, A. O.</td>
<td>2108</td>
<td></td>
</tr>
<tr>
<td>Brown, B. Warren</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Brown, Edwin John</td>
<td>1300</td>
<td></td>
</tr>
<tr>
<td>Brown, Howard</td>
<td>504</td>
<td></td>
</tr>
<tr>
<td>Brown, Katherine L.</td>
<td>2203</td>
<td></td>
</tr>
<tr>
<td>Brown, L. P.</td>
<td>627</td>
<td></td>
</tr>
<tr>
<td>Brown, Margaret C.</td>
<td>1811</td>
<td></td>
</tr>
<tr>
<td>Brown, Paul Ervin</td>
<td>2275</td>
<td></td>
</tr>
<tr>
<td>Brown, William Moody</td>
<td>2118</td>
<td></td>
</tr>
<tr>
<td>Brownell, Clifford Lee</td>
<td>1700</td>
<td></td>
</tr>
<tr>
<td>Brownell, William A.</td>
<td>650</td>
<td></td>
</tr>
<tr>
<td>Browning, Alma</td>
<td>436</td>
<td></td>
</tr>
<tr>
<td>Brubacher, John Siler</td>
<td>1430</td>
<td></td>
</tr>
<tr>
<td>Bruen, H. W.</td>
<td>899</td>
<td></td>
</tr>
<tr>
<td>Bruna, Freda</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>Bryan, J. Shepard</td>
<td>501, 1301</td>
<td></td>
</tr>
<tr>
<td>Bryan, Robert Leeman</td>
<td>2082</td>
<td></td>
</tr>
<tr>
<td>Bryant, G. O.</td>
<td>1133</td>
<td></td>
</tr>
<tr>
<td>Bryant, Stanley J.</td>
<td>454</td>
<td></td>
</tr>
<tr>
<td>Brydie, Caroline Elizabeth</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td>Brye, Edwin</td>
<td>1052</td>
<td></td>
</tr>
<tr>
<td>Buckingham, B. R.</td>
<td>651</td>
<td></td>
</tr>
<tr>
<td>Buell, Florence</td>
<td>2204</td>
<td></td>
</tr>
<tr>
<td>Bugbee, Ethel Schumann</td>
<td>455</td>
<td></td>
</tr>
<tr>
<td>Bullard, Mrs. Maria Louise</td>
<td>763</td>
<td></td>
</tr>
<tr>
<td>Bull, Roy</td>
<td>803</td>
<td></td>
</tr>
<tr>
<td>Bunn, B. D.</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Burd, Mrs. Helen Allen</td>
<td>1554</td>
<td></td>
</tr>
<tr>
<td>Burdock, Mary Jane</td>
<td>1855</td>
<td></td>
</tr>
<tr>
<td>Burger, Bertrand</td>
<td>556</td>
<td></td>
</tr>
<tr>
<td>Burger, I. Victor</td>
<td>2053</td>
<td></td>
</tr>
<tr>
<td>Burk, John M.</td>
<td>737</td>
<td></td>
</tr>
<tr>
<td>Burke, Margaret M.</td>
<td>162</td>
<td></td>
</tr>
<tr>
<td>Burkey, A. A.</td>
<td>1701</td>
<td></td>
</tr>
<tr>
<td>Burks, Barbara Stoddard</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>Burns, Andrew Louis</td>
<td>1015</td>
<td></td>
</tr>
<tr>
<td>Burns, Robert Leo</td>
<td>1948</td>
<td></td>
</tr>
<tr>
<td>Burr, Samuel</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Burr, L. D.</td>
<td>57, 1949</td>
<td></td>
</tr>
<tr>
<td>Bursch, James Frederick</td>
<td>164</td>
<td></td>
</tr>
<tr>
<td>Burton, A. L.</td>
<td>1917</td>
<td></td>
</tr>
<tr>
<td>Burton, William Hollis</td>
<td>242</td>
<td></td>
</tr>
<tr>
<td>Bush, G. C.</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>BUSINESS EDUCATION</td>
<td>See COMMERCIAL EDUCATION</td>
<td></td>
</tr>
<tr>
<td>Butler, Edward W.</td>
<td>1726</td>
<td></td>
</tr>
<tr>
<td>Butterfield, M. E.</td>
<td>1838</td>
<td></td>
</tr>
<tr>
<td>Butterworth, Julian E.</td>
<td>1767, 1918</td>
<td></td>
</tr>
<tr>
<td>Byrne, Audrey</td>
<td>1201</td>
<td></td>
</tr>
<tr>
<td>Cain, Abad</td>
<td>559</td>
<td></td>
</tr>
<tr>
<td>Cain, C. E.</td>
<td>735</td>
<td></td>
</tr>
<tr>
<td>Calkins, Thomas V.</td>
<td>1277</td>
<td></td>
</tr>
<tr>
<td>Calvin, John</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Campbell, Doak S.</td>
<td>1132</td>
<td></td>
</tr>
<tr>
<td>Campbell, Genevieve Randolph</td>
<td>932</td>
<td></td>
</tr>
<tr>
<td>Campbell, William Giles</td>
<td>1968</td>
<td></td>
</tr>
<tr>
<td>Campion, Howard Arthur</td>
<td>2034</td>
<td></td>
</tr>
<tr>
<td>CAMPR. 765, 1853, 1855, 2351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANADA, education</td>
<td>118, 120-121</td>
<td></td>
</tr>
<tr>
<td>Carle, Rose Mary</td>
<td>456</td>
<td></td>
</tr>
<tr>
<td>Carleton, Clayton H.</td>
<td>1875</td>
<td></td>
</tr>
<tr>
<td>Carmichael, A. Max</td>
<td>201, 1969</td>
<td></td>
</tr>
<tr>
<td>Carpenter, James M.</td>
<td>1919</td>
<td></td>
</tr>
<tr>
<td>Carpenter, Leewell Hunter</td>
<td>1096</td>
<td></td>
</tr>
<tr>
<td>Carpenter, W. W.</td>
<td>342</td>
<td></td>
</tr>
<tr>
<td>Carr, Rose Amelia</td>
<td>652</td>
<td></td>
</tr>
<tr>
<td>Carr, William G.</td>
<td>1392-1393, 1393, 1490-1491, 2239</td>
<td></td>
</tr>
<tr>
<td>Carreaux, M.</td>
<td>50, 481, 2134</td>
<td></td>
</tr>
<tr>
<td>Carroll, Jane M.</td>
<td>1655</td>
<td></td>
</tr>
<tr>
<td>Carter, Cameron A.</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>Carter, R. L.</td>
<td>305, 1692</td>
<td></td>
</tr>
<tr>
<td>Carter, T. M.</td>
<td>202, 1561-1563, 1839</td>
<td></td>
</tr>
<tr>
<td>Case, Charles</td>
<td>1876</td>
<td></td>
</tr>
<tr>
<td>Cass, Earl Milleder</td>
<td>1238</td>
<td></td>
</tr>
<tr>
<td>Castell, Stanley</td>
<td>1713</td>
<td></td>
</tr>
<tr>
<td>Cate, Emily Hearne</td>
<td>1812</td>
<td></td>
</tr>
<tr>
<td>Cates, Edwin Hine</td>
<td>452</td>
<td></td>
</tr>
<tr>
<td>Cattell, Psycha</td>
<td>1753</td>
<td></td>
</tr>
<tr>
<td>Chabon, Irving</td>
<td>1018</td>
<td></td>
</tr>
<tr>
<td>Chadbourne, Ava R.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chadbourne, S. B.</td>
<td>470, 654, 1714</td>
<td></td>
</tr>
<tr>
<td>Chamberlain, Arthur H.</td>
<td>949</td>
<td></td>
</tr>
<tr>
<td>Chamberlain, Leo Martin</td>
<td>1746</td>
<td></td>
</tr>
<tr>
<td>Chambers, W. W.</td>
<td>1230</td>
<td></td>
</tr>
<tr>
<td>Chamberline, Lawrence Francis</td>
<td>2944</td>
<td></td>
</tr>
<tr>
<td>CHAPEL PRACTICES</td>
<td>2038</td>
<td></td>
</tr>
<tr>
<td>Chapman, Frieda F.</td>
<td>453</td>
<td></td>
</tr>
<tr>
<td>Chapman, H. B.</td>
<td>1251, 1692</td>
<td></td>
</tr>
<tr>
<td>CHARACTER EDUCATION</td>
<td>See MORAL EDUCATION</td>
<td></td>
</tr>
<tr>
<td>CHARACTER TESTS</td>
<td>1905-2003</td>
<td></td>
</tr>
<tr>
<td>Charlesworth, H. W.</td>
<td>653</td>
<td></td>
</tr>
<tr>
<td>Chase, Vernon E.</td>
<td>304, 443, 445, 470, 664, 686, 1202</td>
<td></td>
</tr>
<tr>
<td>Cheating, 1202</td>
<td>1337, 1408, 1701</td>
<td></td>
</tr>
<tr>
<td>Chauncey, M. E.</td>
<td>1091</td>
<td></td>
</tr>
<tr>
<td>CLEOPATRA</td>
<td>1962</td>
<td></td>
</tr>
</tbody>
</table>
AUTHOR AND SUBJECT INDEX

Clerical training. See Commercial education.

Clark, James Willis, P. 2158.
Clark, James Willis, P. 2159.
Clark, L. E., 1383, 1434.
Clark, L. L., 2349.
Clark, L. M., 1651.
Clark, L. S., 817-820.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
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Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
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Clark, L. W., 1662, 1679.
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Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
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Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
Clark, L. W., 1662, 1679.
AUTHOR AND SUBJECT INDEX

Crisman, Curtis, 1950.
Cros, James Cecil, 407.
Cross, James Cecil, 407.
Crowell, Edith Smiley, 847.
Crowell, Edwin Ambrose, 63.
Croviley, Minnie Charlie, 1768.
Croy, Otto Clemen, 1657.
Crudup, Josiah, Jr., 823.
Cump, Oliver W., 1431.
Cumn, Oliver W., 1431.
Cunningham, Lillian Gibson, 5.
Cunningham, Nettie J., 609.
Cunningham, Thumas Nettles, 2022.
Curley, Alice Minor, 2376.
CURRENT EDUCATIONAL CONDITIONS, 47-110; foreign countries, 111-135.
CURRENT EVENTS, 2245.
CURRICULUM MAKING, 1616-1636.
Curry, Chapman Kenton, 244.
Curtis, Michael Sebastian, 34.
Cushing, Hazel, 204.
Custer, Raymond E., 2377.
Cutter, Mary A., 306.
Daley, Samuel Jesse, 953.
Dalke, Abe, 2241.
DANCING, 1830.
Daniel, Walter, 486.
Danneberger, Charles O., 2089.
Danner, Ruth Mae, 2023.
Dansettelle, Helen Ann, 487.
Dantong, Stanley Leon, 2158.
Davis, Alice Everett, 1769.
Davis, Earl, 1158.
Davis, Fred Raymond, 2159.
Davis, George, 764.
Davis, James Ernest, 739.
Davis, Mary Dabney, 062-984.
Davison, Harold J., 1432.
Dawson, Charles D., 1583, 1681.
Dawson, Frances M., 1770.
Dawson, Harold J., 1432.
Dawson, James, 789.
Dawson, L. O., 167.
Dawson, Mildred A., 1157.
Deady, Rev. Carroll F., 2276.
DEFECTIVE CHILDREN. See Exceptional Children.
Deibert, James Leonard, 2121.
DeJean, Rev. Hilary, 2024.
DELIQUENT CHILDREN. See Exceptional Children.
Delllott, Don Thomas, 117.
Deloney, J. M., 1565.
Denison, Albert Bruce, 1724.
DENOMINATIONAL CHURCHES AND EDUCATION. See Religious and Church Education.
DENNY, JOHN, 40, 44-45.
Denny, Mary E., 535.
Dennis, Carleton E., 379.
Dickens, Brooks, 2276.
Dickey, Levi H., 906.
Dickinson, Alice, 2122.
Dictionary, teaching use of, 477.
DILLARD, Mary Eliza, 2256.
Dillon, Rev. Philip A., 144.
Dimmock, G. B., 1883.
Dirks, Isaac T., 1716.
Distel, H. J., 107.
Dixon, Esther McCracken, 2025.
Doe, Yu Boo, 1905.
Dodson, Mary, 2905.
Dorsey, George C., 2089.
Dorsey, R. M., 1540.
Dorsey-Clay, Caroline V., 145.
Dorson, George Edgar, 1818.
Dougherty, Mary L., 245.
Domingo, Carleton E., 479.
Douglas, Robert H., 1021.
Downs, Mary Williams, 1726.
DOWNY MUSCLES TEMPERAMENT TEST, 193, 296, 2922.
Downs, Mary Williams, 1840.
Dolchester, Pa. High school, 1822.
Drake, W. E., 64.
DRAWING. See Art Education.
Dreisscll, W. A., 1279.
Druot, H. H., 1439.
Duffy, Jonathan H., 246.
Dryden, Linus, 7.
Dudley, Louise, 388.
Feingold, Emanuel N., 1028.
Fennell, Ethel Luella, 412.
Ferguson, A. C., 1660.
Ferguson, Dwight Hayden, 2029.
Ferguson, Myrtle Walters, 901.
Fentsch, Lln., 730.
Fetterolf, Howard Cleveland, 2092.
Fickes, George Herman, 2030.
Field, A. M., 1552.
Field, Eugene, 225.
Fields, Arbor D., 1010.
Fields, Maudie Joe, 8.
Fields, Thomas Benton, 1570.
Fick, George Herman, 2030.
Fichay, Frank Andrew, 1438.
First Day of School, 1074.
Fiske, Tabor, 1871.
Fisher, Mary Ellen, 593.
Fitzsimons, Francis F., 1153.
Flanagan, R. E., 577.
Flanagan, Sister Wilbrod, 610.
Fleming, Harold D., 888.
Fleming, L. Avery, 1439.
Flinn, Virgil L., 1681.
Flinton, M. A., 989.
Flood, Georgia S., 2257.
Flory, Charles D., 69.
Flowers, Lawrence Eugene, 1562.
Flynn, Luther, 1924.
Foote, John M., 66, 1440.
Forn, T. G., 310.
Ford, Hoyt, 1316.
Ford, Willard S., 1732.
Foreign Children. See Exceptional Children.
Foreign Countries, education, 111-135.
Foreman, Luella, 1372.
Form Board, 273.
Fort, L. M., 492.
Fort, M. K., 1585.
Fositt, Flavius J., 1841.
Foster, Emery M., 1441.
Foster, I. Owen, 1134.
Foster, James Carlisle, 1254.
Fourth-H Clubs, 1637.
Foust, Thomas R., 1925.
Fouts, Ethel Luella, 412.
Fox, Florence C., 1886.
Fox, Fred Cates, 1029.
Fox, Otto Lee, 902.
Frampton, B. A., 1442.
Frank, J. O., 170, 740-741.
Frasser, Maud M., 616.
Frederick, Sister M. Bartholomew, 969.
Fressman, Frank N., 1882.
Freeman, Frank S., 240-251.
Frey, T. H., 1926.
French, Helen Alken, 413.
French, Jessie Lee, 792.
French, John Martin, 1694.
Fry, Ralph A., 1100.
Fryklund, Verne C., 2065.
Fuller, F. E., 1611.
Fuller, Florence D., 632.
Funk, Mark Neff, 147.
Furay, Paul Hanley, 252.
Furst, Harold Dale, 941.
Gabolish, Sister M., 437, 438.
Gale, Clara M., 929.
Gale, Eleanor Ruth, 594.
Gamble, O. C., 1463.
Gamble, Leo May, 698.
Gang, 1903.
Gannon, Mary Augusta, 1996.
Gardner, Emelyn E., 537.
Garner, Truman Alvard, 1090.
Garlough, Leslie Nathan, 1695.
Garrett, James Elmer, 253.
Garth, Thomas R., 2597.
Gartis, William, 1662.
Gates, John A., 2031.
Gates, Walter Estelle, 1135.
Gauger, Marguerite Elston, 207.
Gaw, Grace, 918.
Geason, James T., 247.
Geasby, Isabel, 538.
Geil, Milton George, 120.
Geissler, L. R., 1962.
Georgia, State department of education, 1603.
Gerberich, J. Raymond, 2124.
Gerhardt, Mrs. Haltee Williams, 9.
German Language. See Languages, modern.
German Language Test, 623.
German, education, 134.
Gerwig, G. W., 1974.
Gestalt Theory, 142, 938.
Gethman, H. M., 86.
Gewin, Franklin F., 2298.
Gibbons, Charles E., 1906-1907.
Gibson, Maud, 1100.
Gibson, Richard N., 1780.
Gies, William J., 2209.
Gifford, C. W., 871.
Gifford, Walter S., 1275.
Gifted Children. See Exceptional Children.
Gilbert, Margery, 207.
Gill, J. C., 942.
Gillis, John Allison, 2348.
Gilmour, Nettie C., 2298.
Gianis, Joseph, 806.
Gleason, Clyde W., 206.
Glenn, W. D., 1883.
Gluck, Harold, 1695.
Godfrey, W. A., 1904.
Goebel, Pearl Ursula, 338.
Goldberg, E. W., 1504.
Goldberg, Sophia Joyce, 2309.
Goldsmith, Alfred G., 1374.
Goldstein, Samuel A., 826.
Gounby, Mrs. John, 1870.
Good, Carter V., 345, 463, 633, 919; 1081-1084, 1875, 2181, 2207, 2238.
Good, Virginia, 2258.
Good Roads, 634.
Goodall, Josephine Mary, 705.
Goodrich, John C., 175, 1975.
Gordon, Samuel Potter, 399.
Gore, J. H., 414.
Gould; Mary Pearl, 1208.
Goulet, Frank X., 1553.
Gray, Brailnord B., jr., 2152.
GRADUATE, See Classification, Graduation and Promotion.
GRADUATE WORK, 1411.
Grafton, Allen, 2033.
Graham, George Alfred, 1605.
Graham, Lorena, 1620.
Grant, Lottie, 906.
Gress, Anna, 457.
Gray, Mathew Robert, 1657.
GREEK, See Classics, ancient.
Green, E. J., 1927.
Green, Elsie E., 539.
Green, Geraldine Robinson, 2372.
Green, Rhus E., 1101.
Green, Roberta LeBran, 494.
Greene, Charles E., 905, 990-991, 1035, 1192, 1255, 1238, 1444, 1781, 2096, 2203.
Greene, Roy V., 1928.
Greenleaf, Walter J., 1376-1377.
Greenwood, Vernon, 2125.
Green, Ruth Gamberli, 1036.
Greer, William, 1037.
Greer, Alice, 209.
Griﬃth, Mrs. Mary, 546.
Grimes, Louise R., 495.
Grinnell, L. R., 1296, 1982.
Grinster, Thomas Hill, 1378.
Grogan, J. Leroy, 1161.
Grosberg, Samuel, 1445.
Grosdine, Henry C., 1554.
Grover, Elbridge C., 1379.
Crowdon, H. C., 172.
Grumewald, Lucille Reesa, 2227.
Grype, Carl Antonius, 121.
Gump, O. P., 1105.
Gunn, Evelyn Mary, 496.
Gunn, W. W., 1929.
Guthard, Paul K., 1254.
Gustafson, Gilbert T., 1688.
Gustin, Margaret, 872.
Guthrey, Casey Garnett, 742.
Guthridge, Wallace H., 1279.
Guthrie, Glenn J., 1088.
GYMNASIUMS, 1826.

H
Haddow, Anna, 497.
Haddox, Clara, 1816.
Hadley, H. H., 1446, 1930.
Haines, Edna, 969.
Haltbrink, Winifred N., 2259.
Halberstadt, Loring C., 1586.
Halbert, Blanche, 2097.
Hale, Virginia Ann, 2310.
Halenz, Herwath Friedrich, 827.
Hall, Murtil Elizabeth, 920.
Hall, Newell Pratt, 1102.
Hall, Robert Taylor, 1844.
Halstead, Carl Nelson, 1705.
Halter, Helen F., 1300.
Hamilton, Bryan, 1304.
Hamlett, F. L., 498.
Hammond, H. P., 2228.
HANDWRITING, See Writing.
Hankinson, J. H., 634.
Hanna, Ben M., 1859.
Hannah, Margaret H., 499.
Hanner, Blanche, 578.
Hansen, Mary A., 1730.
Hardy, Mattie C., 1782.
Harloe, Charlotte McFay Turner, 541.
Harmon, Helen Williams, 2311.
Harmon, Thomas Leonard, 1505.
Harney, Julia C., 11.
Harper, Byrd D., 1897.
Harper, Manly H., 1844.
Harper, Robert H., 1445.
Harper, Thomas B., 659.
Harr, C. A., 1942.
Harring, Sydney E., 415.
Harris, Ernest Alvin, 829.
Harris, Harvey Waterston, 642.
Harris, Jessie O., 1104.
Harris, Paul Everett, 2127.
Harshberger, Edith Rodgers, 1817.
Haskell, Harvey Lee, 235.
Hart, Ada Bess, 936.
Hart, John McKinley, 416.
Harter, Genevieve, 970.
Hartson, L. D., 2128.
Hass, Keith, 1605.
Hass, Dorothy A., 919;
Hass, F. R., 2162.
Hankinson, County C., 19.
Hanson, Laurence R., 1101.
Harley, Robert H., 1219.
Harlow, Florence, 972.
Harn, Bess, 956.
Hawkins, Henry J., 416.
Hawley, T. U., 743.
Hawser, Murray William, 2349.
Hawthornes, Robert Leroy, 635.
Hay, George A. F., 1105.
Hay, R. Louis, 636.
Hayes, Margaret, 661, 690, 960, 2812.
Imperial, Benedicto M., 70.
India, education, 112, 119, 126.
Indiana, 15, 253, 1966.
Individual differences, 330-370.
Industrial education. See Vocational training.
Institute of international education, 126.
Insurance, school, 1459.
Intelligence tests. See Psychological tests.
International aspects of education, 136-139.
International kindergarten union, 975, 1734.
Iowa English association test, 567.
Ireland, education, 127.
Irmina, Sister M., 458.
Irvin, Helen Gale, 945.
Irons, Archie, 257.
Jackson, Luther P., 2272.
Jacob, Robert Augustus, 1450.
Jacobs, Charles Louis, 1164.
Jacobs, F. R., 1283.
Jacobs, Guy A., 235.
Jacobs, Leo L., 1785.
Jacobs, Morris, 876.
Jacobs, Marie, 311.
Jensen, Alma M., MO.
Jensen, George C., 2289.
Jensen, George C., 1210-1212.
Jewett, Ida Adele, 1222.
Johns, Roe Lyell, 1954.
Johns, W. B., 1204.
Johnson, B. Lamar, 1598.
Johnson, Clarence Elbert, 2098.
Johnson, Earl A., 1047.
Johnson, Frederic, 896.
Johnson, Frank Richard, 2136.
Johnson, Harold N., 1451.
Johnson, Harriet M., 976.
Johnson, Henrietta A., 311.
Johnson, Homer L., 2050.
Johnson, James, 299.
Johnson, Palmer O., 795-796.
Johnson, Palmer O., 2314.
Johnson, Thomas Covington, 128.
Jones, Anna May, 2314.
Jones, Burton Robert, 419.
Jones, Elmer Clifton, 2525.
Jones, Evelyn Gertrude, 2184.
Jones, G. L., 312.
Jones, Harold Ellis, 211-212.
Jones, J. W., 1165-1167, 1210-1212, 2038.
Jones, Jane Louise, 2209.
Jones, Lee O., 1924.
Jones, Lorenz Belle, 1777.
Jones, Thomas Barnes, 1941.
Jones, W. B., 1810.
Jones, W. E., 1384.
Jones, William C., 72.
Jordan, Gilbert John, 1738.
Jordan, R. H., 1385.
Joseph Aloisius, Senior, 2309.
Journalism, 452. See also School Journalism.
Judson, Ulric W., 1137.
Junior colleges, 1130-1149.
Junior high schools, 1155-1169.
K
Kaderli, Fred, 1006.
Kaemmer, Lester, 360.
Kai, Dan Kaneko, 47.
Kampf, Grover A., 1786.
Kansas state school code commission, 1452.
Kentucky University. Bureau of school service, 74.
Kersey, Cleon, 2135.
Keesler, Russell E., 1455.
Kettler, Albert Julian, 2272.
Kelt, Ellen, 46.
Keys, Noel, 315.
Kibby, Irwin Wesley, 1511.
Kidder, Raymond S., 896.
Kilgore, James, 1812.
Kilmer, Louis R., 381.
Kimmel, Herbert, 1224.
Kinsella, Mrs. Pansy, 259.
Kindergarten education, 908-904.
King, Callie M., 316.
King, Clara Belle, 545.
King, Frank Richard, 2136.
King, H. B., 1813.
King, J. W., 1108.
Kingsbury, John A., 1787.
Kirby, Byron Clayton, 380.
Kirby, David, 1049.
Kirby Grammar Test, 554.
Kirk, H. R., 390.
Kirkwood, C. E., 1514.
Kiser, O. L., 78.
Kitzmiller, Alphonse Blaine, 808.
AUTHOR AND SUBJECT INDEX

Klein, Arthur J., 76, 1390.
Klein, Eva S., 2316.
Klein, Katherine, 420.
Klene, Vivian, 2382.
Klopp, Mrs. Stella C. W., 2185.
Klopp, William Josiah, 747.
Klotz, Celia Euphrasia, 715.
Knauber, Alma Jordan, 929.
Knight, Laura C., 37.
Knight, Mrs. Laura T., 1979.
Knotts, Josephine Rebecca, 2292.
Knowlton, Daniel C., 397.
Knox, J. E., 1667.
Koehnke, Jeanette D., 905.
Kohlbrenner, Bernard, 1317.
Kopf, Helen M., 261, 693, 2316.
KOREA, education, 115, 132.
Kramer, Grace A., 666, 992.
Kreezer, George, 177.
Krook, William Josiah, 2099.
Krous, George T., 1391.
Krueger, Louise Olson, 2288.
Kruger, Lewis Dunn, 1608.
Krugman, Morris, 2137.
Krum, Helen M., 2140, 693, 2316.
KUHLMANN ANDERSON TESTS, 261.
Kuntz, Leo F., 178.
Kunz, Bernice Bullock, 708.
Kyker, Benjamin Frank, 2288.
Lamb, T. D., 1342.
Lancaster, Thomas Jesse, 2384.
LAND-GRANT COLLEGES, 1358, 1376-1377.
Landin, Hazel M., 2186.
Landis, Cloyce Ivan, 373.
Landreth, Austin, 1515.
Landsittel, F. C., 1109.
Lange, Irene Dunn, 262.
LANGUAGES, ancient, 573-590; modern, 591-626.
Lanker, Raphael O'Hara, 2281.
Lanigan, Miss C. C., 2138.
Laporte, Fred, 207.
Laton, Anita Duncan, 707.
Latin language. See LANGUAGES, ancient.
Lathrop, Carl Edward, 737.
Lathrop, Edith A., 76.
LEADERSHIP, 110A, 1878.
Leaf, Curtis T., 877.
LEARNING. See EDUCATIONAL PSYCHOLOGY.
Lease, Jessie Fern, 2385.
Leatherman, Zoe Emily, 2261.
Lee, Robert B., 152.
Lefever, David Welty, 263.
LEGAL EDUCATION, 2230-2232, 2236.
LeGrande, H. O., 294.
Lehman, H. C., 146.
Lehr, Vergil C., 1060.
Leis, Walter Benjamin, 2042.
LEISURE, 1116. See also PLAY AND RECREATION.
Leitzell, Edna M., 617.
Leland, Bernice, 1706-1707, 1888.
Lentz, T. F., 295.
Leonard, George Franklin, 1624.
LeSourd, Howard M., 2043.
Lessenger, W. E., 362, 1226, 1256, 1721.
Leslie, Roy George, 422.
LESSON ASSIGNMENT, 147, 153, 367, 1085.
LETTER-WRITING, 525.
Leuper, Henry C., 724.
Leuther, Rev. H. L. W., 2139.
Levine, Aaron A., 774.
Levy, Mae M., 546.
Lewis, A. C., 66.
Lewis, Bessie Kate, 15.
Lewis, C. W., 106.
Lewis, Ellen, 592.
Lewis, Russell Austin, 1517.
Lewis, Winfred, 1788.
LIBERAL ARTS COLLEGE, 1146, 1170, 1336, 1407, 1418, 2182.
LIBRARIES AND READING, 2365-2403.
Lillethun, Clara C., 125.
Lillis, Gerald A., 303.
Limbert, Paul M., 2044.
Lincoln, Edith M., 1789-1792.
Lincoln, Nebr. Public schools, 450.
Lindblom, Maria Theresa, 374.
Lindfert, Harriette-Elsie, 266.
Linscheid, Adolph, 1805.
Linton, Ethel, 209.
Liston, Harry, 2262.
LITERATURE. See ENGLISH LANGUAGE, literature.
Little, H. A., 77.
Lo, Chihlin Chin, 1168.
Locke, Philip, 878.
Lockhart, Earl Granger, 667.
Lockwood, Stephen R., 1169.
Loftis, J. Wesley, 2187.
LOP, 423.
Longshoer, W. T., 1570.
LOOK AND ADAPT METHOD, 376.
Lord, F. E., 776.
Lord, J. Milton, 2140.
Lorenzo, Louis, 2317.
Loughren, Amanda, 709.
Louisiana, State department of education, 668, 994.
LOUISIANA, education, 283.
Lovejoy, Philip, 1518.
Lowder, Grace, 755.
Lubin, Sadie, 504.
Luby, Sylvester D., 2045.
Lucas, Darrel B., 2200.
Ludeman, W. W., 1240.
Ludgate, Abbie Mabel, 1110.
Lundin, Roy S., 1629.
Lusby, Margaret, 1863.
Lutuy, Emille, 375.
Lynan, Helen, 1214.
Lynch, Eugene Baker, 1809.
Lynn, Mary M., 905.
Lyon, Mrs. John, 579.

M
Mabillon, Dom Jean, 31.
Macao, Mother, 35.
McAuliffe, Mary Frances, 505.
McBride, Katherine, 279-280.
McBroom, Maude Mary, 506.
McCaffey, Eleanor Marie, 880.
McCain, William A., 1610.
McCallum, Charles L., 179.
McCarr, Edward, 670.
McCarty, Joseph F., 608.
McChee, Ralph Stanley, 17.
McClure, Leon, 1457.
McClure, Virginia, 1793.
McClure, William E., 2318.
McCobb, H. H., 1140.
McCombs, Newell Devin, 819.
McConnell, T. Raymond, 1170.
McConeville, Rev. James J., 2229.
McCrenchen, Mrs. Pearl Garden, 2384.
McCready, Charles F. W., 1051.
McCready, Otis C., 1069.
McCulloch, Harry Weber, 710.
McCullough, Ashley Melvin, 1587.
McCullough, Jack, 798.
McCullough, P. J., 1519.
McCullough, Leona Hadley, 1052.
McDonald, Mrs. Lois Paul, 778.
McDonald, Mary, 786.
McDonough, Thomas Edward, 1890.
McDonough, Thomas Herman, 1821.
McDowell, Elizabeth Dickenson, 2319.
MacFadyen, Miriam, 424.
McFarland, John J., 1141.
McGee, Theron Charlton, 2046.
McGehee, Dellah, 2244.
MacGinnis, Lorna C., 611.
McCoyney, Margaretta, 955.
McGuire, Verne, 1559.
McCuffey, William Holmes, 39.
McInnosh, Daniel Cobb, 1044.
McKee, William J., 126.
McKenzie, Katherine, 2248.
McKown, Katie N., 716.
McKinley, H. T., 507, 1503, 1611.
McLain, C. R., 78.
MasLachey, Josephine, 977.
McLaughlin, Margaret L., 608.
McLaughlin, Samuel J., 1671.
McLean, George Alonzo, 1284.
McLeod, Mrs. Irene, 907.
Maeham, Proctor Cornelius, 127.
McMillan, Maed, 1035.
McMillan, T. H., 500, 847.
McMinnies, Maud, 732.
McNabb, E. W., 934.
MacNaughton, David Victor, 1736.
MacNeel, J. R., 2141.
McNeely, John Gracey, 1672.
McNeill, Leon A., 2047.
McPheron, Wilfred I., 2142.
McRae, C. L., 510.
McReynolds, O. L., 881.
MacRury, Norma Olive, 2202.
Macune, Katherine, 1643.
Magee, Robert M., Jr., 1220-1227.
Magill, E. C., 2165.
Mahan, Charles A., 1822.
Mahan, Thomas Jefferson, 2246.
Maine. Department of education, 1794.
MAINE, education, 4.
MALAY STATES, education, 128.
Malloy, Kathle V., 364.
Malony, George B., 1254.
Malony, W. N., 511.
Malott, J., 1210.
Maness, Levi Rufus, 725.
Mangold, Sister Maria Cecilia, 318.
Mann, Carleton Hunter, 1558.
MANN, Horace, 37.
Mann, James C., 137.
MANUAL TRAINING. See Vocational training.
Marberry, J. O., 49, 1438.
Marchman, R. M., 471.
Markham, F. H., 1320.
Markham, W. T., 582.
MARKS AND MARKING, 1857-1908.
Marksbury, Mary R., 1111.
Marshall, Anna Onedia, 1395.
Marshall, Emily L., 79.
Marshall, Justin E., 1558.
Marshall, W. M., 1889.
Martin, James Taylor, 1054.
Martin, Ruth Porter, 1142.
Marvin, Albert Jerrold, 882.
Mary, Sister, 1906.
Mary Alice, Sister, 391.
Mary Aloysius, Sister, 1112.
Mary Basil, Sister, 593.
Mary Claire, Sister, 748.
Mary Francis, Sister, 671.
Mary Justine, Sister, 381.
Mary, Mary Elizabeth, 512.
Mason, Edward G., 1171.
Mason, F. R., 761.
Massachusetts. State department of education, 1113, 1172, 1321, 1625, 1708.
Mashey, Jackson, 18.
Masterson, James Thomas, 1574.
Mathews, C. O., 267, 319.
Matravers, Chester H., 513.
Mattey, W. E., 1114.
Mattern, L. W., 809.
<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew, Brother</td>
<td>1997</td>
</tr>
<tr>
<td>Mattie, F. Dorsey</td>
<td>150</td>
</tr>
<tr>
<td>Matzen, John</td>
<td>177</td>
</tr>
<tr>
<td>Maurer, Nettie A.</td>
<td>181</td>
</tr>
<tr>
<td>Maurus, Rhabanus</td>
<td>30</td>
</tr>
<tr>
<td>Maxwell, Elsie</td>
<td>218</td>
</tr>
<tr>
<td>Maxwell, Paul Ammon</td>
<td>149</td>
</tr>
<tr>
<td>May, Eric Oscar</td>
<td>1937</td>
</tr>
<tr>
<td>May, Walter M.</td>
<td>298</td>
</tr>
<tr>
<td>Mayer, Mary Helen</td>
<td>38</td>
</tr>
<tr>
<td>Mayer, Mrs. W. C.</td>
<td>423</td>
</tr>
<tr>
<td>Mayo, Scovel Summer</td>
<td>1738</td>
</tr>
<tr>
<td>Maze Learning Ability</td>
<td>2292</td>
</tr>
<tr>
<td>Mead, Arthur Raymond</td>
<td>121</td>
</tr>
<tr>
<td>Meader, James L.</td>
<td>1215</td>
</tr>
<tr>
<td>Meadows, John Cassius</td>
<td>159</td>
</tr>
<tr>
<td>Meadows, Leon R.</td>
<td>1128</td>
</tr>
<tr>
<td>Means, Hazel Elizabeth</td>
<td>1755</td>
</tr>
<tr>
<td>Medical Education</td>
<td>2225</td>
</tr>
<tr>
<td>Meek, Lois Hayden</td>
<td>218-214, 996</td>
</tr>
<tr>
<td>Meents, Richard O.</td>
<td>788</td>
</tr>
<tr>
<td>Merringer, Walter E.</td>
<td>1265</td>
</tr>
<tr>
<td>Mehrfus, O. Myking</td>
<td>1670</td>
</tr>
<tr>
<td>Melcher, George</td>
<td>330, 564, 696-698, 866, 1319</td>
</tr>
<tr>
<td>Melcher, William</td>
<td>2387</td>
</tr>
<tr>
<td>Memory</td>
<td>161</td>
</tr>
<tr>
<td>Mander, Harry Alvin</td>
<td>153</td>
</tr>
<tr>
<td>Mental Development</td>
<td>277-278</td>
</tr>
<tr>
<td>Mental Hygiene</td>
<td>1805</td>
</tr>
<tr>
<td>Menzies, Jessie A.</td>
<td>799</td>
</tr>
<tr>
<td>Merrill-Palmer school</td>
<td>1795</td>
</tr>
<tr>
<td>Merssefau, E. B.</td>
<td>1242-1243</td>
</tr>
<tr>
<td>Michigan</td>
<td></td>
</tr>
<tr>
<td>Michigan, Department of public instruction</td>
<td>957, 1626</td>
</tr>
<tr>
<td>Middlebrooks, A. J.</td>
<td>2356</td>
</tr>
<tr>
<td>Miles, Samuel Cloud</td>
<td>152</td>
</tr>
<tr>
<td>Military Education</td>
<td>2225</td>
</tr>
<tr>
<td>Millbrook, Grace</td>
<td>1173</td>
</tr>
<tr>
<td>Miller, Allida Ras</td>
<td>711</td>
</tr>
<tr>
<td>Miller, C. M.</td>
<td>2100</td>
</tr>
<tr>
<td>Miller, Donald Waldo</td>
<td>1847</td>
</tr>
<tr>
<td>Miller, Earl</td>
<td>884</td>
</tr>
<tr>
<td>Miller, Earl J.</td>
<td>1871</td>
</tr>
<tr>
<td>Miller, Eleanor Cimstead</td>
<td>677</td>
</tr>
<tr>
<td>Miller, Ellen, 218</td>
<td></td>
</tr>
<tr>
<td>Miller, Katherine</td>
<td>286</td>
</tr>
<tr>
<td>Miller, Fletcher M.</td>
<td>2338</td>
</tr>
<tr>
<td>Miller, Frank</td>
<td>1938</td>
</tr>
<tr>
<td>Morris, Larry</td>
<td>325</td>
</tr>
<tr>
<td>Morris, Mrs. Galie J.</td>
<td>20</td>
</tr>
<tr>
<td>Morrison, J. Ewing</td>
<td>1281</td>
</tr>
<tr>
<td>Morrison, Michael</td>
<td>1939</td>
</tr>
<tr>
<td>Morris, John T.</td>
<td>1144</td>
</tr>
<tr>
<td>Morris, John Van Llew</td>
<td>331, 1319</td>
</tr>
<tr>
<td>Morris, Francis Grover</td>
<td>1399</td>
</tr>
<tr>
<td>Morland, B. D.</td>
<td>1645</td>
</tr>
<tr>
<td>Morris, Elizabeth Hunt</td>
<td>1329</td>
</tr>
<tr>
<td>Morris, Mrs. Galie J.</td>
<td>20</td>
</tr>
<tr>
<td>Morin, Roma L.</td>
<td>1461</td>
</tr>
<tr>
<td>Milwaukee vocational school</td>
<td>2144-2145, 2263</td>
</tr>
<tr>
<td>Minch, Sister M. Esther</td>
<td>1325</td>
</tr>
<tr>
<td>Mining Education</td>
<td>2106</td>
</tr>
<tr>
<td>Minnesota, Department of education</td>
<td>1627</td>
</tr>
<tr>
<td>Minnich, Harvey C.</td>
<td>29</td>
</tr>
<tr>
<td>Milton, Arthur</td>
<td>154</td>
</tr>
<tr>
<td>Misaki, Hisakichi</td>
<td>209</td>
</tr>
<tr>
<td>Misner, Frank</td>
<td>1938</td>
</tr>
<tr>
<td>Mitchell, L. B.</td>
<td>270</td>
</tr>
<tr>
<td>Mitchell, John Pearce</td>
<td>1143</td>
</tr>
<tr>
<td>Mitchell, Lillian</td>
<td>1871</td>
</tr>
<tr>
<td>Moderow, Gertrude</td>
<td>1844</td>
</tr>
<tr>
<td>Modern Languages, see Languages, Modern</td>
<td></td>
</tr>
<tr>
<td>Mohr, Arthur B.</td>
<td>1815</td>
</tr>
<tr>
<td>Moloney, Horstine Marie</td>
<td>1906</td>
</tr>
<tr>
<td>Monahan, A. C.</td>
<td>1740</td>
</tr>
<tr>
<td>Monahan, Jean E.</td>
<td>1115</td>
</tr>
<tr>
<td>Monleison, Re. Pedro O.</td>
<td>19</td>
</tr>
<tr>
<td>Monroe, John</td>
<td>271</td>
</tr>
<tr>
<td>Monroe, Walter S.</td>
<td>1628-1629</td>
</tr>
<tr>
<td>Montana, University</td>
<td>1307</td>
</tr>
<tr>
<td>Montfort, Mrs. Tommie Smith</td>
<td>580</td>
</tr>
<tr>
<td>Monto, S. Wilhelmina</td>
<td>2387</td>
</tr>
<tr>
<td>Mooey, Walter Edwin</td>
<td>1797</td>
</tr>
<tr>
<td>Moore, Evelyn B.</td>
<td>738</td>
</tr>
<tr>
<td>Moore, G. C.</td>
<td>1462</td>
</tr>
<tr>
<td>Moore, Joseph Rockefeller</td>
<td>2330</td>
</tr>
<tr>
<td>Moore, Ruth Mary</td>
<td>618</td>
</tr>
<tr>
<td>Moore, William J.</td>
<td>1623</td>
</tr>
<tr>
<td>Moores, Maple</td>
<td>1396</td>
</tr>
<tr>
<td>Moral Education</td>
<td>1965-2003</td>
</tr>
<tr>
<td>Morgan, David Ansel</td>
<td>1839</td>
</tr>
<tr>
<td>Morgan, Francis Grover</td>
<td>1399</td>
</tr>
<tr>
<td>Morland, B. D.</td>
<td>1645</td>
</tr>
<tr>
<td>Morris, Elizabeth Hunt</td>
<td>1329</td>
</tr>
<tr>
<td>Morris, Mrs. Galie J.</td>
<td>20</td>
</tr>
<tr>
<td>Morris, John T.</td>
<td>1144</td>
</tr>
<tr>
<td>Morris, John Van Llew</td>
<td>321, 1319</td>
</tr>
<tr>
<td>Morrison, J. Ewing</td>
<td>1573, 1741</td>
</tr>
<tr>
<td>Morrison, Kellaphene Alfred</td>
<td>455</td>
</tr>
<tr>
<td>Morrison Technique</td>
<td>371</td>
</tr>
<tr>
<td>Morris, Elizabeth C.</td>
<td>1871</td>
</tr>
<tr>
<td>Morton, H. P.</td>
<td>1145</td>
</tr>
<tr>
<td>Moser, A. R.</td>
<td>1858</td>
</tr>
<tr>
<td>Mosher, Raymond M.</td>
<td>376</td>
</tr>
<tr>
<td>Motherseed, G. B.</td>
<td>1965</td>
</tr>
<tr>
<td>Moving Pictures, see Visual Instruction</td>
<td></td>
</tr>
<tr>
<td>Mueller, Maude Frances</td>
<td>377</td>
</tr>
<tr>
<td>Mulgrave, Dorothy I.</td>
<td>426</td>
</tr>
<tr>
<td>Mullikin, O. S.</td>
<td>80</td>
</tr>
<tr>
<td>Multiple-Response Test</td>
<td>769</td>
</tr>
<tr>
<td>Municipal University</td>
<td>1413</td>
</tr>
<tr>
<td>Munroe, Vedanto Z.</td>
<td>2146</td>
</tr>
<tr>
<td>Murphy, Carolel</td>
<td>951</td>
</tr>
<tr>
<td>Murphy, B. Jackson</td>
<td>81</td>
</tr>
<tr>
<td>Murray, Roosevelt Lee</td>
<td>1742</td>
</tr>
<tr>
<td>Music Education, 597-922</td>
<td>tests, 910-914</td>
</tr>
<tr>
<td>Myers, C. Everett</td>
<td>322</td>
</tr>
<tr>
<td>Myers, J. T.</td>
<td>810</td>
</tr>
<tr>
<td>Myatt, Cynthia</td>
<td>1866</td>
</tr>
<tr>
<td>Nagle, J. Stewart</td>
<td>138</td>
</tr>
<tr>
<td>Narcotic Education</td>
<td>995</td>
</tr>
<tr>
<td>Nagrog, F. R.</td>
<td>712</td>
</tr>
</tbody>
</table>
AUTHOR AND SUBJECT INDEX

Naehl, Bert Allen, 333.
Naehl, Harry B., 294.
Nason, J. M., 22.
National education association, 1222, 1574, 1630.
Nature study, 743-771.
Nebraska. Department of public instruction, 1940.
Neal, Minnie Davis, 2390.
Negrin, Rae Dalven, 129.
Negroes, education, 2276-2289.
Nell, R. B., 1400.
Nelson, George E., 801.
Nelson, Ormery E., 2283.
Nelson, Janet Fowler, 272.
Nelson, John B., 1401.
Nelson, K. Irene Bowman, 2391.
Nelson, Lila Marie, 672.
Nelson, Lillian M., 130.
Nelson, Margaret Viola, 427.
Nelson, Simon Peter, 472.
Nettel, C. H., 1058.
Wubauer, Paul Frederick, 673.
Neuben, Lester, 1163.
Neuner, John J., 1287.
Neviow, Robert F., 548.
Neveln, Charles Milton, 778.
Newt Trier township high school, 1402.
New type tests, 329, 730, 799, 802, 1039, 1463, 1547.
New York. State education department, 865.
Newark, N. J. Public schools, 787.
Newcomb, Douglas Alexander, 2221.
Newcomb, Ralph Samuel, 1174.
Newell, Constance, 273.
Newspapers. See Libraries and Reading.
Nichols, C. U., 2392.
Nicholson, W. B., 2293.
Niebuhr, Hulda, 215.
Nixon, Mabel, 2232.
Nolan, Oma Irene, 779.
Noland, Claude C., 1465.
Noll, Ada, 1116.
Noll, Victor Herbert, 811.
Nordgaard, Ernest John, 1800.
Normal schools, 1190-1217.
North, Rosamond, 515.
Norouza, George E., 1983.
North Carolina education association, 155, 1891.
North central association of colleges and secondary schools, 922.
Norwood, Pat H., 1468.
Null, Frank Otto, 1856.
Nursery school. See Preschool, Kindergarten, and Primary Education.
Nutrition, 1795, 1801.
Nutt, John Hiram, 82.

O

Oak, Lura S., 1330.
Oakland, Calif. Public schools, 674-675.
Ober, Edith Lowe, 481.
O'Brien, Mercedes Ellen, 2147.
O'Brien, Robert Enlow, 3048.

Occupations, study. See Vocational Guidance.
Odell, Charles W., 325-326, 348.
Ogden, Robert M., 182.
Ogle, Fletcher Andrew, 1941.
Ohio institute, 1524-1525.
O'Leary, Charles E., 365.
Olson, Vivian Frances, 1060.
Olson, William C., 216.
One-teacher schools. See Rural Education.
O'Neill, Sarah, 392.
"Only Child", 206.
Open-air schools, 1770.
Oral composition, 487, 492.
Oregon. University, 2323.
Oregon state teachers association, 462.
O'Reilly, Addie V., 428.
Orientation courses, 1371, 1410.
Orleans, Jacob S., 327-328, 581-582, 590.
Orr, M. L., 1177.
Osburn, Gertrude May S., 619.
Osburn, William Q., 2247.
O'Shea, Harriet Estabrooks, 183.
O'Shea, M. V., 598.
Oshins, Louis, 2224.
Osterberg, Hildur Christine, 1061.
Otis Self-administering tests, 239, 257-258, 262.
Overholtzer, John M., 2211.
Owen, Chilton Ross, 1328.
Owen, Margaret, 583.
Owens, Arthur Campbell, 83.
Owens, William A., 274.

P

Page, Henry A., 1527.
Pack, Arthur Newton, 767.
Pageants, 2341.
Pallari, Nazarea, 1608.
Palmer, Bernice, 923.
Palmer, E. Laurence, 768-770.
Palmer, Mary Elims, 2226.
Palmer, Nida Pearl, 1322.
Parent-teacher associations, 1874.
Parental education, 1875-1877, 1890, 1892, 2190, 2197, 2199, 2267.
Parham, Marie Anne, 1892.
Parker, Beryl, 131.
Parker, Delta, 2190.
Parkhill, George D., 1893.
Parochial schools, 381, 1842, 2046.
Parrott, J. Easton, 1467.
Partis, W. M., 636.
Parrott, Hattie S., 908, 909, 1300-1301.
Part-time education, 2344.
Passal, Broder, 320.
Patel, Henry Curtis, 1324.
Patrick, George W., 1206.
Patten, Alva Phillip, 1146.
Patterson, John W., 1631.
Patterson, Rose M., 349.
Patten, Gordon Sexton, 726.
Patten, Leonard Merrick, 366.
Pauls, E. M., 367.
Pauls, Emmanuel Marlen, 384.
Pauls, Ella Everett, 217.
Payne, Anna L., 218.
AUTHOR AND SUBJECT INDEX

PAYNE, Dorothy Mary, 599.
Peacock, Deane Stanfield, 1632.
PEARSON R TEST, 261.
Pease, Glenn R., 184.
Peck, Claude Francis, 834.
Peet, J. H., 429.
PEG BOARD, 198.
Pelk, W. E., 1178.
PELLEGRINI, 200, 204, 234, 2325.
Pennsylvania, 1018, 1066, 1214, 1225, 1253, 1394, 1418, 1426, 2117, 2140.
PERKINS, illoyd E., 84.
Perry, Rev. Francis M., 1468.
Perry, Raymond Carver, 759.
Perry, Victor Winfred, 1179.
Perry, Winona M., 185, 1403.
Persing, Ellis C., 749.
PERSONALITY TRAITS, 200, 204, 234, 2325.
PERSONNEL WORE, 1018, 1066, 1214, 1225, 1253, 1394, 1418, 1426, 2117, 2140.
PHILADELPHIA EVLISH TEST, 566.
PHILANTHROPY IN EDUCATION, 1619.
PHILIPPINE ISLANDS, education, 19, 70, 406, 481, 1006, 2054.
Phillips, Adams, 750.
Phillips, Frank M., 85, 1229.
Phillips, James Paul, 2212.
Phillipson, Alioe May, 640.
Phipps, Madge, 887.
PHYSICAL GROWTH, 217, 1766, 1769, 1814, 1823, 1857, 1883, 1899.
PHYSICAL TRAINING, 1807-1808.
PHYSICS, teaching, 821-827.
PHYSIOLOGY, 1795.
Plekenbrink, Anna L., 1646.
Pierson, Celia D., 2148.
Pieters, C. E., 639.
Pipe, Lewis A., 760.
Pitman, Edna Berzice, 567.
Pittenger, B. F., 49.
Pitta, L., 727.
PLATOON SCHOOLS, 379-381.
PLAY AND RECREATION, 1853-1868.
Pleasant, John L., 1799.
Plummer, Edna Lee, 1307.
PORTER, teaching, 529, 534-555, 539, 546, 553, 555.
Pogue, Frances, 2213.
Poland, Edward Herbert, 276.
POLAND, education, 125.
Pollock, P. B., 86.
Pollock, L. B., 2168.
Poon, R. G., 583.
PORTER, Electa Penina, 219.
Porter, Jennie D., 2284.
Porter, Fursil Bach, 2368.
Posey, George Franklin, 87.
Post, Clara May, 620.
Postel, Harold H., 1118.
POSTURE, 1719, 1760.
Potthoff, Edward F., 1404.
Potwin, Ross William, 1823.
Powell, Mary Neil H., 549.
PRACTICE TEACHING, 1237-1245.
PRE-SCHOOL, KINDERGARTEN AND PRIMARY EDUCATION, 958-964.
Preskis, Rev. Matthew, 2050.
Presley, Robert Henry, 948.
Pressey, Sidney L., 1468.
Pressey, Ral. O., 277.
Price, Malcolm Poyer, 676.
Frinchard, Clarence Edward, 1469.
PRIMARY EDUCATION. See PRE-SCHOOL, KINDERGARTEN AND PRIMARY EDUCATION.
PRIMERS, 411-412, 415, 424.
PRINCIPALS. See SCHOOL PRINCIPALS.
PRIVATE SCHOOLS, 57, 1019, 1024, 1027, 1064, 1080, 1358, 1829.
PROBLEM METHOD. See PROJECT METHOD.
Proctor, William Martin, 1633.
PROFESSIONAL EDUCATION, 2229-2236.
 Profitt, Mars M., 2101.
PROJECT METHOD, 382-383.
PRE-SCHOOL, KINDERGARTEN AND PRIMARY EDUCATION.
PRINCIPALS. See SCHOOL PRINCIPALS.
PUBLIC SPEAKING, 938.
PUBLICITY. See EDUCATIONAL PUBLICITY.
Pugh, Jesse S., 1743.
Punke, Harold Herman, 1470.
PUPIL LOAD, 1061.
Purdue Rating Scale, 1314.
Putnam, Margaret Adelaide, 2326.
Putnam, W. E., 1343.
PUZZLE SOLVING, 876.
Pyfe, Elizabeth, 677.
Quackenbush, Charles H., 1528.
QUEBEC, education, 207.
QUICK, Herbert, 38.
Quillard, Margaret J., 220.
Quilling, Florence, 219.
RADCLIFFE, Ralph, 1066.
Rader, Glen E., 1744.
Ragan, William B., 1471.
Rahje, Jeannette Marie, 517.
Raines, Lester, 186.
Rainwater, Cleo, 430.
Raleigh, N. C. Public schools, 961, 989-1000.
Rambo, William Lester, 1344.
Ramsey, Elsie, 587, 590-591, 833.
Randolph, Ethel Adelaide, 665.
Rankin, Mrs. Lurline, 780.
Robinson, Charles Scott, 1473.
Robinson, William McGinnley, 1183.
Rodgers, Alma L., 621.
Rodgers, Leola, 782.
Rodman, E. L., 1529.
Roe, Maritina B., 1684.
Roeser, Joseph, 1070, 1409.
Roeser, Hedwig Elizabeth, 1296.
Rogers, Agnes L., 270-270.
Rogers, F. R., 110.
Rogers, Helen Irene, 224.
Rogers, Leon W., 1474.
Romberg, Annie, 2218.
Rosalski, Sister M., 22.
Rose, Ella J., 2192.
Rosanof, George W., 2395.
Ross, Harold Ellis, 1957.
Ross, Max, 612.
Ross, Helen, 448.
Rouss, Jean Jacques, 43.
Rowland, Dewey, 2217.
Royster, Richard S., 2149.
Rubrake, Raymond H., 622.
Rubberg, Robert Carl, 419.
Ruddy, John Joseph, 276.
Rude, Axel S., 188.
Ruger, Mabel E., 1802.
Rugg, E. U., 830-856, 1281.
Rule, Harly C., 761.
Rushon, Jessie Eva, 23.
Rushon, Sarah Eva, 752.
Russell, Dale, 1233.
Russum, Julius Franklin, 1710.
Retledge, R. E., 80, 1071.
Ryan, Carl J., 2056.
Ryan, Rev. Cecil J., 1410.
Ryan, Rev. Leo V., 1475.
Ryan, Michael J., 448.
Ryan, W. Caron, Jr., 2066.
Ryland, R. T., 8.
Sabbatical Leave, 1255.
Sacks, Maxwell L., 2057.
Saelinger, Sister Mary Ignatia, 1001.
Salarjlan, Nuvar Etter, 1957.
Safety Education, 958-957.
St. Louis, Mo. Public schools, 1119.
Salaries, See Teachers, salaries.
Saltz, Lydia A., 2150.
Saltz, Charles, 189.
Salmon, Anthony, 2286.
Salter, Clarence Harvey, 512.
Samaritano, Peter, 638.
Samson, H. H., 1297.
Samuelson, Agnes, 1942.
San Francisco, Calif. Public schools, 2102.
Sanders, E. H., 781.
Sanger, Paul V., 281, 836.
Sandberg-Woody Test, 304.
Saporra, Doris W., 937.
Sargent, Mae K., 200.
AUTHOR AND SUBJECT INDEX

Sauer, Charles A., 1745.
Saunder, Douglas, 2167.
Sawage, Howard J., 1235.
Sawian, Ruth E., 1803.
Sawyer, Guy E., 1345.
Sayers, Ephraim Vern, 156.
Schaaf, William L., 1184.
Schaed, Emma A., 1002.
Scheierman, A. A., 1375.
Schiebre, Alphonse, 91.
Schisler, W. R., 1634.
Schlafer, George E., 1885.
Schleppegrell, Adolphine Marie, 2218.
Schmidt, Frederick Karl, 1689.
Schmidt, G. A., 2168.
Schmitz, Sylvester, 1186.
Schoenberg, Samuel, 2219.
SCHAOL REPORTS, 1450, 1454.
SCHOOL SUPERVISORS, 1432, 1443-1444, 1734, 1737.
SCHOOL VISITORS, 1887.
Schrabstätter, Alvina Helen, 2058.
Schray, Emma, 900.

Schreiter, Herbert Gustave, 2189.
Schrock, Clarence W., 714.
Schroeder, H. H., 1476, 1530.
Schrope, Mrs. Nora K., 1673.
Schuldt, Viola L., 1856.
Schwerter, Raymond A., 190.
Schwittals, Rev. Alphonse M., 1411.
SCIENCE, teaching, 756-857, tests, 768-764.
Scott, Mrs. Adelin White, 255.
Scott, Cecil Winfield, 81.
Scott, Harry Alexander, 182.
Scott, Harry Milton, 72.
Scudder, Anna Maria, 2056.
Seaberg, Eva Tingey, 399.
Seams, Herbert Lee, 2051.
Sease, Robert L., 2052.
Seashore, Ernest F., 900.
SECONDARY EDUCATION, 1007-1119.
Secrest, Fred G., 1500.
Seder, Reuben Irwin, 1288.
Selfert, Myron T., 2013.
Selberg, Edith M., 771.
SELF-GOVERNMENT, See STUDENT SELF-GOVERNMENT.
Senn, Edward L., 520.
Sennour, Alfred C., 1120.
SEVEN-FOUR-TWO PLAN, 1591.
Sewall, Franklin C., 2232.
SEX DIFFERENCES, 196, 746.
SEX EDUCATION, 1869, 1875, 1902.
Sexton, Elmer K., 521.
Seymour, Olive J., 2054.
Seymour, R. W., 552.
Shambaugh, Olive Lucile, 222.
Sharitz, Horace B., 1186.
Sharp, Marlay A., 2170.
Shaver, Clumber B., 753.
Shaw, E. O., 1477.
Shearon, John Joseph, 857.
Sheekell, Oliver M., 522.
Sheffy, T. H., 49.
Sheley, Curtis Franklin, 584.
Shen, Yung-Cheh, 132.
Shepard, Oma, 601.
Shepherd, E. M., 449.
Shepherd, Harry Raymond, 1674.
Sheppard, Edwin Telfer, 1412.
Sheppard, James H., 728.
Sheridan, Marion Campbell, 553.
Sherwood, Annie, 1897.
Sheue, Harry M., 187.
Shikles, Gail, 1866.
Shiner, E. A., 1269.
Shirley, Frank Carl, 2014.
Shoemaker, Elmer L., 1478.
Shores, Louis S., 1413.
Short, Vivian, 717.
Shouse, John L., 1591.
Shrode, Ida May, 783.
Shultz, Irvin T., 1238.
Shumway, Ernest Hill, 1853.
Shuttleworth, Frank E., 1414.
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simmen, Helen M.</td>
<td>1072</td>
</tr>
<tr>
<td>Simms, T. B.</td>
<td>1647</td>
</tr>
<tr>
<td>Simon, Donald Lionel</td>
<td>1073</td>
</tr>
<tr>
<td>Simpson, Genevieve</td>
<td>623</td>
</tr>
<tr>
<td>Simpson, Robert Gilkey</td>
<td>888</td>
</tr>
<tr>
<td>Simpson, Thompson</td>
<td>32</td>
</tr>
<tr>
<td>Simpson, Wesley Earl</td>
<td>1804</td>
</tr>
<tr>
<td>Sims, James W.</td>
<td>1003</td>
</tr>
<tr>
<td>Sims, Verner Martin</td>
<td>1908</td>
</tr>
<tr>
<td>Sioux City, Iowa. Public schools</td>
<td>2103</td>
</tr>
<tr>
<td>Simms, T. B.</td>
<td>1647</td>
</tr>
<tr>
<td>Simms, Helen M., 1072</td>
<td></td>
</tr>
<tr>
<td>Singleton, John S.</td>
<td>1270</td>
</tr>
<tr>
<td>Site, Emi Sylvester</td>
<td>2091</td>
</tr>
<tr>
<td>Slaght, W. E.</td>
<td>1988</td>
</tr>
<tr>
<td>Slavens, Jean</td>
<td>2295</td>
</tr>
<tr>
<td>Sloan, Mary Elizabeth</td>
<td>1418</td>
</tr>
<tr>
<td>Smart, Bessie Bernice</td>
<td>444</td>
</tr>
<tr>
<td>Smith, A. A.</td>
<td>1653</td>
</tr>
<tr>
<td>Smith, Anne Isabelle</td>
<td>285</td>
</tr>
<tr>
<td>Smith, Atherton Carlyle</td>
<td>191</td>
</tr>
<tr>
<td>Smith, Bert R.</td>
<td>1531</td>
</tr>
<tr>
<td>Smith, C. B.</td>
<td>1532</td>
</tr>
<tr>
<td>Smith, Calvin S.</td>
<td>1479</td>
</tr>
<tr>
<td>Smith, Charles Alonso</td>
<td>1533</td>
</tr>
<tr>
<td>Smith, D. R.</td>
<td>563</td>
</tr>
<tr>
<td>Smith, Earl Duane</td>
<td>678</td>
</tr>
<tr>
<td>Smith, Frances Emily</td>
<td>43</td>
</tr>
<tr>
<td>Smith, H. C.</td>
<td>1534</td>
</tr>
<tr>
<td>Smith, H. O.</td>
<td>1989</td>
</tr>
<tr>
<td>Smith, Henry Lester</td>
<td>1746</td>
</tr>
<tr>
<td>Smith, Homer J.</td>
<td>1747</td>
</tr>
<tr>
<td>Smith, Irene Hall</td>
<td>889</td>
</tr>
<tr>
<td>Smith, James Willard</td>
<td>1480</td>
</tr>
<tr>
<td>Smith, M. B.</td>
<td>286</td>
</tr>
<tr>
<td>Smith, Mary Victoria</td>
<td>2397</td>
</tr>
<tr>
<td>Smith, Mary R.</td>
<td>820</td>
</tr>
<tr>
<td>Smith, Mildred S.</td>
<td>400</td>
</tr>
<tr>
<td>Smith, Otto Orville</td>
<td>890</td>
</tr>
<tr>
<td>Smith, Robert Ernest</td>
<td>2104</td>
</tr>
<tr>
<td>Smith, W. A.</td>
<td>1748</td>
</tr>
<tr>
<td>Smith, Wiley F.</td>
<td>911</td>
</tr>
<tr>
<td>Smith, William Raymond</td>
<td>1535</td>
</tr>
<tr>
<td>Smyer, Mary Walter</td>
<td>2268</td>
</tr>
<tr>
<td>Snyder, Edna Caste</td>
<td>253</td>
</tr>
<tr>
<td>Snyder, Agnes</td>
<td>1187</td>
</tr>
<tr>
<td>Snyder, Nelson S.</td>
<td>814</td>
</tr>
<tr>
<td>Snyder, Oliva W.</td>
<td>586</td>
</tr>
<tr>
<td>Social Aspects of Education</td>
<td>1809-1904</td>
</tr>
<tr>
<td>Social Studies, 853-896</td>
<td></td>
</tr>
<tr>
<td>Sociology, educational</td>
<td></td>
</tr>
<tr>
<td>Sociology, Educational</td>
<td></td>
</tr>
<tr>
<td>Solanas, Robert C.</td>
<td>2220</td>
</tr>
<tr>
<td>Somers, Florence A.</td>
<td>1827</td>
</tr>
<tr>
<td>Sonsteness, Elsie</td>
<td>464</td>
</tr>
<tr>
<td>Soper, Wayne Wellington</td>
<td>1451</td>
</tr>
<tr>
<td>Sonseron, Herbert</td>
<td>1121</td>
</tr>
<tr>
<td>Soundelie, H. P.</td>
<td>1188</td>
</tr>
<tr>
<td>Spanhis Language, Teaching</td>
<td>514-524</td>
</tr>
<tr>
<td>Spaulding, David Merrick</td>
<td>132</td>
</tr>
<tr>
<td>Spaulding, Robert Miller</td>
<td>587</td>
</tr>
<tr>
<td>Special Classes</td>
<td></td>
</tr>
<tr>
<td>Special Methods of Instruction</td>
<td>371-401</td>
</tr>
<tr>
<td>Special Subjects of Curriculum</td>
<td>402-407</td>
</tr>
<tr>
<td>Speech Training</td>
<td></td>
</tr>
<tr>
<td>Speech, Dorothy</td>
<td>331-1990</td>
</tr>
<tr>
<td>Speed, R. L.</td>
<td>1800</td>
</tr>
<tr>
<td>Spellings, 452-468; tests, 469-474</td>
<td></td>
</tr>
<tr>
<td>Spencer, Herbert</td>
<td>41</td>
</tr>
<tr>
<td>Spencer, Howard N.</td>
<td>24</td>
</tr>
<tr>
<td>Speltz, Clark H.</td>
<td>1675</td>
</tr>
<tr>
<td>Spooner, Julia A.</td>
<td>1271</td>
</tr>
<tr>
<td>Sprague, H. A.</td>
<td>1944</td>
</tr>
<tr>
<td>Spruell, Clarence T.</td>
<td>224</td>
</tr>
<tr>
<td>Sprouse, Wesley Floyd</td>
<td>1074</td>
</tr>
<tr>
<td>Spurr, F. B.</td>
<td>602</td>
</tr>
<tr>
<td>Stack, Alma Pearlie</td>
<td>2067</td>
</tr>
<tr>
<td>Standardization of Schools, 1940, 1942</td>
<td></td>
</tr>
<tr>
<td>Stanford Achievement Tests, 330, 659</td>
<td></td>
</tr>
<tr>
<td>Stanford-Binet Tests, 297</td>
<td></td>
</tr>
<tr>
<td>Stanford, Sue S.</td>
<td>1296</td>
</tr>
<tr>
<td>Stanbury, Chester T.</td>
<td>1906</td>
</tr>
<tr>
<td>Stanbury, Paul W.</td>
<td>1600</td>
</tr>
<tr>
<td>Stanton, Joseph O.</td>
<td>2499</td>
</tr>
<tr>
<td>State Aid, 1453, 2070</td>
<td></td>
</tr>
<tr>
<td>State Departments of Education, 1464, 1452</td>
<td></td>
</tr>
<tr>
<td>Staats, George, Jr.</td>
<td>236</td>
</tr>
<tr>
<td>Stebbins, Charles M.</td>
<td>588</td>
</tr>
<tr>
<td>Steedman, Melissa Branchon</td>
<td>2221</td>
</tr>
<tr>
<td>Steele, Noah Edmund</td>
<td>1272</td>
</tr>
<tr>
<td>Steeves, Blanchard P.</td>
<td>603</td>
</tr>
<tr>
<td>Stegman, Helen M.</td>
<td>666</td>
</tr>
<tr>
<td>Steidley, Hubert A.</td>
<td>1986</td>
</tr>
<tr>
<td>Steiger, Lester Roy</td>
<td>1676</td>
</tr>
<tr>
<td>Steiner, Jesse W.</td>
<td>2332</td>
</tr>
<tr>
<td>Steinhaus, Arthur H.</td>
<td>1839</td>
</tr>
<tr>
<td>Sten, M. E.</td>
<td>1839</td>
</tr>
<tr>
<td>Stenography. See Commercial Education</td>
<td></td>
</tr>
<tr>
<td>Stenquist, John L.</td>
<td>833-335, 1600</td>
</tr>
<tr>
<td>Sterrett, Karl File</td>
<td>1122</td>
</tr>
<tr>
<td>Steuer, F. J.</td>
<td>287</td>
</tr>
<tr>
<td>Stevenson, Clarence W.</td>
<td>336</td>
</tr>
<tr>
<td>Stevenson, Problem Analysis Tests, 600</td>
<td></td>
</tr>
<tr>
<td>Stewart, Cecil C.</td>
<td>933</td>
</tr>
<tr>
<td>Stewart, E. A.</td>
<td>2194</td>
</tr>
<tr>
<td>Stigler, Grace L.</td>
<td>571</td>
</tr>
<tr>
<td>Stigler, W. A.</td>
<td>465</td>
</tr>
<tr>
<td>Stingley, Clarence L.</td>
<td>1123</td>
</tr>
<tr>
<td>Stirewalt, Martin Luther</td>
<td>2233</td>
</tr>
<tr>
<td>Stoddard, George Dinmore</td>
<td>2228</td>
</tr>
<tr>
<td>Stokes, Stuart M.</td>
<td>1809</td>
</tr>
<tr>
<td>Stone, Dora D.</td>
<td>387, 557, 1872</td>
</tr>
<tr>
<td>Stone, C. W.</td>
<td>1943</td>
</tr>
<tr>
<td>Stone, H. E.</td>
<td>1415, 1968</td>
</tr>
<tr>
<td>Stonecipher, Ernest E.</td>
<td>1944</td>
</tr>
<tr>
<td>Stopfer, Emmett C.</td>
<td>1417</td>
</tr>
<tr>
<td>Story-telling, 923</td>
<td></td>
</tr>
<tr>
<td>Stout, Harriet</td>
<td>912</td>
</tr>
<tr>
<td>Straits Settlements, education, 128</td>
<td></td>
</tr>
<tr>
<td>Stranahan, Esther</td>
<td>2069</td>
</tr>
<tr>
<td>Strayhorn, Elizabeth</td>
<td>288</td>
</tr>
<tr>
<td>Strayer, George D.</td>
<td>92-95, 1749-1761</td>
</tr>
<tr>
<td>Streeter, Vivian</td>
<td>628</td>
</tr>
<tr>
<td>Strickler, Fred</td>
<td>1189</td>
</tr>
<tr>
<td>Strong, Martha Opal</td>
<td>554</td>
</tr>
<tr>
<td>Stroup, Charles A.</td>
<td>96</td>
</tr>
<tr>
<td>Stubbs, Laura Elsa</td>
<td>858</td>
</tr>
<tr>
<td>Student Self-Government, 1712-1717</td>
<td></td>
</tr>
<tr>
<td>Student Self-Support and Scholarship, 1372</td>
<td></td>
</tr>
</tbody>
</table>
AUTHOR AND SUBJECT INDEX


TRIGONOMETRY. See GEOMETRY AND TRIGONOMETRY.

Triplett, Louise, 2070.

Trost, Herman M., 642.

TRANCY, 2333.

TRUE-FALSE TESTS, 456, 357, 760, 2196.

Truitt, William J. B., 370.

Tsalak, Leo, 1192.

Tucker, Herman Arthur, 1079.

Tucker, J. H., 535.

Turetsky, Arthur G., 1195.

Turner, Edna Marie, 227.

Turner, Floss Ann, 700.

Tuttle, Louis, 1018.

Tyler, Bertha N., 1907.

Tyler, Bertha Marie, 660.

Tyler, Caroline, 589.

Tyler, Ralph Winfred, 1193.

TYPEWRITING. See COMMERCIAL EDUCATION.

U

Uhl, Christiana Dunlap, 1932.

Uhrbuck, Richard S., 206.

Umbel, Maude, 524.

UNGRATED CLASSES. See EXCEPTIONAL CHILDREN.

UNIT PLAN, 155, 270, 387.


UNIVERSITIES AND COLLEGES. See HIGHER EDUCATION.

UNIVERSITY EXTENSION. See EDUCATION EXTENSION.

Unruh, H. D., 701.

Updatt, Ruth M., 228.

Upperman, Harry Lee, 2071.

Usher, Paul Bradford, 2109.

Utah education association, 1280.

Ute, Theodore, 1848.

V

VACATIONS, 992, 1001, 1005, 1583.

Valade, Ernest A., 36.

Van Buskirk, E. F., 1902.

Van Campton, Merritt S., 1484.

Van Cott, Harrison H., 1128.


Vanderbilt, Maude, 2287.

Van Dyke, Seth Howard, 1200.

Van Meter, Louise, 525.

Vannatter, H. W., 536.

Van Slaeg, Wilard, 577.

Van Wagenen, M. J., 339.

Vassar college, 2271.


Vauhlin, James, 299.

Vieth, Paul Herman, 2072.

Vincent, Alexander Roy, 220.


VISION. See SCHOOL CHILDREN, vision.

Visitation, Sister M., 438.

VISUAL INSTRUCTION, 390-401.

VOCABULARY, CHILDREN'S, 222, 317, 975.

VOCABULARY STUDIES, 405, 412, 422, 424, 432, 443, 479, 504-505, 506, 529, 532, 556, 522, 572, 603, 820, 741, 808, 878.

VOCATIONAL GUIDANCE, 2113-2164.

VOCATIONAL TRAINING, 2079-2114.

Volmer, Albert M., 261.

Von Borgerson, Fred, 1084.

Waage, John, 1086.

Wade, N. A., 1217, 1245.

Wagner, R. E., 107.

Wagner, H. Ray, 1501.

Wahlquist, John T. 108.

Waldeck, Arthur G., 1195.

Walt, W. T., 603, 733-734.

Waldran, Mildred R., 538.

Wales, Beulah, 624.

Walker, Thomas Prince, 1539.

Walklet, Joseph K., 1125.

Wallace, H. M., 2171.

Wallace, T. J., 1866.

Wallin, J. E. W., 297, 2335.

Walsh, Mrs. Louise Gilbrecht, 27.

Walsh, Luville Gertrude, 2272.

Walsh, Matthew John, 27.

Walsh, Rev. Thomas Stephen, 1006.

Walters, Nelle, 1830.

Walther, E. Curt, 783.

Walton, Mrs. Maud Smith, 2110.

Wandling, Harry F., 2111.

Wang, Feng-chang, 604.

Waples, Douglas, 158.

Yard, C. D., 1753.

Yard, Mae Yoho, 1903.

Warfield, Hulah Mae, 2073.

Warner, William Everett, 1106.

Warren, F. G., 1197.

Warren, Margaret Wilson, 1867.

Warren, Ohio. City schools, 1087, 1601, 2152.


Washington, Melton Hebron, 118.

WASHINGTON, BOOKER T., 42.

Wassman, W. W., 1088.

Waters, Audley A., 462.

Watkins, Louise North, 529.

Watson, William Rendly, 1127.

Watt, Robert Delapion, 208.

Watts, Lillie Ellen, 1309.

Weatherhogg, John, 1754.

Weaver, Olney Serenus, 1310.

Webb, Hanor A., 2390.


Wedel, Edward B., 1540.

WEEK-DAY RELIGIOUS INSTRUCTION. See RELIGIOUS AND CHURCH EDUCATION.

Weekes, Blanche Ethel, 555.

Weeks, Alice L., 2153.

Weeks, Angelina L., 572.

Wei, Wilson Shih-Sheng, 2273.

Weidemann, Charles C., 1549, 1831-1833.

Weil, Blanche, 232.

Wellin, Anna, 502.

Welch, Ralph W., 467.

Wellman, Beth L., 198.

Wellis, Alice, 2514.

Wells, Ross Lee, 984.

Welton, Robert Lee, 2172.
<table>
<thead>
<tr>
<th>Author/Subject</th>
<th>Index Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Werner, C. A.</td>
<td>1485</td>
</tr>
<tr>
<td>Werner, C. H.</td>
<td>605</td>
</tr>
<tr>
<td>West Virginia, State department of education</td>
<td>1891</td>
</tr>
<tr>
<td>Westenberger, Edward J.</td>
<td>1805</td>
</tr>
<tr>
<td>Westphal, Clarence Arthur</td>
<td>2074</td>
</tr>
<tr>
<td>Wheeler, Carleton A.</td>
<td>606</td>
</tr>
<tr>
<td>Whildin, Olive</td>
<td>2296</td>
</tr>
<tr>
<td>Whinery, Sunley M.</td>
<td>1425</td>
</tr>
<tr>
<td>Whipple, Gertrude</td>
<td>434</td>
</tr>
<tr>
<td>Whisonant, Carol J.</td>
<td>1946</td>
</tr>
<tr>
<td>Whitcomb, Edelmire S.</td>
<td>2190-2197</td>
</tr>
<tr>
<td>White, Annabel Lee</td>
<td>644</td>
</tr>
<tr>
<td>White, Dorothy</td>
<td>530</td>
</tr>
<tr>
<td>White, H. K.</td>
<td>741</td>
</tr>
<tr>
<td>White, Paul C.</td>
<td>2075</td>
</tr>
<tr>
<td>White, R. H.</td>
<td>1592</td>
</tr>
<tr>
<td>Whitehead, Eugene S. J.</td>
<td>45</td>
</tr>
<tr>
<td>Whiting, Frederick Allen</td>
<td>2303</td>
</tr>
<tr>
<td>Whitney, F. L.</td>
<td>1148-1149, 1311, 1347, 1592, 1834</td>
</tr>
<tr>
<td>Whittinghill, R. T.</td>
<td>1541</td>
</tr>
<tr>
<td>Wichita, Kansas, Public schools</td>
<td>109</td>
</tr>
<tr>
<td>Wichman, J. R.</td>
<td>1542</td>
</tr>
<tr>
<td>Wiebking, Gale, Phyllis</td>
<td>2198</td>
</tr>
<tr>
<td>Wiecking, Anna M.</td>
<td>2113</td>
</tr>
<tr>
<td>Wiecking, Emina</td>
<td>139</td>
</tr>
<tr>
<td>Wiederhold, Margaret Frances Hill</td>
<td>209</td>
</tr>
<tr>
<td>Wilbur, R. G.</td>
<td>1235</td>
</tr>
<tr>
<td>Wilcox, Alfred Churchill</td>
<td>2336</td>
</tr>
<tr>
<td>Wiley, George M.</td>
<td>110, 1090, 1128</td>
</tr>
<tr>
<td>Wiley, Roy William</td>
<td>1348</td>
</tr>
<tr>
<td>Wilfong, Harry D.</td>
<td>1486</td>
</tr>
<tr>
<td>Wilkerson, Dorey A.</td>
<td>1808</td>
</tr>
<tr>
<td>Wilkerson, James Roy</td>
<td>2076</td>
</tr>
<tr>
<td>Wilkerson, Helen Septa Samuel</td>
<td>2251</td>
</tr>
<tr>
<td>Wilburn, GunnDeWitt</td>
<td>28</td>
</tr>
<tr>
<td>Willebrandt, Arthur Frank</td>
<td>735</td>
</tr>
<tr>
<td>Williams, Charles Sheldon</td>
<td>134</td>
</tr>
<tr>
<td>Williams, Effie</td>
<td>2400</td>
</tr>
<tr>
<td>Williams, Joseph Edward</td>
<td>880</td>
</tr>
<tr>
<td>Williams, Lillian Gray</td>
<td>2077</td>
</tr>
<tr>
<td>Williams, Marion Louise</td>
<td>931</td>
</tr>
<tr>
<td>Williams, Martha Ruth</td>
<td>1904</td>
</tr>
<tr>
<td>Williams, Robert L.</td>
<td>2078</td>
</tr>
<tr>
<td>Williams, Samuel Watkins</td>
<td>645</td>
</tr>
<tr>
<td>Wilmington, Del., Board of public education</td>
<td>1643</td>
</tr>
<tr>
<td>Wilson, Almira Selter</td>
<td>2199</td>
</tr>
<tr>
<td>Wilson, Bert Felix</td>
<td>1544</td>
</tr>
<tr>
<td>Wilson, I. O.</td>
<td>331</td>
</tr>
<tr>
<td>Wilson, James H.</td>
<td>2173</td>
</tr>
<tr>
<td>Wilson, Katherine G.</td>
<td>533</td>
</tr>
<tr>
<td>Wilson, Lester A.</td>
<td>1947</td>
</tr>
<tr>
<td>Wilson, M. H.</td>
<td>195, 2003</td>
</tr>
<tr>
<td>Wilson, Mary</td>
<td>2200</td>
</tr>
<tr>
<td>Wilson, Maud E.</td>
<td>557</td>
</tr>
<tr>
<td>Wilson, Morris Enoch</td>
<td>914</td>
</tr>
<tr>
<td>Wilson, William McDonald</td>
<td>1711</td>
</tr>
<tr>
<td>Winchell, Karl F.</td>
<td>2401</td>
</tr>
<tr>
<td>Windes, Eustace E.</td>
<td>1091-1092</td>
</tr>
<tr>
<td>Winfield, Oscar A.</td>
<td>46</td>
</tr>
<tr>
<td>Winward, Kathleen Mars</td>
<td>2274</td>
</tr>
<tr>
<td>Wisconsin, State department of education</td>
<td>1879</td>
</tr>
<tr>
<td>Wictor, Roland Orval</td>
<td>401</td>
</tr>
<tr>
<td>Witham, Ernest C.</td>
<td>1849</td>
</tr>
<tr>
<td>Wolter, Opella Halden</td>
<td>233</td>
</tr>
<tr>
<td>Womem, education</td>
<td>2253-2274</td>
</tr>
<tr>
<td>Wong, Grace D.</td>
<td>135</td>
</tr>
<tr>
<td>Wood, Ben D.</td>
<td>613, 2236</td>
</tr>
<tr>
<td>Wood, C. R.</td>
<td>1331</td>
</tr>
<tr>
<td>Wood, Ethel H.</td>
<td>2223</td>
</tr>
<tr>
<td>Wood, Margarita Middleton</td>
<td>2402</td>
</tr>
<tr>
<td>Wood, Ray C.</td>
<td>1093</td>
</tr>
<tr>
<td>Wood, Vernon Everett</td>
<td>816</td>
</tr>
<tr>
<td>Wood, Wilder Maude Gant</td>
<td>2224</td>
</tr>
<tr>
<td>Woodburn, E. C.</td>
<td>1236</td>
</tr>
<tr>
<td>Woodell, R. F.</td>
<td>2304</td>
</tr>
<tr>
<td>Woodside, Beatrice Y.</td>
<td>607</td>
</tr>
<tr>
<td>Woodward, Edward J.</td>
<td>1545</td>
</tr>
<tr>
<td>Woodward, Thomas J.</td>
<td>1903</td>
</tr>
<tr>
<td>Woody, W. H.</td>
<td>1426</td>
</tr>
<tr>
<td>Woody-Scott Test</td>
<td>688, 694</td>
</tr>
<tr>
<td>Worcester, Dean A.</td>
<td>308</td>
</tr>
<tr>
<td>Word discrimination test</td>
<td>563</td>
</tr>
<tr>
<td>Work-study-play school</td>
<td>See Platoon schools</td>
</tr>
<tr>
<td>Wright, Christine Carrie</td>
<td>2403</td>
</tr>
<tr>
<td>Wright, Ralph McClellan</td>
<td>1848</td>
</tr>
<tr>
<td>Wrightstone, J., Wayne</td>
<td>1686</td>
</tr>
<tr>
<td>Writing</td>
<td>445-449; tests, 450-451</td>
</tr>
<tr>
<td>Wycoff, Glenn L.</td>
<td>468</td>
</tr>
<tr>
<td>Wynne, John Peter</td>
<td>159</td>
</tr>
<tr>
<td>Yager, Sylvan C.</td>
<td>2114</td>
</tr>
<tr>
<td>Yarbrough, Thelma S.</td>
<td>1835</td>
</tr>
<tr>
<td>Yardley, Hattie F.</td>
<td>1893</td>
</tr>
<tr>
<td>Yates, George Anderson</td>
<td>1094</td>
</tr>
<tr>
<td>Yensen, Lloyd N.</td>
<td>1904</td>
</tr>
<tr>
<td>Young, Frank</td>
<td>1844</td>
</tr>
<tr>
<td>Young, Harry F.</td>
<td>29</td>
</tr>
<tr>
<td>Young, Wilbur Shelby</td>
<td>1129</td>
</tr>
<tr>
<td>Young, Zella Palmer</td>
<td>1290</td>
</tr>
<tr>
<td>Y. M. C. A., education</td>
<td>114</td>
</tr>
<tr>
<td>Zachary, Caroline Beaumont</td>
<td>234</td>
</tr>
<tr>
<td>Zadach, Herbert S.</td>
<td>683</td>
</tr>
<tr>
<td>Zeleny, L. D.</td>
<td>237</td>
</tr>
<tr>
<td>Zerbe, H. M.</td>
<td>833</td>
</tr>
<tr>
<td>Zook, D. B.</td>
<td>2337</td>
</tr>
<tr>
<td>Zook, Roy C.</td>
<td>735</td>
</tr>
<tr>
<td>Zoology, teaching</td>
<td>790</td>
</tr>
</tbody>
</table>
### INDEX OF INSTITUTIONS

[The numbers refer to item, not to page]

<table>
<thead>
<tr>
<th>A</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akron, University of, 12, 299, 335, 500, 548, 552, 514, 1010, 1140, 1748, 1845, 1875, 2028, 2237, 2337, 2384.</td>
<td>California, State department of education, 1147.</td>
</tr>
<tr>
<td>Alabama, Department of education, 2079.</td>
<td>California, State teachers college, San Diego, 527.</td>
</tr>
<tr>
<td>American association for adult education, 2360.</td>
<td>Institute of child welfare, 212.</td>
</tr>
<tr>
<td>American association of teachers colleges, 1339, 1363.</td>
<td>California teachers association, Division of research, 71, 1200-1203, 1336, 1490-1491.</td>
</tr>
<tr>
<td>American library association, 2607.</td>
<td>Cartaret county, N. C., Public schools, 872.</td>
</tr>
<tr>
<td>American society for thrift, 949.</td>
<td>Chicago, Ill., Board of education, 2119.</td>
</tr>
<tr>
<td>Arkansas City junior college, 1131.</td>
<td>Chicago principals' club, 403, 637, 684, 692, 1302, 2390.</td>
</tr>
<tr>
<td>Atlanta, Ga., Board of education, 573, 630, 2343.</td>
<td></td>
</tr>
</tbody>
</table>
INDEX OF INSTITUTIONS

Eastern Kentucky state normal school and teachers college, 1153.
Elizabeth McCormick memorial fund, 1782.
El Paso, Tex., Public schools, Department of research, 465.
Emory university, 107, 634, 761, 1487, 1494, 1620, 1989.
F
Federated council on art education, 917.
Florida, University of, 890, 1368, 216.
Fordham university, 3, 22, 144, 1099, 1115, 1133, 1720, 2138.
Frick educational commission, 1971.
Fullerton junior college, Fullerton, Calif., 1130.
G
General education board, 1332.
George Washington university, 26, 388, 421, 539, 818, 879, 1139, 1846.
Georgia, State department of education, 1903.
Georgia, University of, Peabody school of education, 471.
Guilford county, N. C., Public schools, 1923.
H
Hamline university, 1400.
Hamtramck, Mich., Board of education, 1518.
Harvard university, 124, 232, 1890; Psycho-educational clinic, 1763.
High school head masters association, Boston, Mass., 1978.
High school teachers association of New York, 688.
Humboldt state teachers college, Arcata, Calif., 71.
I
Illinois, Department of public instruction, 2352.
Illinois, University of, 1557, 1611, 1611; Bureau of educational research, 325-326, 347-348, 1020-1029.
Illinois state teachers association, Central division, 997.
Illinois state teachers association, Department of research and statistics, 1256, 1922.
INDEX OF INSTITUTIONS

Indiana State Normal School, Terre Haute, 1165-1167, 1210-1212, 2038.
Indiana University, 59, 67, 123, 247, 255, 276, 298.
Institute of International Education, 136.
International Kindergarten Union, 975, 1974.
International Y. M. C. A.-college, 1340, 1381, 1507.
Iowa. Department of Public Instruction, 1942.
Iowa State College, St. Joseph, Mo., 1136.
Iowa State Teachers College, Pittsburg, 316, 355, 1702.
Iowa State Teachers College, Mankato, 1217, 1782.
Iowa State University, 355, 1702.
Iowa State Teachers College, St. Joseph, Mo., 1136.
Juvenile Adjustment Agency, 2218.

K
Kalamazoo, Mich., Public schools, Department of research, 335, 1702.
Kansas, St. Ti teachers college, Pittsburg, 316, 428, 437, 441, 466, 948, 1800.
Kansas City, Mo., Public schools, 320, 561, 695-696, 840.
Kansas City Public School Code Commission, 1432.
Kansas City Public Schools, Bowling Green, 289, 347.
Kansas University of, 1, 20, 29, 74, 790, 1046, 1057, 1334, 1406-1408, 1523, 1783, 1841, 2032, 2084, 2086.
Kentucky College, 2350.
Knoxville, Tenn., City schools, Research department, 654, 691, 2381.

L
Lawrenceville, N. J., Public schools, 56.
Lehigh University, 40.
Lincoln, Nebr., Public schools, Department of Measurements and Research, 402, 450, 1118.
Little Rock, Ark., Public schools, 1037.
Long Beach, Calif., City schools, Department of Research, 387, 910, 1872, 2175-2176, 2374, 2882.
Los Angeles, Calif., City schools, Department of Psychology and Educational Research, 389, 557, 632, 1038, 1690-1691.
Louisiana, State Department of Education, 66 668, 994, 1440.

M
Maine, State Department of Education, 1794.
Marquette University, 35, 673, 809, 1029, 1328, 1809, 1887.
Martins Ferry, Ohio, Public schools, 478, 1889.
Maryland, State Department of Education, 777, 1035.
Maryland, State Normal School, Frostburg, 1217, 1243.
Maryland, University of, 113, 129.
Massachusetts, State Department of Education, 1113, 1172, 1521, 1625; Division of Research and Statistics, 1708.
Merrill-Palmer School, 205, 1796, 2175, 1990, 2202.
Miami University, 39, 207, 346, 1031-1034, 1375, 2235, 2331.
Michigan, Department of Public Instruction, 957, 1026.
Milbank Memorial Fund, 1771-1777, 1787.
Mills College, 2302.
Milwaukee Vocational School, 2144-2145, 2263.
Minnesota, Department of Education, 1627.
Minnesota, Department of Public Institutions, Research Division, 261.
Minnesota, State Teachers College, Mankato, 2113.
Minnesota State Teachers College, St. Cloud, 237.
Mississippi Agricultural and Mechanical College, 738.
Montana, University of, 1397.
Montana State School of Mines, 2106.
Montrose, Colo., Public schools, 2387.
Mount Hope, W. Va., Public schools, 97.

N
National Association of Appointment Secretaries, 2123, 2128.
National Association of Deans of Women, 2772.
National Catholic Educational Association, 1411.
National Child Labor Committee, 1906-1907.
National Council for the Social Studies, 844.
National Education Association, 1574, 1590, 1630, 1633; Research Division, 1322, 1570.
National Junior Personnel Service, 2151.
National Research Council, 2291.
National Society of College Teachers of Education, 262, 1375, 1405.
Nebraska, Department of Public Instruction, 1940.
Nebraska, State Teachers College, Kearney, 2098.
Nebraska, University of, 168, 485, 520, 605, 647, 715, 913, 1101, 1136, 1294, 1392, 1403, 1469, 1737, 1754, 1831-1833.
Negro Agricultural and Technical College, Greensboro, N. C., 54.
New Hampshire, State Board of Education, 262.
New Hampshire, University of, 2090, 2116.
INDEX OF INSTITUTIONS

New Jersey, State teachers college and normal school, Upper Montclair, 124.
New Mexico, University of, 145.
New Trier township high school, Winnetka, Ill., 142.

Newark, N. J., Public schools, Department of reference and research, 521, 787.
Newark normal school of physical education and hygiene, 1811.
Norfolk, Va., City school board, Division of research and experimentation, 1982.
North Carolina University of, 14, 53, 55, 58, 64, 75, 78, 86, 90, 1833, 1900.
North Carolina college for negroes, 2277.
North Carolina college for women, 424, 1224.
North Carolina education association, 1891.
North Carolina state college of agriculture and engineering, 1638, 2141, 2142, 2148.
North central association of colleges and secondary schools, 922, 2264.
North Dakota, State teachers' college, Mayville, 1969.
North Dakota University of, 311, 364, 510, 927, 947, 1094, 1088, 1307, 1676, 1762, 2288.
North Dakota agricultural college, State College, 96.
Northwestern state teachers college, Alva, Okla., 321.

New Britain, 199, 1822, 1923, 1941, 1902, 2117.

Oakland, Calif., Public schools, Bureau of curriculum development, research and guidance, 39, 354, 474-475, 688-689, 1017, 1071, 1098, 1381, 1383, 1693 2014.
Oberlin, Ohio, Kindergarten-primary training school, 969.
Ohio college association, 293.
Ohio Institute, 1334-1335.
Ohio state educational conference, 965.
Ohio state teachers association, 1234-1235.

Ohio state university—Continued.

Ohio Wesleyan university, 35, 267, 312, 319, 585, 754, 934.


Oklahoma agricultural and mechanical college, 1097.

Oregon, University of, 1324, 1338, 1718, 1837, Bureau of educational research, 2233.

Oregon state teachers association, 462, 1271, 1515.


Pennsylvania, State normal school, Indiana, 27.
Pennsylvania, University of, 1232, 1249, 2046.
Pennsylvania state educational association, 322.

Personnel research federation, 1843.


Philippine Islands. Bureau of education, 302, 2104; Measurement and research section, 481.

Pluca, Ohio, Public schools, 200, 693, 2161.

Pitt county, N. C., Public schools, 952, 994, 1753, 1759.

Pittsburgh, University of, 153, 230, 371, 386, 409, 411, 413, 415, 422, 499, 673, 888, 1020, 1031, 1066, 1072, 1156, 1163, 1238, 1348, 1435, 1459, 1546, 1724, 2089-2090, 2132, 2202.

Plainfield, N. J., Public schools, 309, 491, 1704.

Portland, Oreg., Public schools, Department of research, 488.

Presbyterian church in the United States, Board of education, 2015, 2234.

Private school teachers' association, Philadelphia, Pa., 1064.

Providence, R. I., Public schools, 435, 2133; Department of research and guidance, 1894.

Purdue university, 1814.

Quincy, Ill., Senior high school, 784.
Quincy, Mass., School department, 60.

Raleigh, N. C., Public schools, 981, 999-1000, 1566, 1623.

Rochester, University of, 2275.


St. Louis, Mo., Public schools, 1119.

St. Mary-of-the-Woods college, 562.

Salisbury N. C., Public schools, 765, 1897.

San Francisco, Calif., Public schools, 2102.
San Jose, Calif., School department, 417, 684.

Shaw university, 2276.
Sioux City, Iowa, Public schools, 2103.