UNITED STATES DEPARTMENT OF THE INTERIOR
Ray Lyman Wilbur, Secretary
Office of Education
William John Cooper, Commissioner

BIBLIOGRAPHY
ON
EDUCATIONAL FINANCE
1923–1931

By CARTER ALEXANDER
and TIMON COVERT

Bulletin, 1932, No. 15

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

For sale by the Superintendent of Documents, Washington, D. C. — Price 20 cents
NOTE

Carter Alexander, expert consultant of the National Survey of School Finance, is professor of education at Teachers College, Columbia University. Timon Covert, coordinator of the survey, is a specialist in school finance of the United States Office of Education. Wm. John Cooper is director of the survey and Paul R. Mort is associate director.
## CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Business education</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VII</td>
<td>Business management</td>
<td>35</td>
</tr>
<tr>
<td>VIII</td>
<td>General</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Personnel</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Cafeteria</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Accounting</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Capital accounting</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Capital outlay</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Child accounting</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>City schools</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Costs, general</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Costs, individual</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Costs, statistics</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Finance, fiscal</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Finance, foreign</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Finance, general</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Finance, individual</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Finance, revenues</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Finance, statistics</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Finance, surveys</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Class size</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Commercial education</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Consolidation</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Aid</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Costs and economies</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Continuation schools</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Contracts</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Board of education</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Control of finance</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Cost accounting</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Cost of living</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Foreign</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Methods of calculating</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Public relations</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>County</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Surveys</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Unit</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Cripples, schools for</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Aid</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Current expense</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Deaf, schools for</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Debt service</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Economic phases</td>
<td>66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Page</th>
<th>Administration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult education costs</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Agricultural education</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>All-year schools</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Art</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Athletics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Attendance</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Automobile costs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Auxiliary agencies</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Costs</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Blind, schools for</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Bonds</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Borrowing</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>School, general</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>School, public relations</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>School statistics</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>School, States, individual</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>When</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Budget</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>In business</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Municipal</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>National</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>School, general</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>States, individual</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Building</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Accounting</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Aids</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Costs, cities, individual</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Costs, economics</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Costs, estimating</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Costs, general</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Costs, high-school</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Costs, junior high school</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Costs, maintenance, and operation</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Costs, statistics</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Finance, cities, individual</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Finance, general</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Finance, public relations</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Finance, States, individual</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Finance, surveys</td>
<td>35</td>
</tr>
</tbody>
</table>

Page III
<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economies</td>
<td>68</td>
</tr>
<tr>
<td>Foreign</td>
<td>68</td>
</tr>
<tr>
<td>General</td>
<td>68</td>
</tr>
<tr>
<td>Efficiency measures, finance</td>
<td>72</td>
</tr>
<tr>
<td>Elementary schools</td>
<td>72</td>
</tr>
<tr>
<td>Accounting</td>
<td>72</td>
</tr>
<tr>
<td>Aid</td>
<td>72</td>
</tr>
<tr>
<td>Costs</td>
<td>72</td>
</tr>
<tr>
<td>Costs, foreign</td>
<td>73</td>
</tr>
<tr>
<td>Equalization</td>
<td>73</td>
</tr>
<tr>
<td>County</td>
<td>73</td>
</tr>
<tr>
<td>Foreign</td>
<td>73</td>
</tr>
<tr>
<td>General</td>
<td>73</td>
</tr>
<tr>
<td>Minimum programs</td>
<td>76</td>
</tr>
<tr>
<td>States, individual</td>
<td>77</td>
</tr>
<tr>
<td>Equipment</td>
<td>85</td>
</tr>
<tr>
<td>Budget</td>
<td>85</td>
</tr>
<tr>
<td>Costs</td>
<td>85</td>
</tr>
<tr>
<td>Economies</td>
<td>86</td>
</tr>
<tr>
<td>Evenings schools</td>
<td>89</td>
</tr>
<tr>
<td>Expenditures</td>
<td>89</td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>86</td>
</tr>
<tr>
<td>Accounting</td>
<td>88</td>
</tr>
<tr>
<td>Budget</td>
<td>86</td>
</tr>
<tr>
<td>Buildings</td>
<td>86</td>
</tr>
<tr>
<td>Finance plans</td>
<td>86</td>
</tr>
<tr>
<td>Financial management</td>
<td>88</td>
</tr>
<tr>
<td>Federal</td>
<td>88</td>
</tr>
<tr>
<td>Aid</td>
<td>88</td>
</tr>
<tr>
<td>Policies</td>
<td>89</td>
</tr>
<tr>
<td>Statistics</td>
<td>89</td>
</tr>
<tr>
<td>Feeble-mindedness, costs</td>
<td>89</td>
</tr>
<tr>
<td>Finance, public</td>
<td>90</td>
</tr>
<tr>
<td>Foreign</td>
<td>90</td>
</tr>
<tr>
<td>General</td>
<td>90</td>
</tr>
<tr>
<td>States</td>
<td>90</td>
</tr>
<tr>
<td>Finance, school</td>
<td>90</td>
</tr>
<tr>
<td>Bibliographies</td>
<td>90</td>
</tr>
<tr>
<td>General</td>
<td>90</td>
</tr>
<tr>
<td>Fire insurance</td>
<td>94</td>
</tr>
<tr>
<td>Accounting</td>
<td>94</td>
</tr>
<tr>
<td>Economies</td>
<td>94</td>
</tr>
<tr>
<td>General</td>
<td>94</td>
</tr>
<tr>
<td>States, individual</td>
<td>95</td>
</tr>
<tr>
<td>Fiscal control</td>
<td>95</td>
</tr>
<tr>
<td>City</td>
<td>95</td>
</tr>
<tr>
<td>General</td>
<td>97</td>
</tr>
<tr>
<td>Legal</td>
<td>97</td>
</tr>
<tr>
<td>State</td>
<td>98</td>
</tr>
<tr>
<td>Fiscal independence</td>
<td>98</td>
</tr>
<tr>
<td>Fixed charges</td>
<td>98</td>
</tr>
<tr>
<td>Foreign, general</td>
<td>98</td>
</tr>
<tr>
<td>Foundations</td>
<td>99</td>
</tr>
<tr>
<td>General control</td>
<td>99</td>
</tr>
<tr>
<td>Government costs</td>
<td>99</td>
</tr>
<tr>
<td>Federal</td>
<td>99</td>
</tr>
<tr>
<td>State</td>
<td>99</td>
</tr>
<tr>
<td>Statistics</td>
<td>100</td>
</tr>
<tr>
<td>Group insurance</td>
<td>100</td>
</tr>
<tr>
<td>General</td>
<td>100</td>
</tr>
<tr>
<td>Teachers, foreign</td>
<td>100</td>
</tr>
<tr>
<td>Teachers, general</td>
<td>100</td>
</tr>
<tr>
<td>Teachers, higher education</td>
<td>101</td>
</tr>
<tr>
<td>Teachers, state and city systems</td>
<td>103</td>
</tr>
<tr>
<td>Health</td>
<td>103</td>
</tr>
<tr>
<td>Costs</td>
<td>103</td>
</tr>
<tr>
<td>Costs statistics</td>
<td>103</td>
</tr>
<tr>
<td>Higher education</td>
<td>103</td>
</tr>
<tr>
<td>Accounting</td>
<td>104</td>
</tr>
<tr>
<td>Budget</td>
<td>104</td>
</tr>
<tr>
<td>Budget, foreign</td>
<td>106</td>
</tr>
<tr>
<td>Business management</td>
<td>106</td>
</tr>
<tr>
<td>Costs</td>
<td>107</td>
</tr>
<tr>
<td>Federal relations</td>
<td>109</td>
</tr>
<tr>
<td>Foreign</td>
<td>110</td>
</tr>
<tr>
<td>General</td>
<td>110</td>
</tr>
<tr>
<td>Group insurance</td>
<td>111</td>
</tr>
<tr>
<td>Physical education</td>
<td>111</td>
</tr>
<tr>
<td>Public relations</td>
<td>111</td>
</tr>
<tr>
<td>Revenues</td>
<td>112</td>
</tr>
<tr>
<td>Salaries</td>
<td>114</td>
</tr>
<tr>
<td>Scholarships</td>
<td>114</td>
</tr>
<tr>
<td>Statistics</td>
<td>116</td>
</tr>
<tr>
<td>Student finance</td>
<td>116</td>
</tr>
<tr>
<td>Support</td>
<td>119</td>
</tr>
<tr>
<td>Surveys</td>
<td>120</td>
</tr>
<tr>
<td>Tuition</td>
<td>122</td>
</tr>
<tr>
<td>High school</td>
<td>122</td>
</tr>
<tr>
<td>Highway costs</td>
<td>122</td>
</tr>
<tr>
<td>Home economics</td>
<td>123</td>
</tr>
<tr>
<td>Household arts</td>
<td>123</td>
</tr>
<tr>
<td>Income</td>
<td>123</td>
</tr>
<tr>
<td>General</td>
<td>123</td>
</tr>
<tr>
<td>Statistics, general</td>
<td>123</td>
</tr>
<tr>
<td>Statistics, school</td>
<td>124</td>
</tr>
<tr>
<td>Index numbers</td>
<td>124</td>
</tr>
<tr>
<td>Indian school costs</td>
<td>125</td>
</tr>
<tr>
<td>Industrial education costs</td>
<td>125</td>
</tr>
<tr>
<td>Instruction costs</td>
<td>125</td>
</tr>
<tr>
<td>General</td>
<td>125</td>
</tr>
<tr>
<td>High school</td>
<td>125</td>
</tr>
<tr>
<td>Higher education</td>
<td>125</td>
</tr>
<tr>
<td>Junior colleges</td>
<td>125</td>
</tr>
<tr>
<td>Junior high school</td>
<td>125</td>
</tr>
<tr>
<td>Rural</td>
<td>129</td>
</tr>
<tr>
<td>Statistics</td>
<td>129</td>
</tr>
<tr>
<td>Insurance</td>
<td>129</td>
</tr>
<tr>
<td>Costs</td>
<td>129</td>
</tr>
<tr>
<td>General</td>
<td>129</td>
</tr>
<tr>
<td>Interest costs</td>
<td>129</td>
</tr>
<tr>
<td>Junior college</td>
<td>129</td>
</tr>
<tr>
<td>Aid</td>
<td>129</td>
</tr>
<tr>
<td>Bibliography</td>
<td>130</td>
</tr>
<tr>
<td>Costs</td>
<td>130</td>
</tr>
<tr>
<td>Financial administration</td>
<td>130</td>
</tr>
<tr>
<td>Legal</td>
<td>131</td>
</tr>
<tr>
<td>Salaries</td>
<td>131</td>
</tr>
<tr>
<td>Statistics</td>
<td>131</td>
</tr>
<tr>
<td>Support</td>
<td>131</td>
</tr>
<tr>
<td>Junior high school</td>
<td>134</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>134</td>
</tr>
<tr>
<td>Laboratory costs</td>
<td>134</td>
</tr>
<tr>
<td>Land-grant colleges</td>
<td>134</td>
</tr>
<tr>
<td>Statistics</td>
<td>134</td>
</tr>
<tr>
<td>Legal</td>
<td>134</td>
</tr>
<tr>
<td>Legislation</td>
<td>135</td>
</tr>
<tr>
<td>Liability insurance</td>
<td>135</td>
</tr>
<tr>
<td>Library</td>
<td>136</td>
</tr>
<tr>
<td>Aid</td>
<td>136</td>
</tr>
<tr>
<td>Costs</td>
<td>136</td>
</tr>
<tr>
<td>CONTENTS</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Library—Continued.</td>
<td>Page</td>
</tr>
<tr>
<td>Pensions</td>
<td>136</td>
</tr>
<tr>
<td>Statistics</td>
<td>136</td>
</tr>
<tr>
<td>Support</td>
<td>136</td>
</tr>
<tr>
<td>Life insurance costs</td>
<td>137</td>
</tr>
<tr>
<td>Luxuries</td>
<td>137</td>
</tr>
<tr>
<td>Maintenance</td>
<td>137</td>
</tr>
<tr>
<td>Costs</td>
<td>137</td>
</tr>
<tr>
<td>Economics</td>
<td>138</td>
</tr>
<tr>
<td>Equipment</td>
<td>139</td>
</tr>
<tr>
<td>Statistics</td>
<td>139</td>
</tr>
<tr>
<td>Manual arts</td>
<td>139</td>
</tr>
<tr>
<td>Mill school costs</td>
<td>139</td>
</tr>
<tr>
<td>Music costs</td>
<td>139</td>
</tr>
<tr>
<td>National school finance survey</td>
<td>139</td>
</tr>
<tr>
<td>Negro schools</td>
<td>139</td>
</tr>
<tr>
<td>Costs, elementary</td>
<td>139</td>
</tr>
<tr>
<td>Costs, general</td>
<td>140</td>
</tr>
<tr>
<td>Costs, high-school</td>
<td>140</td>
</tr>
<tr>
<td>Costs, higher education</td>
<td>140</td>
</tr>
<tr>
<td>Salaries</td>
<td>140</td>
</tr>
<tr>
<td>Statistics</td>
<td>140</td>
</tr>
<tr>
<td>Support, general</td>
<td>141</td>
</tr>
<tr>
<td>Support, States, individual</td>
<td>141</td>
</tr>
<tr>
<td>Teacher training</td>
<td>142</td>
</tr>
<tr>
<td>Night schools</td>
<td>142</td>
</tr>
<tr>
<td>Nurses, school</td>
<td>142</td>
</tr>
<tr>
<td>Nursery schools</td>
<td>142</td>
</tr>
<tr>
<td>Operation</td>
<td>143</td>
</tr>
<tr>
<td>Costs</td>
<td>143</td>
</tr>
<tr>
<td>Economics</td>
<td>143</td>
</tr>
<tr>
<td>Statistics</td>
<td>144</td>
</tr>
<tr>
<td>Outside associations</td>
<td>144</td>
</tr>
<tr>
<td>Parent-teacher associations</td>
<td>144</td>
</tr>
<tr>
<td>Parochial school costs</td>
<td>144</td>
</tr>
<tr>
<td>Pay-as-you-go</td>
<td>144</td>
</tr>
<tr>
<td>Pay roll</td>
<td>144</td>
</tr>
<tr>
<td>Pensions</td>
<td>145</td>
</tr>
<tr>
<td>Costs</td>
<td>145</td>
</tr>
<tr>
<td>General theory</td>
<td>145</td>
</tr>
<tr>
<td>Library</td>
<td>146</td>
</tr>
<tr>
<td>Teachers' allowances</td>
<td>146</td>
</tr>
<tr>
<td>Teachers, foreign</td>
<td>146</td>
</tr>
<tr>
<td>Teachers, general treatment</td>
<td>147</td>
</tr>
<tr>
<td>Teachers, State systems</td>
<td>149</td>
</tr>
<tr>
<td>Teachers, statutes</td>
<td>152</td>
</tr>
<tr>
<td>Teachers, support</td>
<td>153</td>
</tr>
<tr>
<td>Personnel</td>
<td>153</td>
</tr>
<tr>
<td>Budget</td>
<td>153</td>
</tr>
<tr>
<td>General</td>
<td>153</td>
</tr>
<tr>
<td>Physical education</td>
<td>154</td>
</tr>
<tr>
<td>Placement</td>
<td>154</td>
</tr>
<tr>
<td>Placement schools</td>
<td>154</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>154</td>
</tr>
<tr>
<td>Printing costs</td>
<td>155</td>
</tr>
<tr>
<td>Private schools</td>
<td>155</td>
</tr>
<tr>
<td>Foreign</td>
<td>155</td>
</tr>
<tr>
<td>Property value for schools, statistics</td>
<td>155</td>
</tr>
<tr>
<td>Public relations on school finance</td>
<td>155</td>
</tr>
<tr>
<td>Pupil cost accounting</td>
<td>159</td>
</tr>
<tr>
<td>Purchasing economies</td>
<td>159</td>
</tr>
<tr>
<td>Records</td>
<td>160</td>
</tr>
<tr>
<td>Recreation</td>
<td>160</td>
</tr>
<tr>
<td>Reports</td>
<td>160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>161</td>
</tr>
<tr>
<td>Techniques</td>
<td>161</td>
</tr>
<tr>
<td>Revenues</td>
<td>162</td>
</tr>
<tr>
<td>City school</td>
<td>162</td>
</tr>
<tr>
<td>Federal</td>
<td>162</td>
</tr>
<tr>
<td>General</td>
<td>162</td>
</tr>
<tr>
<td>Management</td>
<td>164</td>
</tr>
<tr>
<td>Nonpublic</td>
<td>164</td>
</tr>
<tr>
<td>Public relations</td>
<td>165</td>
</tr>
<tr>
<td>School, statistics</td>
<td>165</td>
</tr>
<tr>
<td>States, general</td>
<td>166</td>
</tr>
<tr>
<td>States, individual</td>
<td>166</td>
</tr>
<tr>
<td>Statistics</td>
<td>172</td>
</tr>
<tr>
<td>Retirement costs</td>
<td>172</td>
</tr>
<tr>
<td>Rural</td>
<td>172</td>
</tr>
<tr>
<td>Aid</td>
<td>172</td>
</tr>
<tr>
<td>Costs</td>
<td>172</td>
</tr>
<tr>
<td>County unit costs</td>
<td>173</td>
</tr>
<tr>
<td>County unit, general</td>
<td>174</td>
</tr>
<tr>
<td>County unit, support</td>
<td>176</td>
</tr>
<tr>
<td>General</td>
<td>177</td>
</tr>
<tr>
<td>Public relations</td>
<td>179</td>
</tr>
<tr>
<td>Support</td>
<td>179</td>
</tr>
<tr>
<td>Surveys</td>
<td>180</td>
</tr>
<tr>
<td>Safeguarding funds</td>
<td>181</td>
</tr>
<tr>
<td>Salaries</td>
<td>182</td>
</tr>
<tr>
<td>- Attendance officers</td>
<td>182</td>
</tr>
<tr>
<td>- Bibliography</td>
<td>182</td>
</tr>
<tr>
<td>- City studies</td>
<td>183</td>
</tr>
<tr>
<td>- City teachers, statistics</td>
<td>184</td>
</tr>
<tr>
<td>- Economics</td>
<td>184</td>
</tr>
<tr>
<td>- Elementary principals</td>
<td>184</td>
</tr>
<tr>
<td>- Elementary teachers</td>
<td>185</td>
</tr>
<tr>
<td>- General</td>
<td>185</td>
</tr>
<tr>
<td>- High-school principals</td>
<td>187</td>
</tr>
<tr>
<td>- High-school teachers</td>
<td>187</td>
</tr>
<tr>
<td>- Higher education</td>
<td>187</td>
</tr>
<tr>
<td>- Janitors</td>
<td>188</td>
</tr>
<tr>
<td>- Junior and senior colleges</td>
<td>188</td>
</tr>
<tr>
<td>- Kindergarten teachers</td>
<td>189</td>
</tr>
<tr>
<td>- Music supervisors</td>
<td>189</td>
</tr>
<tr>
<td>- Negro</td>
<td>189</td>
</tr>
<tr>
<td>- Nurses</td>
<td>189</td>
</tr>
<tr>
<td>- Other school employees</td>
<td>189</td>
</tr>
<tr>
<td>- Physical-education directors</td>
<td>189</td>
</tr>
<tr>
<td>- Public relations</td>
<td>190</td>
</tr>
<tr>
<td>- Research directors</td>
<td>190</td>
</tr>
<tr>
<td>- Rural, general</td>
<td>190</td>
</tr>
<tr>
<td>- Rural superintendents</td>
<td>190</td>
</tr>
<tr>
<td>- Rural supervision</td>
<td>190</td>
</tr>
<tr>
<td>- Rural teachers</td>
<td>190</td>
</tr>
<tr>
<td>- State departments</td>
<td>191</td>
</tr>
<tr>
<td>- State regulations</td>
<td>191</td>
</tr>
<tr>
<td>- State studies</td>
<td>191</td>
</tr>
<tr>
<td>- State superintendents</td>
<td>193</td>
</tr>
<tr>
<td>- Statistics</td>
<td>193</td>
</tr>
<tr>
<td>- Substitute teachers</td>
<td>194</td>
</tr>
<tr>
<td>- Superintendents</td>
<td>194</td>
</tr>
<tr>
<td>- Supervisors</td>
<td>195</td>
</tr>
<tr>
<td>- Teacher training</td>
<td>195</td>
</tr>
<tr>
<td>Salary schedules</td>
<td>196</td>
</tr>
<tr>
<td>- General</td>
<td>196</td>
</tr>
<tr>
<td>- General</td>
<td>196</td>
</tr>
<tr>
<td>- Merit systems</td>
<td>197</td>
</tr>
<tr>
<td>- Single salary</td>
<td>197</td>
</tr>
<tr>
<td>- Single salary</td>
<td>198</td>
</tr>
</tbody>
</table>
Contents

Page

Science costs .................................. 198
Secondary education .......................... 198
Aid ............................................. 198
Budget ........................................ 198
Costs .......................................... 198
Costs, high school ............................ 200
Costs, junior college ......................... 200
Costs, junior high school ...................... 200
Economies .................................... 200
Foreign ........................................ 201
General ....................................... 201
General, junior high school ................... 202
Statistics ...................................... 202
Support ........................................ 202
Sick benefits for teachers ..................... 203
Social-study costs ............................. 203
Special classes costs .......................... 204
Stadia .......................................... 204
State aid ....................................... 204
Buildings ..................................... 204
Colleges ....................................... 205
Consolidation .................................. 205
Crippled children .............................. 205
Elementary schools ............................ 205
General ....................................... 205
High school ................................... 208
Higher education .............................. 209
Junior colleges ............................... 209
Libraries ...................................... 209
Rural .......................................... 210
States, individual ............................. 211
Transportation ................................ 218
Vocational ..................................... 219
State control, fiscal ........................... 219
State costs, schools ............................ 219
State department .............................. 221
State general .................................. 221
State statistics ............................... 222
State support .................................. 222
Foreign ....................................... 224
State surveys .................................. 224
States, individual, alphabetically ............ 225
Statistics, school .............................. 304
Summer-school costs .......................... 304
Supervision costs ............................. 304
Support ........................................ 304
Supply accounting ............................. 304
Supply budget ................................ 305
Supply costs .................................. 305
Supply economies ............................. 305
Supply management ........................... 305
Supply purchasing ............................ 306
Support, school ................................ 309
Surveys, general ............................... 309
Taxation ...................................... 309
Assessment .................................... 309
Collection ..................................... 310
Equalization ................................... 311
General ....................................... 311
Rural .......................................... 314
School, statistics ............................. 314
States, individual ............................. 314
Statistics ...................................... 319

Page

Taxes .......................................... 319
Business ....................................... 319
Gasoline ....................................... 320
Income ......................................... 321
Inheritance ................................... 322
Luxury ......................................... 323
Property ....................................... 323
Severance ..................................... 324
State ............................................ 324
Statistics ..................................... 325
Teachers ....................................... 325
Associations ................................... 325
Contracts ...................................... 325
Placement ..................................... 326
Supply and demand ............................ 326
Tenure ......................................... 327
Teacher training .............................. 327
Costs .......................................... 327
Federal aid ..................................... 328
Fiscal administration ........................ 328
General ....................................... 328
High-school ................................... 328
Public relations .............................. 328
States, Individual ............................. 328
Statistics ..................................... 329
Support ........................................ 329
Teaching aids .................................. 329
Teaching load .................................. 329
Tenure of teachers ............................. 329
Terminal costs ................................ 329
Textbooks ..................................... 330
Costs .......................................... 330
Economies .................................... 330
Tobacco ....................................... 331
Turnover ....................................... 331
Transportation ............................... 331
Accounting .................................... 331
Aid ............................................. 331
Costs .......................................... 331
Economies .................................... 333
General ....................................... 334
Legal aspects .................................. 334
Statistics ..................................... 335
Tuition ......................................... 336
Vacation school costs ........................ 337
Value of education ............................ 337
Foreign ....................................... 340
Visual education costs ........................ 340
Vocational education .......................... 340
Accounting .................................... 340
Costs .......................................... 340
Federal aid ..................................... 341
General ....................................... 341
Statistics ..................................... 342
Vocational guidance ........................... 342
Costs .......................................... 342
General ....................................... 342
Placement ..................................... 342
Wages .......................................... 342
Wealth ......................................... 342
Wealth and ability to support schools ....... 343
Statistics ..................................... 343
LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
Office of Education,
Washington, D. C., June, 1932.

Sir: One of the first tasks to which the staff of the National Survey of School Finance turned its attention was the preparation of a bibliography in the field of school finance to supplement the thorough-going job done by the Educational Finance Inquiry a decade ago. Every effort was made to speed this work because of the needs of the survey staff. Because of the value of such a bibliography in stimulating research workers in the field, it was considered desirable to publish the bibliography as soon as it was reasonably complete and to supplement it from time to time during the life of the survey.

This work has been done by various members of the survey staff under the general direction of Dr. Paul R. Mort, Associate Director of the survey, and under the immediate supervision of Dr. Carter Alexander, Teachers' College, Columbia University, and Mr. Timon Covert, specialist in school finance, United States Office of Education. The bibliography is now ready for publication. Considering the limitations of time which have been placed upon the organization of the vast number of references relating to school finance, these men have been able to bring together in record time materials which promise to serve a most useful purpose to educational workers throughout the country.

I recommend its publication as a phase of the work of the National Survey of School Finance.

W. John Cooper, Commissioner.

The Secretary of the Interior.
FOREWORD

This bibliography, conceived as one of the earliest undertakings of the survey, does for the materials published from 1923 to 1931 what the Educational Finance Inquiry's bibliography did for the earlier years. In addition it lists some good mimeographed materials and some unpublished references whose titles seem promising. The time limitations and tremendous growth of the literature of the field, however, have made it impossible to cover all references as thoroughly as in the earlier work. Annotations and references are less complete for the same reasons.

Like the earlier bibliography, this one aims to stimulate school executives and research workers to progress in financing education. In a way each heading in the bibliography represents one or more problems in school finance. Nearly every important heading opens and plainly marks new and easy highways to representative data, ideas, statistics, and descriptions of practice essential for sound solutions of the problems involved. Accordingly the bibliography endeavors to include only usable materials. It makes no effort to provide under a given head all the references which a specialist working in that one field for the time expended on this whole bibliography could assemble.

The very fact that some headings have a paucity of materials is a challenge to school finance men everywhere. For every such empty place means that very little has been done in that field to put it on a sound financial basis. Until the financial aspects of any phase of education are sufficiently understood and controlled, it can never hope to become an integral part of the accepted educational program, public or nontax-supported. The vacant headings therefore offer rich opportunities for exploration. Every such study of merit should be promptly published or at least circulated in mimeographed form.

For the library facilities necessary for the undertaking, the bibliography workers are indebted to the library staffs of the United States Office of Education, of Teachers College (Columbia University), and of the Library of Congress. All three staffs operated heartily at all times and expended much energy to make the project a success. The completeness of a number of sections of the bibliography could not have been attained without the help of the Bureau of Educational Research Library at Ohio State University. The Director of the Bureau, Dr. W. W. Charters, and his staff, generously permitted the survey workers to copy hundreds of references from their exceptionally useful card files. The completeness of the State lists is largely due to the help of State department staffs

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and of the university professors who checked and extended the preliminary lists assembled at headquarters for their respective States. Of these men, Prof. F. H. Swift of the University of California, N. B. Trenham of the California Taxpayers' Association, and Dr. M. C. S. Noble, jr., director of research and statistics, North Carolina State Department of Education, rendered unusually valuable aid.

The closing date for regular references was September 1, 1931. Some outstanding references published after that date are included, but complete service on materials since then has been impossible. Space and time limitations have made it out of the question to do much with four distinct kinds of valuable materials: (1) official routine publications which will readily come to the mind of any serious investigator; (2) references on historical phases; (3) titles on foreign educational finance; (4) unpublished theses submitted for graduate requirements at universities.

Such annotation as occurs would have been largely impossible without the aid of previous bibliographies and annotations. The magnitude of the work and the speed required has made footnote acknowledgment or quotation marks on all borrowed sentences out of the question. Indebtedness in this matter is here acknowledged, once and for all, to many sources, especially to the bulletins of the United States Office of Education, of the National Education Association, and of the University of Illinois Bureau of Educational Research. On the annotating done from the documents themselves, Mr. Gordon McCloskey, of the survey staff, rendered an important service in addition to the work of filing and indexing.

The arrangement and cross-indexing of materials have received special attention. These will expedite the work of the educational executive and investigator when searching for important materials on almost any problem of educational finance, and from various angles of approach. Since improvement in school finance in most cases involves legislation in some States, all references to a particular State are listed under the State's name, even if this results in duplication. A man interested in improving schools in a given State ought to see its school-finance problems as a whole. The listing by States will greatly facilitate his attaining this overview.

The problem of editing for literary form has been exceedingly difficult. Because of the variety of sources and time limitations, uniformity has been impossible. To improve this editing materially would be exceedingly laborious, time-consuming, and costly, while adding little or nothing to usefulness. It accordingly seemed preferable to issue the bibliography after a reasonable effort at uniformity. The material will thus be available months or a year before a highly meticulous and expensive editing would have permitted publication.

HOW TO USE THE BIBLIOGRAPHY

Look in the Table of Contents for some likely general head, or under States, individual, if references are desired for a particular State, then turn to the indicated pages in the bibliography proper. After several instances of such use, headings at the tops of pages will become serviceable as a rough index.
 HOW TO SECURE COPIES OF MATERIALS

The place of publication is indicated in connection with each reference as far as known, except for periodicals and well-known publishers. The full titles and addresses of educational periodicals can be obtained from the proper section (U. S. Office of Education. Bulletin, 1931. No. 1. pp. 163-71) of the directory of the United States Office of Education. The Education Index, H. W. Wilson Co., University Avenue, New York City, gives the title and also the addresses and publishers of books. The publishers can also be located easily through any book store. Where the printer and place of printing have no significance, the reference gives instead the person from whom copies may be obtained.

Many of the documents issued by public education authorities are free. Many of the materials can be borrowed from the libraries of State universities, State historical societies, the United States Office of Education, or the Library of Congress. Probably no one library has anything like all the documents referred to in the bibliography. In writing for mimeographed materials and other documents, the supply of which is likely to be exhausted shortly, it will be advisable to request information as to the location of the nearest known copies to you, in case no copy can be sent you from the original supply.

CARTER ALEXANDER.
BIBLIOGRAPHY ON EDUCATIONAL FINANCE,
1923–1931

ACCOUNTING, SCHOOL
COST, GENERAL
(For accounting for any particular item, e.g., Pupils or Fire Insurance, see that item)

Outlines specific methods for school financial accounting and defines classification headings for expenditure and receipts.

In measuring efficiency by comparative costs and in determining educational cost, the nature and influence of variables (49 given) must be considered. Business procedures used in industry cannot be carried in their entirety into the field of education, because actual costs in education must be determined only in terms of permanent values acquired by the child.

Attempts to clear up misunderstandings concerning cost-units. A unit-cost is some division or multiple of a service or material used in the school system stated in terms of dollars expended. It is made for a special purpose and is difficult to determine satisfactorily. No unit can serve all purposes. Validity, reliability, and objectivity are requisite factors. The studies made should be multiple and the results obtained by one specific unit illuminate the results obtained by applying other units.

Also published in Educational record (University of Nebraska publication) 4: 1–4, October, 1931.

A stimulating theoretical treatment with practical applications and forms.

Views the cost sheet as a "method of thinking and not a mere exhibit," to be used "in inferring from the data and analyses whether every classified service and every instructional function is carried at the level of minimum cost consistent with maximum efficiency."

A technical and descriptive article investigating and comparing the statistics of school costs for 1913 with those of 1923. The research reveals and analyzes the statistics of five factors contributing to increased costs of city schools, namely, increased attendance and expansion of school service, a rising proportion of school population attending secondary schools, public and social demand for better teachers, depreciation of the dollar, and acceleration of building programs retarded during war. Tables and graphs supplement the statistics and discussion.

Discusses the deficiencies of contemporary financial accounting in schools; the objectives, qualities, and essential parts of an adequate accounting system. Systems that have been proposed by experts or tried and used successfully in the field are given, as well as advantages that may be expected to follow the use of an up-to-date accounting system.

These chapters divide costs into current operating costs and capital costs, and discuss the technique and application of cost accounting. Items of school expenditures are listed in detail and classified. Depreciation and capital reserve theories are analyzed and the need for scientific and uniform cost accounting is explained. Practical application of uniform accounting to a comparative study of school costs.

ACCOUNTING SCHOOL


ECONOMIES


The chief causes of waste in city school administration are: Too large proportion of budget spent for overhead, failure to control distributions and assignment of teaching service, rapid expansion of fields of school service, exploitation of too many school by-products of profit of business firms, extravagance in school buildings, positions for personal friends and political favorites. Efficient expenditure may be obtained through single-headed control, coordination in fields of activity, merit system for appointments, checking system on administrative assignments, a schedule for teaching positions, and a system of cost accounting covering all school activities.


A means of discovering and making available the advantages which may be derived from the use of mechanical equipment in school accounting and related procedures. Data were secured from a personal study of 17 public-school systems, and from information secured by correspondence and other indirect means from 17 other public-school systems, all using mechanical accounting equipment.

GENERAL


To be efficient, accounting must be simple, adequate, and made to fit the school system and trend in educational requirements. Methods should provide for comparability, year to year, activity to activity, and school to school. Improvements in standardization are needed. Strictly business methods are essential. School officials have a fiduciary responsibility.


A constructive criticism of the public-school accounting as practised in the United States from 1913-1924. Uses uniformity in procedure for comparable cost figures so that data collected by the United States Office of Education at great expense may be useful and valuable. In this way the amount of education given for a stated sum can be accurately computed. Case examples of wrong principles now in practice as to depreciation and depreciation reserve liabilities. States that the cost unit should be the pupil instruction hour.


Deals with the 13 underlying principles of financial public-school accounting which can be applied to both city and State school accounting. An appropriate illustration, showing the necessity for the efficient operation of these underlying principles is discussed. A treatment of the principles, instead of systems and forms of public-school financial accounting.


Presents completely a complete system of school accounting. Describes the voucher accounting system in detail and presents a codified classification for expenditures. Discusses problems of business administration, stores control and internal accounting. Accounting forms supplement the discussion.


Contains a complete list of financial forms for all phases of public-school accounting, accompanied by a brief discussion of their value and usefulness.


A review of the purposes and values of school accounting, including a discussion of comparable unit costs, adequate fire protection, precautions against unnecessary debts, budgetary procedure, the safeguarding of school funds, and proper accounting.

Presents some conditions necessitating accurate and accurate accounts and accounting control. Much of the current school business is done on a credit basis. Calls attention to the fact that State aid is frequently delayed but the school budget often must be presented a year in advance.

Financial systems in relation to schools. Sierra educational news, 20: 3-8, February 1924.


This study defines accounting and divides it into functional and fiscal bases. Functional bases: Administration, supervision, coordinate activities, and auxiliary agencies. Fiscal bases: Building operation, building maintenance, fixed charges, debt service and capital outlay. The author concludes that it is necessary to maintain these two fivefold bases of classification since money spent for either is logically aiding the other. Special accounts are kept to arrive at expense cost studies. May also be done by coding.


From the financial records of 15 Wisconsin schools for the year 1921-22, this pamphlet attempts to motivate more attention to scientific accounting of school money, or make such accounting easier and more reliable. Other States may derive some benefit from this edition.

Viewing school costs in terms of school service. Nation's schools, 8: 90, 92, 94, 96, September 1931.

A method of putting school costs over a period of years on a uniform basis when length of term, cost of living, and pupil-teacher ratio varied. Illustrated with data from elementary schools of Glendale, Ariz.


Stresses only those matters which experience and observation show have given school clerks most trouble. Emphasizes methods of keeping of financial records and accounts of the board of education. Presents accounting forms and describes recommended procedures.


Shows huge discrepancies in the cost percentages of various items of neighboring city school reports. Points out the need for a dictionary of accounting terms to simplify financial reports and to facilitate significant comparisons.


Presents facsimiles of a balance sheet for control of school expenditures, and the outlines of a monthly budget control statement. These statements form an efficient means of checking current operations and directing the course of financial administration.


Confusion and tardy development of present school accounting methods discussed. Points out the need of a standardized system. Includes illustrative forms, accounting problems, and a comprehensive bibliography.


Describes the values of detailed cost accounting and suggests methods and forms for use. Defends such accounting as a means of securing public confidence in the business administration of the school.


Nine big items which make up the total appropriations for schools are synchronized in terminology suggested and developed by the United States Office of Education. Given in detail the subdivisions of these nine major classifications.

Making finance the servant, not the master of education. Nation's schools, 8: 64-66, September 1931.

The need of long-time budgeting and sound accounting considered merely as
AGENCY FOR包围 the educational program which in turn should be considered as only part of the larger social program.

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Running review and bibliography of researches in this field, 1923 to the fall of 1931.

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The theory of accounts in school finance is basically like that of commercial firms, but it differs in that it is not designed to show profit and loss, but only to indicate sources of revenue and purposes of expenditures. The article shows, also, the unit to be used in computing unit costs, and names the major divisions of public-school accounting, as maintenance, capital outlay, and debt service. An explanation is given as to what each includes, its subdivisions, and definition. The nomenclature suggested by the Office of Education is used. Financial forms are designated. Recommended that an audit of all books and records be made annually and that an internal accounting system of the lunch room, bookstores, athletic records, and entertainments be kept by the principal.


Lists and justifies the major accounts and exhibits of concern to the school executive. Criticizes present systems employed, discusses the use of accounts for comparative costs and stresses their value for control of school policy.


Shows the need of detailed cost-statement information in small districts for furnishing information to school boards, and in working out school housing and instructional programs. Divides bookkeeping into three parts: (1) Budget (in detail); (2) Receipts and Disbursements (divided into the legal classifications as required by statute in the State); (3) Distribution of costs (on a contractual basis). The New Jersey simplified accounting system plan embodies these features in a complete system. A plan so simple that any competent person may keep it, irrespective of a knowledge of bookkeeping.


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The need of keeping records in school board offices in an adequate manner so that valuable information may be readily gained, is met by the simplified use of the cash journal invoice and payroll register combined with two ledgers: (1) general—for revenues and expenditures for the school district, city or county; (2) school ledgers for expenditures split up according to individual schools.


A series of eight articles, with facsimile illustrations, outlining in great detail an accrual accounting system for city school systems, 1923. Original records and books of original entry. School revenues revenues classified by source and other information required relative to income and school expenditures, their function, character, object; ledger accounts, their purpose and value; cost accounts method of operation and information available; school budget and appropriations; simple and effective methods for the control of expenditures; monthly and annual reports. The system provides for a distribution of all expenses at the time such expense is contracted.


Compiled from an extensive research, and a comprehensive bibliography, which is appended. Examines the philosophy and economy of a simplified and uniform accounting system, sets up the data forms, and organizes the needed for effective administration, and lists specific methods and forms by which the various accounting requirements of school systems may be met in a simple and uniform manner.


Discusses the deficiencies, purposes and desirable characteristics of school financial accounting; notes and illustrates needed records and financial statements. Outlines types of unit costs studies and the requirements, principles, and procedures of internal accounting.

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Discusses the essentials underlying the need for efficient accounting in public-school administration. Points out advantages of standardization in keeping school accounts. Presents necessary forms.

Rorem, S. O. School accounting in 115 cities under 25,000 population.
American school board journal, 75: 53-55, September 1927.


An inclusive and general handbook written from research and experience, based on the practices of many cities. Incorporates a treatment and model organization for the business administration of practically every phase of a city school system. The book presents the philosophy and purpose of school existence, investigates the composition and organization of school boards and evaluates the various relationships of the school and the municipal government. It includes a survey of typical school budgets, discusses the provisions, preparation, and administration of budgets, discusses and evaluates methods of school financial accounting, lists basic principles and methods of insuring school property, presents fundamentals of building capital outlays, and publicity programs.


A theoretical and analytical treatment, based on problems, evaluating and questioning actual accounting and administrative forms and methods in terms of social philosophy and educational objectives. When solutions are offered they are suggestive and provisional only, but the data and the considerations offered afford a basis for many of the problems raised.

Local Systems


Describes in detail the accounting code, the accounts, the internal accounting procedure, the pay-roll procedure, the subject cost procedure, the service of supplies, textbooks and equipment, and the budgetary procedure used in the administration of the public schools in Hamtramck, Mich.


The design and installation of a complete school accounting system on an accrual basis with provisions for budget control and inventory control.

State Systems


Describes in detail Iowa's new uniform school accounting system and presents facsimiles of the forms used. Iowa has a complete, comprehensive accounting and budgetary system of all public moneys from State departments and institutions down through the county and township organizations to municipal and school district corporations. The entire financial system is under the immediate direction of one Director of the Budget and his staff. The system is simple enough for practically all school secretaries to handle and its use will become easier each passing year. The general outline is not expected to change for years to come.


A well-organized presentation of a uniform financial accounting procedure pre-
posed in 1924 for all of the public schools of Michigan. Presents a method for preparing the budget, and analyzes it by the seven conventional divisions in general and in detail. Discusses cost accounting rules for a uniform procedure throughout the state and gives samples of the various blanks and forms that are essential for a uniform school accounting procedure and explains the proper use of each.

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STATE TEACHERS ASSOCIATION. A uniform financial procedure for the public schools of Michigan having a population of 2,000 or less. Lansing, Mich., State teachers association, 1925. 16 p. (Bulletin, no. 4. Pt. 2.)


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STATE DEPARTMENT OF PUBLIC INSTRUCTION. A system for keeping internal school accounts in public school districts in the State of New Jersey. New Jersey education bulletin, 14: 49-54, October 1927.

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Pennsylvania. A uniform accounting system for school districts. Harrisburg, Pa., Department of public instruction. 1830. 20 p. (Bulletin, no. 50.)


Wisconsin. FOWLER, JOHN GUY. The accounting of public school expenditures in Wisconsin. Madison, Wis., University of Wisconsin, 1924. 60 p. (Bureau of educational research bulletin, no. 4, November 1924.)

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ADMINISTRATION

See also General Control


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Improvements in administering the taxes voted in village and consolidated school districts are vital and rest with the superintendents. The school board is no longer the logical administrator because of the growing complexity of the modern school program and the lack of time and executive skill on the part of laymen.

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A stimulating theoretical treatment with practical illustrations of the problem of securing schools of maximum efficiency through proper executive and financial management.

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TRENHUM, N. BRADFORD. School boards meet the depression. The Tax Digest, October, 1931, p. 348. California Taxpayers' Association, Los Angeles.

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Summarizes methods being used in California, especially in Los Angeles to meet the need for retrenchment. Points out that foresight might have been exercised by educators in prosperous years which would have diminished the impact of this depression.
Agricultural Education

See also Vocational Education


Outlines the general provisions of the National Vocational Education Act. Explains the distribution of funds under the act of 1917 and the George-Reed act of 1929. Gives statistical data for the improvement of teacher service, and the costs and educational value of part-time and evening agricultural schools.

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Mississippi. Board of Vocational Education. The minimum financial goal for agriculture project work in Mississippi. Mississippi Board for vocational education, 1923. 8 p. Bulletin, 1923, no. 34.)


Scattered data on salaries for 1926-27 in open country and village high schools.


A tabulation showing a decade of progress (1918-1928) in the total amount of expenditures for vocational agricultural education in the State of Ohio through Federal, State, and local expenditures are possible by years for totals and also for total expenditures for high-school departments.


Shows the influence of supervised practice in agriculture supported by public funds, in the State of Texas, and gives a list of successful agricultural projects with a complete financial state-
The cost of educating a child in school is a major concern for parents. In the United States, the cost of education has been a topic of discussion for many years. In a recent study, the total estimated expenditures for schools in the United States for one year were approximately equal to the total estimated cost of war debts of all nations.

In addition to the cost of education, the cost of athletic programs is also a concern. Athletics can be a valuable part of the educational experience, but the costs associated with them can be significant. In a recent study, the annual cost of playing games was estimated to be approximately $68-73. This cost is in addition to the cost of education and other school expenses.

Another important aspect of education is the cost of art materials. In a recent study, the cost of art materials for the secondary schools in Jefferson County, Ala., was estimated to be $41.94 per child. This cost is a significant burden for many school systems.

In conclusion, the cost of education and athletic programs is a major concern for schools and families. It is important for schools to find ways to minimize these costs while still providing quality education and athletic programs for their students.
ATHLETICS

Chicago and in Buffalo. In Chicago the general scheme of finance is under a Board of Control, consisting of one member from each school. The Board furnishing a per capita allowance for each student. In Buffalo the Department of Physical Education has general administrative control of athletics and the management of high-school athletics is vested in an Athletic advisory council, the entire sports program being financed from money realized from the sale of tickets.


An attempt to show that marked improvements in business administration have taken place in the athletic department of schools and colleges, as evidenced by the fact that in eight of the universities composing the Big Ten Athletic Conference, the university treasuries have complete charge of all athletic receipts and expenditures. It is pointed out how high schools and junior colleges and high schools may adopt this centralized budgetary.


Pages 86-90 give a good general picture of sources of revenue and accounting methods in athletics in institutions of higher education with citations of individual schools for illustrations. Other parts have scattered finance material accessible only through sub-heads such as cost and salaries and the like under the items to which they refer, e. g., coaches or scholarships.


Well-annotated references, 9 on financing athletics, 8 on cost of athletics, 1 on financial aid to athletes, and 2 on athletic scholarships. Cost and salary data are indexed under the heads to which they refer, e. g., coaches or d'athletes.

Carnegie foundation for the advancement of teaching on American college athletics. Texas outlook, 13: 14-15, December 1929.


J. A. O. The financing of inter-junior college athletics. School executives magazine, 50: 15-17, September 1930.

A questionnaire investigation to determine ways and means necessary to finance inter-junior college athletics for Duluth Junior College, based upon data from 25 junior colleges in 11 different States. The data deal primarily with the athletic budget, its sources of income and expenditures.


—— The annual football debate. Athletic journal, 7: 44-46, September 1926.


Practical suggestions and citations of administrators on how to secure economies in this field and check list for knowing when such economies are secured.

Host, A. Watt. The organization and administration of finances in interscholastic athletics. Knoxville, 1930. 13 p. The university of Tennessee record extension series VI, no. 6, Knoxville, Tenn., April 1930.

Presents forms for budgeting and accounting for expenses of athletics. Uses a budget of $4,500 to illustrate procedure.

Johnson, A. H. Comments on business aspects of athletics. In Fifteenth annual meeting of university and college business officers, 1925. Iowa City, University of Iowa, 1926. p. 94-97.

Raisons nine questions concerning the control and business accounting of college athletics. Notes progress in the budget preparation, accounting for receipts and disbursements, the purchase of equipment and supplies, care of equipment, extension of plants, and the addition of internal sports to the program.

Kleberger, F. Rental system for administration of athletic clothing. Junior health and physical education, 1: 8, 24-25, 63, October 1930.

Kuntz, Charles A. The business aspects of athletics. In Association of university and college business officers. Fifteenth annual meeting. Iowa City, University of Iowa, 1925. p. 79-94.

Accounts for the gate receipts, costs, expenditures, and profits of intercollegiates.
athletics at Ohio State University. Football finances seven other sports, an intermural athletic program, and the construction of a stadium. Only 15 percent of gate receipts are required for the maintenance of varsity teams, the remainder going to support other activities.


Wagenhorst, Lewis H. The administration and cost of high-school interscholastic athletics. New York, N. Y., Teachers college, Columbia university, 1926. 134 p. (Teachers college, Columbia university. Contributions to education, no. 205.) Includes the provisions made by local boards for athletic and physical education activities, costs of physical education compared with costs of athletics, and determinative sources of revenue and methods of handling money.


ATTENDANCE COSTS

Austin, T. L. Waste in expenditure due to nonattendance. Lincoln, Nebr., University of Nebraska, 1927. (Teachers college, University of Nebraska. Research Bulletin, January 1927.) A detailed analysis of costs in a small Nebraska community in 1925-26, enlarged to include a few figures for the State. The methods of computing the costs are suggestive, particularly the one showing the decreased efficiency of the dollar.

Hanson, Whittier Lorenz. The costs of compulsory attendance service in the state of New York and some factors affecting the cost. New York, N. Y., Teachers college, Columbia University, 1924. 122 p. (Teachers college, Columbia university. Contributions to education, no. 158.) Examines the type of attendance service found in certain cities of New York State. The degree to which laws are enforced, the cost per child to the State of efficient attendance service, and the factors which effect the cost of attendance up to 1922. Finds attendance service costs well under 1 per cent of total current expenses.


From a study of total population, average daily school attendance, total expenditures for schools, and number of pupils enrolled in the high schools of the United States from 1870 to 1924, draws six conclusions regarding the status of the school, increasing costs, and school support. Submits increase in school enrollments, particularly in the upper grades, depreciation of the dollar, and the increase in the amount, the kinds and quality of school service demanded by society, as explanations of increasing school costs.


STATISTICS

[These will be found in the State and city school statistics bulletins of the United States Office of education. See State Statistics and City School Statistics]

AUTOMOBILE COSTS

California. Automobiles and school enrollment in California. School and society, 24:788, December 25, 1926. A comparison of the expenditures for automobiles in California with the cost of education in 1926. Expenditures were, for education $130,737,912; for gasoline, $145,353,483. Adding automobile capital outlay and other motoring expenses, the cost of education becomes comparatively negligible.


AUXILIARY AGENCIES COSTS

See also: Attendance; Health; Library; Physical Education

BORROWING

GENERAL

Aymes, Leonard P. Bond prices and business. Cleveland, Ohio, Cleveland Trust Co., 1924. (Cleveland Trust company. Business bulletin. 1924.)


Reproduces a model bond law drafted by the committee on municipal borrowings of the National Municipal League for the purpose of assisting State legislatures in securing uniformity in legislation and economy for the taxpayers.

Rightor, C. E. The preparation of a long-term financial program. New York, N. Y., Municipal administration services, 1927. 28 p. (Municipal administration services. Publication, 1927, no. 5.)

Discusses the need for public improvements, limitations of the budget, solution of the problem through long-term planning, organization for preparation of program, scope of program by governmental units, scope of program by kinds of improvements to be considered, means of financing improvements, period included in the program, necessity of official cooperation, procedure of formulating program, departmental estimates of expenditures, estimates of revenues, and the correlation of estimates with revenues, as factors in the preparation of a long-term financial program.


Analyzes the development and present scope of public borrowing, the trend

HENZLIE, F. E., RICHARDS, W. M., and others. Practical economics in school administration. Chapter XI. Auxiliary agencies. University of Nebraska, extension division, Lincoln, Nebr., 1932. p. 142-51, 198-201. (University of Nebraska publications, educational monograph, no. 3. 1932. 212 p.)

Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Tabulates cost of auxiliary agencies and statistics per pupil in A. D. A. for 3641 cities of different sizes in the various sections of the United States in 1923.

STATISTICS

[These will be found in the State and city school statistics bulletin of the United States Office of education. See State Statistics; City School Statistics]

BIBLIOGRAPHY

See Finance, School, Bibliographies

BLIND, SCHOOLS FOR

See also Crippled. Schools for: Deaf, Schools for


Per capita costs for schools reporting for 1927-28, classified according to school levels. Bases per capita cost figures upon enrollment instead of attendance figures.

White House Conference. Special education, the handicapped and the gifted. p. 5-6. New York, Century Co. 1931.

Gives costs of schools for blind, deaf, and crippled children.

BONDS

See Borrowing and its subdivisions
of expenditures for public improvements, defaults and bankruptcies, legal restrictions on public borrowing, loan policies, the term of loans, the consolidation, and long-term budgeting of loan funds, and borrowing combined with taxation.

SCHOOL GENERAL


This article contrasts old and new methods of selling and buying school bonds, and notes certain factors which have affected the changes.


A general account of procedure and precautions to be followed in the issuance of school bonds in small towns.


A brief discussion of main problems in issuance and sale of bonds, 1927. Sale of bonds is only a means of borrowing money. A financial specialist for consultation is a necessity.


A series of monthly articles continuous from January, 1928, to December, 1931, now temporarily suspended, giving the trend of school bond prices. The school bond index represents the net yield of school bonds of various states during the various months, a comparison by months and years. A discussion of rates of interest and tables of comparison for: (1) Average yield of all school bonds sold during current months; (2) amounts and yields of bond issues; (3) bond sales, schools, municipal, all public and private, average rate bonds were sold during month (municipal); (4) average yield of long term Federal Government bonds; (5) security prices; (6) revised index number of wholesale prices.


Chapter XVIII discusses the forms which borrowing for schools assumes throughout the United States. Suggests more careful planning in order to build up a reserve fund in lieu of borrowing and efficient accounting systems when bonding indebtedness is necessary. Chapter XIX gives in detail the diverse features connected with the administration of the issuance and redemption of school bonds. Appendix C gives every necessary step.

— Principles governing the indebtedness of local school systems. Teachers college record, 28: 928-45, May 1927.

Discusses legitimate school debts, borrowing for current needs, borrowing to refund outstanding obligations, borrowing for replacements, the pay-as-you-go plan, the establishment of a building revenue, borrowing for plant requirements, building costs and bonded debts, indebtedness and school property value, unsatisfactory debt conditions, school debt and the future, and the plant in relation to the current educational program.


Covers the difficulties in connection with school bond issues. Points out the difficulties resulting from the long-term bonds. Two types of bonds are discussed: (1) Straight sinking fund floated, and (2) serial bond. Massachusetts, New Jersey, North Carolina, Wisconsin, and in 1923, Ohio provided for serial bonds only. Explains manner of determining length of period for which serial bonds should be issued.


Four articles dealing with purposes and authorizations, limitations upon the exercise of bonding power, negotiations of securities and the refunding and redemption of bonds. State tendency is to limit bond issue to building and equipment purposes, issued only when authorized by a vote of the electorate or by an act of legislative body of political unit. Borrowing power restricted by maximum term of bonds, rate of interest, time of payment of interest, denomination of bonds and minimum sale price and maximum amount of issue.


Investigates the use of public credit in connection with the administration of the public schools of Florida. Reviews the background of the debt problem from 1901-1928, and analyzes in considerable detail the present school and municipal debt of the State.

HEINZLIE, F. E., RICHARDS, W. M. and others. Practical economics in school administration. Chapter X. Debt service. University of Nebraska, extension division, Lincoln, Nebraska, 1932. p. 139-42, 197-98. (University of Nebraska public
Practical suggestions and citations from authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

**LINDSAY, E. E.** Indebtedness and bonds. *In His Problems in school administration. New York, N.Y., Macmillan co., 1928. p. 252-90.*

General discussion of school indebtedness on bond forms, forms of indebtedness, the theory of bonding and the merits of different types of bonds, bond provisions for new buildings and cost of generating, proportion comparison of building costs by different plans of financing, changing from the bonding to the depreciation plan, and publicity for the depreciation plan.


Reproduces the various forms necessary for issuing school bonds.


Discusses the advantages and disadvantages of the three types of long-term borrowing methods: (a) straight bonding, (b) sinking fund, and (c) serial bonds.


A stimulating presentation of why a school district should, and how it may, balance its budget.

**PETERSON, RUSSEL S.** Competitive school bond sales. *American school board journal, 71: 41, September 1925.* This article contains a short section dealing with the advisability of securing competitive bids from local dealers when placing bond sales on the market. This price was followed in the sale of bonds for the school district of St. Joseph, Mo., 1925.

**FITZGERALD, BENJAMIN F.** Indebtedness. *In His An introduction to public school finance. Boston, Mass.*


Detailed explanation and statistical tables which can be used to calculate accurately the initial and annual principal and interest payments which will equalize the annual cost of a serial bond issue.


Discusses the basis for determining the exact legal debt limit of a district. Uses court decision from various States on the question of legal debt limits to show that the exact legal debt limit of a district is determined by constitutional or statutory provisions under which the district exists.


A stimulating presentation of why a school district should, and how it may, balance its budget.

**SANDERS, VERNON T.** Calculating school district debt limits. *American school board journal, 73: 41, September 1929.*

Discusses the basis for determining the exact legal debt limit of a district. Uses court decision from various States on the question of legal debt limits to show that the exact legal debt limit of a district is determined by constitutional or statutory provisions under which the district exists.
Borrowing

UNIVERSITY OF THE STATE OF NEW YORK. EDUCA-


Discusses why boards borrow, trends in bonding practice, justification of borrowing, principles governing borrowing, and types of bonds, based upon philosophy and research. Outlines publicity campaigns and proceedings necessary to issue bonds, and payment plans.

SCHOOL PUBLIC RELATIONS
See also Building Finance, Public Relations


Campaign for bond issue for high school; a noteworthy piece of work at Eau Claire, Wis. American educational digest, 44: 253-55, February 1925.


Recent bond campaigns are examined and the publicity techniques are presented and described. Bibliography.

ENGELHARDT, Fred. Fiscal statements showing indebtedness. American school board journal, 73: 54-55, 143-44, August 1926.

Discusses the need for clear fiscal statements regarding school debt. 12 essential features of school bonded debt statements, 7 features of sinking fund statements, important funded debt ratios, the relationship between debt plans and current educational programs, some case studies, and statements of temporary loans.


Covers Illinois, Indiana, Minnesota, Ohio and Wisconsin for years 1928-30. Most frequent cause is antagonism between factions.


An accurate study of a community's ability to finance its school building program with detailed account of the ability of Madison, Wisconsin, using 10 statistics as a basis of comparison. Concludes that bonds should be issued only when large sums of money are needed for building purposes, sites, or renewing, extending, replacing bonds or funding outstanding indebtedness.


Discusses three methods: Private sale, irregular methods, public sale. Observes all legal requirements. Cites a list of financial publications as a guide to channels of publicity.

GREENE, G. W. Voting school bonds during a period of depression. American school board journal, 82: 58, April 1931.

A brief but interesting review of the high points in a bond-election campaign plan as it was organized and carried on in a Washington town of about 7,000 population. The pronounced success of the plan in the face of hard times indicates its soundness.


Purpose of financial statement as an aid in controlling financial operations. Through statement of fixed assets and fixed liabilities determines cost of plant operation. Such cost is value of property and services consumed, not expenditures or disbursements of school revenue.


Describes methods of presenting various types of school data to the public as a means of securing support for school bond issues. An examination of the methods, purposes, and principles of such campaigns indicates that spectacular methods are unsound and ultimately not as effective as more conservative methods.


A short discussion of a publicity campaign procedure used in a school building-bond election to acquaint the public with the functions and volume of a small California junior high school.


Discusses school bond issues and holding companies as a solution of school building problems. States that these companies are formed to build needed school buildings and that the school corporation, in turn, leases the sites, buildings, and equipment and in time owns them, meanwhile having their full use.
What about school bond elections?

American school board journal, 69: 34, 131-32, December 1924.

Describes school bond campaign technique which proved successful in New Philadelphia, Ohio, includes a list of school bond issues in 84 cities ranging from 4,000 to 100,000 in population, and a discussion of methods for meeting opposition to school issues.

What wins a school bond election.

American school board journal, 71: 68, December 1925.

Describes the methods by which the Denver school board met severe opposition to and secured the passage of a school bond issue. Points out advantages of acquainting the public with facts in such a campaign.

Why school bond issues have failed.


Why some school bond issues have failed.

American school board journal, 76: 68-69, June 1928.

Contends that school bond issues fail because school authorities do not adequately inform the public concerning the necessity for school expenditures, the purposes for which school money has been and will be spent, and the values of education.

SCHOOL STATISTICS

See also Borrowing, School, States, Individual

[These will be found in the State and city school statistics bulletin of the United States Office of Education. See State School Statistics; City School Statistics.]

Debt statistics occur regularly in the standard Cost of Government series of the National Industrial Conference Board. The latest, issued in 1931, covers the latest previous years feasible for the various items. Gives State and local combined debt for schools in totals and percentages for geographical divisions. Figures for general Governmental debts, rates of interest and the like, by Individual States. Sources of data indicated.


A presentation of the gross bonded indebtedness of 241 cities as of January 1, 1929, shows a range from $301,374.496 in New York City to no debt. In Washington, D.C. and Holyoke, Mass. The cities are arranged in five groups.


Graphical and detailed presentation of Federal, State, and local debts since 1913. Analysis, using tables and charts, the sources from which State and local revenue is derived. Concludes agency that expands and purposes of expenditure and indicates the trend as on the increase.
Borrowing


SCHOOL, STATES, INDIVIDUAL


Tables and graphs showing the trends of capital outlay financing and bonded indebtedness for schools in California from 1914 to 1920. Significant upward movements after the War with a tendency to level off and decline slowly after about 1927 are depicted. A seldom mentioned educational cost of more than $10,000,000 for bond interest is mentioned.


What the 1931 California Legislature did to provisions dealing with school bonds. From a condition of 40-year serial bonds, with a maximum rate of 6 per cent and provisions for suspending redemption payments for half the life of the bonds California moved to 25 years as maximum duration, 5 per cent maximum interest, and suspension not longer than 5 years. Savings during the next generation on the present basis should approximate $75,000,000. A formula is included for rapid calculation of the total cost of a bond issue to extinction.


Compares the total and per student bonded indebtedness for school purposes in California for 1920 and 1929 by counties. Explains the tendency for decreases per unit of attendance with a prediction of still further decreases.


Illinois. Table showing total bonded indebtedness of school districts of Illinois, school years 1925 and 1926, with increases and decreases indicated. *Educational press bulletin*, 220: 3, December 1926.

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General statistical and tabular analysis of the fund and types of school bonds issued in Nebraska from 1920-1928. Discusses methods of paying, methods of redemption, options, pay-as-you-go, time maturity, etc. Concludes that bonds should be issued only as a last resort. Short-term serial bonds which embody the pay-as-you-go plan are most acceptable and most economical.

New Jersey. State Department of Education. Comparison of school and municipal net indebtedness, per cent total net debt is of assessed wealth (1928), and school and municipal expenditures in the various communities of the State. *Education bulletin*, 15: 448-513, June 1929.

BORROWING

1926. Present sales data on State and local borrowing and indebtedness for New York State, in tabular and graphic form for 1917-1925. Shows current tendencies in public expenditures and the growing proportion of expenditure for capital outlays to the total of public expenditures.

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Data for previous years in similar bulletins.


Statistics in amounts carried and falling to carry for individual cities and villages.

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AND SUTTON, D. H. The disposition of school bond issues and special levies submitted in Ohio cities and exempted villages, November 4, 1930. Ohio State university, Columbus. (Mimeographed. The Bureau of educational research.)

BEEDER, WARDO G. The mounting indebtedness for schools in Ohio. Educational research bulletin, 4: 1-4, January 1926.


Discusses school bonds and their issuance as related to school laws of Ohio. In 1927, and the advisability of using a form blank transcript of each section authorizing the sale of bonds. Quotes the sections of the transcript regarded as essential. Advises expert counsel for every step of the procedure.

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WARD, JESSE LYNN. Bonding in Ohio. American school board journal, 69: March, April, May 1925.

Pictures the bonded indebtedness in the State over a long term of years, for school and other purposes. Compares the increase to the increase in enrollment and to that for current expenditures, in considerable detail. Presents many data to show detailed picture of the financial conditions in the State.

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WHITMER, J. W. and others. The steps required in issuing bonds and completing a school-building program in Ohio. Educational research bulletin, 5: 255-37, September 8, 1928.


Careful analytical study of the situation of public debt for education in Oregon with substantiating statistical tables. Debt distribution to each county on the basis of debt per inhabitant and debt per pupil enrolled. Wealthiest counties per child enrolled have least indebtedness, with resulting inequalities in providing educational opportunities. Ability of counties to finance education is in a ratio of 5 to 1, a result of antiquated district system of control.


South Carolina. DERRICK, S. M. Bond issue for permanent improvement of State institutions; selected argument and bibliography for the South Carolina high school league debate, 1926-27. Columbia, University of South Carolina, Bureau of publications, 1926. 108 p. (On cover: Bulletin of the University of South Carolina, no. 187, September 15, 1926.)


Texas. MOODY, DAN, and MORGAN WEAVER, COMP. Common school districts; tax and bond forms, Austin, Tex., Department of education, 1926. 52 p. (Bulletin no. 206, July 1926.)


WHEN

See also Borrowing, School, General


Plan of payment must be determined by greatest justice to all taxpayers. Borrowings should be made at such times and by such manner as to secure most favorable interest rates and method of repayment. A long-term program for financing is essential in any program for developing school building projects.


Can we pay as we go? Public affairs, no. 281. Kansas City, Mo., January 10, 1928.


— and Royalty, Paul. When to issue school bonds. Bloomington, Ind., Indiana University, 1926. 15 p. (Bulletin of the school of education, vol. 2, no. 6, July 1926.)

Discusses the relation of land prices to money rates and possible savings from selling bonds when money is plentiful, as a defense of the principles that public money should be saved whenever possible. States that seasonal fluctuations of high bond prices and low interest rates can be utilized.


Discusses pay-as-you-go plan, building reserves, amount and time for bond issues, common unsatisfactory conditions affecting indebtedness, and the municipal control of school debts. Examines possible future improvements in school bonding procedures, and the relation of the building program to the educational program. Analyzes the educational theory.

Essex, Don L. Bonding vs. pay-as-you-go in financing school buildings. New York, N. Y., Bureau of publications, Teachers college, Columbia university, 1932. (Teachers college, Columbia university, Dissertation.)

An exhaustive study of the status and implications of the pay-as-you-go policy for American school systems (1920-1933). The policy is advocated as a more advantageous method of financing school projects. The book is a study of the status and implications of the pay-as-you-go policy for American school systems (1920-1933). The policy is advocated as a more advantageous method of financing school projects.


Fowlkes, John G. School bonds. Milwaukee, Wis., Bruce publishing co., 1924.


The cost of financing a school building program by the bonding, the pay-as-you-go, and the depreciation plans are compared in this article. The text is divided into two parts: one part, which is devoted to the study of the problems involved in the planning and financing of school buildings, and the other part, which is devoted to the study of the practical advantages and disadvantages of each plan. The practical advantages and disadvantages of each plan are examined by the superintendent of the San Francisco schools.


A brief report of a study of the pay-as-you-go plan for new school buildings in 133 cities of varying population. Shows that during the last 10 years, 14 per cent of the total amount expended for new school buildings in three cities was
financed by the pay-as-you-go plan, and 84 per cent chiefly by bond issues.


Discusses the two plans of school financing proposed by Streets—set-aside plan and the collection of sufficient tax money prior to construction. Shows that the latter plan costs more than the former and presents a graphic comparison of the two plans.


MOHLER, ARTHUR B. Methods that may be employed in financing new buildings. *Nation's schools*, 9: 74-77, January 1932.

The advantages and disadvantages of the following three plans are set forth: Pay in advance; pay-as-you-go; and the credit plan.


This section advocates the pay-as-you-go policy for communities having an annually recurring program of outlay. Points out the advantage of being the cheapest method of financing improvements, with regard to direct cash outlay.


An explanation of how Lansing, Mich., makes all building costs out of current funds, thus saving for educational activity, large sums which most communities pay for interest on bonded indebtedness.


The author, a well-known banker, a member of the municipal securities committee of the Investment Bankers Association of America lays down seven steps, with full explanation of each, for making school bonds more attractive and desirable to the investor. Lists a table suggesting amortization of bonds. Bankers pay the best price for what is most attractive to them.


**BUDGET ECONOMIES**


Discusses the abstract nature of attempts to measure the efficiency of budgetary procedures used by school administrators; reproduces a tentative score-card for measuring the efficiency of local machinery set up for the preparation, voting, execution, and control of school budgets. The score-card was prepared from literature of the field, opli-


Sets up standards for the personnel of budget preparation, the estimates of expenses and incomes, budget forms, budget publicity, and execution of the budget, and for checking the budget and handling deficiencies.


Describes wastes existing in America, including educational ones. Points out financial and educational retenchment possible by careful planning of expenditures without impairment of instruction. Lists some instruction practices in Pennsylvania, defines budget, and offers suggested economies.


The advantages and necessity of a careful and intimate study of local educational needs to account specifically for each dollar spent, and to reasonably determine desirable lines of retenchment and expansion.


(Abstracts.)

An abstract of the discussion of State aspects of fiscal articulation. Recommends that State support be based upon equilized educational opportunities, with the elements of the State's educational system coordinated through a central agency of educational control, and an executive budget with appropriations voted by the legislature.


A general and exhaustive criticism of wasteful methods in school finance, followed by a practical budgetary system in 1929 to eliminate waste and to increase efficiency. Gives six criteria to be used in preparing a budget.


Philosophical article explaining effective budgeting as an economy measure. Outlines methods of determining sums available for expenditure and for coordinating the budget and the educational policy, with a philosophy and technique of budget control.

IN BUSINESS


Applies business methods of forecasting to the construction of educational budgets. Includes graphs.


DONALD, W. J. Be sure your budget is honest. *Factory*, 36: 1034-1172, June 1926.

Contends that the really effective budget is a budget of probabilities, not one of possibilities.


Concise discussion of various types or classes of budgets used in manufacturing and industry. Presents methods of computation and the process of commercial and industrial budgets with organization and clarity. Only indirectly applicable to educational finance.


Reviews a banker's experience with many industrial budgets and recommends a method of procedure that may be applied to educational budgets.


What a budget means to the treasury department of a progressive organization. *The Annalist*, 26: 545, October 30, 1925.

GENERAL


Presents a picture—more or less complete—of the budgetary practice, as it exists to-day, in the National, State, and local governments of the United States, and of the budgetary experience of the United States covering only the last 25 years. Considers briefly historical, legal, social, and economic phases.

NATIONAL MUNICIPAL LEAGUE. Committee on municipal budget law of the National municipal league. A model municipal budget law. New York, N. Y., National municipal league, 1928, 17 p. (Supplement to the National municipal review, vol. 17, no. 7, July 1928.)

The model budget law recommended for States, counties, and municipal governments is given in some detail.


MUNICIPAL

Burd, C. E. Civic bodies unite to study city budget. American city, 80: 413, April 1924.

Various organizations cooperated for this study. They hoped to work out a model budget plan based on the average expenditures for departments during the past 10 years.


Points out the salient points developed in scientific budget construction and the causes for ineffective municipal budgets.

Suggestions for improving the present budget procedure in cities. American city, 80: 292-95, March 1924.

Several usable ideas for improving the present budgetary procedure in cities, touching on the following questions: Lack of uniformity, construction or improvement programs, the budget as a means of publicity, and flexibility in budget operation.


Supports the plan of budget-making by the superintendent of schools on the ground that his place as chief executive of the school system puts him in a strategic position for doing this work. Calls attention to need for utilization of practical experience of teachers and for a continuous study of the subject throughout the year.


Examines municipal situations in New Jersey to the suggestion that the State government be given certain authority to draft and administer municipal budgets.

NATIONAL


NATIONAL BUDGET SYSTEM. National budget system, 1927. Brookings Institute, Washington, D. C.

GENERAL SCHOOL

For material on budgeting for any item, e.g., Personnel, or Extracurricular Activities, look for Budget under that item.

Asplund, Rupert P., Mechanics and Operation of Successful School Budget Control. The tax digest, September, 1929, p. 316; California Taxpayers' Association, Los Angeles.

Relates the evolution of school budget procedure in New Mexico. A county budget commission, budget hearings and State review enter into the picture.


Possibility of administering through scientific procedure and controlled accounts, a school budget and pay roll in order to keep or to gain the public confidence. Gives general set-up of the system of bookkeeping as used in Gary, Ind.


Carter, H. Keeping within the budget. Nation's schools. 5: 37-38, April 1929.

This article explains how a superintendent may speedily and accurately inspect the disbursements in a small school by using a chart showing expenditures according to function. Gives accounting form headings and a clear record of disbursements by the month which become
valuable for quick inspection and for compiling new budget estimates or for inspection, control, and reference.


Gives an example of the confusion and extravagance resulting from the uncoordinated work of school board purchasing committees and explains how a budget planned and administered by a trained superintendent will effect order, efficiency, and economy.


Includes 2,080 articles written between 1907 and 1926. Articles are cross-indexed under 32 heads, chief of which are history, nature and purpose of budgets, importance, feasibility, and legal basis of the budget, charts and diagrams used in budgets, forms of budgets, principles of budget making, preparation, voting and executing of budgets, budget reports and criticism of budgets. Index of authors.


After discussing the abstract nature of attempts to measure of efficiency of budgetary procedures used by school administrators, this article reproduces a tentative score card for measuring the efficiency of local machinery set up for the preparation, voting, execution, and control of school budgets. The score card was prepared from literature of the field, opinions of administrators, job analyses, and actual checks against budget operation in the field.


Philosophical article attempting to apply business methods of financial estimating to school budgetary practices. Outlines a score card of 20 items by which school administrators may measure the efficiency of their practices in regard to the preparation, voting, execution, and control of their budgets.


A score card and a manual for scoring school budgets. Given a concise review of school budget practice.


Summarizes a rather exhaustive study of the unforeseen and unpredictable factors seriously affecting the school budget.


Discusses procedure in budget construction and presentation 1929-30. Three documents—report of previous year—actual budget proposals and budget questions and answers—present the school board with fiscal report functioning budget and allow every board member full information upon every budget item. Presents actual budget figures summary 1930-31.


Series of four articles on school budgets and budget procedure, laws relating thereto, and ways and means of control. Points out fundamental principles involved in authorization by State provision, adoption, prescribing, and approving basis for and control of expenditures.


Reviews 100 city school budgets and gives examples of "superior" budgets. Annotates three city school budgets—Des Moines, Iowa, Madison, Wis., and Montclair, N. J., and lists characteristics of a constructive and effective budget.

--- and ENGELHARDT, FRED. Some aspects of budgetary practice in local school systems. Teachers' college record, 23: 394-412, December 1926.

A general treatment of school budgetary practices and principles. Reproduces a budgetary calendar and discusses standards essential to budgetary control, cyclic aspects of budgetary control, become budget considerations, tentative expenditure budget, budget and plant program, budgets for internal activities, responsibilities for the budget, budget review and approval, the form of annual budgetary statement, procedure in the preparation of the budget, and the limitations of the budget.


A comprehensive and detailed discussion pointing out the necessity of including in the budget a plan for sufficient funds, and of giving the entire plan publicity. Cites general practices in budget making, illustrated with forms and charts.


Helpful points on school budgets, what they are for, how to prepare and use them, functional analyses, unit costs, etc.

Simple nontechnical presentation of the common considerations in planning a school budget. Warns of the results of too stringent economy.


GREENE, G. W. Budgetary control in the smaller school systems. American school board journal, 81: 4, 7, 8, December 1930.

This article discusses a nontechnical, practical accurate method of school budget producing exact information to be placed in hands of school board each month. A final yearly itemized statement becomes a basis for the ensuing budget.


The author, who is director of the administration bureau, Deparrtment of public instruction of Pennsylvania, declares that "State supervision must accompany State money."


How to prepare and analyze a school district budget. Tax digest, 7: 198-200, June 1929.


Informing the principal on his budget. American school board journal, 74: 144, 146, May 1927.

Presents 12 instructions issued by the business manager of Evansville, Ind., to the various school principals informing them just what amount of money their schools are allowed for the school year, and charging them with the efficient utilization of such allowances.


Defines the purposes of the budget, outlines the ordinary classifications, enumerates the accounting needs which are made by the budget, and discusses the comparisons a budget should facilitate and some other general uses of the budget.

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LOVEJOY, O. C. Administering the school budget efficiently. Nation's schools, 5: 92, January 1930.

This article recommends the card system of requisition because it enables one to accurately foretell amount needed for next year, to trace color, and to reorder same articles. This system of supply financing begets efficiency and economy in purchase and distribution. Explains a method by which supplies may be predicted accurately in quantity, like quality, and within budget specifications at a price.


Emphasizes the fact that administration must study school costs by departments, carefully analyzing present expenditures and making estimates of needs scientifically. Suggests budgetary activity to carry out the unit type of functional-instructional organization in which the board of education is legislative and judicial and the administrator, with his force is executive or the functional-institutional organization. The author demonstrates how Hamtramck, Mich., developed its budget and organized to execute the plan. Tables or diagrams illustrate the features.


Analyzes the provisions of various school budgets and expresses some unreasonable differences. Suggests principles that should govern the budget provisions for buildings and supplies and recommends standardization and simplification as a means of securing the proper apportionment of funds.

MCGAUGHY, J. R. Who shall determine the amount of the city school budget? American city, 30: 330-32, April 1924.

From a study of the budgets of 377 cities, the investigator attempts to show that school finances should not be subject to any control but that of school officials.


MOEBHMAN, ARTHUR B. Making finance the servant not the master of education. Nation's schools, 8: 64-66, September 1931.

The need of long-time budgeting and sound accounting considered merely as agencies for carrying out the educational program which in turn should be considered as only part of the larger social program.


The chapter on "The school budget," outlines and analyzes the three complementary phases of budget development, preparation, presentation, and adminis-

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Historical article outlining the following six constructive practices as progress in budgetary procedure: The budget as a continuous process, definition and classification of items of the budget, demanded by schoolmen for written estimates, introduction of better business standards, accounting to public and securing public support by use of budget information for publicity purposes, and comparison of school costs with other public expenditures.

REEDER, Ward G. Some suggestive forms for school budget-making. Educational research bulletin, Columbus, Ohio. 5: 207-300, October 8, 1926.

As an outline to guide the preparation, presentation, and administration of a school budget, this article reproduces the summary budget form suggested for use in the Ohio schools, in order to facilitate the training of school officers. Significant are comparisons, the effective presentation of county, state and federal financial reports, and the auditing of financial reports.

Fundamental principles of school budget-making. Ohio teacher, 47: 107-109, November 1926. (This article may also be found in Educational research bulletin, 5: 263-88, September 22, 1926.)

Practical suggestions for form and reproduction of the summary budget form used in the Ohio schools, and the introduction of better business standards in budget preparation, presentation, and administration. The budget as an effective means of controlling school expenditures, and the importance of frequent and comprehensive budget presentations.


Discusses the principles of budget-making and the importance of presentation, adaptation, and administration. Tabular data show the approximate per cent which each item of expenditure is of current expenditures.


Practical guide to the preparation of school budgets, with emphasis on presentation, adaptation, and administration. Tabular data show the approximate per cent which each item of expenditure is of current expenditures.

School budgets—full educational returns for every dollar. American educational digest, 47: 254, 270, February 1928.


Advocates a scientific approach to school budget making, with emphasis on the importance of presentation, adaptation, and administration. Tabular data show the approximate per cent which each item of expenditure is of current expenditures.
of Pennsylvania.

Table of comparative statistics prepared by superintendent of Beaver County, Pa., based upon total expenditures of representative boroughs shows combined expenditure increased 100 per cent in 5 years. Ratios on budgets show little variation for last 20 years.


Thoroughly covers statutory and charter provisions in hundreds of cities, particularly in New York State, unit costs for budget purposes and suggested record forms for collecting budget data.


This chapter outlines facts and procedures that may be followed in drafting a budget. Illustrates the forms through which the necessary data may be collected and lists the factors that must be considered for an effective budgetary procedure.


The planning of the school budget of Clearfield, Ohio, to meet a deficit of $3,500 and prepare for future increasing expenditures. Budget arranged under seven main heads, under each head an additional item of other expense. In this provision lay the solution of unforeseen expense. The original deficit was met in the grand total.

**States, Individual**


Discusses financial aspects of the California School Code showing the course followed by the budget from tentative estimates to setting the tax rate together with a description of the sources and amounts of school funds, tax rates and apportionments. The responsibility of school boards for tax rates and school costs is stressed.


Murray, George Stephen. Accounting for depreciation of school buildings. New Haven, Conn. Journal of educational research, 24: 318, November 1931. A mimeographed bulletin setting forth the problem and its importance, commercial and municipal depreciation practices, the depreciation of school buildings, principles of depreciation, the technique for computing depreciation allowance, and conclusions.

Woodward, Harry R. Should depreciation be accounted for in public-school buildings? School and society, 34: 870-73, December 26, 1931. A philosophical discussion. In some States school boards are forbidden by law to set up reserves for depreciation over a long period of time.

AIDS
(Costs, Cities, Individual)

COSTS, CITIES, INDIVIDUAL
(See Building Finance, Cities, Individual)

COSTS, ECONOMIES


What an architect does for his money. American school board journal, 80: 37, January 1930.

A check list which will enable school superintendents to know what services they may reasonably expect from the architect in the construction of a school building. Outlines the architectural activities commonly involved in preliminary work, bids and contracts, and erection of the building. Discusses "instruments of service" and analyses the architect's costs and profits.

Discuss the concentration of interest by Detroit school authorities on the economical construction of a group of elementary school buildings. Gives the amount of reduction in cost, from year to year, on the per-pupil basis, and a detailed description of the material used.


Computes the cost of installing blackboards which are not used by investigating practices in 284 regular and special class rooms in junior and senior high schools.


Hopkinson, G. M. Economies in Cleveland school budget plans. *Architectural forum*, 37: 2, 81-84, August 1924.

How one school saved $285,000 on its building program. *Nation's schools*, 8: 88, September 1930.

Huber, Paul. Beauty and economy are on a par in these three parochial schools. *Nation's schools*, 3: 35, January 1929.


Outlines the details of standardization and construction which has enabled Philadelphia to construct thoroughly modern fireproof buildings at costs as low as $253 per pupil without sacrificing architectural beauty.


An architect sets forth certain economies which may be effected by careful inspection of the innumerable details that go to make up a complete design.


An account of Minneapolis' savings in school building construction and maintenance based on improved plans.


Analyzes appraisal, replacement, finance, and abandonment in connection with the whole plant program. Suggests a schedule for building elimination based on factual data.

— Financing the school plant program economically. *Nation's schools*, 8: 78, 78, 80, 82, November 1931.

Discusses the expense of the ultimate plant and explains definite procedures that will effect economies.

— When remodeling is profitable. *Nation's schools*, 4: 43, November 1925.

Pugh, Jesse J. Efficiency in the use of a school building. *Educational research bulletin*, Columbus, Ohio. 8: 89-94, March 6, 1929.

Examines the plan for utilizing a school building to determine its efficiency. Includes such questions as, number of rooms occupied each period, comparison
of utilization of building as a whole to that of each room, use of rooms for special purposes, and percentages of pupil space occupied in each room throughout the day. Recommends plan which will keep space occupied.


Significant methods in economizing on construction by rehabilitating old buildings. Discusses problems of altering and modernizing these structures so as to preserve them for years of future service.


Explains how organized and systematic methods of assembling the various structure elements may become definite and material factors in lowering construction costs.

SMITH, HENRY LEAster and NOFFSINGER, FOREST RUBY. First supplement to the bibliography on school buildings, grounds, and equipment—August 1927 to April 1932. Vol. IX, nos. 1 and 2, September—November 1932. (Scheduled for bulletin of the school of education of Indiana university.)

Will contain sections on economics in the building program, standardization of school buildings and equipment, and status of building operations.


These pages refer to the problems involved in the practice of economy in school-building construction from the standpoint of type, design, plans and specifications, mechanical equipment, and construction supervision technique.


This paper reviews opinions of educators, survey findings, architect institute opinions, and city systems experiences relative to the correct size for a high school. The author concludes with summary of factors thus found. Mass education lowers per capita expenses but there is a noticeable slump in the quality of the product put out and of teaching. Other factors such as health, transportation, curricula to be administered, and time lost in class shifts enter the problem.

WADE, JEAN. The schoolroom floor and how to select it. *American educational digest—School executives magazine*, 48: 109, November 1928.


The large savings effected by Oakland in school-building construction due to standardized requirements, adequate planning, and supervision by the building superintendent amounted to about 20 per cent.

WORMUTH, GEORGE F. School business administration. *American school board journal*, 78: 37, April 1929. (See also the June, July, August, September, November, and December 1929; the January, February, March, May, June, July, August, September, October, November, 1930, and February and March, 1931, numbers for other articles of series.)

Presents the superintendent's responsibilities in connection with school building construction, mechanical and educational equipment, landscaping, insurance, supplies, rehabilitations, and cost analysis of school building projects. The articles appear under four major headings: (1) Selection of sites for school buildings; (2) Educational specifications for school buildings; (3) Architectural designs, plans, and specifications; (4) School building-construction economics. The series begins with an introductory article in Volume 78 (April, 1929). Three articles entitled "Selection of sites for school buildings" appear in June, July, and August numbers; three articles on "Educational specifications of school buildings" appear in September, November, and December of the same year; "Architectural designs, plans, and specifications" are discussed in the four issues for January, February, March, and May, 1930, and the February, 1931, numbers. The series ends in the March number with a brief history of education business theory during the past 40 years.


Lower building costs can be attained only by the most careful planning and
supervision by competent architects and consultants. Suggests solving of the problem by increased utilization of existing facilities.

COSTS, ESTIMATING

BARK, JAMES A. Budgeting a school building and equipment program. Sierra educational news, 20: 386-88, June 1924.


Method for estimating cubic-foot building cost when certain constants are determined. Tables for local costs and calculations based on recent school buildings contracted for in Boston.

DALMAN, M. A. Problem of housing schools; needs, finance, and education program worked out in brick and steel. American school board journal, 89: 64-65, April 1930.

ENGELHARDT, N. L. and ENGELHARDT, Fred. Planning school building programs. New York, N. Y., Teachers college, Columbia university, 1930. Chapter XVI, p. 388-431 deals with variables which influence school building costs. Tables show the variation in cost for various divisions of construction of buildings of different capacities within the same State. Variation of costs of school building construction in various cities throughout the United States. Pages 422-43 discuss factors affecting the value of land which is to be purchased for a school site. Shows the relation between the cost of site and cost of building for certain schools in New Jersey as typical.


HOLY, T. C. and DAVIS, H. H. Method of determining expenditures required to maintain the status quo of school plants. American school board journal, 74: 45-46, June 1927.

Presents 10 steps of applying a technique for determining the expenditures required to maintain the status quo of school plants, by use of an index of construction costs and an investigation of the average age at which school buildings are replaced, which is found to be about 45 years.


MOEBLAMAN, ARTHUR B. Comparative building costs. Detroit educational bulletin, 7: 10-11, 1923.


Compares methods of computing school building costs (per pupil based on the maximum pupil capacity, per square foot of usable floor space, and per cubic foot) for the purpose of estimating new building construction. Comparative data, arranged in tabular form for 228 school buildings (elementary and high-school buildings) give the median cost per pupil, median cost per square foot, and the median number of square feet per pupil in the various types and sizes of school buildings. Fifteen typical examples of detailed description and cost data for buildings of various sizes and types.

COSTS, GENERAL


A discussion of school costs as shown in school property value estimated in three ways: (1) original cost, (2) replacement, (3) present value demonstrating that depreciation is a basic expense. Tables of estimated annual depreciation of various equipment given.


Fred FowLEs, J. C. Index of school building and school supply
prices. See monthly numbers of Nation's schools up to June 1930.


Discusses the preparation of school building specifications, adequacy and character of the working drawings, checking of specifications, and gives a detailed check list for checking school building plans as a means of insuring a school board an efficient building for the money it spends.


Expenditures for school buildings. School and society, 26: 222, August 1930.

Findings on school building expenditures based on a study of conditions in 14 large cities. School building costs exceed those of all other public works. Data on construction.


Appraisal of needs in finance policy, present and future, on basis of efficiency of operation and satisfaction of instructional needs. Achievement conditioned by community willingness to support program and meet cost. Finance needs. (1) Acquisition of sites, (2) movable equipment, (3) site development. Future needs. (1) Specific needs of schools for maintenance, (2) incurred expenditure for capital improvement.


An original theoretical treatment with practical illustrations of the costs involved in providing buildings and equipment, depreciation, in extension of the plant, and in the use of capital reserve.


Similar figures are issued annually in the department's Education bulletin, traceable through the index at the end of each volume.

Proportion of costs—Current and building. American school board journal, 77: 82-84, October 1928.

News items about buildings and current expenses from many states. Includes chart showing distribution of school building costs.

Representative school building programs. Sierra educational news, 21: 295-97, May 1925.


Discusses excessive repairs and fuel consumption, strained eyes, ill arising from poor ventilation, the thwarting of youthful enthusiasm for education, the repulsion of good teachers, discouragement of community growth, and the apathy of a community of human beings, as costs which must be attributed to the maintenance of an old school building.


Smith, Henry Lester and Noffsinger, Forrest Ruby. First supplement to the bibliography on school buildings, grounds, and equipment—August 1917 to April 1932. Vol. IX, nos. 1 and 2, September-November 1932. (Scheduled for bulletin of the school of education of Indiana university.)

Will contain a section on building costs.


Outlines various school building problems including finance and gives methods for estimating the cost of building programs and determining type of buildings to be planned, considering the fiscal status of the district.

Costs, High Schools


This study contains only tabulations of vocational school buildings, building and equipment costs for the city of Buffalo during the period 1929-1931.

Wide range in high-school costs. School, 42: 3, September 4, 1930.

Per pupil costs of large high-school buildings in New York City, Buffalo, Toronto, Detroit, and Chicago are found to range from $657 to $1,100. Actual costs are tabulated.
COSTS, JUNIOR HIGH SCHOOLS


Points out that lack of skill in planning for specific educational purposes and the too elaborate use of expensive building materials are contributing causes of costly school buildings. Cites the Woodrow Wilson junior-senior high school, Beckley, W. Va., as an example of sane economy in planning and construction.


Brief discussion of gross building costs for junior high schools in terms of type of building desired and special considerations relative to locality. Supervision of construction is essential.


COSTS, MAINTENANCE AND OPERATION
See Maintenance Costs and Operation Costs

COSTS, STATISTICS
See also Building Costs, General; Property Value for Schools, Statistics

Statistics on costs of school buildings are no longer issued by themselves except by a few State departments, notably in New Jersey. Certain construction companies issue building costs for all buildings for their sections of the country. The American Appraisal Company of Milwaukee, Wis., prepares such statistics monthly, classified by types of buildings and sections of the country. These are not available for unlimited distribution but may be obtained under certain conditions.


Report of a survey which reveals that 81 institutions of higher learning plan the expenditure of more than $80,000,000 for building construction during 1931. Investigation reveals that elementary and secondary schools will spend over $208,000,000 for the same purpose during 1931.


Statistics of expenditures made for building construction in the various States and the entire United States in 1928. National expenditures were $7,003,600,000.

FINANCE, CITIES, INDIVIDUAL
See also City School Finance, Surveys


Canton, Ohio. DELF, I. W. A survey of the secondary school-building facilities of Canton, Ohio, for the determination of needs of readjustment and expansion. Canton, Ohio, Board of education, 1931. 85 p., tables, diagrams, maps.

Survey made because of the rapid growth of the school population as well as the growth of the city by the principal of one of the high schools. He presents a comprehensive plan for the guidance of the board of education in the future.

Cedar Rapids, Iowa. Cedar Rapids school plant program, 1924. *Iowa City, Iowa, University of Iowa*, 1924.

Davenport, Iowa. School plant program for Davenport. *Iowa City, Iowa, University of Iowa*, 1925.

Detroit, Mich. RIGHTOR, C. E. How Detroit's 10-year financial program was prepared. *National municipal review*, 15: 108-14, February 1926.


A thorough study of the building finance problem in a community that can readily provide for its building needs, with the bulk of the tax money coming from nonresident property owners.

Points out interest savings possible by construction of school buildings from current funds. Gives general conditions and the statistics contributing to the success and economy of such a plan in Lansing, Mich.

Marietta, Ohio. Building program for Marietta, Ohio. *Columbus, Ohio. Ohio university*, 1924. (Bureau of educational research. Monograph, 1924, no. 1.)

Marshalltown, Iowa. School-building program, 1925. *Iowa City, Iowa, University of Iowa*, 1925.

Marysville, Calif. Sears, Jesse B. Marysville union high school. A report of an investigation of the physical needs of the school and a plan for financing the proposed program of development. Marysville, Calif., *Board of education, 1925. p. 15-20, 22-23, 30-33, 35-40.*

Milwaukee, Wis. School-building program, 1925. Milwaukee, Wis., *Board of education*, 1924.

Ottawa, Kans. School-building program. *Lawrence, Kans. University of Kansas.* (Bureau of school service series.)

Describes a striking example of modern schoolhouse planning. Layouts and illustrations indicate definite educational policies. Functional grouping is noticeable in all departments.


Points out interest savings possible by construction of school buildings from current funds. Gives general conditions and the statistics contributing to the success and economy of such a plan in Lansing, Mich.

A summary of the planning of a school-building program in a typical American city. The major factors involved are briefly discussed. Methods and techniques are described in the text, and maps are included to show location of schools and population trends.


This survey is significant as an illustration of the type of scientific investigation essential to sound school-building programs. It presents the outstanding factors and problems that must be studied and solved.

White Plains, N. Y. School-building program for White Plains, N. Y. *Board of education, 1923.*

FINANCE, GENERAL

See also Capital Outlay


Briggs, Herbert B. Public-works regulations, policies, and practices as applied to school buildings. *American school board journal*, 82: 60-68, 142, 144, 146, January 1931.

An analytical study of the effects of limitations and restrictions placed upon school boards by public works regulations with reference to the construction and equipping of schoolhouses. Numerous cases are illustrated to show the point in question. Favor safe minimum rather than rigid maximum requirements.


Presents the difficulties commonly met by school board members who advance money to meet financial emergencies and outlines the technical points in court decisions concerning such informal loans. Warns board members to be cautious in making personal loans.
BUILDING


This chapter (XVIII) deals with the method of financing and the cost of school-building programs. Data show the relationship between total payments for public schools in continental United States and capital outlay (1924-25 and 1925-26). Variations in per cent of capital outlay to total expenditures for schools in the various States.


A complete and detailed statement of a study to determine how much more it costs initially to build well as compared with a medium quality and a poor quality building, when providing the same educational requirements and lay-outs. Construction details and total costs for each of the three grades of buildings are included.


Sets forth some court decisions dealing with the administration of college dormitories, with references to the means of financing construction, the maintenance of proper discipline therein, and the tort liability of the institution for injuries to students resulting from housing conditions.

MOEHLMAN, ARTHUR B. Location and use as factors in plant appraisal. Nation's schools, 8: 78, 80, 82, June 1931.

Sets up principles and techniques for the appraisal of the school plant as they relate to location, site, and utilization. Discusses the final appraisal of the school plant to determine immediate and gradual eliminations and the nucleus around which the future plant will be developed.


Describes a high-school association organized as a corporation under a legal State charter to provide funds for the construction of a $200,000 building and the renting of same to the school board which had previously assumed its legal limit of bonded debt.


A doctor's dissertation which develops techniques whereby school authorities without a technical knowledge of architecture may intelligently evaluate working drawings for school buildings. Useful for school architects in checking the work of draftsmen for adequacy and completeness. A valuable guide of State departments of education in planning and administering the work of the division of school housing.


Contains 2,283 annotated references on the field published between 1912 and 1926. Financial references can be located in index under headings enumerated in Smith and Noffsinger reference.

—— and NOFFSINGER, Forrest Ruby. First supplement to the Bibliography on school buildings, grounds, and equipment. Vol. IX, nos. 1 and 2, September-November 1932. (Scheduled for bulletin of the school of education of Indiana university.)

Will contain 2,800 briefly annotated references from August, 1927, to April, 1932, with a few exceptional items before August, 1927, to extend the original bibliography, covering all phases of
school buildings including higher institutions and private schools. Financial topics include: Building costs, the ability of the community to finance the building program, school bonds and other methods of financing the building program, economies in the building program, standardization of school buildings and equipment, the maintenance of buildings and equipment, insurance and depreciation, status of building operations.


This chapter classifies school bonds, presents methods for financing capital outlay, notes trends in school bonded indebtedness, devises measurements of a city's ability to finance capital-outlay programs, discusses public programs in relation to marketing and retirement of school bonds, points out advantages of serial bonds, and evaluates various plans of financing capital-outlay programs.


An examination of school laws and court decisions regarding the legality of public performances in schoolhouses, use of schoolhouses for teachers' residences, superintendents' use of school buildings, combinations of business and school buildings, use of private property for school purposes, sale of school supplies, profit, lease of school lands for business or amusement purposes, and the lease of school buildings for private schools or religious purposes.


When school finances fail; how a Pennsylvania town provided a needed high school. American school board journal, 73: 94, August 1920.

How the citizens of Point Marion, Pa., organized a private holding company under a legal State charter and issued $188,000 worth of bonds to finance the construction of a school building, and how the building was rented at a rate which would pay the interest and retire the bonds upon maturity to the school board which had previously assumed its legal limit of bonded indebtedness.


Defines bonded indebtedness and evaluates the serial bond, the pay-as-you-go plan, and contingency funds as methods of financing school-building construction. Appraises the value of education as a social investment and proposes the standardization of school facilities as a means of economy.

FINANCE, PUBLIC RELATIONS

See also Borrowing, School, Public Relations


Develops the thesis that a city school system should have a building program which includes planning for the future, expert advice, legitimate publicity methods, and reasonable projects approved by the public. Such a plan should be based on a survey of existing schools, population, trend of growth, topography of the district, ultimate plans including educational programs, and funds available or to be submitted as a proposed bond issue to meet the cost of the proposed buildings.


Measuring the ability of a community to finance a school building program. In School buildings, by T. C. Holy. p. 184-98.

Selling a school building to a community. American school board journal, 60: 125, October 1924.


STOCKINGER, W. A. Moulding public opinion into action. American school board journal, 60: 56-57, 147, July 1924.

FINANCE, STATES, INDIVIDUAL

Delaware. DuPONT, PIERRE S. How Delaware can finance a State school-building program. Wilmington, Del., Delaware school auxiliary association, [n. d.]. 59 p. (Bulletin of the service citizens of Delaware. Vol. 6, no. 3.)


Discusses in detail a legislative proposal to secure $9,000,000 for school-building purposes in Delaware.


Careful study of the apparent extravagance in the building programs of school districts. Describes present
status and makes specific recommendations for both immediate and ultimate substantial economies without curtailing the educational offerings or preventing attractive and distinctive buildings.


FINANCE, SURVEYS
See Building Finance, Cities, Individual; City School Finance, Surveys

BUSINESS EDUCATION
See Commercial Education

BUSINESS MANAGEMENT

GENERAL
See also Economies, General; Safe-guarding Funds


From an investigation of cities of various sizes this article reveals conflicts between the business and professional workers of school staffs, and suggests activities on the part of superintendents, business managers, and educational associations which will tend to coordinate the activities of all school workers.


Covers 1923 to fall of 1931 with running review and a selected bibliography for each chapter. Includes chapters on public-school accounting, public-school budget, finance and business management of higher institutions, fiscal control and textbooks in business management of schools and financial economies.


Analyzes school costs in relation to school efficiency in North Carolina. Examines local administrative problems, borrowing practices, State laws and methods of business administration, and suggests constructive improvements. Takes "educational factors" into account and justifies rising educational costs.


Compares the business management in three large school systems, three medium-sized ones, and three small ones in New Jersey, in an attempt to show their differences in business procedure, and the reason for such differences. Especially good for criteria.


A thoroughly businesslike volume on the business administration and the various aspects of the Buffalo public schools. Some sections that have rarely been handled in surveys are included here, such as the selection and purchase of school sites, bonds for employees and nonresident tuition. This volume should be very helpful to all workers in this field.

Current practices and procedure relating to financial responsibility and accountability of public officials, University of Minnesota, Minneapolis, 1925. 125 p.

Unpublished Master's thesis.


A comprehensive and challenging survey of the past, present, and future of public-school business administration. Reviews the earlier efforts on the improvement of techniques as the center of attention which is being replaced by problem analysis.

— Some general implications for school business administration arising out of the present economic conditions. In proceedings of the twentieth annual meeting of the

What is efficient school business administration? American school board journal, 80: 41, May 1930.

Rates numerically methods of business management in several school systems, according to the character of their practices upon uniformity and efficiency of practices. Gives examples of each grade of system, indicating its strong and weak points.


More than a hundred problems covering all the important phases of the field. The set-up, assignment, and references will be helpful to school authorities facing similar problems.

...and Engelhardt, Fred. Public-school business administration. New York, N. Y., Teachers college, Columbia university, Bureau of publications, 1927. 1,068 p. presents a complete and comprehensive treatment of the organization and management of public-school business administration from the standpoint of sources of income, care and management of school and property funds, and a proper distribution of expenditures of the school fund. Comparisons with business organization and administration.


A general treatment of property management in local school systems. Discusses property values, service values of educational property, classification of school property, difference between equipment and supplies, factors underlying plant management, responsibilities for management, specialization in services, property standards, school-building standards, standards for classroom equipment, uses of school property, reuse and multiple use, educational service use of buildings, multiple use of classrooms, maintenance and operation programs, maintenance budget, and property inspection.


Outlines the major business functions which come under the direction of the business manager of the Detroit public schools. Gives total expenditures for various divisions of cost, such as school construction work, employment service, maintenance, heating and ventilating service, and purchasing operations.


Henzlik, F. E., Richards, W. M., and others. Practical, economies in school administration. Chapter II. General administrative procedures and control. University of Nebraska, extension division, Lincoln, Neb., 1932. p. 9–19, 185–71. (University of Nebraska publications, educational monograph no. 3, 1932. 212 p.)

Practical suggestions and citations from authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


A valuable handbook to give the school clerk professional assistance similar to that now available for superintendents and teachers. Stress is not found to give school clerks the most trouble, particularly the keeping of financial accounts and records.


Principles and techniques involved in efficient school business management. Offers a detailed treatment of personnel of school business administration and outlines administrative relationships of school organizations. Discusses budget making, school revenues, school finance and supply accounting, sites and buildings, school insurance and inventory, pay-roll procedures and the administration of rural education and school transportation. Accounting forms supplement the discussions.

BUSINESS MANAGEMENT


Running review and bibliography of researches in this field, stressing those from 1923 to the fall of 1931.


Running review and bibliography of researches in this field, stressing those from 1923 to the fall of 1931.


Practically the entire field of school business management receive detailed treatment. The work and organization of school boards; types of municipal control; school budgets; school operation and accounting; financial reports and publicity; construction, maintenance and insurance of school plants, purchasing and supply management and accounting records and forms etc., constructive and analytical discussion.


A comparative cost study of 97 cities with more than 50,000 population, of which 62 have the unit type of business administration and 45 have the multiple type. Points out progress and problems and shows the difference between the two types of administration from the standpoint of economy.

--- The business administration of a city school system. New York, N. Y., Teachers college, Columbia University, 1926. 129 p. (Teachers college, Columbia university. Contributions to education, no. 197.)


Principles of common law relating to expenditure by school boards based on data obtained from State and Federal Supreme court decisions. The material is classified as (1) general contract construction, (2) contracts relating to property, (3) contracts relating to employees, (4) miscellaneous contractual powers.

Theelker, A. L. Methods of financing the schools; the effect of financial organization upon the system.

School executives magazine, 48: 556-58, August 1928.

An examination of the sources of school revenue and recommendations for certain administrative controls. Recommends a unified administration, a survey of expanding educational needs preparatory to budgetary expansion, a budget prepared scientifically and in detail by an expert, and the use of standardized budget forms.


Discusses in the light of local experience as well as the general principles of administration, methods of purchasing equipment and supplies, maintenance of plant, and school-building repairs.

Westover, R. M. Duties of the school business manager: The tax digest, May, 1931, p. 174; California taxpayers' association, Los Angeles.

A short account of the place of the school business manager in the educational set-up dealing particularly with budgets, cost accounting, purchasing, inventories, housing plans, and the relations of the superintendent and manager.

PERSONNEL

See also Pay Roll


Heer, Amos Leonard. The present status of business executives in the public schools of the United States in cities with 25,000 or more inhabitants. Kent State College, Kent, Ohio.


Authority must center in superintendent’s office in order to insure efficiency in the selection of school books and supplies for the school. It is contrary to principle of school administration to divide educational and business administration between two independent executive officers.

**CAFETERIA**


A thoroughly practical treatment illustrated by practice in different cities, particularly in Cleveland.

FORD, WILLARD S. Some administrative problems of the high-school cafeteria. *New York, N. Y., Teachers college, Columbia university, 1927*, p. 57-58, 74-75, 77-80, 89 and chapter VII. (Teachers college, Columbia university. Contributions to education, no. 228.)

These pages cover a financial study of the practice at that date in a number of high-school cafeterias concerning the equipment budget, wages of cafeteria employees, distribution of cafeteria expenditures, average amount spent per pupil, and quality buying.

**ACCOUNTING**

**CALIFORNIA TAXPAYERS’ ASSOCIATION**


The objective of the study was to determine costs so that cafeteria service could be put on a self-supporting basis. Harold A. Stone, Director of Research, Frank E. Bearer, in charge.

**CAPITAL ACCOUNTING**

See also Building Accounting


Describes the methods of calculating annual depreciation, rent, interest on indebtedness for buildings and sites, and the annual accrual cost of plant and equipment extensions for the purpose of presenting a procedure of accounting for the depreciation of capital values invested in school buildings and equipment.


 Defines depreciation and discusses the purpose of depreciation charges in school accounting. Gives a technique for computing depreciation allowances for the budget, and five principles to assist in estimating and accounting for the depreciation of school buildings.


Chapter 10 discusses methods of financing capital outlay, sale and redemption of bonds, and bond accounting. Presents a long list of publicity techniques and accounting forms and a selected bibliography.

**CAPITAL OUTLAY**

See also Building Costs


A study of capital outlay in relation to a State’s minimum educational program determined by statistical techniques for the curve of the best fit applied to data from one State. Constant relationship of capital outlay to current expenses was not evident; a defined limit was revealed. Critical evaluation of previously proposed plans by Adams, Baldwin, and Mort is included.


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

**NATIONAL EDUCATION ASSOCIATION. RESEARCH DIVISION.** Capital outlay costs per pupil in average daily attendance in cities. 1928. *Washington,

CHILD ACCOUNTING

See Pupil Cost Accounting

CITY SCHOOLS

COSTS, GENERAL

See also Costs

Cooper, William J. Per capita school costs. American school board journal, 80: 3, 12, January 1930.

Per capita school costs in 93 cities of more than 30,000 in population are tabulated and the extreme variations which exist are revealed. Elementary and high-school enrollment trends since 1920 are based upon the averages of the reports received from 33 states.

Dawson, Howard A. Standards of expenditures for the principal items of city school costs. Nashville, Tenn., George Peabody college for teachers, 1927. 173 p. (Contributions to education, no. 31.)

Studies the percentage of the school enrollment in A. D. A., the number of pupils per teacher, percentage of the population 15 to 19 years old in A. D. A. in high school, ratio high-school A. D. A. is to elementary-school A. D. A., the percentage of population 7 to 17 years of age attending school, and the drawing power of the high school as measures of the effectiveness of a school program. Assumes that schools which show high achievement along these lines are spending their money well, and by analyzing the methods which secure these results, determines how schools may spend a given amount of money most effectively.

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Ehrenberg, H. H. Taxation and school costs in cities of more than one thousand inhabitants. South Dakota educator, 33: 200-3, 206, February 1925.


The facts for 1921-22 in 12 cities of more than 10,000 with special study of costs arising from tendency of population to send all children up to 18 years of age to school.


Statistical table showing comparison of per cent of municipal funds devoted to schools 1910 and 1920, with cities classified by size.


Holy, T. C. Financial data for Ohio cities, as of September, 1928. Columbus, Ohio, Ohio State university, Bureau of educational research, 1928.

Published also for subsequent years.

Hudson, C. A. School costs in a group of Ohio villages ranging in population from approximately one thousand to three thousand. Educational research bulletin, 5: 175-79, April 28, 1926.

School costs in their relation to general municipal costs. American school board journal, 76: 90, January 1928.

Reveals statistically that the cost of education has not increased any faster than the cost of other forms of public service and contends that all increases are in keeping with the rising standards of American life and the expanded services of government and education.

Compares per capita costs for 1924-25-26 as found in 250 cities of various sizes of more than 5,000 in population. Analyzes per capita costs for functions. Lists cities having high per capita costs and shows the extreme variations.


**COSTS, INDIVIDUAL CITIES**

This includes only general costs. For cost of any phase in a given city, see that phase.


Includes cost comparisons with 16 other Indiana cities.


Presents a comparative study of the trend in teachers' salaries with the trend in civil service employees' salaries in Chicago city schools from 1912-1929. Data on total expenditures for salaries in tabular form.


A statistical presentation of parochial and public school costs showing a diversity of parochial and public-school costs, ranging from $26.65 to $132.95 in Chicago with similar figures on functions. Concludes that it is necessary to correct some parochial school costs for expenses borne by the church.


Statistical presentation of elementary, junior high school, and senior high school per pupil costs in 1925.

Des Moines, Iowa. How much do our schools cost the taxpayer? *Board of directors, Des Moines public schools*, 1932. p. 43.

Excellent example of a defense of school costs in one city by an economy showing, as compared with similar cities. Good heads, tables, graphs, and typograpy.


The public-school budget of Fordson, Mich. is statistically and graphically analyzed in terms of general control, instruction, operation, and maintenance of plant, auxiliary agencies, coordinate activities and fixed charges. Increases of enrollment and costs are examined for period of 1923-1928.


Montclair, N. J. Report of Montclair, N. J., survey committee on administration and costs. 1923. Pt. II.


Analyzes and graphs the services the taxpayer is paying for and compares the costs of rendering these services in various cities in 1930.


Analyzes the daily and annual costs of schools in New York City for 1929, not increased costs, and examines sources of income.


Pasadena, Calif. Peterson, L. H. Analysis of school costs in Pasadena, Calif. Pasadena, City schools, 1926. (Research bulletin, vol. 4, no. 9, May 1926)


COSTS, STATISTICS

These appear in the statistics of city school systems bulletins of the United States Office of Education. See City School Statistics. Many valuable statistics appear from time to time in the research bulletins of the National Education Association, traceable through the index at the end of each volume. The Financial Statistics of Cities series of the Bureau of the Census gives many finance statistics of cities by size groups, and individual cities, particularly valuable for comparison with the cost of other governmental services. The latest in print is the number for 1928.


Ranges for city groups and figures for individual cities on cost and percentage of current expense for current expense and its six standard subdivisions. Corresponding data for previous years appear in these publications of the United States Office of education:

1921–22. 4 pages. (Statistical circular, no. 1.)
1922–24. 7 pages. (Statistical circular, no. 4.)
1924–26. 9 pages. (Statistical circular, no. 7.)
1927–28. 11 pages. (Statistical circular, no. 12.)
1929–30. 13 pages. (Pamphlet no. 19, April 1931.)

FINANCE, FISCAL CONTROL

See Fiscal Control, City.

FINANCE, FOREIGN


— Farmer, Samuel. The financing of urban schools. Canadian school board journal, 5: 7–8, June 1926.


FINANCE, GENERAL


Includes poor budgetary economy and the tendency to increase teacher salaries.


Produce two charts which will show the cost tendencies of each department in city school systems each month and culminate in advance the total annual financial effects of the tendencies indicated. States that these charts can facilitate the control of school expenditures.


Bibliography of 560 studies being made of city school systems. 402 completed studies, 100 studies in progress, and a number contemplated for 1931–32. Includes studies in school finance. The first similar list was Circular, no. 18, August 1930.

FINANCE, INDIVIDUAL CITIES


Carbondale, Ill. How one community met its problem for increased financial support; the Carbondale school situation and its solution of the problem. American school board journal, 78: 86, June 1929.


__BEEBY, D. J. The finances of the Chicago board of education. Chicago principals' club reporter, 18: 3–7, March 1929.__

__DODGE, CHESTER C. Chicago’s financial muddle. Chicago principals’ club reporter, 19: 3–5, April 1930.__

__HENRY, NELSON B. Financial support and administration of the Chicago public schools. Elementary school journal, 32: 498-503, March 1922.__

Description of the factors underlying this problem and an analysis of changes needed in the finance system and the administrative practices.

__Report of the Secretary of the committee on finance to the Chicago board of education. 1924.__

__School finance. Chicago principals’ club reporter, 19: 3–5, January 1930.__

__ROGERS, DON C. Financial condition of the Chicago public schools. Chicago, Ill. Chicago principals’ club, 1926. Unp. (Service bulletin, no. 6, June 1926)___

__The financial needs of the Chicago schools. School facts, 1: 1-4, May 12, 1930.__

__What Chicago’s “student city” spends. Chicago commerce, 22: 13, 28-29, August 28, 1926.__


Minneapolis, Minn. REED, CARROLL R. Financing the schools in Minneapolis, 1932. Minneapolis, Board of education, 1932. 60 p.

Shows in detail educational expenditure in Minneapolis since 1900. Analyzes the cost by functions, graphs, tables.


Tabulates statistics of dollar expenditures, city school levy, buildings and land sales, bonded debits, fines and penalties, instruction costs, interest on debts and depository funds, library, lunch, playground and transportation costs, real and personal property tax rates and revenues, rentals, tutions, and of State aid for 93 Ohio cities during 1926.

__WALLS, R. A. School finances in a small Ohio city. American school board journal, 75: 42, 142, 144, November 1927.__

FINANCE REVENUES
See City School Finances

FINANCE, STATISTICS

[Finance statistics are to be sought in the bulletins of the United States Office of Education. The latest in print, Bulletin, 1929, no. 24, covers 1927–28 for city school systems. Bulletins for earlier years can be located through the list of educational publications for the United States Office of Education at Washington or by looking under the head of City School Systems in Carter Alexander's Educational Research, third edition, 1931. The statistics include such items as value of school property, receipts by sources, expenditures by classes for day schools, part-time and continuation schools, night schools and summer schools, expenditures for current expense and its functions with their subitems for kindergartens, elementary schools, junior high schools and high schools, and expenditures for debt service and capital outlay. Statistics for individual cities tabulated by classes, with gross State summaries. The research bulletins of the National education association contain many valuable city school finance statistics, traceable through the index at the end of each volume. The Financial Statistics of Cities series of the United States Bureau of the Census (latest in print, 1928) gives statistics on schools as compared with other governmental services).


FINANCE, SURVEYS

See also Building Finance, Cities, Individual; Surveys, General

Aberdeen, S. Dak. Wood, O. S. and WITTENBACK, F. E. A survey of the public schools of Aberdeen,
S. Dak., with proposed site and building program 1925-26, p. 57-64.


Chapter II deals with the problems of finance. Gives a critical review of current or past practices, based on statistical data, and outlines a constructive program for a more efficient and effective business administration.


A detailed and critical analysis of educational conditions in a prominent southern city. One of the most comprehensive and complete school surveys in print. Contains chapters on business administration, population studies, present school plant, and proposed school plant.


This is volume 3 of the report of the work and progress of the schools of Houston for the period mentioned. It is an attempt to show graphically what activities are being carried on, why they are being done, and how well they are done. The subjects considered deal with achievement of the schools at all levels, the failures and causes of failures, special classes, creative work, vocational education, etc.


Madison, Wis. Clauson, Olaf L. The ability of the city of Madison to support public education. Master's thesis, 1930. *University of Wisconsin, School of education, Madison, Wis.*


This survey of 12 Cape Cod towns contains facts about school systems needs; a technique for measuring ability of children toward meeting individual needs; a table showing distribution of salaries paid teachers in 1924-25; and a chapter on school finances.


The problem of school finances in a city which is far more generous with protection and charities than with schools, and has a huge amount of tax-exempt property.

Newark, N. J. O'Shea, M. V., and others. All year schools of Newark. N. J. Board of education, 1928. 90 p.


Includes sources of revenue, assessed valuation of district, school tax rates, growth in enrollment, growth in expenditures, unit costs by functions, costs per pupil in average daily attendance, kindergartens, elementary, high-school, and junior college costs, valuation of property, and bonded indebtedness in the Pasadena school district.


Contains a section on the building and another on Financial Accounting and Business Procedure. The treatment of salaries includes a comparison of salaries paid administrative officers and janitors in cities of 50,000 to 100,000, with those paid in Racine. Median salary at Racine higher than median for United States as a whole.

Part I. Foreword by the United States Office of Education and personnel of the office who served on the staff for the Buffalo school survey; Administration and organization, elementary schools, secondary education, provisions for exceptional children, the industrial education program, commercial education pre-service and in-service education of teachers, adult education, finance and school costs. Part II. The Board of Education, general office administration, financial administration, purchase, distribution, and control of supplies, school sites, school architecture, school buildings, school plant operation and maintenance, Bureau of research and statistics, and summary of findings and recommendations.


Covers usual general unit costs for Schenectady and eight other comparable cities in New York State, latest data being for 1925.

Springfield, Ohio. Holy, T. C. Survey of the schools of Springfield, Ohio. Columbus, Ohio State university, 1931. 84 p. (Bureau of educational research. Monographs no. 10.)

A compact but comprehensive survey of a school system including the following major divisions: Growth and character of the city, school organization and school population, status of the present school plant, utilization of the present plant, the financial program, and school-building needs.

South Kingston, R. I. Survey of public schools of South Kingston, R. I. Providence, R. I., State board of education, 1927. 15 p. (Rhode Island education circulars.)


Surface Creek, Colo. Manuel, Hirschel T. and others. The Surface Creek survey: an educational survey of school districts numbers 6, 9, 18, 22, 23 and 24 of Delta County, Colo. Delta, Colo., Authorized and published by the boards of education of the districts surveyed, 1924. 127 p. tables, map.

CLASS SIZE


An exhaustive analysis of the cost of education in Vallejo, Calif., with comparable data from 19 other cities. Tables and charts, show school plant investment, relationship of size to per capita costs, placement with reference to population, distribution, ability, and effort of the school district to finance its building needs.


The problem of school finance in a Boston suburb that has favored buildings over current expense and yet has a very inadequate school plant.


Accounts for the costs of general control, instruction, operation, maintenance, fixed charges, health activities, and other activities in the Winnetka public schools in 1925-26.

CLASS SIZE

See also Instruction Costs; Teaching Load


Reviews the test method used by Rice, Elliott, and Harlan to measure the relationship of class size to efficiency, the percentage promoted method used by Cornman, Boyer, Bachman, and Elliott, and the experimental method used by Breed, McCarthy, Stevenson, and Almack. Concludes that to assure economic use of school funds class sizes should not be reduced indiscriminately.
Buckingham, B. R. Class size once more. Educational research bulletin, 4: 186, April 29, 1925.


Class size in the elementary school. Elementary school journal, 26: 487-88, March 1926.


A statistical tabulation of high-school instructional costs in seven types of white and Negro schools in Virginia in 1923-25 is presented in chapters 4 and 5 of this study.


Davis, C. O. The size of classes and the teaching load in the high schools accredited by the North central association. School review, 31: 412-29, June 1923.

Efficiency of teaching and size of class. School review, 34: 642-44, November 1926.

Harlan, C. L. Size of class and types of instruction. Journal of educational research, 14: 120-25, September 1926.

A statement to the effect that class size seems relatively unimportant in the amount children profit from classroom activities. Suggests the necessity for special investigation as to adapting different types of instruction and the nature and content of the subject to classes of different sizes.


Using salary data of 1929 to 1931 as a basis, this series of two articles analyzes the instruction costs in a small high school in terms of teacher loads, costs of various departments and groups, costs of various subjects, and costs of various programs of studies. Statistical tables supplement the discussion.


An extensive scientific study of the cost and relative efficiency of large and small classes at the University of Minnesota. "All that can be said is that in the courses investigated the effect of class size upon student achievement is, in the opinion of the subcommittee, too slight to warrant the cost of small classes." Bibliography.

Class size in universities. Educational review, 72: 231-34, November 1926.

Examines the advantages and disadvantages of large and small classes in the university and concludes that in so far as results can be accurately measured, students are being trained just as efficiently in large classes as small ones. Concludes that the enlargement of classes to curtail university expenses is probably legitimate.


A study of how one school system found it could teach the pupils with fewer teachers without a corresponding decrease in the efficiency of the schools. Bibliography of 15 references with unusually good brief abstracts.

Stevenson, P. R. Class size. Educational research bulletin, Ohio State University, 3: 140-43, April 2, 1924.

Class size in the elementary school. Columbus, Ohio state university, November 30, 1923. (Ohio state university studies, vol. 2, no. 10, chapter 1.) (Bureau of educational research monographs no. 3.)

Briefly states the savings made by increasing class size and the cost of decreasing class size. Defends the thesis that if better work is done in smaller classes, costs should become a secondary consideration.

More evidence concerning large and small classes. Columbus, Ohio state university, 1926, p. 231-33. (Educational research bulletin, vol. 4, no. 11.)

A discussion of instructional costs in relation to class size. Since these costs approximate two-thirds to three-fourths of the total school costs, the question is raised concerning the amount of superiority a small class should show over a large one to justify its greater cost. The records of two algebra classes, one of 12 pupils, and one of 37 pupils of the same intelligence, taught by the same teacher, indicate that the training received in the large class was practically as effective as that in the smaller.


A treatment of the effects of new teaching devices and techniques provided by the advance of educational, social,
and physical science. Explains that these improvements may make it possible to increase the size of classes without harming class. Administrators should be alert to both the educational and financial economy inherent in new educational equipment and devices.

COMMERCIAL EDUCATION

COSTS

Iowa. Status of commercial education in secondary public schools of Iowa. Iowa City, University of Iowa, 1926. p. 9. (University of Iowa extension bulletin, no. 144. College of education series, no. 19.)

Describes, by means of statistical data, the relationship between certain factors, such as training, age, business experience, and teaching experience, and salaries paid to commercial teachers in secondary public schools of Iowa, 1925-26. Data are divided into groups on the basis of sex, and each group is subdivided into five further groups according to high school enrollment.

Iowa City. La Dow, Robert. A survey of commercial education in the junior college. Iowa City, Iowa City press, 1929. 240 p. (Research studies in commercial education, no. 4.)

Median salary paid junior college commerce instructors is $2,350, as against $2,400 in colleges.

Marion, Ind. Cole, M. S. A descriptive research investigation and study of the commercial educational needs of Marion, Ind., based on the tabulated results of a questionnaire. Ball state commerce journal, 2: 19-25, May 1931.

The last of a series of reports dealing with the commercial educational needs of Marion, Ind.


Brief tabular study of salaries received by teachers of commercial subjects in day and evening classes in the vicinity of Detroit during 1929.


CONSOLIDATION

California. Report on Santa Barbara county, Calif. California teachers' association, Los Angeles. Report no. 19. February 1929. 154 p. tables, diagrams. (See also similar studies of other California counties.)

One section, covering 43 pages, concerns administrative educational problems. Sets forth a practical plan in detail for consolidating small elementary schools whereby a saving of $25,850 in teachers' salaries would be effected. (Saving of $12,389.19 would result if school-owned buses were operated at the same average cost as that of contract buses.


Shows how the pioneer one-room schools are being replaced by modern rural schools. Presents data concerning 4 typical consolidated schools of Colorado. Compares cost with those of 4 city school systems.


A study based on data from 96 Connecticut towns to determine the comparative costs, teacher qualification, and holding power in the two types of schools. Costs no greater in consolidated schools. Holding power better in consolidated schools, and teachers in these schools are better trained.


A detailed study of the consolidated schools of the community of Alachua, Fla. Four communities had united four years previous to the time of the study. Six buses are used to transport pupils; 4 are driven by men at a salary of $25 each per month and 2 by students at $10 each per month.


Henry, F. E., Richards, W. M., and others Practical economies in school administration. Chapter XII. How school costs can be reduced by the elimination of small school units. Lincoln, Nebr., University of Nebraska, extension division. 1932. p. 151-69, 200. (Univer-

sity of Nebraska publications, monograph no. 3, 1932. 212 p.)

Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Compares per pupil costs in the 36 consolidated schools of Illinois which have significant transportation expense with the per pupil costs in 1-room schools similarly located. Consolidated schools cost practically the same, but provided transportation and better education.


Sets forth by tables and graphs inequalities in school tax rates, in educational offerings, and in attendance. Tax rates are 11 times higher in some districts than in others due to unequal distribution of wealth. In 10 counties studied the average daily attendance in 1-room schools was 17.3 and 540 schools had fewer than 15 pupils each in average daily attendance.


The report contains many data relative to consolidation and transportation. Average cost for the year 1925-24 per elementary pupil in townships having only 1-room schools was $52.82 and in other townships it was $61.56; less transportation cost in each case. These costs are $46.66 and $43.74, respectively.


A study of 92 second-class cities ranging in size from 2,000 to 15,000. Data include many facts relative to consolidation and the conclusions are applied to the planning of consolidations.

Kellogg, George H. Tabulation of costs of schools of Story county, Iowa, and Second report on transportation. 1924. 2 p. (Mimeographed.)

A concise presentation of statistics of each school of the county (5 city and town independent, 13 consolidated, and 11 one-room). Median annual per pupil costs in the different types of schools.

Stone, H. E. The costs of establishing and operating consolidated schools in Iowa. Master's
CONSOLIDATION


A study of all consolidated schools in Iowa to determine important cost factors involved in their establishment and maintenance to provide a basis of recommendations for financing them. The cost of transporting pupils to consolidated schools in Iowa (approximately $50 per pupil per year) is a burden of expense peculiar to these schools and therefore should be met by State aid.


Analyses in detail the taxes paid and the cost of education in Iowa's 287 consolidated school districts.

KANSAS. SMART, THOMAS J. A proposed larger school unit for an area in northeastern Kansas. Lawrence, University extension division, University of Kansas, 1927. (University of Kansas studies in education, vol. 1, no. 8, July 1, 1927.)

A detailed study of the factors involved in the administration of 5 rural high-school districts, including valuations, school tax levies, present school costs (in relation to enrollment and size of classes), and buildings with view of improving the administrative unit for the 5 schools.

How better schools for less money may be made available for a Kansas community. Bulletin of education, University of Kansas, vol. III, no. 3, February, 1931. Bureau of school service and research, University of Kansas, Lawrence.

A statistical study to show economy of combining schools. Five districts involved. Data in tabular and graphic form are presented.


Contains a chapter describing the steps taken to bring about larger administrative units for rural schools and many data showing present costs and educational opportunity for education in rural districts.

NEW MEXICO. MONToya, A. The consolidated schools of Bernalillo county, N. Mex. Washington, D. C.


Describes a 6-year program of consolidation resulting in the establishment of 6 schools and the elimination of several small schools. Transportation costs 8 cents per day per pupil. Expenses are greater but schools are better.


A table in this pamphlet contains a number of data on finance for each of the 105 consolidated schools involved in the study. Includes assessed valuation of districts, value of school property, transportation costs, teachers' salaries, etc.

GENERAL


A complete description of existing school districts in Arkansas including provisions for their legal controls. Shows how larger units would be beneficial.


Good example of effective study and presentation of all important financial matters involved.


Explains the legal aspects of consolidation.

SEARS, JERSEY B. Marysville union high school. A report of an investigation of the physical needs of the school and of a plan for financing the proposed program of development. Board of education, Marysville union high school, Marysville, Calif., 1925. 51 p. tables, graphs.

Among the recommendations it is suggested that a junior high school plan for


Discusses the advantages of consolidation, involving also the transportation of children to school at public expense.


An interesting review of the centralization of the 10 districts of the town of Farmington, Conn. Contains many data and is an illuminating article on the subject for the student interested in the history of the movement.


A comprehensive study including many data on consolidation of schools. This movement has been steadily growing in favor with the people of the county. Schools have been united every year since the movement began, and very little consolidation has been undone.


Discusses the dual system of organization for elementary and secondary schools, a dwindling rural population, the sentimental preservation of rural schools, transportation facilities, costs, methods of finance, State aid, incentive for consolidation, mandatory regulations concerning transportation, regulation for closing small schools, the basic school unit as a factor in centralization, and miscellaneous legal considerations as factors in the centralization of elementary schools in Illinois.


This study proposes a minimum educational program and outlines the procedure for setting up an equitable financing plan. Tables show the operation of the proposed financing plan in all Kansas school districts. One-teacher district problem.


A study of the educational facilities in Washington parish, La. Sets forth through tables, description, and maps the situation in regard to organization, administration, finance, and needs of the schools. Recommends closer supervision of attendance, transportation, finance by the parish board of education and the parish superintendent of schools.


An interesting description, using many data of the Anne Arundel county, Md. schools. The schools of this county are consolidated.

of public instruction, 1929. 74 p. tables. (Bulletin no. 56.)

Contains one section on consolidation. Shows number of consolidations, number of one-room schools replaced, and other relevant data.


Most of the 12 objections to consolidation frequently heard can be grouped under two heads: First, transportation problems, and second, finance. The 12 objections are listed and answered in the article.


Several chapters are devoted to problems of the larger rural school unit and consolidation. Data are used for illustrating what is being done throughout the country.


A description of the consolidation movement in Crawford county, Pa. by townships. One hundred and forty-four 1-room schools in the county have been closed. Nine township in this county were among the first in the State to consolidate its schools. Eleven hundred children are transported from 106 of the closed schools at a cost of $48,569.53, $23,288.24 of which is refunded by the State.

SHAW, ROBERT C. Fifty reasons for consolidation of rural schools. There are others. Pennsylvania school journal, 75:542. April 1927.

The 50 reasons apply particularly to Pennsylvania conditions as stated by the deputy State superintendent.

STATISTICS


A questionnaire study of consolidated schools selected as representative by State departments of education in each of the 48 States. Median school consolidation as judged from 260 schools serves an area of 36 square miles. 16 pupils to school served, employs 11 teachers, enrolls 204 children in elementary grades. 76 in high school pays a salary of $1,425 per year to secondary teachers and $1,120 per year to primary teachers.


Presents tabular information to show a decade of progress in the consolidation movement. Contains detailed information from 106 consolidated schools throughout the United States.

Florida. Consolidation of schools. Tallahassee, State department of public instruction, 1924. 27 p. (Florida school bulletin, vol. 1, no. 5, September 1924.)

Presents in tabular form the consolidation situation in Florida by counties. Giving many data concerning each school. Transportation information included.


A statistical treatment of the rural school situation in Indiana. Numbers of different types (sizes) of schools are presented in tabular form. Other data include enrollment, number of teachers, and costs of transportation.


Data are presented in tabular form and show such items as area, numbers of pupils, length of routes, costs and types of roads for each school. Horse and motor transportation compared. Letter $2.41 more per year per pupil.

Consolidated schools of Iowa. Des Moines, Iowa State department of public instruction, 1928.

A comprehensive presentation of relevant data. Includes many tables showing growth and present status of consolidation.

Kansas. SMITH, M. L. and WILLOUGHBY, WILL W. A survey report concerning the 172 Kansas consolidated schools. Kansas State teachers college, Emporia, Department of consolidation, 1926. (Mimeographed.)

A statistical study of all consolidated schools in Kansas. These schools have averages as follows: Area 38 square miles, valuation $1,263,073, tax rate 9.88 mills, 58 children transported, 3.4 buses per school, and transportation expenses of $3.99 per pupil per month.


A statistical report of the consolidation and pupil transportation situation in the State. Includes data on numbers and types of schools, buses, and routes and on attendance and costs.
Minneapolis. Report of consolidated schools, 1924-25. 9 p. (Mimeographed.) Minneapolis, Minn., State department of education. (See similar report for years 1923-1924 and 1925-26.)

Sets forth, in tabular and explanatory form, the consolidation situation. The data show large numbers of consolidated schools, enrollment in such schools, pupils transported, school conveyances used, and a larger amount spent for transportation in 1925-26 than in the preceding years.

Oklahoma. Duke, E. A. School consolidation and transportation of pupils in Oklahoma. 1926. Oklahoma City, Oklahoma department of education, 1926. 79 p. (Bulletin no. 113.)

A comprehensive report of Oklahoma's 274 consolidated schools. The study presents information relative to the legal provisions for organizing consolidations, areas of districts, valuations, enrollment, transportation, teaching force, grades maintained, school terms, teachers' homes, and costs. A large table lists each district with itemized information. Many blank forms are included.


Shows status of the consolidation movement giving relevant data.

CONTINUATION SCHOOLS

See also Vocational Education


Tallies the savings for employers, students, and the public due to part-time education.


CONTRACTS

CONTRACTS, BOARD OF EDUCATION

See Purchasing Economics

CONTRACTS, TEACHER

See Teacher Contracts

CONTROL OF FINANCE

See Fiscal Control

COST ACCOUNTING

See Accounting, School, Cost, General

COST OF LIVING

BURGESS, Mrs. A. H. Is the public school system expanding more rapidly than the standards of living? Colorado school journal, 43: 8-10, May 1928.


A report made by a committee on the academic standard of living appointed by the Yale university chapter of the American association of university professors. With a foreword by James Rowland Angell.


A report on a study made by Dr. Royal Meeker in the summer of 1926 at the request of the Central Committee of Teachers' Associations of Minneapolis.


Investigates the nation's ability to pay teachers' salaries comparable to those paid in other professions, and the economic position of public-school teachers. Compares the income and economic position of teachers with other classes of gainfully employed persons in the United States. Discusses obstacles delaying adequate compensation for teachers and devises bases for fixing rates and a classification of school employees as guides to salary scheduling. Includes annotated bibliography.
COSTS

ECONOMIES

Economy suggestions often occur in references dealing with costs of a specific phase of work, e.g. Budget. See also Economies.

BALLOU, Frank W. Why the cost of public education has increased. Nation's schools, 1: 24-28, May 1928.


A brief synopsis of Association Report No. 2 in which the educational expenditures of Sonoma county are analyzed. Comparisons made include teaching load, per-pupil costs, and costs of different schools, curricular offerings, etc.


An official viewpoint of how economy and its problems can be best utilized in terms of the Cleveland budget for 1924. Instruction economy, its limitations, and its possibilities, is the significant problem treated. Improving the quality of instruction in the one safe basis of economy. The mere saving of money is not necessarily economical in practice.

EVANS, F. O. Your money's worth in education. Tax digest, 8: 331, September 1930.

Financing public education. American educational digest, 47: 350, April, 1930.


KIRCH, J. D. Costs and economies of education. Tax digest, 8: 218, June 1930.


Contains in many places original theoretical treatments with practical applications constituting a "plea for retrenchment in needless and uneconomical expenditure."


One hundred and twenty-two reasons why taxpayers boost school costs: thirty ways educators may reduce them. *Public service*, 376: March 25, 1924.


This philosophical examination of American school finance procedures describes the expansion of educational services as a "magnification process" used by school officials to graft public-school funds.


This article explains how Montezuma, Iowa, built a small school at a low cost, using qualified school architects to plan it and select the materials. Gives table with financial transactions involved, featuring an average cost of 21.5 cents per cubic foot for 39 rooms.


FOREIGN


Calls attention to the fact that the educational programs and the organization of the various nations are by no means comparable. In doing this gives some per pupil cost statistics for England and Wales, France, Prussia, Norway, Sweden, Denmark, Holland, Italy, Czechoslovakia, Belgium, Canada, Australia, New Zealand and South Africa.


A statistical study comparing costs of education in the United States and England. In the United States per capita costs exceeded those in England in every comparison made except that in American cities of 10,000 to 30,000 population the cost was less than in London.


High cost of education. *Canadian school board journal*, 3: 6, 8, October 1924.


Tabulates statistics of total school expenditures and per capita and per pupil school costs in the Philippine Islands from 1927-1929, and analyzes expenditures into salaries, outlay, and other expenses.

GENERAL

For the costs of any particular item, e.g., buildings or instruction, see that head. See also Costs. Methods of Calculating; Costs, Public Relations


Using data compiled by the National Education Association, this article compares educational need with educational support. Calls attention to recent increases in school attendance, improvements of sites and equipment, rising standards for teachers and curriculum, and to the fact that school expenditures
do not exceed the general ability to pay. States that a desirable educational goal has not yet been reached.


California. Lacy, James Samuel. The depression and school costs. The tax digest, March, 1932. p. 83. California Taxpayers' Association, Los Angeles. The startling increase in the cost of public education in California since 1910; the reasons for it; the loose thinking and easy-going attitudes that characterized it; the present necessity for re-trimmechment; and how it may be and is being done.

Trenham, N. Bradford. High schools cost $192 per pupil. The tax digest, March, 1930. p. 102. California Taxpayers' Association, Los Angeles. Shows total expenditures for education in California excluding capital outlays and transfers by counties for kindergarten, elementary, and high schools. The years 1926 and 1929 are compared. Per unit of attendance costs are shown also. Despite the increased attendance and the increasing value of the dollar, the unit costs continued to mount.

Trend of educational costs in California. The tax digest, February, 1930, p. 68. California Taxpayers' Association, Los Angeles. Compares the cost of each school in California with each other for 1926 and 1929 in the following factors: Average daily attendance, number of teachers, average number of years of teachers, teachers' salary, and valuation per unit of attendance. The low teaching loads are apparent.


Cost of education in the United States. The Scottish educational journal, 8: 685, August 24, 1923.


Evans, F. O. Your money's worth in education. The tax digest, September, 1930, p. 331. California Taxpayers' Association, Los Angeles. Points out the tendency for current educational cost per unit of attendance to increase in cities as taxable valuation per child increases. Also average salaries, value of school property, proportion of specialists and days of school go up while teaching load goes down. Explains the type of program that can be had at $70, $80, $90, and $100 per child. Concludes that programs costing more than $105 do not bring corresponding educational advantages and that at this point the law of diminishing returns is operative.


Fletcher, F. N. Why the mounting costs of schools? The tax digest, September, 1929, p. 312. California Taxpayers' Association, Los Angeles. Explains the factors involved in the great increase in school expenditures. Comparisons of Nevada and Utah point out the economies of larger units of administration.


Fowlkes, John G. Viewing school costs in terms of school service. Nation's schools, 8: 90, 92, 94, 96, September 1931. A method of putting school costs over a period of years on a uniform basis when length of term, cost of living, and pupil-teacher ratio varied. Illustrated with data from elementary schools of Glendale, Ariz.


Compares the economic wealth, the yearly income, and the yearly surplus of the Nation with the cost of education. In view of the products of education, and the economic progress of the Nation educational costs are defended as very reasonable.


Detailed costs from regular State sources for all phases of the public-school system, chiefly, 1928 to 1930, with recommendations for economies and a better financial organization.


Similar figures yearly in this publication.


Percentage of increase in total expenditures for public schools, excluding debt services; in all states from 1910 to 1924. Texas school journal, 45: 23, January 1928.


Discusses school expenditure per capita and per $1,000 of wealth to show the trends of expenditures for education in each of the several States and in the Nation for various decades from 1870 to 1922. Comparisons are made and increases are noted by five statistical tables.

ROGERS, ELMER E. Expenditures applied to education. Nebraska educational journal, 7: 420, October 1927.


Explains why costs have gone up, and points out 12 additions to educational programs in recent years. Points out the fallacies that sometimes beset both taxpayer and educator in dealing with educational costs. Larger units are essential, be concludes.


MCALLISTER, LOWELL H. A quantitative study of the growth of education in the United States.

M. A. thesis, 1931. Ohio State University, Columbus, Ohio.


This chapter traces school cost trends from 1870 to 1927, notes tendencies toward increasing costs, and discusses expansion of school service in relation to the ability of the people to pay and possible economies in the fiscal administration of the schools.


Analyzes the necessity of education to American society and shows that schools cost only 5 cents a day per capita.


Probably the best theoretical treatment of school cost. Very original views that may sometimes be considered too advanced but that can not safely be ignored by any good school executive.


Attempts to determine the point at which school population density ceases to be a factor affecting educational costs the amount of increase in unit-costs which occur as school population densities decrease from this point, and the total cost of education due to sparseness in States affected. Concludes that educational unit-costs in States having 17 or more children between 5 and 18 years of age per square mile are not affected by the factor of sparseness, and that unit-costs tend to rise as population decreases from 17 pupils per square mile.


Takes up the problem of increases in school costs due to rise of the percentage of the population in school and the problem of finance incident to these increases. Advocates better fiscal administration through State departments, reforms in taxation, and more adequate systems of support.


Useful data on school costs, taxes, teachers' salaries, and some accomplishments of American education, in 1928.


A discussion of three factors effecting increased school expenditures. Increased enrollment and school services; the depreciated dollar; and a 124 per cent rise in per pupil taxable wealth. The ratio of increase due to enrollment multiplied by that of depreciation of the dollar and taxable wealth gives an index of justified school costs.

What price education; is the interest in athletic sports overshadowing that of education? *Missouri school journal*, 45: 8, January 1927.

This article asks if a nation which can afford to spend more than $2,000,000 on a 2-man prize fight which lasted only 39 minutes can afford to spend $3,000,-000 to educate 3,000,000 children for a fight that will last approximately 39 years.

**METHODS OF CALCULATING**

The references under this lead are general ones for computing various school costs. For methods of calculating a particular cost, e.g., Instruction Costs, High School, see that head. See also Index Numbers and Research Techniques: Costs, General.


Presents a technique for estimating the cost of future school programs by using the cost of former programs and considering the cost of new services which the school contemplates offering.


A valuable discussion of accounting problems and procedures. Classifies, with annotations and suggestions, the nine basic costs outlined in United States office of Education Bulletin, 1928 No. 24, "Report of committees on uniform records and reports." Offers suggestions for extracting some unit costs having definite, significant value for comparison appended by some interpretative factors to explain differences.


Suggests ways in which index numbers may be used in educational work. Reviews the definition, need and advantage of index numbers, and the history of their use in education and other
Costs and expenditures. Notes and encourages the use of index numbers for cost of living of teachers, price of school buildings, school bonds, and the price of supplies.

Index numbers of costs in education. Teachers college record, 80: 378, 381, 794, March–May 1929.

Index numbers of costs in education corrected monthly to agree with current prices. Prices for 1929 arbitrarily taken as 100. 1928-29 prices given in ratio to 1926. Four subheads: (1) Teachers cost of living, (2) Price school buildings, (3) Price school bonds, (4) Price of instructional supplies. Twelve months charted each month.


Cline, E. D. and Cushman, C. L. The mill levy as a measure of comparative school costs. American school board journal, 71: 50, September 1925.

Explains that a comparison of the millage school tax levied to support the programs of various districts is not a valid comparison in the absence of the ratio of assessment to actual value upon which the millage is levied, since assessment ratios are commonly found to vary from 45 to 77.

Cook, Katherine M. By what standard shall school costs be measured? School life, 11: 35, October 1925.

Measures school costs in terms of what they do, not in terms of how many dollars they circulate. Suggests as measures of school costs, the number of 14 and 15-year-olds dropping out of school, percentages of eliminations in sixth, seventh, and eighth grades, per cent in daily attendance, per cent failing promotion, and per cent graduates are of total enrollment.


Discusses depreciation of the dollar, increases in elementary and high-school attendance, needed increases of teachers, changes in costs of school building, construction and the expansion and enrichment of the educational program as causes of rising school costs.


Shows the degree to which a given community can finance a program of public education and how money furnished by the community may best be distributed among the various phases of the educational programs offered. The author points out that the budget maker should be an expert in school administration.

He finds that expenditures for schools in cities of 10,000 to 30,000 population are determined by what the people want, rather than by what is economically feasible. Contains many original data from 91 cities (1912–1922) on measures of efficiency, expenditures, and definitions of curriculum, attendance, teachers, school officials, classification of expenditures, etc.


Discusses principles and methods of cost accounting. Presents basic for the allocation of costs, the uses of various unit costs, and methods and limitations of comparing school costs. Outlines and analyzes methods and considerations involved in the classification and accounting for the several items of school costs. Shows forms for the accounting, tabulation, and presentation of the various costs.


Contains a valuable table showing how to calculate unit costs of education in advance if average number of pupils per teacher and average salary are known.

Ford, Horace S. Unit educational costs. In University and college business officials. Fifteenth annual meeting, 1925. Iowa City, State university of Iowa, 1925. p. 138–150.

Discusses teaching salaries, student-tuition, number of students in each class, average age of students, average teaching hours of instructors, number of students taking subjects, and the teaching cost per student clock hour for each subject. Outlines and analyzes methods and limitations of comparing school costs. Six of Mark Twain's rules governing literary art are paraphrased and applied to the presentation of unit costs as an indication of what story those costs should tell and how they should tell it.


A contention that any adequate means of appraisal in education must be based upon a procedure which will take into account both the cost of the educational product and the educational value. States that the variables in comparative school cost accounting are presented.

Grubb, Stephen. A technique for the determination of unit school costs. Iowa City, Iowa, University of Iowa, 1925. 104 p. (University of Iowa studies, vol. 8, no. 1. Studies in education. First series, no. 97, July 15, 1925.)

A definition of certain unit costs in education based on data secured from two Iowa cities, one of 50,000 and the other of 15,000 population. The unit costs considered are said to be among those which have not been constant. The pro-
A proposed plan is recommended as one which will facilitate the control of these unit costs.


Analyses 108 studies on school costs by outstanding leaders in the field. Presents a variety of units of costs but finds no one unit is best for all purposes. Describes the essentials of a valid cost unit and points out the most frequently used.


Develops the principle that since instruction is the primary purpose of the school, the final unit of cost must be based upon instruction plus accessory costs. Points out common inaccuracies of computing unit costs and discusses the administrative values of unit cost accounting.


Discusses the variables that must be considered in making a comparative study of raw money cost between any two school systems. Statistical data (1924-25) for two school systems and shows why these raw costs cannot be compared until certain variables are considered.


Presents the major considerations to be kept in mind in planning an intelligent financial program for a school system.


Presents a system of uniform financial accounting for the public schools of Michigan bearing the recommendation of the State Department of Education. Includes rules and regulations for making the school budget.


Pages 52-68 (Theory of educational costs) give a clear presentation of the theory of educational costs from three viewpoints: (1) raw money, (2) cost in relation to classroom achievement, (3) costs in relation to the ultimate social effects of the school upon society.

Pages 64-65 (Cost Method) discuss the method of determining educational costs, when considered in two divisions: (1) the validity of the several methods of computing costs through a comparison of two hypothetical cities, and (2) the specific rules defining cost terms and cost types.


This book presents numerous suggestions on methods of calculating school costs. It is pointed out that accounting and budgetary procedures are frequently inexact and inefficient.


A method of computing unit costs which reduces them to thousandths of a cent per pupil hour, as a method of locating financial leaks in school costs. Describes the accounting system used to record and manipulate such statistics.

Cost tendency charts applied to city school work. *American school board journal*, 75: 48, 140, October 1927.

Devises two charts as aids in showing the cost tendencies of each school department each month and in estimating in advance the total annual financial effects of these tendencies. States that these charts can facilitate the control of school expenditures.


A consideration of comparative costs as a basis for intelligent budget making. Reviews the history of cost studies and outlines eight common questions cost studies will answer. Discusses the selection of comparable cities, studies of budgetary apportionments, studies of comparative costs of schools of grades and subjects, of elementary, junior and senior high school costs, the factors in cost differences, and the use of cost studies.


Discusses pupil-hour and class-hour costs. Concludes that these units of measurement are most adaptable to comparative cost studies. Forms and methods for computing and comparing the statistics of such studies supplement the discussion.


Discusses the purposes and principles of various types of educational unit-cost studies. Lists 16 specific items on which unit cost studies may advantageously be made, with the proper cost of each item.

REID, FLOYD W. and RUSSELL, JOHN D. The computation of unit costs in schools of higher education.
Nation's schools, 4: 29-36, October 1929.

ROE, WARREN A. Cost sheets and quantity production in education. National education association, Department of elementary school principals bulletin, 5: 147-56, April 1926.

An argument to the effect that educational costs will be materially reduced by the elimination of failures and repeaters. Examines the cost of repetition of grades, and claims that society has no right to set up such standards for promotion that will force a portion of the enrollment to fail. States that the school should be made to fit the child and that money spent on a school that does, is not wasted.


PUBLIC RELATIONS

See also Costs, General; Public Relations

Are school costs excessive? Industrial arts magazine, 18: 263, August 1929.Defends the expenditures for education by comparing total education cost in the United States with the total cost of an array of comforts and luxuries.

Are school costs relatively large or small? Lincoln school bulletin, 1, 2, March 14, 1924.


Bumping the budget. The public and the schools; 259: 2-8, October 5, 1926.

Canada. Five cents a day. Manitoba teacher, 43: 12, December 1928.

CARPENTER, W. W. and RUT, JOHN. The responsibility of teachers for knowing the basic facts relative to school costs. In Their The teacher and secondary-school administration; from the point of view of the classroom teacher. New York, Ginn and co., 1931. Chapter XVIII. Gives a good bird's-eye view of the subject.


Cost of education. Facts and arguments to support effectually the statement "that every dollar invested in education brings returns to American business by creating a high standard of living."

Cost of education. Kentucky high-school quarterly, 10: 44-46, April 1924.

Cost of education. Public and the schools, 202: 7-8, April 15, 1924.

Cost of education. Public library. 29: 170-72, April 1924.


After stating that in 1928, Uncle Sam spent $270 per capita for life insurance, $1,200 for automobile expenses, and $700 for luxuries, the author asks if it is unreasonable for him to spend $250 for the education of his children the same year.

DES MOINES PUBLIC SCHOOLS, IOWA BOARD OF DIRECTORS. How much do our schools cost the taxpayer? 43 p. Issued by the board of directors, Des Moines public schools, March 1932.

Answers questions using relevant data, graphs, and tables concerning school costs.


Educational costs; apparent and real. Educational research bulletin, 2: 324-25, November 28, 1923.


FOWLER, JOHN GUY. Viewing school costs in terms of school service. Nation's schools, 8: 90, 92, 94, 96, September 1931.

A method of putting school costs over a period of years on a uniform basis when length of term, cost of living, and pupil-teacher ratio varied. Illustrated with data from elementary schools of Glendale, Ark.
GRILL, G. W. Comparative school costs. Educational research bulletin, 3: 89-100, March 5, 1924.


HARMAN, A. F. Are the schools costing too much? Alabama school journal, April 1932. p. 14-17. (Also reprinted by Alabama education association.)

Excellent example of a good general treatment based on sound principles of general public policy with a dignified popular presentation. Particular reference to Alabama.

High cost of learning. New student, 7: 3-4, April 25, 1928.


How money is spent in school system. Illinois teacher, 16: 19, January 1923.

How the dollar was spent in 1924-25. Education bulletin, 12: 362-69, March 1923.

ILGEN, V. C. Are increased public school costs justified? Missouri school journal, 46: 10-12, December 1929.


Under the name of "Sanctified Squander," this article lists some attacks commonly made by members of a disgruntled public upon the validity of school expenditure, and describes the strategy with which Superintendent R. G. Jones met them in Cleveland, Ohio.


JOHNSON, THOMAS E. Increased expenditure necessary to meet demands of civilization. School bulletin, St. Paul, 9: 2-3, November 1926.

KEITH, J. D. Costs and economies of education. Tax digest, 8: 218-21, June 1930.

KNUDSEN, O. A. As others see us. Journal of Arkansas education, 8: 11-12, February 1930.

Examines the charges of the association for retrenchment in public expenditures that have been made against the costs of schools. Cautions that raw figures, un-necessary, may make the association too much.


NATIONAL EDUCATION ASSOCIATION.


Compares statistics of per capita income and the percentages of total national income spent for educational purposes in United States with similar statistics of other nations. Calculates the percentage of total State and national income annually spent for public schools and compares this amount with the annual State and national expenditures for life insurance, building construction, passenger automobiles, soft drinks, ice cream, candy, chewing gum, amusements, jewelry, cosmetics, and sporting goods. Appraises the economic and social value of the schools.


Need of more school accommodations. Elementary school journal, 24: 83-85, October 1923.

From Chicago daily tribune.


Corresponding figures for previous years in numbers of this bulletin.

NORRIS, J. K. Cost of public education from the viewpoint of schools. Texas Outlook, 14: 57-68, July 1930.

Using the arguments that education contributes to the preservation of the nation's resources, that increase in school costs has been legitimate, and that all investment in education is socially productive, this article defends rising school costs and gives the reasons for their increase. (Also published in mimeographed form by N. E. A. )

Brief abstract from an article on the cost of public education from the viewpoint of business. Points out that the layman, skilled in matters of financial management, can bring valuable experience to the fiscal problems of the public schools.


Points out that excessive repairs and fuel costs, poor ventilation, strained eyes, thwarting of youthful enthusiasm for education, the repulsion of good teachers, discouragement of community growth, and the apathy of a community of human beings, are costs which must be attributed to the maintenance of an old school building.


Describes how an attack on the schools will do great harm in communities which most need to spend more rather than less for schools. Indicates the responsibility of the teacher in an effort to protect the schools. The conspiracy in North Carolina of the so-called Hancock Law, illustrates the point.

Sounding's note of caution on school costs. American school board journal, 73: 69, August 1926.


Points out that depreciation of the dollar, increasing attendance, lengthening school term, improving the quality of education, raising teachers' salaries, and improving school plants are factors of increased school costs in West Virginia.


Points out the overexpansion in education and the need for a return to more basic and fundamental work with a curtailment of over specialization. Closely tied in with the subject of costs and school finance.


STATISTICS

See also Costs, General. For Statistics on costs for any item, e. g., City Schools of States, see that item

[Fiscal aspect of education: expenditures for schools (1890-1925); comparative support of education by States (1924); source of revenue (1925); systems of public-school support (1926); public aid to colleges (1922-23). In The cost of government in the United States. New York, N. Y., National industrial conference board, inc. 1927. p. 147-90.]


COUNTY

GENERAL

See Rural, County Unit, General

SURVEYS


Presents in detail data relating to school costs in a rural county. Includes items on school tax, teachers' salaries, and income per district.


A detailed study of the county's business, including the administration and cost of the various types of schools. Recommendations include a continuation
of the policy of unionisation of small schools to reduce per capita costs, more careful administration of pupil transportation, elimination of small classes in large schools, etc. (Other studies made by the California taxpayers' association, such as the Kern county study, are those of Santa Rosa, Santa Paula, San Diego, and Santa Barbara.)


One section, covering 43 pages, concerns administrative educational problems. Sets forth a practical plan in detail for consolidation of small elementary schools whereby a saving of $25,850 in teachers' salaries would be effected. A saving of $12,389.17 would result if school-owned buses were operated at the same average cost as that of contract buses.

The findings of the Santa Barbara county study. Tax digest, 7: 151-59, May 1929.


Presents, by means of statistical data for 1925-26, the money-getting and money-spending activities of the public schools. Jacksonville's ability to support schools is shown by a comparative study of the financial data of comparable cities in other parts of the country.


A comprehensive study including many data of consolidation of schools. This movement "has been steadily growing in favor with the people of the county. Schools have been united every year since the movement began, and very little consolidation has been undone. . . ."

Indiana. Hancock county. Hancock county school bulletin. Hancock county, Board of education, 1925.


A study of the educational facilities in Washington parish, La. Sets forth through tables, description, and maps, the situation in regard to organisation, administration, finance, and needs of the schools. Recommends closer supervision of attendance, transportation, and finance by the parish board of education and the parish superintendent of schools.


Some financial aspects are considered for the local area.


— Cuyahoga county. Bach, Joseph A. A study of the finances of the schools comprising the county school district of Cuyahoga county, Ohio.


— Oklahoma, Garfield county. Davis, Gilbert Lawton. Educational inequality in Garfield county, Okla-


Pennsylvania, Lackawanna county. Francis, Thomas and Northup, E. M. Survey of the one-teacher elementary schools of Lackawanna county, Pa., 1926. Scranton, Pa., County superintendent of schools. 23 p. tables, diagrams, graphs.

A study to show present conditions of the one-teacher buildings in order that recommendations for improvement and consolidation might be made. Forty-five one-teacher schools maintained in 12 different districts. Some situated on grounds of less than 1 acre. Recommendations include beautification of grounds and better selection of site.


— Cavins, L. V. A school survey of type counties of West Virginia.

West Virginia, State department of schools, 1928.

COUNTY UNIT
See Rural county unit

CRIPPLES, SCHOOLS FOR AID
See State Aid, Crippled children

COSTS


Gives total and per pupil cost in 20 cities for general administration, instruction, transportation, maintenance, operation, medical aid, new equipment, miscellaneous, and grand total. Compares per pupil costs on various items with similar costs on regular day schools.


Study of legislation for education of crippled children. Brief historical summary since 1897. In 1927 all States except Connecticut, Delaware, Kansas, Maryland, Kentucky, Vermont, and Washington operated with the Federal Government under terms of National Civilian Vocational Act. Tendency is to provide education through special classes in local districts. Digest of laws in 21 States under three heads: (1) Local aid, (2) State regulation, (3) State aid.

WHITE HOUSE CONFERENCE. Special education, the handicapped, and the gifted. p. 5-6. New York, Century co. 1931.

Gives school costs for blind, deaf, and crippled children.

CURRENT EXPENSE

Costs


Morrison, Henry C. Operating cost. In His The management of the school...

An original theoretical treatment with practical illustrations of what should constitute current or running expense.


STATISTICS
(These will be found for the total and subdivisions in the State and city school statistics bulletin of the U. S. Office of education. See State Statistics and City School Statistics. Current expenses statistics are frequently published also in the research bulletins of the National Education Association, traceable through the index at the end of each volume. See also City School Costs, statistics)

CURRICULUM
BAWREN, W. T. Applying the remedy of high per capita costs—increased enrollment the way out? Industrial education magazine, 38: 305-6, March 1928.

Discusses decreasing per capita costs of instruction through the curtailment of the special subjects in the curriculum. Points out that an increase in enrollment per teacher in shop work and drawing would result in the overloading of teachers or a modification of the entire manual arts program. This would change the material aspect of the manual arts shop by curtailment of variety of experience, modification of equipment, and use of instructional helps and longer shop periods.


Cawthon, W. S. Curriculum revision and school finances. Journal of the Florida education association, 8: 5-6, January 1931.

Reveals that even with an extensive school debt of more than $7,500,000, Florida is not maintaining an acceptable educational program. The State office shows 10,585 weighted instruction units in the State which should be guaranteed a minimum program from a large State fund of $10,585,000.

Touton, Frank C. California curriculum study. The tax digest, April, 1927, p. 137-38; California taxpayers' association, Los Angeles.

Reveals some of the wastes of educational expenditures due to improper curriculum construction.

DEAF, SCHOOLS FOR
BRAT. Pensions for those long employed in schools for the deaf. American annals of the deaf, 63: 201-23, May 1924.


Similar data for previous years in corresponding bulletins.


WHITE HOUSE CONFERENCE. Special education, the handicapped, and the gifted. p. 5-6. New York, Century co. 1931.

Gives school costs for blind, deaf, and crippled children.
ECONOMIC PHASES

For economic phases of any item, see that item. See also Values of Education.

ALTHAUS, CARL B. Some facts regarding economic conditions in Kansas and their relation to financing the public schools of the State. Kansas State teachers association, Topeka, Kans., 1932. p. 32.

Excellent example of a thorough study of school finance possibilities in the depression with the resulting decreased ability to support schools.

ANDERSON, C. R. Should teachers' salaries be reduced to meet the present economic depression? American school board journal, 81: 41-42, December 1930.


Discusses increased utilization of existing plant, minor changes and alterations, additions, and new construction.


Discusses the economic importance of meeting rural school needs.


CLARK, HAROLD F. The effect of population upon the ability to support education. Bloomington, Ind., University of Indiana, 1923. p. 1-29. (University of Indiana, School of education, Bulletin, vol. 2, no. 1, September 1925.)

Emphasizes the importance of the ratio of children to adult population as a factor in determining the ability of a community to support education. Develops formula, the use of which, it is contended, in connection with figures for per capita wealth, provides a more adequate measure of ability to support education than has hitherto been available.

COMMITTEE ON RECENT ECONOMIC CHANGES, HERBERT HOOVER, CHAIRMAN. Recent economic changes. National Bureau of economic research, 51 Madison Avenue, New York city. 900 p. 2 volumes.

Includes committee's recommendations based on factual material for the following topics: Changes in consumption and the standard of living; new and old industries; technical changes in manufacturing industries; specific changes in certain technical production factors; the changing structure of industry; construction; transportation; marketing; labor; management; agriculture; price movements and related changes in money and credit and their effect on business; foreign markets and foreign credits; the national income and its distribution; how matters stood in the spring of 1929.


Facts and arguments to support effectively, the statement "that every dollar invested in education brings returns to American business by creating a high standard of living."


Does our present system of school finance show signs of breaking down? Western school journal, 26: 189-90, May 1931.

ECONOMIC EFFECTS OF EDUCATION. Bloomington, Ind., University of Indiana, 1928. p. 1-39. (Cooperative research bureau publication, May 1928.)

Quotations from books classified as "Economic Theory since 1870" on the economic effects of schooling, in general, taken from the works of 66 economists and arranged in alphabetical order by authors.


Indicates the fallacies underlying the common attacks on the schools and these issues which must be clearly understood and intelligently defended. The average citizen and school board member does not know the relative value of the services, but is more interested in times of crises than ever before.


Discusses three general methods (the price method, the special assessment method, and the general taxation method) of paying for public improvements. Points out that according to our present analysis of the behavior of urban land values, these methods are quite inadequate to serve as the basis for the formulation of a sound and defensible program for financing a comprehensive city plan.


Argues that the aggregate of local school systems produces only a minor fraction of what it might produce if it could do much better until there are better State and national organizations. Shows that schools can pay their way by improving demand, inculcating thrift, preventing overpopulation, expanding professional vocations, and creating economic intelligence.


Discusses wealth and income of the States, probable causes of increase in real income, the economic significance of the educational financial burden, and contends that school support does not financially deplete the national income. Concludes that the school is economic in nature and must pay its own way.


Argues that the school must produce in economic value as much as it consumes. Analyzes school system economic costs into services and goods used up in operation, the use of land occupied by schools, and the use of capital invested in schools.

NATIONAL BUREAU OF ECONOMIC RESEARCH. 51 Madison Avenue, New York City.

From 1921 to date, this organization has issued very valuable volumes, dealing mainly with income, business cycles, and related topics. It made the study for President Hoover's Committee on recent economic changes. Complete list sent free on application to the bureau.


Discusses reduction of teachers salaries, reduction of educational services, State school legislation growing out of the depression, increased responsibilities of the schools and, the protection of essential educational services.


Shows clearly by means of statistical data, the trends in economic conditions in the United States during the first nine months of 1928 in employment, wages and cost of living, industrial activities, prices movements, foreign trade, loans to foreign countries, and credit position.

A picture of world economic conditions at the beginning of 1929. New York, N.Y., National industrial conference board, inc. 1929.

An examination of economic conditions in Great Britain, Germany, France, Italy, Belgium, Sweden, Netherlands, Denmark, Switzerland, Austria, Czechoslovakia, Russia, Canada, Mexico, Argentina, Brazil, Chile, Colombia, Australia, Japan, China, and the United States at the beginning of 1929. Involves industry, commerce, labor, wages, unemployment, foreign trade, costs of living, and politics.


A study, under two main headings, (1) the Nation's economic ability to meet school costs, and (2) school costs and economy in public expenditures, of the ratio of school costs to income and wealth, the value of education versus its cost, the economic effect of increased school expenditures, causes of growth in school cost, economy in Federal expenditures and school costs, and the effect of the war on national and school expenditures. Education is evaluated in terms of social and economic contributions. Statistics and graphs supplement the discussion.


Valuable pioneer study comparing the States on economic resources in 1922 using wealth and income as measures. Computes the educational load in each State and relates this to the State's ability to support schools. Discusses accomplishments of differences in ability and unmeasured factors affecting it. Bibliography of 73 annotated references.

Simson, J. A. The school in time of economic depression. Los Angeles school journal, 14: 36, 38, 40, 42, April 27, 1931.


A considerable showing of items to indicate that public education has made the kind of contributions expected of it as the "foundation upon which the democratic State is built." Suggestions for future.

Reviews and analyzes the theories and purposes which have directed the development of educational support and administration in America and points out some of the resulting economic values resulting from the educational program.


ECONOMIES

FOREIGN


Asks if comparatively wealthy America can afford to prepare her citizens less generously than do both England and Germany. Explains that in these Nations the attitude is assumed that even in time of economic stress, to reduce school expenditures is to reduce the health, physical, mental, and moral strength of the coming generation. States that this is a policy which no Nation with either humanity or wisdom can afford to pursue.

GENERAL

For Economies on Any Item, See That Item.

The following heads have subheads on economies: Budget, Building costs, Consolidation Costs, Costs, Equipment, Maintenance, Operation, Purchasing, Research, Salaries, Secondary Education; Supplies; Transportation. See also: Borrowing, When; Efficiency Measures, Efficiency; Safe-guarding Funds; Waste. 

ALEXANDER, CARTER. School expenditures and the public. Teachers college record, 26: 17-26, October 1924.

ALLEN, RICHARD D. Cutting down unnecessary school costs. Vocational guidance magazine, 3: 274-77, May 1925.


An unusually thought-provoking article with plenty of practical suggestions for carrying out the author’s advice to North Carolina: “As in economics, so in education it must get down to the bedrock of facts and with the tentative blueprints of the whole structure build with the principles of common sense and social idealism.” While cooperating in economy, be audacious to lead.


A very practical discussion of all important economies that do and those that do not, involve curtailment of school activities, favoring the latter. Special reference to California, but helpful anywhere.


Presents results of a questionnaire study. Replies from 68 school administrators in California shows that 59 school systems had inaugurated economy programs for the year 1931-32. Economies are listed.


Although a study of the expenditures of county government, the report deals primarily with school expenditures, giving not only recommendations for reducing costs of education but also of increasing educational opportunity.


Points out under 6 main heads economies which may be realized in school administration. Contains many relevant data.

CHICAGO SCHOOL BOARD. Statistical bulletin, 1931, no. 15.

A survey of the extent of nonpromotion in the city schools of Chicago during the first semester of the school year 1930-31, showing the costs of ineffective teaching and the savings which could be effected by more efficient teaching. Shows that approximately 5 per cent of the pupils failed in the system as a whole.


A brief discussion of two kinds of improvements which can be made in school expenditures, buying more cheaply and
ECONOMIES

more efficiently, and giving more careful consideration to purchasing. Concludes that the greatest improvement can be made through the latter, for it is an imperative need of education to re-plan in terms of the occupational and economic needs of the group.

CLIFTON, A. R. How to measure educational standards. Nation's schools, 4: 57, August 1929.


Des Moines. How much do our schools cost the taxpayer? Board of Directors, Des Moines public schools, 1932. p. 43.

Excellent example of a defense of school costs in one city by an economy showing, as compared with similar cities. Good headings, tables, graphs, and typography.

DIXON, A. H. How taxes may be reduced. Ohio teacher, 44: 202-4, January 1924.


Economies within the power of school directors. American school board journal, 80: 44, February 1930.


A significant statement of the true economies possible through intelligent application of sound principles in budgetary procedure, administration of tax levy and collection, purchase of equipment, services and supplies, and in safeguarding public funds. Bibliography.


A questionnaire report of recent school economies which, it is claimed, do not greatly sacrifice educational values.


HENZLIK, F. E., RICHARDS, W. M., and others. Practical economies in school administration. University of Nebraska, extension division. Lincoln, Nebr., 1932. (University of Nebraska publications, educational monograph no. 3, 1932. 212 p.)

Criteria for determining the genuineness of an economy. Practical suggestions and citations from authorities on how to secure economies and a check list for knowing when economies are secured, for each of 12 important phases of school administration. The material for each phase is cited in connection with it in this bibliography.


A bibliography of 226 references and some with subdivisions (1913-1931) on financial economies for public schools numerically, alphabetically, and topically arranged by author, title, or publication with number. *


Running review and bibliography stressing 1923 to fall of 1931.


Describes the publicity technique used by a school board to procure a tax levy sufficient to meet the increasing demands made on a school.


Discusses such causes of extravagance in school administration as excessive overhead costs, failure to properly assign the teaching service, and playing politics. Recommends a single-headed control as the means of eliminating these unnecessary costs.

IVER, C. A. Shorter elementary course of study. School life, 9: 184, April 1924.

Points out a theoretically possible saving of $100,000,000 by elimination of the eighth grade from the elementary organization. *

JONES, H. G. Possible economies through control of business administration. School and society, 19: 297-300, March 1924. *

KERSEY, VIRGINIO. The cost of cheap educational programs. California schools, State department of educa-
ECONOMIES

LAMBERT, A. C. Instruction and plant operation as constant costs. American school board journal, 80: 42, April 1930.

Shows, by means of tables, the percentages of school costs devoted to instruction and plant operation. Points out the distinct tendency of these two major items of school cost to take constant proportions of the total cost.


Describes the budgetary distribution of a medium-sized school and analyses five means of avoiding wastes. Recommends a carefully compiled inventory of school needs, a thoughtful consideration of how to meet these needs, an efficient purchasing scheme, effective supervision of all purchases, and a scientific anticipation of future needs as economy measures.

LOVEJOY, PHILIP C. Diverse economies that mean money to the system. Nation's schools, 8: 82, 84, August 1931.

Considers the issues of sick leave and health insurance in relation to possible economies, scientific purchase of equipment and improved methods of reporting personal expense accounts.

Miscellaneous economies. Nation's schools, 6: 20, October 1930.

Lists with explanatory description six money-saving methods found in Hamtramck schools.


Suggests three specific steps toward saving money as follows: (1) Study adopted policies of the board of education, initiate steps so board of education will place on record such a policy if it doesn't exist; (2) ascertain that all departments of the system are operating in accordance with these policies; (3) make an analysis chart showing how money is being spent. Cites difference between educational and financial economy but that educational economy in the long run would result in financial economy and warns school officials not to be shortsighted by effecting economies which will later lead to far greater expenditures.

Saving money by the concentration of service. Nation's schools, 7: 75-82, April 1931.

This second article in a series on this general subject deals with saving money by concentration of service through readjustment of teachers as economical adjustments occur. Considers several methods of effecting economies.


General discussion of reckless spending and techniques for saving money in school administration. Suggests larger pupil-teacher ratio with educational interests as helpers and cites economic efforts of five city superintendents.


Emphasizes the facts that the board of education is not a bargain hunter, that the administration is not a price cutter when administrative service is concerned.


A representative of the Minneapolis taxpayers' association gives an unusually clear statement of the economy in school expenditure advocated by outsiders. Superintendent Studebaker makes an exceptionally good reply from the standpoint of a superintendent of schools, using Des Moines data for illustrations.


Sets up a group of 12 diagrams to show essentials of the organization for the management of school supplies and equipment.


A stimulating "plea for retrenchment in needless and uneconomical expenditure."


Summaries of the financial emergency as a whole and by States. Suggestions on possible economies, and references on specific economies. Discusses State aid and profitable tax revisions.

A study of the wealth, income, and school support in individual States. Statistical tables give the financial data, expenditures, investments, and income by States, 1926. Selected annotated bibliographies.


Cites the facts with financial tables and charts to prove that educational expenditure in the past and now can be justified in the light of education’s (1) importance to the general welfare, (2) the Nation’s ability to pay, and (3) the present policy of wise, constructive economy in public outlay.


Discusses a poorly planned system of finance resulting in educational inarticulation. Conflict existing between the higher institutions and the elementary secondary level, teachers colleges and universities, State colleges and State universities, and between various subject-matter fields hinder an articulated plan. Suggests three remedies: common agencies of control, State budgeting, and informal method.

O’Shea, M. V. Can we save in education without harming the schools? Nation’s schools, 9: 33-34, February 1922.

If economies must be made certain phases of the educational program, including length of school term must not be curtailed, lest we revert to practices of earlier decades and nullify the work of many years past.

Reasonable economy in school administration. American educational digest, 44: 568, August 1925.

Reducing economic waste of poor teaching. American educational digest, 44: 11, September 1924.

The economic waste resulting from poor teaching substantiated by statements from various business men. The related lines of work and practical ways through which essential training for educational leadership may be given are outlined.

Reeder, W. G. Crisis confronts the schools. Educational research bulletin, 10: 271-72, May 13, 1931.

Editorial discussing economic conditions of 1931. Upholds reduction in ex-

penditures in education when achieved without crippling schools. Suggests that schools eliminate all waste; sell themselves to the public through larger advertising and public relations campaigns; keep older students in school, thereby reducing unemployment among adult population.


Running review and bibliography of researches in this field, stressing those from 1923 to the fall of 1931.


Saving by losing. School and community, 15: 433-35, October 1929.


Analyses five types of financial activities for possible economies that have little effect on the quality and quantity of education provided. A comprehensive check list is compiled to assist school administrators in detecting possible economies.


Smart, T. J. How better schools for less money may be made available for a Kansas community. Kansas university bulletin of education, 3: 3-19, February 1931.

Presents a federation plan of organization and method of financing education jointly for communities in Kansas, thereby reducing cost. Based on financial expenditures of the school districts involved, and at the same time securing the benefit of larger-and better schools. This plan may be applied elsewhere.


Outlines the savings in the school budget which can be made by enlarging size of classes, organizing the elementary school into seven instead of eight grades, and in building programs.


A brilliant summary of professional efforts toward efficiency and economy in
nontechnical language. Doctor Suzzallo points out the value of organizations like California taxpayers' association and condemns short-sighted economy by uninformed groups.


A résumé of the 1926 Annual Superintendents Convention at Lake Tahoe. Efficiency and economy were the keynotes of the Convention although the depression was still three years in the future.

What is expected of educational research. Tax digest, 8: 21, January 1930.


An account of a school book bindery which binds books at an average cost of 28 cents, a saving of 24 cents over commercial rates.

EFFICIENCY MEASURES; FINANCE

For efficiency measures of any item, e. g., budgets, see that head.

See also Economics; Value of Education; Waste

BUCKINGHAM, B. R. Securing support on the basis of value. Educational research bulletin, Ohio State university, 3: 166-67, April 16, 1924.

HEY, SPURLING. Value for money in education. Manchester, Thomas Hope, Educational publisher, 1925. 32 p.

Attempts to account for the money value of education in England. Analyses statistically expenditures, and discusses the problem under the following headings: Traditional misgivings, the expenditure for which value is demanded, the cost of housing pupils, the cost of physical and mental defects, medical inspection and treatment, free meals, cost of administration, teachers' salaries, maturity's debt to youth, the cash value of health, the business man's demand, and incalculable returns.

JONES, T. N. Financing an efficient school system. Texas outlook, 12: 9-11, July 1929.

KERR, E. S. Improvement of schools through more adequate finances. Journal of the Ohio State teachers association, 3: 26, July 1928.


Discusses interest, depreciation charges, three methods for predicting costs, determination of economies which can be effected without decreasing school efficiency, equalization, measurement of costs involved in minimum programs, uniform local taxes, the distribution of State aid, and the obligation of the Nation to support education as phases of scientific educational finance.

ELEMENTARY SCHOOLS

ACCOUNTING


This article presents a simple, comprehensive, nontechnical method for handling the recording of receipts and disbursements of school funds in each individual elementary school in Detroit. Each school is furnished with an ordinary bound cash book, with printed directions including an illustration. The central office exercises supervision over expenditures for equipment only. The practical value of the system is that it relieves the principal and other administrative officers of criticism or dishonesty.

See State Aid, Elementary Schools

COSTS


MARION, J. A. The administration and financing of our elementary system of education. Western school journal, 24: 341-43, November 1929.


A brief statistical résumé of two statements showing per capita costs of elementary education in England for 1928-29, and in the United States for 1927-28. In England the costs are taken from groups of schools, while in the United States, from cities listed in three groups.


**COSTS, FOREIGN**


Calls attention to the fact that the educational programs and the organization of the various nations are by no means comparable. Presents some per pupil cost statistics for England and Wales, France, Prussia, Norway, Sweden, Denmark, Holland, Italy, Czechoslovakia, Belgium, Canada, Australia, New Zealand, and South Africa.

**EQUALIZATION**

**COUNTY**

California. Suzzalo, Henry. Educational specialist favors county unit plan; only way to bring about equal educational opportunity in California. *Tax digest*, 7: 76, March 1929.


Deals with equalization and reward of effort, together with some special progress reports. Includes a discussion of Work's article on the importance of rewarding local school effort. Concludes that it is better to secure and maintain an attitude of growth toward education than to sacrifice it for equality of educational opportunities. Lists States reporting definite revisions of the laws concerning State school funds or the securing of appropriations.


Analyzes the inequalities in educational opportunities within a county and the use of a county school survey to locate and define these inequalities, to make plans for their correction and to aid in the execution of the plans.


Analyzes various inequalities in the educational system, finance, attendance, instruction, supervision, and taxes. Suggests remedies through making the county the unit of taxation, enlarging attendance district, giving trained and able teachers to the county and small city schools, inaugurating a more effective method of supervision in the rural districts, reducing overhead expenses in township and by using the county as a unit in the purchasing of school supplies.

Ohio. Reed, W. and Whiteman, J. W. The county tax as an equalizer of educational opportunity in Ohio. *Educational research bulletin (Ohio State university)*, 4: 177-82, April 29, 1925.


Discusses results of a school survey of Wise county, Tex. The findings indicate that much more efficient work is being done in large urban schools than in small rural schools. Attributes the difference largely to the attraction urban school salaries have for good teachers.


**FOREIGN**


**GENERAL**

See also State Aid, general; State, Support; Taxation, Equalization


Facts given to show the inadequacies and inequalities of rural school finance.
in the various States, with brief recommendations for improvement. Annotated bibliography of eight references.


BURNHAM, ERNEST. Equalizing rural and urban education facilities. National schools, 8: 70-78, 80, July 1931.

Points out cases of unequal distribution of funds and argues lack of interest in financing rural education. Concludes that proper facilities for rural education demand State equalization funds adequate to the need, distributed where the need is, without reference to the promotion of special features in either organization or curriculum.


Discusses financial administration by the Department of Education and the Board of Control, of a partnership business of education, between the State and the local community to secure the maximum amount of education for every dollar expended and to incur only those obligations from available funds which can be paid during a current biennium. A statement of local tax money is required and combined with the State funds to form the basic revenue operating State aid schools.


Estimates the availability of schools of the proper grade level to rural children. Studies the distances children of different ages must travel to reach such schools, climatic and topographical factors conditioning these distances, and the quantity and quality of the educational program of such schools in 22 counties in California, Colorado, Iowa, Kentucky, and Wisconsin.


Analyzes the causes for raising educational costs and outlines the need for an equalization fund which will relieve some rural districts of their economic strain and provide them with an acceptable program of education. Article has historical interest.


Defines equal opportunity by a discussion of pupil classification, prerequisites of secondary education, educational objectives, need for differentiated curricula, the physical plant, the teachers, basic principles, and the accessibility of the schools. Includes an analysis of the relation of the accessibility to taxation.


LAWLER, EUGENE S. Technique for computing the new aid required for State equalization program. Dissertation completed at Teachers college, Columbia university, New York city, in press with Bureau of publications there.


Discusses educational opportunity with respect to democracy and education, measures of economic ability to support public schools, standards and indices of ability, total actual ability, assessment of ability under taxation and the significance of assessment ratios, importance of true measures of ability, challenges, measures, standards and indices of effort, and the program in the support of public schools.


Discusses the modified use of taxing power, the determination of educational burdens, the administration of equalization funds, and the enlargement of school districts as processes of educational equalization. Examines the financial implications of county units and districts within the county, and defines the ultimate social purpose of equalization. Contends that there must be more effective state educational organization before the Federal Government can be educationally effective.


Deals with the reorganization of the financing of State and local government in order that the principles of equalization of educational opportunity may be put into practice.


Analyzes plans for the equalization of educational opportunity in secondary schools by an attempt both to solve the problem and relieve the present overburdened taxpayer.

State support for public schools. New York, N. Y.: Teachers college, Columbia university, 1926. 104 p. (School administration series.)

Sets up criteria for adequate system of State support. devises a measure of local educational need and ability to support education and outlines a plan for equalizing the burden of support among the various localities of a State.


p. 245-46. (Research bulletin, vol. 9, September 1931.)

Facts to show the inadequacies and inequalities of rural school finance in the various States, with brief recommendations for improvement and annotated bibliography of eight references.


Discusses the charges that education of any kind or every kind for everybody is ridiculous and impossible. Examines briefly various contentions and predicts that future public financial support of education will hinge upon the answer educators can give to the questions: "Shall American educational opportunity be restricted or prescribed and if so, how and by whom?" Analyzes the present program prescribed by static tradition.


Potter, Milton C. What city schools can do to aid rural schools. Nation's schools, 2: 60-71, August 1928.


Traces the influence of the political theory of equality upon the history of American education, especially upon the development of equality, State, and federal financial provisions for the equalization of educational opportunity.


Equality of educational opportunity. State department of public instruction. Indianapolis, Ind., 1926. (Bulletin no. 82.)


Describes an educational program which will provide an equal opportunity for children of all classes and of all abilities, and outlines a State organization which will insure the adequate administration of that program.
EQUALIZATION


Appeals for the reorganization and expansion of administrative units in order to provide an educational opportunity for each individual in keeping with his or her intelligence and abilities. Finance is not mentioned.

Redefinition of the concept of equality of opportunity in education.

Redefines the concept of equality of opportunity in education and traces the development of the equalization movement into many phases of our educational activities.


Studies existing methods of State educational support in the United States. Includes a discussion of the programs of complete State support found in Australia, the methods for paying teachers' salaries entirely from State funds in France and Germany, and recommends complete State support as an ultimate goal for American educational finance.


The need, extent, and status of equalization funds for schools in the United States and the various methods used in apportioning such funds in the several States are examined. Discusses complete State support, sources of equalization funds, methods and bases for determining minimum programs, bases of eligibility for equalization grants, and the equalization plans of Ohio, Texas, Florida, North Carolina, South Carolina, Wisconsin, West Virginia, Maryland, Arkansas, Alabama, Georgia, and New York.


Contains abstracts of addresses given at the December, 1929, meeting of the National Council of State Superintendents and Commissioners of Education in Washington by representatives of Wisconsin, Louisiana, New York, and Connecticut concerning the status of equalization of educational opportunity plans in those States. Outlines programs for the States listed above and notes the traits of present programs.


Discusses the policy of basing the apportionment of State school funds upon the local maintenance of a given program, the impossibility of certain suggested severance taxes, and the consideration of local standards and costs of living as elements of equalization programs which must be more accurately accounted for to fully equalize educational opportunities.


This study involved the definition of the problem of equalization, brief examination of equalization in 48 States, study of entire school financial system in 13 States, evaluation of results, etc. Findings: No State has taken into consideration all of the factors necessary for complete equalization; complete equalization is hardly possible without leveling some subdivisions downward; certain principles must be followed to proceed in the right direction. These are set up.


Presents the educational and social philosophy underlying equalization of educational opportunity, and states that the equalization is primarily a matter of finance.

PROGRAMS, MINIMUM


Maryland. STATE DEPARTMENT OF EDUCATION. Equalizing educational opportunities in Maryland through a minimum program and an equalization fund. Baltimore, Md., State department of education, 1930. 70 p.

Maryland school bulletin, vol. 12, no. 1, September 1930.

Discusses principles which make equalization of educational opportunities necessary and possible. Explains the basis for distributing State school funds in Maryland; the general requirements of a minimum current expense program; the effects of the Maryland equalization program on the teaching staff, attendance,

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enrollment, expenditures, and county tax burdens; the relation of school needs to State's assessed wealth; the relation between State public school tax and State aid to schools; the State public school budget; sources of State school funds; and some general problems connected with taxation.

PICKELL, FRANK G. What education should be publicly financed? Colorado school journal, 44: 28, 30, June 1929.


Discusses what mandatory legislation on the minimum educational program the State should enact. Given present status of such legislation, goes deeply into the division in control between State and locally, treats standards for a minimum program, and treats troublesome administrative problems involved.

What education should be publicly financed? Western school journal, 24: 403-7, December 1929.

STATES, INDIVIDUAL

See also State Aid, State's individual.


Considers in detail the factors which caused the differences in the amounts of State aid received by Alabama counties which participated in the apportionment of the State's equalization fund during 1927-29. Presents reasons for the non-participation of more than one-third of the counties in the distribution of the equalization fund.


A statistical study of the financial support of education in Arkansas from 1923 to 1927. Proposes using the county rather than the district as the unit for school taxation. Under this plan, sufficient funds will be secured, if administered properly on the basis of unit costs of elementary and high-school pupils in attendance. Equalization of educational opportunity will be practically certain.


Devises a plan that will secure standard elementary and high-school advantages for every district in Arkansas. Recommends an equalization program, consolidation and State assumption of some school district indebtedness.


--- STATE DEPARTMENT OF EDUCATION. Outside the city limits. Little Rock, Ark., 1926. 28 p. (Bulletin, No. 14.)


--- DAVIDSON, JAMES B. Help California district schools. Sierra educational news, 25: 22-23, February 1929.

—Explains the injustice of the present plan of distribution of school money in California. Proposes an equalization plan and outlines a method for computing a minimum acceptable program.


—Describes the purpose and basis of Swift's equalization of educational opportunity program for California and explains the methods of determining various educational crite under the plan, the appropriation of funds, equalization of burden, and methods for distribution of funds among the various phases of the equalization program.


—Explains the relation of school programs and costs. The strict adherence to budgets is urged as well as equalization through larger units and State funds.

RAY, A. W. and DAVIDSON, J. B. Outline of a plan to effect further development and adjustment of the California public school system. Public-school journal of California, 4: 3-4, 9, January 7, 1929.

—Swift, F. H. Shall California establish a State public-school equalization fund? Sierra educational news, 26: 12-14, October 1930.

—Examines the scope of equalization plans in the various States and analyzes the sources from which various States obtain their equalization funds. Gives reasons for encouraging the adoption of an equalization program by California.


—State public school equalization. Sierra educational news, 26: 28-29, November 1930.

—Presents a flexible plan for the equalization of educational opportunity in California by use of a State public school equalization fund and describes the steps involved in the administration of the plan.


—From a survey of the existing status of school finance in the State, this study sets up a State legislative device for equalizing educational tax burdens and opportunities among the various school districts of Colorado.


—Discusses the need for an improved basis for the distribution of State school funds, the measurement of educational need, and the ability to support education. Determines a standard for a minimum State educational program and develops a plan for more effective State participation in educational support. Makes 13 definite recommendations with substantiating statistical data.


—Instruction unit becomes law. Journal of the Florida education association, 8: 3-5, June 1931.


—The theory of the modern equalization plan applied to Florida educational and fiscal conditions with the text of a law that would put it into effect.


—WAGNER, ALBERT L. Should Georgia school funds be equalized? Home, school and community, 17: 8-10, May 1925.

—Give justice and opportunity to all; not charity to a few. Georgia education journal, 22: 32-33, November 1929.


—This editorial points the way to a more adequate plan of school support in Idaho by a method of state-wide equalization tax which will be distributed on the basis of (1) assessed valuation per pupil educated, (2) average daily attendance of pupils, (3) the cost of education in a district of that particular size and type.

Equalizing educational opportunities: the primary purpose of the State school fund. Illinois teacher, 16: 4-5, 9-11, September 1926.

GRIMM, L. R. Equalizing higher levels. The Illinois teacher, 19: 259-260, November, 1930.

Presents data showing salaries of teachers and provisions for apportioning school funds in Illinois and sets up a program for adequate State equalization funds.


Presents data showing inequalities between provisions for elementary educational opportunities in different Illinois communities. Points out some remedies.


Shows benefits which would result toward equalizing school tax rates if the county were the unit.


Inequalities of educational opportunities in one-room schools in Illinois. 8 p. State Department of education, 1924. (Reprint from "Illinois Teacher"-November 1924), Springfield, Ill.

STATE TEACHERS ASSOCIATION. Department of research and statistics. Equalization of educational opportunities: The major problem of State school fund. Springfield, Ill., Illinois State teachers association, 1926. 8 p.


We are a State. Illinois teacher, 17: 259-60, May 1929.


A proposal showing a detailed tabular distribution of State funds in Indiana for the year 1928-29 for the purpose of equalizing educational opportunity. Follows somewhat closely the principles of State school support formulated in Doctor Mort's "State support for the public schools."


An argument for reforms in financing, supervising, and administering the rural schools of Indiana. Points out that the county should be the financial unit for education.

IOWA. RUSSELL, WILLIAM F. Concerning the index of opportunity. Teachers college record, 26: 565-71, March 1925.

Examines briefly the extreme variation in the tax rates and the per pupil expenditures in various school districts, describes the data and techniques used in the construction of an index of educational opportunity, and applies the index to 38 Iowa school districts.


From a survey of the existing status of school finance in the State, this study sets up a State legislative device for equalizing educational tax burdens and opportunities among the various school districts of Kansas.

Improvement of the Kansas plan of financial support for common schools. Kansas teacher and western school journal, 28: 17-21, November 1928.

Outlines principles that should govern the financial support of public schools and methods of equalizing the burden of the State minimum program and describes the steps in a practical plan for a more adequate program in Kansas.


Kentucky. Adams, Jesse E. A study in the equalization of educational opportunities in Kentucky. Lexington, University of Kentucky, 1928. 268 p. (Vol. 20, no. 9.)

Presents statistical data, 1923-1929, for three types of school systems in Kentucky: city, independent graded, and county school systems to show inequalities of tax burdens among them. Develops a plan to equalize the burden of school support in the State.


Reviews the origin of the fund, defines and outlines principles of equalization, discusses the failure of the present State fund to equalize and the differences in the ability of parishes to support schools, points out the reasons for nonparticipation and financial distress of certain parishes in Louisiana. Emphasizes the wisdom of omitting special taxes. Lists nine expected results of the equalization plan.


Explains source and distribution of the Louisiana educational equalization fund. Points out that the fund of $1,000,000 is too small to accomplish the desired result of equalizing educational opportunities in the State.


Discusses the equalization plan in State school support as practiced in Maryland. Gives bases for and factors involved in, providing an adequate solution for a State support plan.

State Board of Education. Equalizing educational opportunities in Maryland through a minimum program and an equalization fund. Maryland school bulletin, 12: 6-72, September 1930.

The equalization fund. Maryland school bulletin, 5: 127-28, April 1924.


Discusses the present condition with respect to educational opportunity for rural children. Suggests revision of State's participation in school support and more attention to the county as a unit for administration.


Reports data which indicates the need for an equalization program and recommends some procedure which will facilitate tax relief.


Gainey, Andrew G. Mississippi's equalizing school fund. Mississippi educational advance, 15: 16, January 1924.


--- Governor's address to his survey commission. School and community (Columbia, Mo.), 15: 332-33, June 1929.


--- State Department of Education. Facts concerning public education in Missouri. In Report of the Missouri school survey. Jeffe-
son City, Mo. Department of education, 1924. p. 15-42.

Examines relation of wealth and income to educational and governmental expenditures, the distribution of educational expenditures, and the sources of school money in Missouri. Reveals inequalities of tax burden among school districts and recommends new units and forms of taxation as equalization processes. Statistical data is tabulated to support the recommendations.

--- Unequal educational support.

School and community. (Columbia, Mo.), 13: 26, January 1927.


Referendum measure for the 5-mill State wide levy to equalize school taxes and school opportunities. Montana education, vol. 2, no. 6, February 1926.

Nebraska. A plan equalizing educational opportunity. Nebraska educational journal, 8: 884-88, November 1928.


MORT, PAUL R. A plan for equalizing educational opportunity in Nebraska. Lincoln, Nebr., State teachers association, 1928. (State teachers association. Research bulletin, no. 3.)

Examines the short comings of the present program of school support in Nebraska. Names principles to be considered in the financial support of schools, deduces the minimum program, investigates the relative ability of districts to pay, reviews methods of equalizing the burden among the localities of the State, outlines the small fund plan, suggests new sources of revenue, and devises a practical plan by which Nebraska may equalize a $1,200 program.

The Inequality of educational opportunity in Nebraska. Lincoln, Nebr., State teachers association, 1926. 33 p. (Nebraska State teachers association. Research bulletin, no. 1.)

Analyzes the inequalities in the distribution of wealth for educational purposes in Nebraska, the relative wealth, mill levies, and expenditures of the various districts, and the effect of railroads and coal and gas industries on tax levies. Recommends a county school administrative unit.


UPDBURF, H. A. A plan of State aid for New Jersey. (Title still tentative). (Scheduled for publication by the United States Office of education.)

The theory of an equalization plan that will stimulate a higher local school tax and the effect of State aid on policies of school support. A revision and extension of the similar study made for the New Jersey Survey.


A digest of a report on State aid to public schools in New York State. It presents some of the straightforward methods of attack for particular problems as revealed while developing a system of State aid based upon the principle of the equalization of educational opportunity.


--- The measurement of educational need. New York, N. Y. Teachers college, Columbia university, 1924. 84 p. (Contributions to education no. 150.)

This outstanding pioneer study defines the relation of measurement of need to educational administration and devises the weighted pupil plan and standards for measuring educational need. Develops size standards for 1-teacher schools and a more accurate method of measuring the finance needs of the various New York State school districts.

and others. State support for public schools in New York as related to tax relief and educational expansion. A report to the New York State commission for the
EQUALIZATION


Scientific study of the new State aid program in New York from 1926 to 1930. Considers the potential effect of State school aid as a vehicle of local tax relief in concurrence with the support of a satisfactory educational program.


MOORE, FRED. Equalization of the financial burden of education among the counties of North Carolina. New York, N. Y. Macmillan co. 1925. 88 p. (Contributions to education, no. 184.)

Proposes reorganization to secure equalization of the present minimum program, devises an index of economic ability to pay, plans a security of equalization of assessed property valuations, suggests a revision of State income tax laws, and outlines a technique for determining the size and apportionment of the fund required. Seventeen conclusions and recommendations are drawn.


UNIVERSITY OF NORTH CAROLINA. Notes on education; equalizing funds. University of North Carolina news letter, 14:1, November 17, 1927.


As outline of the purposes and methods of distributing the State equalization fund and the rehabilitation fund in Ohio. Calls attention to the need for a trained county fiscal supervisor to promote more efficient local accounting and administration, and to the future values and possibilities of State aid.


Report of the educational equalization and rehabilita-

A detailed statistical treatment of Ohio's educational equalization fund for the biennium 1929-30.


Shows various district school tax rates, amount of wealth available for school taxation, an educational program which can be considered adequate, the cost of this program, the rate at which districts can be reasonably expected to support this program, and the amount of State aid necessary to equalize this acceptable program.


REEDER, WARD G. and WHITMER, J. W. The county tax as an equalizer of educational opportunity in Ohio. Educational research bulletin (Ohio State university), 4:177-22, April 29, 1925.

STATE TEACHERS ASSOCIATION. Educational council. Report. 1926. Ohio State teachers association, Columbus, Ohio.

Oklahoma. CURRY, GUY. The $15 amendment; equalizing the burdens of taxation. Oklahoma teacher, 6:5, 30-31, April 1925.


Summarizes the findings and recommendations of the commission and gives a detailed discussion of the findings of the research staff concerning the problems of school finance in Oklahoma. Tabulates comprehensive statistical data to support recommendations.


A reprint of the scholarly finance section of the United States Bureau of Education's Survey of Oklahoma schools, with data to 1922. Recommends more State support, change to a county unit, and a better distribution of State aid for equalization purposes.
EQUALIZATION


A statistical study of school revenue and the equalization of taxation for education in Oregon, 1928-1926, prepared by a committee of the Oregon State Teachers Association. This study has a four-fold purpose: To analyze the constitutional and statutory provisions for the support of public education; to present and interpret data showing inequalities in taxation and distribution; to present a plan of distribution; and to apply the proposed plan to the Oregon situation.

SWIFT, FLETCHER HARPER. Does Oregon need a State public-school equalization fund and how shall it be provided? Oregon education journal, 5: 7-8, 24-26, March 1931.


Outline steps involved in reaching a $1,500 minimum program per elementary teacher and the tax rates necessary to support this program. Sets up a procedure for the revaluation of property and the determination of current expenditures per teaching unit and State reimbursements to various types of special education in Pennsylvania. Discusses bases for the distribution of State appropriations to county boards of education in Pennsylvania, and data showing the relationship between population density and transportation load.

Report of committee to study the present plan of financing the public schools and related matters. Harrisburg, Pa., Department of public instruction, 1929. 263 p.

Compares expenditures for education in Pennsylvania with those in other States, examines principles underlying State educational subsidies and devises a plan for the equalization of tax burdens among school districts. Analyzes present systems of State subsidies, recommends a larger unit and drafts an equalization bill. Comprehensive statistical data is tabulated as a basis for the recommendation.

WEBER, J. C. Inequality in ability to support public education. Pennsylvania school journal, 75: 206, December 1924.


STATE UNIVERSITY. Inequality of educational opportunity. University weekly news (South Carolina), 11: 1, February 16, 1927.


This bulletin contains a concise but complete outline of the State school finance systems of each of the 48 States. An examination of the section on any State will reveal the status of equalization in that State.


Analyzes the situation with respect to certain inequalities existing in those factors deemed important in determining the degree and character of educational opportunities and results. The study treats of inequalities between county and city white elementary schools in Tennessee, and between the white elementary schools in nine selected counties in that State.


Let us not grow weary; a suggestion relative to a difficult problem. Texas outlook, 11: 24, November 1927.


ROGERS, W. J. Larger units of school administration to eliminate inequalities. Texas outlook, 14: 66, February 1930.

SWIFT, F. H. Sound methods of school finance as a means of equalizing educational opportunity in Texas. Texas outlook, 8: 8-12, February 1924.

Utah. CLARK, LOUISE. County unit of school administration equalizes educational opportunity in Utah. The
Washington. Tax digest, March 1928, p. 101; California taxpayers' association, Los Angeles. A report of two weeks' field work studying the operation of the county unit system in Utah.


—Preliminary statement regarding a plan for equalization of educational opportunities in Utah. Salt Lake City, Utah, State superintendent of education, 1930. 11 p.


Virginia. Gifford, W. J. Can Virginia afford to give her children a fair educational opportunity? Virginia teacher, 8: 4-5, January 1927.

—Hart, H. School funds and equalization. Virginia journal of education, 22: 107-9, November 1929. Analyzes school costs, showing how funds may be raised and distributed, based upon the economic background and needs of public education. Funds raised involve the ratio of support between State and local unit. Gives four guiding principles for distributing State funds and suggests that the State board of education make adjustments between the salary schedule and fixed sums appropriated by the general assembly.


Proposed state-wide relief and equalization program for the elementary and high schools of West Virginia. Education news, 6: 17-18, November, December, 1930.

—Statement of the effects of the proposed relief and equalization program for the elementary and high schools of West Virginia. Charleston, W. Va., State department of education, 1930.


Wyoming. Reuss, Walter C. Equalization of educational opportunities and equalization of State support in Wyoming. Laramie, Wyo., State teachers association, 1929. 52 p. An analysis of the conditions of wealth, taxation, and State aid in the counties and school districts of Wyoming and the application of equalization plans which will result in greater equality of opportunity and school support. Proposes a minimum program and sets up several plans for combined State and local support.

EQUIPMENT

BUDGET

See also other subheads of Equipment


Devises a technique of eight steps for budgeting the amount and cost of equipment in new school buildings. Points out that directed expenditures, if sufficient available funds and better equipment are procured at more favorable prices are advantages that may be expected to grow out of budgeting.


A dogmatic statement of time and method for drafting the budget. Discusses cooperative ownership and cooperative buying as methods of economizing and gives 10 rules for buying school equipment.


From an analysis of school furniture price lists, devises a technique for estimating school equipment costs that purports to be reliable, adequate, flexible, and simple. Gives and explains a device for measuring change in price level from year to year in the form of an index based on 1925 prices.

COSTS


Describes the method used in Newark, N.J. for accounting for and replacing shop equipment.


Complete lists with descriptions, prices, and vendors so that teachers may use them "whether their curricula are organized on a subject-matter basis or on an activity basis." Lists six methods of obtaining money for school needs, and under "How to Spend Money" discusses the budget system, cooperative ownership, and cooperative buying, and gives 10 rules for buying school supplies and equipment.


A popular treatment of the materials in his dissertation, of particular value to school executives who must make equipment estimates.

ECONOMIES

ANDERSON, HOMER W. Equipping the classroom for the pupils' needs. Nation's schools, 1:13–20, January 1928.

Discusses economy as a force in equipping the classroom for the pupils' needs so that the maximum efficiency may be gained at the minimum expense.


Discusses as economy measures scientific selection of all equipment, value of substantial quality, wisdom of splitting awards, budgetary provisions and advantages of early buying, purchasing upon the advice of the superintendent, and buying in an open market.

DONNELLY, ALICE M. Some economies which have been effected in the administration of home economics in the public schools of Ohio. Educational research bulletin (Ohio State university), 4:272–73, September 23, 1925.

Lists 25 economies effected in courses in home economics in various Ohio city schools.


Summarizes printed studies on equipment and supplies made in the school systems of Berkeley, (Calif.), and Atlanta, Ga.


Discusses legal phases of the purchase of industrial school equipment, notices to bidders, forms of proposals, contracts and surety bonds, specifications, lists of equipment for school shops, and some minimum essentials.


Suggestions with regard to the purchase of equipment and supplies.

WARING, RALPH G. The maintenance and reconditioning of school equipment. American school board journal, 73:68, July 1926.

Discusses economies made possible by proper selection and reconditioning of school equipment and describes methods of reconditioning.

EVENING SCHOOLS

(Statistics appear in the City Statistics and State Statistics bulletins of the United States Office of Education. See these heads.)
Extracurricular Activities


A brief and concise article stating the extent and number of night schools in the United States and acclaiming their cultural value. A statistical table gives the enrollment and cost of instruction in public night schools of 31 States 1927-28.


Expenditures

See costs under the particular topic for which expenditures or costs are desired, e. g., Secondary Education, or Attendance.

Extracurricular Activities

Accounting

See also Accounting, School, General.

Brown, V. I. Handling the money from student activities. American school board journal, 75: 122, December 1927.


Gives the rules and regulations carried out in Detroit for internal accounting. This sort of plan protects everyone involved from insinuations and inspires confidence of professional and public interests. Gives such forms as cash receipts, disbursements, total accounts, ledger forms, requisitions and purchase order forms, as well as many more.


Budget


Buildings


Data on sources of support by States.


Shows lines of activity carried on in 920 school centers, the problems involved, the policy of Minneapolis schools in relation to community use, the types of gatherings permitted, and which types are charged for use of the school plant.

Finance Plans


Portrays the problem of financing extracurricular activities in high schools, as shown by the results of a questionnaire mailed to the principal of 300 selected high schools of Washington, Oregon, Idaho, and Montana, in 1928. The student fee system offers possibilities for facilitating extracurricular finance and the tends to increase. Many problems in its operation can be solved only in the light of local conditions.


May, E. O. One fee for all pupil activities. School review, 37: 304-6, April 1929.

Presents the 1-fee plan for all pupil activities paid either in a lump or on installment. Shows the values of the one fee for all activities in easier financing of pupil activities, elimination of
subscription and ticket selling campaigns, enjoyment of all activities by all students at low costs, attendance of all students at all school events, and a better school morale.


Examines current practices with respect to raising extracurricular funds, in order to ascertain prevailing methods, and to determine better methods of distributing money and methods of accounting for extracurricular funds. Discusses attitudes of administrators, criteria for choosing methods and the financing of some individual activities, and describes the extracurricular accounting systems used quite successfully at Ypsilanti, Mich., at Washington high school, Massillon, Ohio, and at Huntington, W. Va.


States activities in Virginia high schools considered extracurricular, the total amounts spent in each phase, and the methods used in raising money, and suggests more businesslike methods in handling and subsidizing them by school boards.


FINANCIAL MANAGEMENT


A description of the methods that should be used by student organisation to account for various extracurricular activity finances by the Los Angeles supervisor of commercial education.

Carter, Raymond B. The administration of the finances of extracurricular activities. Educational research record, (University of Nebraska publications) 4: 5-12, October 1931.


Methods of extracurricular financial accounting and administration used in over 200 schools. Discusses methods of budgeting extracurricular costs, explains extracurricular support, and suggests student accounting methods.

Henzi, F. E., and others. Practical economies in school administration. Extracurricular activities. University of Nebraska, extension division. Lincoln, Nebr., 1932, p. 144-49, 190. (University of Nebraska publications, educational monograph no. 8, 1932, 212 p.)

Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

Indiana. Kirklin, Curtis D. The administration of athletic funds in Indiana high schools. Bloomington, Ind., Indiana university.

Los Angeles school district. Rules for conducting student or school funds and certain activities in all day and evening, elementary, junior, and senior high schools, and junior college. Los Angeles, City school district, 1931, 16 p. (Special bulletin, no. 4, August 31, 1931.)

A complete, fully indexed, easily accessible list covering all parts of the public-school system, with rules presumably found advisable from previous experience. Of great value to any system needing such a set of rules.


This plan has a faculty member chosen to act as trustee of all pupil activity funds, a local bank as depository, and a committee of three faculty members to audit the books at the end of the fiscal year. The faculty trustee of each organization checks the receipts and sees they are deposited with the trustee.


Criticizes the present ad-hoc methods of support, and suggests that the school board subsidize such activities. Shows the 1924 median annual per pupil cost of extracurricular activities. Discusses three different types of financial
organization; accounting of extracurricular activities operated through the principal's office, the commercial departments, and school banks.


A compilation of types of methods and systems in use for handling the money accruing from extracurricular activities with specific descriptions of the budget and accounting system. Suggested forms adaptable to all types of schools and based upon most modern educational principles. Appendices give plans of Kansas, Michigan, Ohio, and West Virginia.


All activities should be financed and administered through a central-control plan, each activity presenting its yearly budget estimate to the central committee.


Outlines and details a plan used in Eldorado, Kans., for handling the finances of the various organizations and activities functioning within the school and controlled by the school principal.

FEDERAL AID

See also Vocational Education, Federal Aid


Explains the theories, methods, and amounts of various Federal aids to education, and the work of the U. S. Office of Education and the Federal Board for Vocational Education. Considers understandable the continued separation of educational education activities from the general educational program.


An argument favoring Federal support of education, using data which reveal that much illiteracy exists in the United States. Calls attention to the need of an Americanization program, of a national program of education for greater physical efficiency and for hygienic purposes, and to the lack of adequately trained teachers, and to the inequalities of educational opportunities.


Seeks some practical definition of the obligation of the Federal Government to subsidize State education systems by analysing the various factors affecting the inequalities of the States to support an effective educational program and the National character of equal educational opportunities.


Kohlmier, A. L. and Bryan, W. L. Educational policies of the United States government and federal aid to education. Bloomington, Ind., Indiana university, 1930. 16 p. (Indiana university studies, study, no. 87.)

A general discussion of Federal aid to education, including a review of the legislation of the Federal Government granting aid to the States for general education and the lack of adequately trained teachers, and to the inequalities of educational opportunities.


Concise review of the most fundamental recommendations submitted by the National advisory committee concerning the financial relations of the Federal Government to education.
NATIONAL ADVISORY COMMITTEE ON EDUCATION. Federal relations to education. Part I, Committee findings and recommendations, p. 11-59, 83, 89. Part II, Basic facts, p. 1-133, 183-239.

The most authoritative statement in print. Part I recommends Federal financial support for education in the States for education in general and not for special phases of education, the grants to be administered by the regional governments only and to be made only on the basis of adequate educational and financial studies. Part II gives a history of Federal aid for education and many recent statistics on school costs and the amounts of Federal participation.

RIGHTMIRE, GEORGE W. Ignorance, like plague, can not be localized, educational opportunities must be equalized with Federal aid distributed in more localized avenues. Ohio State university monthly, 21: 355-56, 362, May 1930.

Analyzes the work of the National Advisory Committee on Education. States that since ignorance is no respector of State lines, responsibility for education and educational opportunities must be equalized in a manner that will encourage local initiative.


Running review and bibliography of researches in this field, stressing those from 1923 to the fall of 1931.


Discusses State administration, the legal basis of a school system, State control of education, State department staff, rural education, organisation of high-school districts, annual State reports of city superintendents, policy of State departments, and national responsibility for education.


Gives the history and recent trends of Federal aid to public schools lists the evils of decentralised suppo, examines sources of State school revenues, reviews methods of apportioning State school funds, and equalisation efforts. Outlines the uses and distributions of State funds and the equalization programs of Arkansas, Delaware, Massachusetts, Utah, and Wisconsin.


A view of Federal aid, notes on a proposal for distributing Florida State aid on an instructional basis, and on Arkansas antidetent law.


Secretary Wilbur defines the places of State and Federal Governments, relative to the support of educational responsibility. Sees a distinct menace in national centralization of educational functions and support. Expresses opinion that the widest development is possible when both bulk of expenditures for education is raised and spent in local districts and only a small amount from central government.


POLICIES

NATIONAL ADVISORY COMMITTEE ON EDUCATION. Federal relations to education. Part I, Committee findings and recommendations, 140 p. Part II, Basic facts, 448 p. 744 Jackson Place, Washington, D. C. National advisory committee on education.

The most authoritative statement in print and one likely to have great influence for the future. The financial items cover mainly the history of Federal aid for education and recommendations on the use of such aid (See Federal aid). Brief financial data appear with the treatment of any one phase of education, e. g., Education of Indians.

STATISTICS

Federal statistics on Governmental expenditures with percentages for education appear in the standard Cost of Government series of the National Industrial Conference Board, the latest issued in 1931, covering the latest previous feasible for the various items. Sources of data are indicated. Other Federal statistics sources are indicated in connection with the topics to which they refer, e. g., City School Systems and Income.

FEEBLE-MINDEDNESS, COSTS


Statistics on costs of property, receipts and expenditures, grouped into private and state institutions.
FINANCE, SCHOOL


Some financial statistics similar to those for previous years in corresponding bulletins.

FINANCE, PUBLIC

FOREIGN

[Extensive collections in this field exist at the libraries of universities emphasizing international relations, e.g., the Benjamin Strong collection of Foreign Public Finance at Princeton University.]

GENERAL

See also Taxation, General


Improved revision of the first edition (1924) of this comprehensive and fundamental treatment of theory, principles, and methods. Analyzes governmental expenditures since 1792, and city expenditures, including those for education, since 1904. Includes such topics as increasing expenditures, economic effect and control of expenditures, administrative revenues, the requisites of a sound tax system, distribution of the tax burden, general property tax, modified property tax, income tax, corporation tax, estate and inheritance tax, local debt, refunding of debt, and governmental budgets. Statistics and fundamental economic theory supplement the discussion.


A good college textbook by the former financial economist of the national industrial conference board. Well balanced, descriptive with much factual information.

STATES

See Taxation, States, Individuals

FINANCE, SCHOOL

BIBLIOGRAPHIES

This includes only general school finance items. For bibliographies on any head, e.g., budgets or city school finance, see that head.


An unusually well-classified list of annotated items up to January 1, 1923. Covers the field thoroughly. Extensively indexed, by subject and author with a running index at top of pages.


Summaries and evaluations for school administrators of 19 recent educational finance dissertations at Teachers college, Columbia university.


This article discusses the uses of available materials, types of inquiry, new research techniques, new prediction techniques needed in educational research methods, and personal qualifications for research. Encourages research to discover the efficiency of contemporary educational policies, the spending power of fiscal areas, possible economies, and methods for raising adequate funds for education.


Covers 1923 to fall of 1931 with running review and a selected bibliography of researches for each chapter. Chapters on public-school accounting, public-school budget, revenues and taxation, public relations, research and survey techniques, finance and business management in institutions of higher education, fiscal control and textbooks in business management of schools, financial economies in business management of schools, and Federal and State aid. Chapters listed in this bibliography under pertinent heads.


A partially annotated bibliography of 100 research studies in educational finance from 1928-29. Authors arranged alphabetically and numerically numbered from 1895-1904. Similar sections in other numbers of this series.

GENERAL

Baldwin, Robert D. A brief sketch of the problem of public-school finance. American school board journal,
FINANCE, SCHOOL

75: 61-63, 140, 143-44, December 1927.

A discussion illustrated with relevant data of rising school costs, some relative values, inequalities within States, the property tax problem, other bases for tax source of all taxes, some State plans, needed budgetary modifications and local leadership designed to set forth an outline of public-school finance problems.


Increased enrollments, curriculum offerings, the extension of educational opportunities, and building programs caused a tenfold increase in capital outlay during 1913-1930. Comprehensive changes in methods of planning, developing, and eliminating unnecessary costs in school-plant construction is the result of research, surveys, documents, and techniques. School buildings are now planned with cognizance of the progress of science and the influence which new inventions or new vehicles of instruction may have upon future building.


DAVIS, STURGIS BROWN. How improve the financial administration of schools? American school board journal, 80: 52-54, June 1930.

Does our present system of school finance show signs of breaking down? Western school journal, 20: 188-90, May 1931.


Chapter XVIII deals with theories and practices in use relative to collection of revenues from their varied sources, accounting for this income efficiently, and when, how, and for what purposes to use debt service. Chapter XIX deals with data on school costs in its multitudinous forms, accounting for it by function, allocating service expenditures on a basis of units for measurements of, comparison of, and its relative nature, scientific determination and proper publication. Shows dependency of all factors upon costs.


This book is the third volume in a series of problem books in public-school administration, prepared by the staff of the department of educational administration in Teachers college, Columbia university. Financing a public-school system is an outstanding problem in the light of the great amount of money needed and expended.


A discussion of the increasing cost of education, and the inadequacy of the general property tax to meet this increase. Includes substantiating statistical tables on the relative weight of the factors affecting the increase in cost of education in Ohio, the sources of school support for the United States as a whole from 1880-1926 and a discussion of various taxes as possible sources of school support.


Includes a discussion of fiscal problems in school administration and presents actual case problems that any superintendent may be called upon to solve. Each chapter includes problems dealing with phases of school finance and business administration.


From research and experience the author gives a detailed and comprehensive treatment of local school finance problems and methods. He discusses in detail finance theory: policies, control and organization of finance machinery; finance publicity; he sets up forms and procedures for the administration of school budgets, and explains the uses of the very definite forms suggested for the administration of cost accounting and internal accounting.

Defines the fundamental and general school finance terms but the list is not exhaustive. Other terms are defined in the chapters in which they naturally appear.


Theoretical treatment with practical illustrations. Examines and analyses the natural and economic laws and the human urges which underlie the principles upon which American education is financed. Inquires into the purpose of the school, the economic and social effects of the school, suggests criteria for determining just what educational activities a society can afford to support, discusses economical and effective methods of support and planning, and devises a technique for estimating terminal costs.


Teachers college influence upon the financing of public education. Teachers college record, 80: 572-77, March 1929.

Reviews the work of Cubberley, Swift, Undergrad, Strayer, Haig, Morrison, Simpson, Clark, himself, and others, as an estimate of teachers college influence upon the financing of education. Includes a consideration of the educational significance of these changes.


Discusses purpose of financial consideration, state and local relationships, federal and state relationships, articulation through common governing bodies, decentralization, control of institutions for preparation of teachers, miscellaneous units of control, control through common boards, and includes a summary and conclusions.


Median salaries paid all classes of teachers in the United States, 1924-25, total value of school property and average value per pupil enrolled in 1924, and state contributions to financial support of schools, 1923-24 are presented statistically. Outlines the New York plan of equalization of educational opportunity and discusses other nonfinancial educational issues.

State advance toward sound school finance programs. Washington, D. C., National education association, 1927. 82 p. (Research bulletin, vol. 5, no. 4, September 1927.)


Increases in value of public school property, 1880-1926; a graph of progress toward adequate school plants, 1920-26; average salaries of teachers and supervisors in 1926; comparisons of school salaries with salaries of other groups, 1913-1926; expenditures of public elementary and secondary schools per pupil in attendance 1924-26, by States, and indications of economic conditions of the States and their expenditures for education are presented, graphically, statistically, and verbally.


This is a general discussion of the problems of public-school finance. It examines the school-finance situation and discusses comparative costs in education, financial records and accounts, school indebtedness, control of school finances, school publicity, educational inequalities, units of school support, apportioning of funds, and sources of school revenues. Suggests methods and techniques for solving various school finance problems.


A discussion of 19 specific problems of applying scientific methods to the financial administration of elementary, secondary, and higher education. Analyzes
problems of securing adequate support, eliminating educational burden, determining sources of revenue, financial control, distributing State aid, thrift and efficiency, rural high-school support, support of higher education, college building costs, tuition fees, public relations, budgeting, new source of revenue, and possible contributions. An outline for some systematic and scientific educational finance procedures.


Discusses general theory of educational support and most recent practices relating to administrative control of public-school finances. Given the needs, methods, unity, policies, and theories necessary to the proper training of an administrator, with tables and charts.


Spalding, George. Public finance; its trend; plans made for control of public expenditures. Tax digest, 8: 866-70, November 1928.


A discussion of interest, depreciation charges, three methods of predicting costs, determination of economics which can be effected without increasing school efficiency, equalization of educational opportunity, measurement of costs involved in minimum standards, uniform local taxes, distribution of State aid, and the obligation of the Nation to support education.


A discussion of State responsibility for education, the county unit, income, business, severance and luxury taxes, and programs of State equalization as processes in adequate financial administration.

Progress in the administration and support of schools during the first quarter of the twentieth century. In National education association. Addresses and proceedings, 1925, p. 17-22.

Traces the development of larger units of school support, progress in the selection, payment and tenure of teachers, equalization provisions, methods of accounting, increased school cost and expanded school services.


Discusses the mutual responsibility of urban and rural people for the education of all the children of the State. It suggests establishing a State standard program of education with financial burden equalized on the basis of a tax which leaves the community free to extend the program beyond that required for support by the State, and better administration and supervision of rural schools.


Useful data on school costs, taxes, teachers' salaries, and some accomplishments of American education, in 1921.


The second section of the bulletin reviews school finance in the United States during the decade 1920-1930. Includes many relevant data.


FIRE INSURANCE

ACCOUNTING


ECONOMIES

Bliss, Vincent. Recent measures that have lowered the cost of fire protection. Nation's schools, 6: 73, August 1930.

Points out that changes made by the National Fire Protection Association in the regulations governing the installation of automatic sprinklers have resulted in a 20 to 30 per cent reduction in the cost of safeguarding schools from fire.


Enumerates objections to self-insurance plans for school buildings and cites assessment and political difficulties, insurance of inflated cost and laxity, and violations of insurance principles.


The purpose of this study was to discover economical and safe methods of insuring public school buildings against fire. The study aimed to point out methods of reducing premium costs by removing such fire hazards as may exist in school buildings, to point out methods of economy through proper insurance procedure; and to determine whether self-insurance and State insurance are practical and economical.


Discusses the advantages of the 5-year renewal term for insurance which will effect a saving and will equalize the budget expenditures for insurance for Coropolis, Pa.

GENERAL


Burke, T. A. What would fire mean to your school? School executive magazine, 51: 258-57, 290, February 1932.

Statistics on financial losses due to school fires, and the causes of these fires. Preventative measures and controls.


Fire insurance and fire prevention. American school board journal, 74: 136, 139, April 1927.


Emphasizes the co-insurance plan, with suggestions for economy in the appraisal, depreciation, reduction in rates, length of term of policy, and type of policy. Tables and figures.

Reeder, Ward G. Community insurance of school buildings. Educational research bulletin (Ohio State university), 4: 161-62, April 15, 1925.


Discusses fire as a destructive force in school buildings, its prevention, control, and safeguards, including exits, fire signals, drills, inspection, and school buildings as insurance risks. Cites surveys in Pennsylvania, New York, and Oregon showing fire losses of 43, 38.6, and 40.1 per cent of the premiums. Discusses various types of property and equipment insurance, terms, and amounts.

Smith, Henry L. and Nowlan, Forrest H. First supplement to the bibliography of school buildings, grounds, and equipment, August 1927 to April 1932. Vol. IX, nos. 1 and 2, September-November 1932. (Scheduled for bulletin of the school of education of Indiana university.)

This section of the book on school administration defines individual, schedule and blanket insurance policies, and discusses the appraisal of school property, ratio of insurance to sound value, determination of rates, allotment of school insurance, maturing of policies, insurance records, proof and settlement of losses, and fire prevention as efficient and economical methods of insurance.


Presents four principles of insuring school property, and discusses the method and types of insurance, as well as kinds of policies. Outlines methods of appraising property and determining insurance rates, of allocating insurance, of recording insurance, and for settlement of losses. Considers prevention precautions the best type of insurance.


Suggests a co-insurance plan as giving a more complete coverage. Recommends a careful survey of all contents of school buildings for adequate insurance and a policy bought for a period of five years. Cites a recent survey showing that 6 per cent of the superintendents were ignorant of the insurance program of their respective schools.


STATES, INDIVIDUAL


Presents statistical data on the amount of savings accumulated over a period of years by the various State and city insurance organisations on public-school property. Attempts to find a way to increase Alabama's plan of insurance so that more funds may be made available for schools.


Concludes that State insurance is not the best method of insurance, is quite specific and builds up a case out of an actual situation.


One chapter deals with State property insurance funds in the United States, giving special consideration to two types of funds, emergency-reserve appropriations as used by 14 States, and self-insurance funds as used by 7 States.


Discusses the advantages and disadvantages of the four general plans of insurance being considered for New York State—not including New York City—which will offer the maximum relief to the taxpayers.


Analyzes case studies and formulates a theory of insurance and analyzes insurance terms. Describes State insurance, fire insurance rating systems, and fire insurance methods and procedures. Gives the statistics of fire losses and city self-insurance, and draws conclusions.

FISCAL CONTROL

CITY


FISCAL CONTROL


Shows that general organization of the educational finance department depends upon the way the function evolved, authoritative opinions, present practices, and adjustment of diverse practices. Cities plans in force in St. Louis, Cleveland, Chicago, New York, and Detroit.


New York State. Young, D. S. Control of available public-school income. New York, N. Y., Teachers college, Columbia university, 1928. Chapters II and III. (Bureau of publications publication.)

An intensive investigation of certain phases of income control (external and internal) through a study of the method used in the public-school systems of 45 cities and 7 villages of New York State in 1924-25. Considers the type of revenue control, effectiveness of present local budgetary control, extent to which public-school moneys become available as needed, the controls now affecting the timely receipt of public-school income, the adjustments made when school revenues are not received as needed, and how moneys received in advance of need are administered.


A statement of problems, together with recommended solutions, relating to the levying of taxes, control of the budget, and issuance of school bonds. Appendices contain statistical data on unit costs of education in the State.


Isolates and places the responsibilities for the control of school finances. Investigates prevailing practices, and suggests more scientific ones. Presents general underlying principles and plans for administrative organization.


A study of the relationship of the school budget to the general municipal budget in 29 council-manager cities. Includes a short sketch of the status of each city school budget, showing its relationship to the municipal budget either as a part of the municipal budget or as a separate and independent budget.


Schence, C. M. The control of school finances by city officials; its advantages and disadvantages. American school board journal, 69: 54-56, July 1924. Also published in Home, school and community, 16: 6-7, 10, August-September, 1924.


Discusses the legality of school board control of expenditures, the final responsibility of the State for education, and the reluctance of the people to vote taxes, and the fact that education is a matter of general rather than local concern.
FISCAL CONTROL

GENERAL


COOPER, WILLIAM JOHN. "Divided houses" that endanger public education. Nation's schools. 8: 31-35, August 1931.

Emphasizes the unity of school control. Discusses dual control and fiscal independence first on the national, State, city, government levels, and second within the school administrative organization. Stresses the importance of the task of the school business manager as a "second mate" in the administrative organization.

MINNESOTA. OVERN, A. V. The control of the tax income of school districts in Minnesota; a comparison with methods of other States. American school board journal, 74: 47-48, April 1927.


A consideration of public-school revenue control and administration of income and expenditures. Recommends financial independence of school board, but gives data on three types in use.


Emphasizes the need for better articulation of fiscal matters between every phase of community and school work. Points out essential procedure basis for the success of a local educational program. Emphasizes the need for cooperation with parents in securing financial support.


OLSEN, H. C. The work of boards of education and how it should be done. New York, N. Y., Teachers college, Columbia university, 1928. Chapters III-IV.


Review and bibliography of researches in this field, stressing those from 1928 to the fall of 1931.


SOUTH CAROLINA. Should schools be guaranteed fiscal independence? South Carolina education, 5: 12, February 15, 1924.

SPALDING, GEORGE. Public finance; its trend; please made for control of public expenditures. Tax digest, 6: 365-76, November 1928.

STRAYER, G. D. Creative administration. Teachers college record, 27: 1-5, September 1926.

—— The scientific approach to problems of educational administration. School and society, 24: 68, December 1926.


LEGAL

See also other Fiscal Control subheads


Cites cases decided before the courts upon various relations, considering the public school a State institution. The State may employ whatever agencies it sees fit to administer its policies. A city can not in absence of statutory authority spend its funds for public-school maintenance. All public-school buildings are State property and the State may adopt any mode of finance not prohibited by the constitution.

SMITH, JAMES H. Legal limitations on bonds and taxation for public-school buildings. New York, N. Y., Teachers college, Columbia university, 1931. 117 p. (Contributions to education, no. 483)

Shows by means of statistical data, the legal limitations on aggregate indebtedness of school districts in each of the forty-eight states, based on assessed valuations. Shows other legal limitations which apply especially to bonds, themselves, namely: approval, type, payment of principal, period of maturity, rate of interest, and sale. Considers the legal limitations on school tax rates for the 48 States.

SOPES, W. W. Legal limitations on the rights and powers of the school board with respect to taxation.
FISCAL INDEPENDENCE

See Fiscal Control

FIXED CHARGES

[Statistics will be found in the State and city school statistics bulletins, of the United States Office of education. See State statistics and city school statistics]


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

FOREIGN, GENERAL

For references giving data from foreign countries on a given topic, e.g., Costa or Peru, see the topic with Foreign as a subhead.

Canada. KRAWCHYK, S. Educational finances. Manitoba teacher, 10: 14, April 1929.

— LATTA, S. J. The problem of financing the public schools of Saskatchewan. Canadian school board journal, 3: 8, September 1924.


Discusses the attitude of Germany and England, where it is assumed that even in a period of economic stress to reduce school expenditures is to reduce the health, physical, mental, and moral strength of the coming generation, and asks if comparatively wealthy America can afford to prepare her citizens less generously. States that this is a policy which no nation can afford to pursue.

SWIFT, F. H. European policies in financing public educational institutions.

A series of studies describing the policies of financing elementary, secondary, and higher educational institutions in Austria, Czechoslovakia, England, France, and Germany. (In preparation.)


FOUNDATIONS


The work of 122 foundations during the last fiscal year, their financial status and fields of interest. A similar publication has been issued for several years.


A discussion of the principles that should govern the administration of educational foundations, by the president of the Carnegie Corporation. The task is to find capable individuals and set them to work in cooperative research, to become a clearing house of academic ideas, to aid scientific undertakings previously approved by a representative group of qualified persons, to cooperate with each other to avoid duplication of effort, and to safeguard their funds against financial use. He warns that foundation administrators must take constant care to use their funds for the advancement of knowledge and not the direction of opinion.

GENERAL CONTROL

See also Administration

[Statistics will be found in the State and city school statistics bulletin of the United States Office of Education. See State statistics and city school statistics]


GOVERNMENT COSTS

FEDERAL

See also Government Costs, Statistics


NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. Federal expenditures (1925-1928). In The cost of government in the United States functional distribution. New York, N. Y., National industrial conference board, inc., 1928. p. 6-8. (Similar figures in the volumes for other years.)


STATE

See also Government Costs, Statistics; Finance, Public, States.


New York. CLARK, HAROLD F. The cost of government and the support of education. An intensive study of New York State with results applicable over the entire country. New York, N. Y., Teachers college, Columbia university, 1924. 77 p. (Contributions to education, no. 145.)

Answers seven questions: What does all government cost in New York State, what part of the cost of each governmental unit is caused by education, how does the cost of education compare with other costs, have education costs increased more rapidly than other costs, what differences exist in the expenditure of various localities of New York, does any method of finance affect the appearance of educational costs, what is the relation of educational costs to the ability of the people to pay? Twelve conclusions.

Ohio. The cost of government in Ohio, 1916 to 1929. Fourth preliminary report of the committee on research submitted to the Governor’s taxation committee. Columbus, Ohio, Committee on research, 1930. 83 p.

The fourth in a series aiming to supply the governor’s tax commission with factual data as soon as prepared. Covers trends in local and State government costs and sources of revenue in Ohio from 1916 to 1929, giving full data on 1928 and some data going farther back. Analyzes the property taxes and estimates future revenues and expenditures, and taxes under various tax proposals. Implies that new sources of revenues must be found or expenditures must be radically curtailed. Data accurate and full.
GROUP INSURANCE

GENERAL

ECKER, FREDERICK H. What group insurance means. Review of reviews, 78: 413-14, October 1928.

Defines group insurance and gives the financial history of group insurance in several large companies, showing that mass production in life insurance not only produces insurance protection at the lowest available cost, but also provides a basis of good will and a sympathetic understanding between employees and employer.


Experience with mutual benefit associations in the United States. 1923.


Industrial group insurance. New York, N. Y., National industrial conference board, 1927.


Defines the group insurance laws in New York State, considers the present status, and discusses the trend during the past 17 years.

TEACHERS, FOREIGN


Discusses three main schemes of group life insurance and the recent interest shown by teachers in this type of insurance as typified by Ontario group insurance schemes. Ninety per cent of the teachers and school caretakers in Ottawa favored such insurance.


TEACHERS, GENERAL


Church, H. V. Group insurance for members. Washington, D. C., National education association, Department of secondary school principals bulletin, 28: 30-32, April 1929.

A plan for group insurance for secondary school principals at an exceedingly low cost. The amount of insurance to carry depends on the salary and the cost upon the age of the applicant.


Examines the status of group insurance in industry and commerce, the annual income of government employees, union laborers, and school employees during 1928 and compares the services of each group. The results indicate the need for teacher group insurance.


Midland schools, 44: 11, September 1929.


South Carolina education, 11: 17, September 1929.

Group life insurance for teachers. Mississippi educational advance, 18: 72, December 1929.

Insurance. Oklahoma teacher, 9: 12, September 1927.

Oklahoma teacher, 9: 13, April 1928.
GROUP INSURANCE

South Carolina education, 10: 22, October 1928.
Lost opportunity. South Carolina education, 10: 143, February 1929.


Discusses group life insurance for the members of secondary school principals. Explains premiums, eligibility, and saving features. Amount of insurance to carry depends on whether 6 per cent of income of an estate will yield enough to support dependents at their present level of living.

Group life insurance. Washington, D. C., National education association. (Department of secondary school principals bulletin, 33: 31-33, October 1930.)

This description of inexpensive life insurance points out the salient features as being low premiums, total and permanent disability features, 65-year age limit, individual policies, and current protection.


A selected annotated bibliography of 72 references dealing with the nature and advantages of a group insurance as applied to the teaching profession. In addition to a number of general articles, the list contains references to material dealing with group insurance activities of State and local teachers' organizations. It includes some of the literature, largely periodical, 1925-1929.


Non-technical study for the information of individuals interested in the application of group insurance to the needs of teachers. Plans for group insurance for a given body of teachers must always be considered in the light of special local needs, policies, and conditions. Selected bibliography of 72 annotated articles.


Describes methods and advantages of organizing a group insurance plan which will provide all teachers with liberal accident and sickness benefits at a 25 per cent saving. Lists six reliable insurance companies which will assist teachers in the organization of such plans.


Describes two forms of group insurance: Group life insurance purchased as an investment, or for the purpose of creating an estate for the benefit of dependents; and disability insurance purchased as a protection against illness or accident. Seventeen of 50 cities in 40 States have, some form of group insurance.

Group insurance for teachers. New Jersey educational review, 1: 21, December 1927.

Group life insurance for teachers. New Jersey educational review, 1: 10, 32, 34, April 1928.

What teachers want to know about their insurance. Mississippi educational advance, 21: 27, October 1929.

TEACHERS, HIGHER EDUCATION


A report of a recent survey by the University of Oregon on group insurance for teachers in various colleges. Outlines a threefold plan.


Deals with various features of group life insurance, analyzes the relation of employee and employer, applies group insurance to teachers in universities and colleges, and enumerates the advantageous features of group insurance.

Minnesota. Outline of group life insurance for the employees of the University of Minnesota. Minneapolis, Minn., University of Minnesota, 1922.

GROUP INSURANCE


WINTINGE, GEORGE C. Pensions and insurance. Association of university and college business officers of Eastern States, 1926. Appendix L.


TEACHERS, STATE AND CITY SYSTEMS


ILLINOIS STATE TEACHERS ASSOCIATION. Department of research and statistics. A brief study of group insurance. Springfield, Ill., 1931.

Analyzes the interest of teachers in insurance, the economic problems of teachers, meeting economic problems, advantages, disadvantages and growth of group insurance. group insurance experiences of local and state-wide teacher groups, legality and administration of group insurance, plans for adequate and the old age problem. Reproduces statistical tables of ages of teachers, mortality of teachers, and the actual history of net costs from 1909-1929.


Examines the legal nature of teachers' credit unions, outlines their history and growth, defines their purpose and function, and analyses some problems which must be faced before 88,000 unacquainted teachers can attempt to organize a state-wide teachers' credit union.


— Existing insurance for Detroit teachers; third report of insurance committee of the administrative division of Detroit teachers' association. Detroit educational bulletin, 10: 10-11, November 1926.


Discusses trends in modern insurance and notes efforts for disability prevention, diversity of insurance, salary saving insurance, and the growth of practically all types of insurance.


Discusses the growth of teacher insurance and examines the costs and benefits of the Oklahoma and Missouri plans for teacher group life insurance.


Discusses the extent of teacher insurance in the United States, the various types, costs, and benefits of same, suggests a variety of plans in each organization to meet the individual needs of the members, and outlines a model of such a plan.


Describes briefly a 8-way protection insurance plan proposed for Detroit teachers—insurance against death, sickness, accident, and old age. Discusses amounts and methods of paying premiums and explains the amounts and time of benefit payments.


Nebraska. Group insurance a reality; Plan and policy adopted by Nebraska State teachers association. Nebraska education journal, 10: 555-57, November 1930.


—— Group disability insurance for members of the South Carolina teachers association. *South Carolina education*, 12: 260, April 1931.


The method used by the Memphis Teachers Association in the elimination of all technicalities in drafting a contract for group disability insurance so that the contract should have the merit of simplicity—simplicity in its items of protection, and simplicity in the filing and settling of claims.


Discussion by the teachers' welfare committee of the Utah Teachers' Association relative to group insurance with accident and sickness benefits.

**HEALTH**

See also Auxiliary Agencies; Physical Education; Higher Education, Student Finance.

**HEALTH COSTS**


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are needed.


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by the differences of their educational departments. Some of the common items of major expense are examined and found adaptable to a uniform accounting system. Points out that the national committee on standard reports for institutions of higher learning presents five types of financial reports which may be prepared uniformly by all institutions to facilitate the analysis and comparison of their respective expenditures.


A complete and comprehensive treatment of business and accounting methods in institutions of higher learning. In the main, it is the system in use at the University of Illinois, giving a complete system of blank forms for business and accounting activities.


Summarizes the principles of financial reporting, reproduces and recommends forms and procedures for preparing and presenting balance sheets, statements of fund transactions, statements of current income and expenditure for current purposes. Offers an outline for the classification of expenditures by object.

Plimpton, Nathan C. A practical system for keeping account of endowment funds and other funds for special purposes. Association of University and college business officers, 1923. Appendix A.


Sprou, R. G. The business administration of university branches. In University and college business officers. Fifteenth annual meeting, 1926. Iowa City; Iowa, University of Iowa, 1926. p. 96-112. Describes the methods of coordinating the accounting systems of the branches of the University of California in detail. Analyzes the accounting problems encountered and the purposes and principles of the existing accounting procedures.


Explains the laws providing for a uniform accounting system in the control of the State institutions of higher learning. Also explains sources of revenue for these schools. Attention is called to the difficulty of maintaining a thorough accounting system, but concludes such accounting is necessary.


BUDGET

Annett, Trevor. How can the financial needs of a college of one thousand students effectively be met? In The effective college, by Robert L. Kelly. New York, N. Y., Association of American colleges, 1928. Chapter XXIII. An outline of the financial needs of a liberal arts college for 1,000 students, the cost of buildings and equipment, instruction, library, administration, current expense, and operations.

Cowl, D. J. An analysis of the financial needs of a college of liberal arts for one thousand students. In Problems of college education. Minneapolis, University of Minnesota, Edited by Earl Hudelson, 1928. p. 57-84. Estimates the financial needs of a democratic, coeducational liberal arts college for 1,000 students. Discusses the desirable standards for such a college, faculty requirements, buildings and equipment needed, summary of endowment, plant and current funds needed, and the annual cost per student.

How much money does a college need? School and society, 32: 6-10, July 5, 1930. Calculates the amounts that should be provided for salaries, administration, libraries, operation and maintenance, and general expenses for a 4-year liberal arts college of 1,000 students. Discusses capital investment needs and sources of income.

Elliott, E. C. Budgetary procedure. In College and university education. Nashville, Tenn., George Peabody college for teachers, 1931. p. 78-89. Advocates monarchical budget control by the president, describes the way that officer may prepare his budget, predicts higher State institutions must take more account of State budget systems, and advocates getting student organizations to budget and report their financial affairs. Illustrates by example from his own institution, Purdue University.

Engelhardt, Fred. Educational policy and budget making. In Problems of college education. Edited by Earl Hudelson. Minneapolis,
HIGHER EDUCATION


Defines the relationship between educational efficiency and budget making. Discusses the factual basis for administration, importance of planning, unique characteristics of an educational enterprise, and the dynamic nature of educational planning. Extension of educational services, need of standardization, units of measure, preparation, administration, and function of the budget, budgetary limitations, and problems of coordination.


Library budgets, appropriations, and expenditures for 1927-28. Analyzes library books and library salary costs per pupil and per faculty member in various states of colleges in an attempt to find an applicable standard for library equipment which will enable colleges to budget an adequate sum for this purpose.


As a description of the process of making the budget at the University of Utah, this article lists the following steps: (1) Consideration of recorded information; (2) estimates of requirements; (3) examination of these estimates; (4) interviews with department heads; (5) actual formulation of the budget; (6) review and adoption by the academic board; (7) execution and recording of data for use in the preparation of future budgets. Explains a method of budget control and accounting.

IVIN, OSCAR WILLIAM. STATE BUDGET CONTROL OF STATE INSTITUTIONS OF HIGHER EDUCATION. NEW YORK, N. Y.: BUREAU OF PUBLICATIONS, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, 1928. (Teachers college, Columbia university. Contributions to education, no. 271.)

Defines, enumerates, discusses, and compares the various types of budgets and budgetary procedures of State educational institutions in the different States for the years 1919-1920. For brevity and convenience this study uses a group of symbols to express a series of ideas, offering greater possibilities of manipulation and comparison.


Outlines the necessity for a complete university budget. Gives various items of budget making and procedure. Lists the elements of basic unit costs as average size of classes, average teacher load, and average salaries of teachers. Includes facsimile requisition blanks of the University of Minnesota.

MOKECT, LLOYD. ANALYSIS OF UNIVERSITY EXPENSES. In University and college business officers. Fifteenth annual meeting, 1929. Iowa City, University of Iowa, 1929. P. 113-38.

Discusses three purposes for analyzing university expenditures: first, to satisfy the public; second, to satisfy State legislators; and third, more accurately to inform institutions concerning the costs of various operations. Applies principles of making a university budget, and interprets the significance of costs.

PHILLIPS, J. D. BUDGETARY CONTROL BY DAILY CHARTS. In Association of university and college business officers. Minutes of the eighteenth annual meeting, 1928. UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN. 1928. P. 43-49.

A series of 12 charts showing unencumbered balances for salaries, wages, and business items in the general operation fund; unencumbered balances in specific legislative appropriations; and unencumbered balances in revolving funds. Suggests that these charts and directions be used as guides to budgetary planning and control.


Describes the methods and advantages of modifying the school budget to meet changing conditions. Recommends that lump-sum appropriations be altered for general purposes, adequate unassigned funds to meet contingencies, a continuous survey to discover funds not needed for the purposes originally indicated, and periodic reports showing the use being made of flexible features of the budget, for the purpose of securing "flexibility," utilizing, and protecting the advantages of a flexible budget.


Describes processes and authority for making the budget in the University of Wyoming. Considers "essential" and "desirable" expenditures as basis for allocation of funds. Explains the process of estimation by which the budget is drafted.


A study of the construction, operation, and maintenance costs of teachers colleges. Examines library and faculty expenses, and discusses methods of taxation needed for cooperation among States in collection of taxes, and tax legislation.

**BUDGET, FOREIGN**


**BUSINESS MANAGEMENT**


Analyzes the conditions and considerations upon which a college may profitably administer personal annuities. Examines the costs and legal complications involved in the taxation of annuities.

Ball, Raymond N. The segregation of investments for special funds. Association of university and college business officers of Eastern States, 1925. Appendix F.


Considers that dormitories should earn a reasonable return on their money investment, and defends the construction of dormitories as a legitimate investment of endowment funds if they yield a reasonable return, if depreciation is adequately accounted for, and the proportion of the fund invested in this manner is not excessive. Gives building, equipment, and operation costs and discusses methods of estimating and administering them.


Fraser, George W. Experiments in teachers college administration; VII An adventure in cooperation. Educational administration and supervision, 14: 184-85, February 1929.


Reproduces the itemized plans and costs of various 10, 15, and 20 year development programs which have been formulated by colleges of various types and sizes. Due to their concise, specific, and detailed form, these plans should prove constructively suggestive to administrators.


The findings of the land-grant survey staff in regard to business management and finance in the 69 land-grant institutions are summarised in this article. The extent of the practice as well as the disadvantages of intermingling the educational and business functions are shown:


Discusses need for continuous research, selection of staff, assignment of duties, and methods of securing cooperation and enthusiasm of the staff. In this part of the book, as the most essential elements of the business administration of a college.


Explains the purposes of consolidating state control of higher education in Oregon. Describes process of abolishing boards of control for separate institutions and creating one central board of control which governs all state institutions of high education and apportions funds.


Describes a document designed to aid college presidents in securing gifts from wealthy individuals for the purpose of building up capital funds, some legal phases of the document and such transactions.

SMITH, SHIRLEY W. Equity in compensation of employees doing similar work under differing circumstances. In Association of universities and college business officers. Minutes of the eleventh annual meeting, 1930. p. 28-34. (Hold at Easton, Pa.)

The superintendent of buildings outlines the maintenance and operation program at the University of Chicago. An assistant superintendent in charge of maintenance, one in charge of operation, and a chief draftsman assist the superintendent. Includes a discussion of the supervision of janitors and methods of performing operation and maintenance tasks.


This chapter discusses the business management of various institutions of higher education in Arkansas and points out their lowest general average of business efficiency. Includes the need for centralization, adequate budgets, budget control, and uniformity of fees in the recommendations.


Costs

See also Instruction Costs. Higher Education: Junior College Costs; Teacher Training Costs


Report of a survey which reveals that 81 institutions of higher learning plan the expenditure of more than $88,000,000 for building construction during 1931. Investigation reveals that elementary and secondary schools will spend more than $208,000,000 for the same purpose during 1931.

California Taxpayers' Association. Report on the University of California. An analysis of the growth of the university from 1918 to 1929, and of the unit cost of instruction during the fall and spring semesters, 1928-1929. Los Angeles, Calif., The association, 1931. p. 25-52. (Reports, no. 38, pt. 2.)


Clock hour costs at the University of Pennsylvania. School and society, 19: 128-27, February 2, 1924.

Cost of a four-year college course. School and society, 26: 647, November 19, 1927.

— Shews that the total expense of giving a 4-year college course at Ohio State university is approximately $4,000 per student. Students pay an average of $2,632, or about three-fourths of the cost, personally, and the State one-fourth. An analysis of the total university expenditures reveals a distribution of 63.9 per cent being spent for instruction, 13.4 per cent for capital outlay, 12.4 per cent for operation, 3.8 per cent for administration, and 3.6 per cent for libraries.


Costs in higher education. School and society, 26: 197-98, August 13, 1927.


— Points out that the cost of medical training has more than doubled since 1910 and budgets have risen enormously. The budgets of several schools divided by the number of undergraduate students show a cost per student in excess of
$1,500. A table shows fees in certain colleges. The average fee per student in all colleges is $202.

Education below cost: a specific instance. What the colleges are doing. 27:5-6, January 1928.

Expenditures of State higher institutions. School life, 12:67, December 1926.


FORD, HORACE S. Unit educational costs. In University and college business officials 15th annual meeting, 1925, Iowa City, Iowa. University of Iowa, 1925. p. 138-50.


The cost of going to college in institutions under private nondenominational control. Washington, U. S. Office of education, 1929. 6 p. (mimeographed.)

HUISELSON, EARL. Class size at the college level. Minneapolis, Minn., University of Minnesota press, 1929. 299 p.

An extensive scientific study of the cost and relative efficiency of large and small classes at the University of Minnesota. "All that can be said is that, in the cases investigated, the effect of class size upon student achievement is, in the opinion of the sub-committee, too slight to warrant the cost of small classes."


This section examines the cost of education in sixteen liberal arts colleges. Finds a definite relationship between current educational expenditures and costs and instructional salaries. Prepares salary schedules from the results of the study, and estimates depreciation, imputed interest, and total per pupil costs of an effective college.


MILLER, W. D. and others. Educational costs and methods of securing such. Association of university and college business officers of eastern States, 1924. Appendix G.


University and college financial statistics. Association of university and college business officers, 1929, p. 17.


Tabulates for each State, statistics of the receipts for tax-supported universities and colleges, and the expenditures for tax-supported teacher-training institutions, as an indication of the costs of higher education in 1928.

PARKINSON, B. L. A study of costs in higher institutions of learning. Columbia, S. C., State, 1925. (Public document, vol. 1.)


Similar figures in corresponding bulletins for previous years.


Presents statistics which indicate that junior colleges may be and are operated for $186 per student per year, while universities are commonly operated at an individual cost of $800 to $700.

REEVES, FLOYD W. Computation of unit costs in higher education. Nation's schools, 4: 29-36, October 1929.

Analyses the methods of computing unit costs of higher education and gives suggestions concerning the uses and interpretation of data presented. Illustrates the relation of the size of enrollment to the cost per student by using data collected in 1925-26 from 39 accredited colleges. Includes tabular material on student costs.


A report concerning the cost of educating students during the first two and the last two years of a college course. Shows the total cost per student for educational purposes, costs in accredited and non-accredited institutions, relation of enrollment to costs, percentage of costs met by student tuition fees, instruction salaries, and student fees, and the cost of instruction per student in large and small colleges, and the relationship between size of institution and the percentage of total costs spent for teachers' salaries. Concludes that present support provides neither an adequate educational program nor adequate salaries for teachers.


Analyses in detail the cost of education during the first and second two years in various types of colleges. Includes many relevant data.

SMITHERS, W. RAY. Unit cost study of a college with an enrollment of 800 students. Columbus, Ohio. Ohio State University. (Ad interim project 1929-30 to be completed.)

Full cost study of a college with an enrollment of 800 students. Includes many relevant data.


An extensive study of unit costs in higher education. The value of cost reports, development and status of cost procedure, the method of obtaining unit costs, their calculation and practical application are discussed.


Washington Reports of the joint board of higher curricula to the governor of Washington. First, second, third, and fourth biennial reports containing data from 1917 to 1924.


By tracing the history of a college chemistry class of 151 men, this author presents evidence of the great waste to both society, and the individuals concerned of money, time, and effort which results from permitting men obviously unfitted for the work to continue in chemistry courses.

FEDERAL RELATIONS


Reviews historical and current Federal support of agriculture, and origin and growth of State universities. Includes statistics of the extent to which land grants aided higher education in terms of money.


This article reviews the historical, financial, and legislative support given education by the Federal Government. Reasoning that national development is in the common interest of the entire Nation, the author presents arguments for increased federal support of educational and industrial research departments in institutions of higher learning.


Reviews Federal acts which provide support for college experiment stations, for college of agricultural and mechanical arts, and for military education. Presents statistics revealing proportion of total operating receipts furnished by the Federal Government for all land-grant colleges between 1910 and 1929.


A concise history of Federal educational legislation applying to States admitted prior to 1862, Federal aid to general education in States admitted after 1862, and Federal aid to States for technical education since 1862.

NATIONAL ADVISORY COMMITTEE ON EDUCATION. Federal relations to education. Part I. Committee findings and recommendations. 140 p. Part II. Basic facts. 448 p. 744 Jackson Place, Washington, D. C.

Part I has good, but scattered theoretical discussions traceable through the index head of higher education. Part II has the same together with many valuable recent financial statistics trace-
able through index heads of Colleges of Agriculture and Mechanic arts, and universities.


Analyzes Federal relations to higher education, by a review of the history and present status of land grants for higher education, and permanent funds.


FOREIGN


Examines sources of university revenue in England, the extent to which students are provided financial assistance and the salary status of professors. Finds 46 per cent of revenue coming from parliamentary and local grants, more than 40 per cent of students assisted financially, and salaries of professors relatively low.


The traditions, theories, and methods of financial administration in English, French, and German universities. Includes a comparison of budgets, bodies of control, student fees, cost of living, and salaries of university professors in three nations with similar phases of university finance in America.

India. Expenditures on universities and arts colleges in British India. Progress in education, 6: 1, March 1930.

Kandzio, Isaac L. Essays in comparative education. New York, N. Y., Teachers college, Columbia university, 1930. (Studies of the Interna-

tional Institute of teachers college, no. 11.)


GENERAL

Bartlett, Lester W. Authority of the State in the control of private institutions. Teachers college record, 29: 597-604, April 1928.

In answer to the question if the State has or has not power to control the expenditures of privately endowed and supported institutions, this article concludes from an examination of history, court decisions, and practice, that "authority rests with the State to incorporate educational institutions," and that while the State must grant the institution the liberty essential to the pursuit of its purpose, the State retains the power to alter or repeal the charter by court interpretation or legislative action.

Brockton, La Verne. College and university bands: Their organization and administration. New York, N. Y., Bureau of publications, Teachers college, Columbia university, 1929. (Teachers college, Columbia university. Contributions to education, no. 374.)

Estimates of costs and depreciation on instruments and uniforms for members of college and university bands, from opinions of experts with measurement of certain institutional bands by these standards. Very detailed figures.


A presentation of an organisation for governing boards of colleges and universities which will facilitate an improved administration of the educational and financial program. Lists some State constitutional rights and duties which control and modify the legal organization of governing boards, as a basis of effective organization.


Discusses the creation of favorable public attitudes, the scientific preparation of the budget, and the security of alumni influence and support as phases of a president’s responsibility for legislative appropriations.


A section of the book analyzes the financial needs of a liberal arts college for 1,000 students, suggests methods for meeting those needs, and discusses the business administration of an effective college. Estimates and analyses in detail the costs of education in a college of this type.


Convincing brief direct treatment of all important problems of small college finances with definite approximate costs for a high-grade college of 200 students in an isolated situation, based on the writer’s experience and observations. A like reference to colleges using members of religious teaching orders.


Running review of researches in this field from 1928 to the fall of 1931. Bibliography.

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SELBOMAN, M. R. A. When and how the college professor should and should not be employed by a utility. *Public utilities fortnightly*, 6: 628-81, November 15, 1930.

STEWART, R. H. The legal and financial relationship of the result of engineering research to the university. In Association of university and college business officers. Minutes of the eighteenth annual meeting, 1928. p. 28-42.

Discusses legal provisions for the financial support of engineering and agricultural research. Notes the cooperation and financial support given college and university research departments by various industries, lists many noteworthy cooperative achievements.


GROUP INSURANCE

See *Group Insurance, Teachers, Higher Education*

PHYSICAL EDUCATION

See *also Athletics; Playgrounds; Physical Education; Stadia*


Tabular material shows a total estimated cost of gymnasium outfit per student of $8.50. The estimated cost of additional sports equipment total $62.75 per student. The cost for each student if the college would furnish intramural equipment would be $60.81. Includes constructive suggestions for financing gymnasiums sports.

PUBLIC RELATIONS

See *also Higher Education, Revenues; Higher Education, Support*


A theoretical analysis of the factors a benefactor is likely to take into consideration prior to the bequest of his wealth to any educational activity or institution.


Discusses the relationship of cost and value in higher education and asks if we can afford not to support an institution which is so fundamental to the maintenance of our standard of living.


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Defines some relationships of the State university to the past, present, and future economic and social welfare of the State. Recommends some activities which the State should support through the university.


Discusses the use of local newspapers, civic clubs, information bulletins, open house programs, radio, and the classroom teacher as agencies of junior college publicity.


JOHNSON, SYRENJORN. The university and the state. Quarterly journal (University of North Dakota), 20: 185-96, spring 1930.

OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE AND ITS SERVICES. An educational and financial accounting to the people of the State by the president and other officers of the college, January, 1930. Stillwater, Okla., The college, 1930. 230 p. (Bulletin, vol. 27, no. 9.)


A discussion of college expenditures, endowments, and incomes. Shows that an educational institution can not account for its profits in the same terms industry can. In answer to a charge that colleges are playing poor, the author analyzes college obligations and explains that an institution is poor or wealthy only in relation to the educational task it has to perform and its essential and justifiable program.


SMITH, S. W. The relation of universities and colleges to the municipalities in which they are situated. Educational business manager and buyer, January 1931.

SPARK, SADIE ETHEL. How schools use advertising material. A study of the use of advertising material by teachers in schools and colleges and by home economic workers. New


THOMPSON, J. O. Relation of State universities to the public. Transactions and proceedings of the National association of State universities, 1926. p. 84-96.

REVENUES

See also Higher Education, Federal Relations; Higher Education, Public Relations; Higher Education, Support; Higher Education, Tuition


Recommends that educational institutions enlist the cooperation of banks, trust companies, and lawyers in an attempt to provide for the security and administration of additional permanent school funds.

BROWN, E. T. Life insurance; an asset or a liability; can life insurance be made a source of revenue for colleges and universities? Educational business manager and buyer, 7: 15-17, 34, April 1931.

California. LIPMAN, CHARLES B. Grants in aid of research at the University of California. Association of American universities, journal of proceedings and addresses of the 29th annual conference held at Catholic University of America, November 10, 11, 12, 1927. Chicago, Ill., University of Chicago Press, 1928. 114 p. (P. Carl Huber, see University of Michigan, Ann Arbor, Mich.)

Caruthers, R. I. Insurance for educational institutions. Association of university and college business officers of Eastern States, 1925. Appendix C.


The Comptroller of Vassar College evaluates in this article, the different types of gifts to colleges and outlines methods by which colleges and univer-
HIGHER EDUCATION

...cities may administer amenities at considerable profit. Urges colleges to cooperate in the standardization of rates and accounting procedures.


Financing of educational institutions. School and society, 24: 474-75, October 16, 1926.


Given away, the Duke and Eastman millions. Literary digest, 83: 33-44, December 27, 1924.


Analyzes the sources of revenues received by institutions of higher learning, and tabulates and interprets statistics of revenues for higher education in the United States, 1927-28, percentage of revenues coming from private benefactions, State aid to private institutions, and percentages of income derived from various sources.

Hall bequest to colleges of the Near East. School and society, 29: 9, January 5, 1929.


Meeting college costs. Vocational guidance bulletin, 4: 1-4, April 1930.


An examination of the sources of Minnesota State college and university income. Finds that 26 per cent of the funds come from the State, chiefly from an unjustly imposed property tax. Calls attention to the need for an income tax and sales tax for the support of education.

Munro, W. B. Are our colleges playing poor? Atlantic monthly, 142: 438-40, October 1928.

Patterson, J. K. University finances: Limits to financial income and mill tax. In National association of State universities proceedings, 1924. p. 130-38.


Brief outline of a plan by which the members of graduating classes shall take out 20-year endowment insurance policies in favor of their alma mater as partial repayment of the money the college has spent on them.


Outlines a plan instituted in certain colleges under which graduating students are requested to pledge themselves to a certain endowment insurance plan ranging in value from $250 to $5,000, naming their school as beneficiary. Benefits are apportioned to scholarship funds, etc.


Stevens, E. A. Can we pay for higher education? "Educational review," 64: 193-95, October 1922.


Fifty-eight replies from State universities throughout the United States regarding the effectiveness of a millage tax for the support of those institutions reveal a difference of opinion. Examines advantages and disadvantages as noted by institutional heads. Finds a general belief that with shifting property values a millage tax will not consistently yield adequate support and will place the burden on already overtaxed property owners.


Virginia. The Virginia high-school literary and athletic league. A bond issue to meet the capital needs of the State institutions of higher learning in Virginia. "Charlottesville, Va., University of Va.," 1928. 81 p. (University of Virginia record. Extension series, vol. 9, no. 6, February 1925.)


SALARIES

See Salaries, Higher Education

SCHOLARSHIPS


Perkin research studentship fund. The chemical age, 21: 547, December 14, 1929.

Commonwealth fund fellowships. School and society, 32: 205-6, August 1930.

Curtis, Henry S. Battleships or scholarships. School and society, 32: 427, September 27, 1930.


Describes the fellowships of this foundation under which 86 scholars, novelists, poets, composers of music, sculptors, painters, scientists, men, and other creative workers have received funds for carrying on research on four continents.


Institute of international education. Fellowships and scholarships open to American students for study in foreign countries. New York, N. Y., Institute of international education, 1929. (Bulletin, 10th series, no. 1, 1929.)


Fellowships for Latin America. School and society, 32: 579, November 1, 1930.


McAndrew, W. History of fellowships awarded. School and society, 32: 332, September 6, 1930.


STATISTICS

[Finance statistics in this field are to be sought in the bulletins of the United States Office of Education on Universities, Colleges, and Professional Schools; Land-Grant Colleges and Universities and Statistics of Teachers Colleges and Normal Schools. The latest in print, the years covered being in parentheses, are respectively: Bulletin, 1929, No. 88 (1927-28); Bulletin 1930, No. 28 (1929); Bulletin 1929, No. 14 (1927-28). Bulletins for the earlier years can be obtained through the list of educational publications of the United States Office of Education at Washington or by looking up the heads of Higher Education, Agriculture, and Mechanical Colleges, and Teacher Training Institutions in Charles Alexander's Educational Research, third edition, 1931. The statistics include such items as benefactions, value of different kinds of property, receipts by sources, and expenditures for the land-grant colleges and teacher training institutions. Data are further classified by public and private institutions, by States and by individual schools. In addition the United States Office of Education collects data on income, attendance, salaries, and legislative budget requests for State colleges and universities in the odd-numbered years and for State teacher-training institutions in the even-numbered years. These data are issued in mimeographed circulars.]

STUDENT FINANCE

See also Higher Education, Scholarships; Higher Education, Tuition.

ANDREW, BENJAMIN R. Student costs in teachers college. Columbia univer-
ing, 1926. Columbus, Ohio, Ohio State University, 1926, p. 29-31.

The acting director of the Harmon Foundation discusses four principles governing the administration of student loans: (1) a careful selection of risks through affiliated colleges; (2) the installment form of repayment; (3) the group guarantee; and (4) a strict follow-up.

CARLSON T. C. Audit and control of finances of student organizations. Association of university and college business officers, 1924. p. 49-54.


Court decisions in cases in which students have questioned the right of the State university to restrict their activities in relation to admission, fraternity membership, and fees.


Discusses need of more attention to student loans, the present method of administration and how such loans should be administered, presents four guiding principles for the selection of students to whom loans are to be made, and outlines five activities which student loan organization should maintain to assure the most efficient use of student loan funds.


Presents a technique by which college business officials may interpret the academic and extracurricular records of students as a basis for guidance in the distribution of credit money provided by benefactors to worthy individuals.


 Recommends the distribution of endowment funds to students in proportion to their ability as a device for attracting the highest type of students to an institution, of creating a spirit of academic vigor, and for spending endowment funds where they will pay the greatest dividends.


A collection of articles by various educators, showing statistics and values of various methods by which students work their way through college.


EBREYSHAW, E. B. The support of student activities. Association of university and college business officers of the Eastern States, 1925. Appendix I.


Compares loans and scholarship funds versus deferred tuition payments as desirable methods of assisting students finance a college education. Describes methods of administering the deferred payment plan at the University of Wichita. Considers the deferred payment plan an outgrowth of economic conditions and in keeping with sound business procedures.


A description of the methods used by the University of Wichita for giving students the privilege of deferred tuition payments. Includes the personal investigations, records, and follow-up methods.

FORSTEE, C. H. What it costs to-day to go to college. School and society, 19: 44-54, January 12, 1924. table.

A comparison of the costs of attending the University of Illinois in 1908-9 and Dartmouth College in 1922-23, etc.


Gives minimum average yearly expenses for tuition, fees, board and room at various classes of institutions. Details on student loan funds at major individual institutions. Description of self-help possible through various activities with a wealth of practical details and tabulation of extent of self-help at many individual institutions. Directory of higher education institutions of the United States with brief notes on amounts of tuition fees, living and minimum expenses and opportunities for self-help.

MOSEY, LLOYD. A study of the housing and living conditions of women students in the Western Illinois State Teachers College at Macomb for the school years 1926–27; 1927–28; 1928–29.

HARMON, W. M. E. Loans to college students. Association of university and college business officers of eastern States, 1924. Appendix D.


LUMBERT, Paul M. Finance. In his Denominational policy in the support and supervision of higher education. New York, N. Y., Bureau of publications, Teachers college, Columbia university, 1929. Chapters VI, VII. (Teachers college, Columbia university. Contributions to education, no. 378.)

Investigates the purpose and powers of denominational boards of education. Examines religious, educational, and financial policies. Chapters 6 and 7 discuss methods and polices of securing and distributing aid found in various denominational colleges.

Loan fund of the Massachusetts Institute of technology. School and society, 32: 121, July 26, 1930.


The report of the investigation by the Comptroller of the University of Illinois concerning the principles which should determine the amounts of State university fees, and the extent to which present practices conform to these principles. In order to make higher education available to the greatest possible number and to equalize educational opportunity for the benefit of the individual and the State, he suggests that no fees would be ideal, but until this ideal can be reached the amount of fees must be determined by the economic and practical conditions of the State.

PAUL, G. H. College expenses. Harvard graduate magazine, 58: 12–13, September 1928.


REYNOLDS, O. Edgar. The social and economic status of college students. New York, N. Y., Bureau of publications, Teachers college, Columbia university, 1927. 57 p. (Teachers college, Columbia university, Contributions to education, no. 272.)

Collected data for, 1923–24, by questionnaires from students at 68 colleges and universities selected at random from 548 liberal arts colleges in the United States. Investigated the social and economic status of college students, parental occupations, parental incomes, parental schooling, nativity, and descent of students, size of families, self-support among students, student residence, and nature of student affiliation.


STEEN, C. E. The support of student activities. Association of university and college business officers of the Eastern States, 1925. Appendix H.


The author of this section recommends financing student health service with annual student fees. Such fees range in various colleges and universities from $1 to $20 per year. The most satisfactory arrangement would provide all health service to all students.


Describes the organization and coordination of the industrial program developed by Berea college in order to assist students earn part of their way through school. Students operate 22 business enterprises.

What football players are earning this fall. Literary digest, 107: 28, November 15, 1930.

WILKINSON, A. G. Inclusion of all fees in one payment. Association of university and college business officers of the Eastern States, 1924. Appendix K.


SUPPORT

See also Higher Education, Revenues; Higher Education, Federal Relations; Higher Education, Student Finance; Higher Education, Tuition.


The author, in this article, argues that universities have no right to harass alumni for funds. It points out that such methods are philosophically and economically unsound and certainly are beneath the dignity of a university.


Gives a fundamental discussion of the need and reasons for research into the methods and sources of taxation for higher education and the publicity that should precede and follow such research. Also gives an interesting theory of the economic significance of higher education.


A fundamental discussion of higher education support from a social and economic standpoint. Presents three principles of higher education finance.


University. The university and the State; a comparative study of the support of American State universities. Athens, Ga., 1926. 24 p. incl. diagr. tables. (Bulletin of the University of Georgia, vol xxvi, no. 28, February 1920.)


GREENLEAF, W. J. Financial support of colleges: Journal of higher education, 1: 254-60; May 1930.

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Shows how the expanding programs in institutions of higher learning reach an increasing portion of the population and the per capita cost of such expansion. Discusses the possibilities inherent in income, inheritance, and luxury taxes, and gives examples of the use of these taxes as sources of educational support and a tabulation of State income tax returns for 1915-1928 for 14 States.

Ohio. LAPOE, JAMES L. Ohio's support of higher education. Educational research bulletin. (Ohio State University) 7: 77-84, May 2, 1928.

Uses an examination of social and economic factors as determinative of Ohio's economic ability to pay for higher education, and of her provisions for higher education in comparison with provisions made by neighboring States with similar educational needs and economic ability. Concludes that Ohio supports her three universities only three-fourths as well as her ability would permit.


PRICE, RICHARD REES. The financial support of State universities; a study of the financial resources of State universities in the light of the experience of the universities of the old Northwest territory, with a suggested policy for the future. Cambridge, Mass., Harvard University press, 1924. xv, 205 p. tables, diagrams. (Harvard studies in education, published under the direction of the Graduate school of education.)


Discusses the uncertainty of college and university support which is dependent upon political appropriations, and the effect of this uncertainty upon the efficiency of the institution. Recommends a fixed State mill tax for university support; explains advantages of this plan.

An evaluation of the social and economic products of higher education by the president of Rutgers University. Concludes that the State must support higher education not out of benevolence to the student but because society has need for a greater number of trained men than could be produced if higher education were placed on a self-sustaining basis, and because the American ideal of democracy demands equalization of opportunity for all classes.


The secretary of the University of Buffalo notes from a survey made by himself that the present mill tax on property cannot support a higher educational program for the increasing numbers which attend our colleges. Institutions are forced to collect fees under various captions. It is recommended that all sources of taxation be used.

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Indicates that a study of all the different forms of fiscal support given by States to their higher educational institutions shows that 63 institutions of 84 investigated receive State aid through annual or biennial appropriations.


Discusses the fixation of millage rates and some current higher education tax problems in Washington. Various forms of taxation are appraised in an effort to determine their applicability to the finance problems of the State.


Analyzes the relationship of the State and the municipality to the support of higher education. Finds cities levying a fixed millage for support of higher education and forecasts an increase of municipal higher educational institutions.

**SURVEYS**


Examines the scope and character of the work done. Recommends policies for the State in its development and maintenance of a State-supported system of higher education. The most important phase is such efficient coordination as to secure the largest possible share of social and economic benefits for the money expended.


**CALIFORNIA TAXPAYERS' ASSOCIATION, INC.** Report on the University of California, an analysis of the growth of the university from 1918 to 1929, and of the unit cost of instruction during the Fall and Spring semesters 1928-29.  *Los Angeles, California Taxpayers Association, Inc.*, 1931. 52 p. tables, diagrams (Association report no. 38, Part II.)

Contains material on the income, disbursements, and endowments, student enrollment in California colleges and junior colleges, unit costs of instruction, functions of the university other than instruction, and the derivation of unit costs of instruction.

**CLEVELAND FOUNDATION. Survey of higher education in Cleveland. Cleveland, Ohio, Foundation Committee, 1925.**


**INDIANA. JUDD, C. H., KITHE, R. H.; MOOREY, F. E., and others. Survey commission to investigate the State-supported institutions of higher learning in Indiana. Indianapolis, Ind., Board of Public Printing, State House, 1929. 206 p.**


Report of the survey of the 69 colleges and universities maintained in accordance with the Morrill Act of 1862. Congress provided the funds for this survey which was carried on by 69 specialists over a period of three years.
LEONARD, R. J., ETZEN, E. S., and O'NEAR, F. B. Survey of higher education for the United Lutheran Church in America. With the cooperation of other members of the staff and graduate students. New York city, Bureau of publications, Teachers college, Columbia university, 1929, 3 v. tables.

Survey made at the direction of the board of education of the United Lutheran church in America by members of Teachers college, Columbia university.


In this survey, extensive studies were made of the University of Missouri, the Missouri State teachers colleges, and the junior colleges.


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A valuable study of denominational colleges, based mainly on surveys of 16 higher educational institutions affiliated with the Board of Education of Disciples of Christ. Section on salaries with chapters on accounting and budgetary procedure, cost studies, effective use of financial resources, sources of revenues, scholarships and loan funds, and economic factors affecting the support of institutions of higher learning. Sensible, business-like recommendations in convenient summaries.


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TUITION

See also Higher Education, Student Finance


Investigates tuition fees in 271 endowed colleges and universities. Includes comparisons of fees in denominational and independent institutions, in institutions of various geographical divisions, in institutions of various sizes, and of institutions located in communities of various sizes.

ARNETT, TREVOR. To what extent should college students pay the cost of education? Association of university and college business officers of Eastern States, 1927. p. 18-29.


Court decisions in cases in which students have questioned the right of the State university to restrict their activities in relation to admission, fraternity membership, and fees.


Traces trends by 5-year intervals from 1910 to 1929 for relation of tuition paid to the cost of the college education for 100 privately controlled and 47 publicly controlled colleges. Classifies institutions in various ways. Conclusions similar to those of the later Cowen study which see. Bibliography of 35 unannotated items.


Traces trends in relation of tuition to the cost of education at 5-year intervals from 1910 to 1930 for private and public colleges and universities, further subdivided for size, geographical location, and sex of students. In general the higher institutions are charging a relatively lower tuition than formerly.


The latter part points out the tendency to raise tuition rates.


PENNIMAN, JOSIAH H. Tuition at the university of Pennsylvania. Educational record, 7: 93-97, April 1933.


A well-conducted study of whether the institution's 1,300 such students cost the State of Alabama anything. Covers teachers' salaries, other expense, equipment, and buildings and concludes that these students paid more tuition than the State paid for them.

HIGH SCHOOL

See Secondary Education, Costa, High School

HIGHWAY COSTS

[Statistics for highway finance appear regularly in the standard Cost of Government series of the National Industrial Confer-
WHITCOMB, Dr. of equipment items for work at different institutions, home economics. New York, N. Y., Teachers college, Columbia university, 1928. p. 77-115. (Teachers college, Columbia university. Contributions to education, no. 318.)

A study of the prevailing techniques of financing home economics including suggestions for more desirable methods. Discusses the preparation of home economics budgets, the purchase of supplies, per-pupil costs, bases for selecting equipment, home economics libraries, and the utilization of home economics rooms.


Per-pupil costs for different classes of work at different levels (p. 86-89). Cost of equipment for departments and for items for several cities with similar estimates for equipment of varying elaboration from New York State department of education, (p. 113-20).

HOUSEHOLD ARTS

See Home Economics.

INCOME

GENERAL

For Income Tax see Taxes. Income.

BRADY, ROBERT A. The money we spend. The survey, 64: 345-7, September 15, 1930.

After asking what human values are expressed by our industrial progress, this article critically examines Doctor King's study of incomes in the United States, and points out that more than 80 per cent of the population including teachers, does not yet receive an income that will provide the minimum of decency and comfort set up by the National Industrial Conference Board.


It reviews methods by which a school district may control its income by accounting techniques. Explains with form and graphs control of income from State aid, temporary loans, monthly demands for cash, accounting for revenues in small school districts, and principles to be considered in borrowing.

ENGELHARDT, N. I. and ENGELHARDT, FRED. Administrative and accounting control of income in local school systems. Teacher college record, 28: 261-82, November 1928.

A general treatment of the administrative and accounting control of income in local school systems. Discusses fiscal dependence and income control, laws and income control, control of income from State aid, allocation of State aid, tax collection and income control, budget estimates of tax income and receipts, monthly demands for cash, interest rates, temporary loans, cash reserves, transfers between funds, protection of resources against risk, bonding school officials, and the protection of funds in depositories.

STATISTICS, GENERAL

The best sources are the publications of the National bureau of economic research, New York City, and the research bulletins of the National education association. Of the former, the latest volume, National income and its purchasing power, by W. I. King and L. Epstein, 1930 cites previous studies. Figures in the latter may be located through the index issued with the last number of each year. For example, volume 3, no. 4 (September 1930) gives the estimated income of States in 1928. Both series give sources of data.


Brings forward the former income studies of the National bureau of Eco-
**INDEX NUMBERS**

See also Costs, Methods of Calculating; Research Techniques


**CLARK, H. F.** Index numbers in education work. Teachers college record, 30: 453-56, February 1929.

Defines the needs and advantages of the development and use of index numbers, reviews past use of index numbers, cites other uses of index numbers in other fields and suggests valuable possibilities for their use in future educational work.

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Discusses need, purpose, methods of construction, and use of price indices of school bonds, buildings, and supplies.

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Index numbers of costs in education. Teachers college record, 30: 678, 681, 794, March, May 1929.

Presents three charts tabulating the monthly indexes of cost of living of teachers, price of school buildings, price of school bonds, and the price of instructional supplies.

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A series of monthly articles continuous from January, 1928, to December, 1928, now temporarily suspended, giving the trend of school bond prices. The school bond index representing the net yield of school bonds of various States during the various months, a comparison by months and years. A discussion of rates of interest and tables of comparison for I. Average yield of all school bonds sold during current months; II. Amounts and yields of bond issues: Bond sales, schools, municipal, all public and private, average rate bonds were sold during year (municipal); IV. Average yield of long term Federal Government bonds; V. Security prices; VI. Revised index number of wholesale prices.

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and **BURG, O. K.** School building index. See Monthly numbers of School executives magazine in 1930.

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and **FOWLER, J. G.** Index of school building and school supply prices. See monthly numbers of Nation's schools up to June 1930.

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Devises a method for measuring the cost of living in various localities and an index of the cost of living and recommends that cost of living be considered in the construction of equalization programs. Shows that in New York State the index can safely be based upon food and rent only.

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Continuation of this standard series whose previous numbers are noted in the introduction. Gives general index and subindexes for component parts for every year 1914 to 1930 using 1923 as a base of 100. Appendix gives all indexes for 1930 on base of 1914 as 100. "Index to previous data on that base. Full explanation of theory, sources of data, and methods of computation."

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Develops a valuable form of index which relates the standing of each State or any item to the average of the United States considered as 100.

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A series not yet completed in March, ranking the States by indexes on the Ayres and Phillips methods, both of which include indexes for interest, for various years. Each index gives rank on total and on each financial item. The two methods differ on the financial items included and the Phillips procedure takes into account the changing value of the dollar. References to publications giving these indexes in previous years.
INSTRUCTION COSTS


Employment and pay-roll indexes in manufacturing industries.

INDIAN SCHOOL COSTS

The best sources of data on Indian school costs are: the annual reports of the "Hearings on the Interior Department Appropriation Bills" before the Congressional subcommittees of the committees on appropriations, the Interior Appropriation Bills, and the reports of the Commissioner of Indian Affairs. Other valuable sources of data are a series of reports on "Hearings before a Subcommittee of the Committee on Indian Affairs of the United States Senate (at present incomplete) and reports to the United States, Committee on Indian Affairs, on "Nontaxable Indian Land," the first of which appeared in 1931.


Similar figures for previous years in corresponding bulletins.

INDUSTRIAL EDUCATION COSTS

See also Vocational Education


Discusses the pioneer work of the Buffalo public schools in developing training courses with a trade vocational objective. Calls attention to State lag requiring that minors temporarily unemployed must attend continuation school 20 hours a week, but points out inadequate facilities for such attendance. Includes tabular data on salaries of administration and instructional staff and shows sources of funds and amount expended by city of Buffalo on vocational education.


Paul, C. E. Per capita costs. Industrial education magazine, 29, 432, June 1928.

An editorial commenting upon per capita costs in administration connected with school instruction in the manual arts. As a first contribution to the discussion a letter is quoted advocating pupil assistants in the teaching of manual arts.


Per capita cost of part-time instruction. Industrial education magazine, 26: 31, August 1924.


INSTRUCTION COSTS

See also Class Size; Teaching Load

GENERAL


Lists and analyzes the facilities and special instructional provisions advisable for an educational program which will provide adequately for individual differences. This analysis will assist administrators in computing the costs of a more efficient program.


How a first section of beginning algebra for boys saved the teaching time of one semester in geometry in Grand Forks, N. Dak.

Evans, F. O. Teachers load and the school budget. Tax digest, 8: 206, June 1930.

 Discusses the responsibility of school boards as trustees of public funds and

A study of data relating to number of pupils per teacher and to per pupil instructional costs in elementary and secondary schools in more than 100 New York State's cities of various sizes during 1919-1923.

HIGH SCHOOL
See also Vocational Education Costs


Tabulates and classifies teaching costs per credit unit for 19 secondary and subjects according to size of enrollments from data obtained from a report of a committee of 15 California high-school principals. Briefly explains the statistics.


CHURCH, E. E. Factors determining high-school teaching costs. High-school teacher, 2: 52, 57. February 1926.

Studies subject teaching costs and number of pupil periods in each subject in 56 West Virginia high schools. Shows that there is a wide range in the cost of high-school subjects and that science teaching costs are high. Concludes that the most efficient instruction is found in schools with enrollment between 200 and 500, that the high schools have sufficient teachers, and that size of classes and teachers' salaries are the two chief factors determining cost.

 Cleveland. BUREAU OF STATISTICS AND CHILD ACCOUNTING. An analysis of the expenditures for high-school teachers' salaries, subject taught basis, 1928-29. Cleveland senior high schools. Cleveland, Ohio, Board of education, 1929.


Teachers' salary costs: per period and per pupil for five periods per week for the year for various high-school subjects; itemized yearly per pupil costs for non-classroom activities; and diploma costs to the taxpayer for a girl graduating


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

LAMBERT, A. C. Instruction and plant operation as constant costs. American school board journal, 80: 42. April 1930.

Shows with tables the tendency for instruction and plant operation costs to take constant proportions to the total cost of education in a number of cities, and suggests a possibility for the establishment of practical norms in the field of school distribution.

New Jersey instructional costs per pupil average daily attendance. Education bulletin, 10: 245-61, January 1930. (New Jersey State department of education.)

Similar figures yearly in the bulletin.


By using school costs as computed by dividing current expenditures by average daily attendance, the Thorndike Intelligence Examination for High-School Graduates, The Iowa High School Con- tent Examination, and the composite marks of high-school graduates earned during the first semester of the year 1923-24 at the State university of lowa, as measures, this article attempts to find the relationships between the cost and efficiency of instruction. Finds no measurable relationship.


Canvasses opinions of administrators and supervisors regarding instructional economy practices, and assembles important possible methods of reducing the cost of the instructional program.

from an academic course, a boy from a
commercial course, and one from a com-
mercial course for the year 1926-28 for
the whole city.

DAVIS, HARVEY HENRY. A technique
for computing unit costs of subjects
taught in high school. Doctor's dis-
sertation, University of Iowa. Co-
lumbus, Ohio. The F. J. Heer print-
ing co., 1930. 39 p.

GARVER, V. A. Unit costs of instruction
in high school. High school teacher, 2: 312-14, October 1926.

HOOD, J. T. Jr. Instruction costs in
typical small high schools: a study.
 Nation's schools, 4: no. 3, 63-68, no.
5, 39-42. September, November 1929.

Recommends that instructional costs
be reduced by the elimination of certain
subjects, by reducing the number of small
classes, and by using an alternating pro-
gram. Includes relevant data.

Idaho. ROUNAL, F. J. Teaching costs
in Idaho high schools. Idaho jour-
nal of education, 11: 19, 34-35. Sep-
tember 1929.

Indiana. BURRIS, B. J. Cost of in-
struction in Indiana high schools.
Indianapolis, Ind., State department of
public instruction, 1924. 39 p. (Bul-
letin, no. 71.)

VARIATION IN HIGH-
school cost of instruction: Causes
and suggestions for improvement.
 Bloomington, Ind., School of educa-
tion, University of Indiana, 1925. p.
21-29. (University of Indiana.
1, no. 4, 1925.)

PUCKETT, ROSEWELL C. Com-
parison of actual classroom salary
costs in the Boise high school.
Evansville, Ind., American school
board journal, 69: 56, 130, September
1924.

Iowa. CROSS, H. A. Teacher cost per
pupil for subjects taught in Iowa
University of Iowa. Iowa City.

Los Angeles, Calif. City schools.
Cost of instruction by subjects in
junior and senior high schools of
Los Angeles. Los Angeles, Calif.,
School board, 1930.

Massachusetts. HooD, J. T. A study
of costs of instruction in Massachu-
setts high schools of less than 200
pupil enrollment. Boston, Mass.,
Boston university, June 1928.

(School of education.)

North Carolina. Cost of instruction
in high schools. In State superin-
INSTRUCTION COSTS


Vichert, Arnold A. Teacher cost per 1,000 pupil hours of instruction in 165 Wisconsin high schools. M. A. thesis, 1925. University of Wisconsin, School of education, Madison, Wis.

HIGHER EDUCATION

See also Higher Education Costs; Junior College Costs

California taxpayers' association (Report No. 38), Report on University of California. (Los Angeles, February 1931.) 52 pp. Harold A. Stone, Director of Research, J. C. Bennett, in charge.

An analysis of the growth of the university from 1918 to 1929 and the unit cost of instruction during the fall and spring semesters 1928-30.


Analyses college finance in an attempt to determine the most useful units of cost and the items which shall be admitted into total cost. Recommends student-credit hour as the most useful unit, and suggests an examination of the curricula to determine if costly methods and courses are justified.

Magee, Herman J. Unit costs of salaries in teachers colleges and normal schools New York. N. Y. Teachers college, Columbia university, 1931. 107 p. (Teachers college, Columbia university, Contribution to education, no. 498.)

Morey, Lloyd. Instructional cost accounting. The second joint meeting of the Association of University and college business officers. Minutes, May 1926. Ohio State University, Columbus, Ohio, 1926. 6 p. 8-17.

Outlines the analysis of instructional costs by the comptroller of the university of Illinois. Defines some units of expense and determines what expenditures shall be included and what excluded in such an analysis. Discusses a general analysis of all expenditures, the fiscal expense per student credit hour, semester credit hour expense, intercollege service, per capita instructional expense, distribution of resources, and capital investment expenses.


JUNIOR COLLEGE

See also Junior College Costs


California taxpayers' association (Report No. 114), Junior colleges in California. (Not published.) Harold A. Stone, Director of Research, J. C. Bennett, in charge, Los Angeles, Calif.

A study of teaching loads and of unit costs of teaching in junior college classes given in high-school departments and in district junior colleges.


Using data from 20 California junior colleges, this study examines the factors affecting junior college instruction costs and sets up some tentative standards for the establishment of junior colleges.

JUNIOR HIGH SCHOOL


Cleveland. Bureau of statistics child accounting. The expenditures for teachers salaries distributed on a subject taught basis, Cleveland junior high schools, 1928-29. Cleveland, Ohio, Board of education, 1929.

RURAL


STATISTICS

[These will be found in the State and city school statistics bulletins of the U.S. Office of education. See State Statistics; City School Statistics. Figures for totals, salaries, textbooks, supplies. Research bulletins of the National Education Association often contain data on total and per-pupil instructional costs by States, traceable thru the index at the end of each volume.]


A study of data relating to number of pupils per teacher and to per pupil instructional costs in elementary and secondary schools in more than 100 New York State cities of various sizes during 1919-1923.

INSURANCE

See also Fire Insurance; Group Insurance; Life Insurance; Liability Insurance; Safe-Guarding Funds

COSTS

[The research bulletins of the National education association, e.g. vol. 8, no. 4, September 1930, give statistics on insurance costs for the United States and for individual States. Sources of data given. Figures for other years may be located through the index issued with the last number for each volume.]

GENERAL


Concludes that State insurance is not the best method, is quite specific, and builds up a case out of an actual situation.


The material presented in this article is a summary of the report of the Wisconsin interscholastic athletic association's limited accident-insurance plan, its purposes and provisions, and how it has operated in actual practice.


This chapter of the study "Readings in Risk and Risk-Bearing," clearly defines by means of practical illustrations, the disadvantages of personal suretyship, moral risk in corporate bonding, intercompany organization among surety companies, and the comparative simplicity of Torrens system and the Recording System.


A survey of municipal insurance practices with some data on school building insurance. Concludes regular insurance is necessary for smaller cities but a city with 200 distinct risks can safely carry its own insurance. Nearly 50 unannotated references.


INTEREST COSTS

See also Borrowing; Safe-Guarding Funds

[Statistics are to be found in the bulletins of the United States Office of education. See State Schools, Statistics and City Schools, Statistics. Valuable data appear in the United States Bureau of the Census series on financial statistics of cities (latest in print, 1928) and financial statistics of States (latest in print, 1929).]


Suggests the standardization of school accounting costs for comparative purposes, listing various items designated operating costs, and specifically deals with imputed interest as a factor in school costs.


Usual article going through July 1931, on all items, and through September on some.

JUNIOR COLLEGE

See also Higher Education; Negro Schools; Secondary Education

AID

See State Aid, Junior College
BIBLIOGRAPHY


This well-arranged and indexed bibliography, the most complete one available on the subject, contains 1,000 references and covers the period from 1867 to 1930. Includes unpublished masters' and doctors' theses and information concerning publishers with addresses of all journals and proceedings of educational associations. Finance references are scattered throughout, traceable through the index.

COSTS

See also Instruction Costs. Junior College: Junior College. Financial Administration


—. Junior college costs. The normal advance, 35: April, 1928.

Presents data from 38 junior colleges which show a range in annual per student cost from $49 to $472. Warns that data produced are not comparable.

Duluth, Minn. Chadwick, R. D. Costs at Duluth. Junior college journal, 2: 172-75, December 1931.

Portion of annual report, showing junior college costs at Duluth, by subjects. Total cost of $251 per student enrolled, $281 per student in average daily attendance.


Presents relevant data to illustrate savings to the State and to parents.


Shows average current expenditure per enrolled student was $290. Annual salary of full time instructors was in 30 midwestern junior colleges, $2,420.


Presents statistics which indicate that junior colleges may be and are operated for $155 per student per year while universities are commonly operated at an individual cost of $550 to $750.


Analysis of costs based upon surveys of two junior and five 4-year colleges. Finds average cost per student in $51. Calculates the probable cost of an effective junior college program will be $340 per pupil in a college of 250 enrollment.


A comprehensive curriculum is maintained in most institutions at present, at a cost ranging from $167 to $440 per student, with an average of $285.

FINANCIAL ADMINISTRATION

See also Junior College Costs; Junior College, Support

Brothers, E. Q. Present-day practices and tendencies in administration and organization of public junior colleges. School review, 36: 665-74, November 1928.


Summary of financial conditions and recommendations as found and suggested by the data of various State surveys.

Coope  r, L. B. Does the junior college pay? Texas outlook, 12: 38, September 1928.


A comprehensive study of the costs of junior colleges considering the distribution and the comparison of costs, social and financial economy of junior colleges, local taxation for their support, tuition, State aid, gifts, sale of bonds, endowments, assessments, appropriations, sources of income, the ability of society to pay for their upkeep, and State versus local support of these institutions.

A study of existing need and ability to pay for junior colleges based upon information secured from 266 high schools and 34 junior colleges. Recommends for economical reasons a minimum enrollment of 150 students drawing upon high-school enrollments of 900. Assumes a cost of $400 per student and finds at least a $15,000,000 assessed valuation desirable.


Data are given for the 10 junior colleges in the State. Findings are given with 5 pertinent suggestions for their administration.


Discusses financial support, taxation, source of the student body, the curriculum, and the relationships to the other units of the school system as problems precipitated from the growth of junior colleges in the United States.


Sets forth four general conditions which should control the establishment of junior colleges. They are existing need, cost of maintenance, immediate urge, and apparent prospects, all in relation to the ability to pay and the attitudes of the community under consideration. Gives an outline for estimating the local need, and probable costs of maintaining reasonable standards, giving consideration to the present tax burden for education.


LEGAL


Discusses recent changes in the laws of California relating to increases in the minimum financial requirements to be met in establishing junior colleges. Comments upon the probable effects these new laws will have on the further development of schools of this type in the State.

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Reviews a North Carolina supreme court decision by which the junior college is defined as a legal element of the free public-school system.


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SALARIES

See Salaries, Junior College

STATISTICS

[These are to be sought in Higher Education, Statistics, which see]

SUPPORT

See also Junior College Cost : Junior College, Financial Administration


A careful study of junior college costs and standards as found in different parts of the country, with effort to make such modification in them as to fit conditions in Arkansas.


Estimates probable staff, operating expenses, amounts of state and district support, and the capital outlay required by a junior college in an attempt to find an indicator of the tax a district will have to levy to support one.


A summary of surveys of California, Massachusetts, Mississippi, New Jersey, Texas, Utah, and West Virginia from standpoint of junior college recommendations. Considers recommendations concerning students, teaching staff, curriculum, finance, and location.


Address given at the Detroit convention of the department. A plea for elimination of tuition charges in junior colleges and for liberal state support.


Green, Reuel E. Where to locate junior colleges. School executives magazine, 49: 178-80, December 1929.


Junior college is growing rapidly. Nation's schools, 6: 90. October 1930.


Names junior college costs and support among the problems for research in junior college educational administration.

Little Rock. Junior college recognition (on a bequest of $2,000,000 to junior colleges of Little Rock, Ark.). School executives magazine, 4: 32-33, September 1929.


Brief discussion of records forms as used in the eight public junior colleges of Missouri. Samples of 80 of these record forms are reproduced, dealing with individual pupils, pupils in groups, teachers, business procedure, and requests to alumni.

Mort, Paul R. State participation in the financing of junior colleges. Teachers college record, 30: 745-51, May 1929.

Discusses the financial implications involved in adjustments made necessary if the State should substitute a statewide system of junior colleges for the first two years of its university, if it should withdraw all support from these first two years in the university, or if it should eliminate tax-supported junior colleges.


Briefly discusses reasons for the legality of expending public funds and fixing prerequisites in terms of financial resources for the establishment of local junior colleges.


Texas. Esty, Frederick and Tinkham, B. F. A study of the financing of public junior colleges in Texas. Austin, Tex., University of Texas, 1951. 50 p. (University of Texas Bulletin, 1951, no. 3126. Bureau of research in social sciences. Study no. 1.)

Compares methods of financing junior colleges in Texas with those in other States, presents general financial facts of Texas school systems maintaining junior colleges; analyzes general control and salary costs; compares junior college costs with university costs; examines the ability of various districts to support junior colleges and discusses the question of State aid. Nine recommendations.


Reid, J. R. Texas Municipal junior colleges. Austin, Tex., Department of education, 1929. 53 p. (Bulletin vol. 5, no. 5.)


A statement of general principles and their application to actual situations in the State of Washington. Presents a detailed analysis of various population and financial data for the 26 largest cities in the State. "Washington at present has logical use for 13 or at the most 17 district junior colleges. State aid or student tuition seems necessary. These 17 districts have 80 per cent of all the high-school students in the State."


Outlines development of junior college at Yakima, Wash., since 1928, and remarkable support given it by the community in a State where the public junior college is not authorized by law.


Abstract of address before Detroit meeting of department of secondary school principals.

JUNIOR HIGH SCHOOL

Look for this as a subhead under the phase desired, as Building Costs, Instruction Costs, Salaries, Secondary Education Costs

KINDERGARTEN

See also Nursery Schools.


A question and answer study concerning kindergartens, with data for salaries, public and private. Kindergarten teachers receive about the same amount as elementary teachers, but less than teachers in secondary grades. In cities of 10,000 and more population the average cost of instruction per pupil in average daily attendance in kindergarten grades is $55.55, in elementary grades $65.50, in junior high school grades $86.91, and in senior high school grades $116.31.


Includes salaries paid kindergarten teachers and supervisors in city schools in 1926-27.


A statistical and graphic study based upon information given by public and private, and by sampling of private schools, public schools with regard to presence of absence of kindergartens; 2) population of towns and cities in which public schools contributing data are located; 3) source of support for private schools.


LABORATORY COSTS

See Science Costs; Higher Education Costs

LAND-GRANT COLLEGES

See also Higher Education; Negro Schools; Teacher Training.


Outlines and explains investigations made by the land-grant colleges survey staff, including those relating to finance.


A rather complete investigation of the sources of income, the method of accounting, and the business management of land-grant colleges for negroes. The average amount paid by the State for the maintenance of these schools is less than 50 per cent. A large amount of the running expense is collected as fees from the students.


Good but scattered theoretical discussions and recent statistics appearing in Part II are traceable under the index head of Colleges of agriculture and Mechanic Arts.

STATISTICS

[Financial statistics on such items as receipts, expenditures, and salaries appear regularly in the bulletins of the United States Office of Education on land-grant colleges and universities, the latest in print for 1929 being bulletin 1930, no. 25. Bulletins for previous years may be located through the price list of educational publications of the United States Office of Education at Washington, D. C., or in Carré Alexander's Educational Research, third edition, 1931, under the head of Agricultural and Mechanical Colleges. Many financial statistics for preceding years appear in the Land-grant College survey published in two volumes as Bulletin 1930, no. 9.]

LEGAL

For legal treatment of any phase, e. g. Junior Colleges, see that head. See also Legislation.


Where and how to find the law relating to school administra-
Suggests a legal code for the use of those who might seek to enact these findings into law.

**LEGISLATION**

[Recent finance legislation items appear in the bulletins of the United States Office of education, the latest in print covering 1926-28 in bulletin 1929, no. 27. Back numbers can be located under the heading Educational legislation in the price list of Educational publications of the United States Office of Education at Washington. The National education association issues a series of bibliographies of school legislation. The first appeared in December, 1929, the second in December, 1930 and the third is scheduled for September, 1932.]


**LIABILITY INSURANCE**


The theory and necessity of liability insurance.


Discusses in detail the legal provision in California regarding the responsibility of a school district for the negligent operation of its motor vehicles. Explains that school districts may carry liability insurance covering accidents to pupils or property and the premiums are a proper charge against the general fund of the school district.


A rather technical treatment of bonding with special reference to legal aspects. Limitation on liability, approval of bonds, termination of liability, receipts versus expenditures, and the amounts for which bonds should be written are some of the questions considered.


Points out that casualty insurance covers two types of risks: Damage to the policyholder's person or property, and damage to the person or property of others. The second type is frequently called liability insurance.

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Discusses the purpose and provisions of liability insurance policies in their relationship to school administration.

Welzien, Joakim Frederick. The legal authority of the American public school as developed by a study of liability to damages. Doctor’s dissertation, University of North Dakota, Grand Forks, N. Dak., 1930. 239 p.

Library aid
See State Aid, Library

Library costs
See also Auxiliary Agencies


Shows, by using the value of library books expressed as a percentage of the total value of the school plant, and in relation to per pupil in average daily attendance and the cost of maintaining libraries per pupil in average daily attendance as measures of library costs in California high schools, that per pupil library costs range from $1.36 to $9.37.


Presents a suggested $10,000 library budget for a junior college with an annual income of $120,000.


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Defines high-school library standards of 14 States, expressed in terms similar to those used by the accrediting organizations, annual expenditures, initial expenditures for books and library, and the value of books.


A descriptive analysis of how a school library can be operated successfully on a modest budget.

Pensions
See Pensions, Library

Statistics
See also Auxiliary Agencies

(Statistics appear in bulletins of the United States Office of education, the latest being in Bulletin 1930, no. 37 and covering 1929. Bulletins giving data for certain previous years can be located under the head of Libraries in the price list of educational publications of the United States Office of education. Some finance data will be found in the State and city school statistics bulletins of the United States Office of education. See State Statistics: City School Statistics. The United States Bureau of the Census gives library statistics in its Financial Statistics of Cities (latest in print, 1929) and in its Financial Statistics of States (latest in print, 1929).)


Support
See also State Aid, Libraries


See also Auxiliary Agencies...
MAINTENANCE

LUXURIES

See also Taxes, Luxury


Statistics of expenditures made in various States and the entire Nation for tobacco, soft drinks, ice cream, candy, chewing gum, theaters, movies, jewelry, perfumes, cosmetics, sporting goods, and toys in 1928 are by States for the items, and compared with education costs. Similar data for previous years may be located through the indexes of the annual volumes of this bulletin. Sources of data given.

MAINTENANCE

See also Operation

COSTS

See also Operation


Points out the necessity for a detailed cost-accounting system which will segregate capital outlay from revenue and expenses for maintenance only. Recommends a maintenance program over a period of years which will show the percentage of revenue devoted to maintenance and taking the optimum life expectancy of a school building into consideration. Illustrates trends in maintenance cost by data taken from a number of cities throughout the United States for the year 1925-26.


Schwartz, H. M. Improvement in the maintenance of public-school buildings. New York, N. Y., Teachers college, Columbia university, 1926. 74 p. (Teachers college, Columbia university. Contributions to education, no. 240.)

Determines scientifically the parts of public-school buildings most frequently in need of repair, the annual cost and relative importance of such repairs, the relationships existing between the size of a building, and the age of the building. Finds painting, boilers, grounds, glazing,
In 1927, school board problems in maintenance and presented a plan for the school superintendents of Indiana university. It will contain a section on maintenance of school buildings and equipment.

**ECONOMIES**


Analyzes the annual cost of an educational plant by dividing the original total cost by the number of years the building serves. Analyzes building needs for which there are no financial provision as an actual debt, and outlines a plan by which school boards may make financial provisions for depreciation and reconstruction.


Analyzes cost of school-building maintenance and operation by a discussion of property values, service values of educational property, classification of school property, difference between equipment and supplies, etc. The underlying plant management, responsibilities for management, specialization in services, and property standards. *School building equipment, use of school property, use of educational services, classroom equipment, use of educational services, multiple uses of classrooms, maintenance and operation programs, maintenance budget, and property inspection.*


Lists a number of problems which face school superintendents relative to operation and maintenance of the school plant, and presents some of the factors which determine the nature of these problems.


**Henzlik, F. E., Richards, W. M., and others.** Practical economies in school administration. Chapter VII. Maintenance of the school plant. *University of Nebraska, extension division, Lincoln, Nebraska*, 1932. p. 122-27. (University of Nebraska, publications, educational monograph, no. 3, 1932. 212 p.)

Practical suggestions and solutions of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


**Moehlman, A. B.** When remodeling is profitable. *Nation's schools*, 4: 43, November 1925.


Describes methods found from experience to be most effective and economical for the preservation of school floors. Finds oil or wax rather preferable to varnish.


Describes a workman's time card, a requisition for material, a credit memorandum for returned materials, a job record card, and purchase forms which will facilitate accounting for school maintenance costs. Reproduces suggestive forms.

**Schwartz, Harwood M.** Improvement in the maintenance of public-school buildings. *New York, N. Y., Teachers college, Columbia university, Bureau of publications*, 1927. 74 p. (Teachers college, Columbia university, Contributions to education, no. 240.)

Suggests certain changes in the organization and housing of repair activities and also a system of records that will make possible desirable refinements in repair accounting, thereby improving the maintenance program of a school system in a more economical way. The correlations among such factors as average yearly cost of repair per building, average yearly cost of repairs per classroom, age, score, size, and type are used in determining relative costs of repairs and also become the basis for predicting the yearly cost of repairs.
NEGO RO SC H OOLS


EQUIPMENT


Describes in detail the methods used to recondition school furniture at a fraction of the original cost developed in the Tuscarora laboratories in Syracuse, N. Y. Explains cleaning solutions, and mechanical techniques, varnish, stain, and paint formulas, and labor and time requirements are given. Estimates costs.


STATISTICS

(These will be found in the State and city school statistics bulletins of the United States Office of Education. See State Statistics; City School Statistics)

MANUAL ARTS

See Vocational Education

MILL SCHOOL COSTS


Figures showing that mill companies in North Carolina about 1924, tended to shorten courses and save money by avoiding taxation in the schools they controlled.

MUSIC COSTS


Gives per capita and percentage of total expenditure costs of music in public schools. Finds median per capita cost to be 91 cents and the median percentage of total expenditures to be 17.


Adapts (p. 192-93) costs figures from Superintendent Chapman's 1928 Department of Superintendence paper and gives prices (p. 146-53) for three grades of every instrument.


Compares the public expenditures for musical concerts with the amounts spent for music in the schools. Describes the music education program at Rochester, N. Y., and analyses its costs.

NATIONAL SCHOOL FINANCE SURVEY


Aims, problems, and news to date of this survey by its associate director, who is the chief technical worker.

School expenditure map for America. School life, 17: 32-33, October 1931.

Describes the plans and personnel of the National school finance survey of the United States Office of Education and lists "21 unknowns of school finance," under consideration by the survey.

NEGRO SCHOOLS

See also Land-Grant Colleges

COSTS, ELEMENTARY


COSTS, GENERAL

COSTS, HIGH SCHOOL


A few figures and statements of status in January, 1929, for State aid, and help from the foundations.


A statistical tabulation of high-school instructional costs in seven types of white and Negro schools in Virginia in 1923-25 is presented in chapters 4 and 6 of this study.

COSTS, HIGHER EDUCATION


Discusses the need for increased revenues and gives the total educational income for Negro colleges in 1925-26.


Report of a conference held to discuss the new law authorizing Federal aid to Howard University. Recommendations agreed upon, include a thorough inspection by the Office of Education, a 10-20-year program of Federal support for the development of educational service, and a building program.


Presents tabular data showing enrollments, teachers' salaries, incomes, receipts, and expenditures statistics for white and Negro land-grant colleges in United States during 1927-28.


Detailed survey of Negro colleges, in 1928, including financial data and recommendations for a number of junior colleges in several Southern States.


A critical detailed survey of 79 institutions of Negro higher education. Four types of government are found, as follows: 22 publicly supported institutions under State control; 9 universities and colleges governed by independent boards and privately supported; 31 universities and colleges under control of white church boards, and 17 privately supported colleges owned and controlled by Negro church boards. Gives figures on increases in income, value of physical plant, and productive endowments.


SALARIES

See Salaries, Negro

STATISTICS

[These are to be found in the publications of the United States Office of education. They can be located under the head of Negro Education in the United States Office of education price list of educational publications]


SUPPORT, GENERAL


Both volumes contain brief but scattering theoretical discussions and background material essential for any intelligent consideration of support of Negro education. Materials are indexed under the head of Negroes.


Outlines the extent of support offered Negro public schools in the South by the Julius Rosenwald Fund.


SUPPORT, STATES, INDIVIDUAL


An itemized outline explaining how $2,000,000 will be spent to promote medical education and Negro welfare in New Orleans by the establishment of an institution named Dillard University.


Describes a semi-consolidation plan whereby 14 "center schools" bring an efficient school within three miles of every Negro child, enabling the county to save the expense of transportation for the improvement of the educational program. A county high school for Negroes is also provided in the plan, with an educational program fitted to the practical needs of the Negroes of that locality.

—Negro common schools in Mississippi. Crisis, 38: 90-102, December 1926.


—Promoting education in Buckinghamp County. Southern workman, 58: 373-76, August 1929.


Notes the discrepancy between expenditures per pupil for Negro and white schools, and analyzes the sources of receipts for Negro schools. Tabulates costs of living and salaries of Negro teachers, and devises a basis for salary schedule calculations for Negro teachers.


TEACHER TRAINING

[Statistics are to be found in the bulletins of the United States Office on statistics of teachers colleges and normal schools. These may be located under the head of Colleges and Universities in the price list of educational publications of the United States Office of Education or under the head of Teacher Training Institutions in Carter Alexander's Educational Research, third edition, 1931.]


Slater fund. Study of county training schools for Negroes in the South. Charlottesville, Va., Slater fund, 1923. 86 p. (Occasional papers, no. 23.)


NIGHT SCHOOLS

See Evening Schools.

NURSES, SCHOOL

See also Auxiliary Agencies; Health: Salaries; Nurses.


NURSERY SCHOOLS

See also Kindergarten.


Per-pupil costs for current expense and its subdivisions for different types of schools.


This biennial review includes comparisons of salaries of kindergarten with other teachers.


Based on questionnaire data from 60 schools, representing three types and various situations. Gives for each type of school, median and quartile figures for cost and annual replacement, for
total equipment and laundry, for total salaries, for staff meals, total for children's food, and tuition per child.


OPERATION COSTS
See also Operation Economies: Maintenance

BENNET, WILBUR E. Funding operating expenses. Ohio school, 4: 75, March 1928.


ECONOMIES
See also Operation Costs: Maintenance Economies


The costs of the work-study-plan at Gary, Ind., 1927-28 are carefully analyzed and tabulated in relation to the services rendered by the various phases and departments of the Gary program.


Checking sheet for janitorial work. American school board journal, 81: 72, October 1930.

DALTHORP, CHARLES J. How to improve janitorial service in small city schools. Nation's schools, 6: 25, July 1930.

Suggests an ascending salary schedule based on training and service as a method to attract efficient, intelligent janitors. Cites importance of the janitor in the school system and his influence upon health, determination of maintenance and insurance costs, and the teacher and pupil efficiency. Gives regulations upon which janitors will be entered, trained and paid.


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Describes the objective means used in the Hamtramck schools for employing custodians. The method eliminates the political and subjective element often used, determines whether the applicant has the qualities demanded of a building custodian or janitor, and involves application references, physical and mental examinations.


A thorough discussion of the principles and procedures pertaining to the selection, promotion, tenure, and dismissal of school janitor-engineers. The author lists eight conclusions which, if put into practice, would be a complete plan for personnel administration.

ROBINSON, E. Standardizing the work and pay of school janitors in Columbus. American school board journal, 79: 45-46, 1928.
STATISTICS

[These will be found in the State and city school statistics bulletins of the United States Office of Education. See State Statistics; City School Statistics]

OUTSIDE ASSOCIATIONS


Practical suggestions on for what purposes the association should and should not raise money.


General description of the status of State school Improvement Associations in the United States, including sources of support.


Purposes and amounts of expenditures and activities with scholarships and loan funds. Citations individual associations.


How funds are raised and for what expended.

PARENT-TEACHER ASSOCIATIONS

See Outside Associations

PAROCHIAL SCHOOL COSTS


This study of comparative per-pupil costs in public and Roman Catholic elementary schools in Chicago in 1928-29 shows that public schools cost $106.30 more per pupil per year than parochial schools. Teacher salaries were $64.10 per pupil for public schools, as compared to $5.15 in parochial schools. Other interesting comparisons.


A section shows salaries paid teachers in Catholic schools, and the tuition range in Catholic secondary schools in 1928. The median annual salary paid women was $500 as compared to $1,000 paid to each man teacher in these schools. High-school tuition ranged from $30 to $175 per pupil per year.


A brief editorial on per capita costs in Catholic schools. Shows expenditure is much lower in these schools than in public schools. Annual per capita costs in parochial schools range from $15 to $20 as compared to a much higher figure in public schools. The Catholic Church expended $35,962,800 for education in 1928.


PAY-AS-YOU-GO

See Borrowing. When

PAY ROLL

Bell, A. H. Administering the school budget pay roll. American educational digest and school executives magazine, 48: 105, November 1928.

PENSIONS

COSTS


Given a teacher's opinion on the $65 annual payment flat-rate plan of the retirement salary payments and cites factors on both sides making it mutually fair.


In answer to the inquiry of what teacher retirement systems cost, the statistics of payments by States into retirement funds, payments into these funds by teachers, total retirement fund amounts paid in teachers' pensions, costs of administration, other expenses, and total expenditures of retirement funds in 14 representative States in 1922 are tabulated.

NORTON, JOHN K. Flat rate versus percentage retirement plans. Sierra educational news, 26: 21, February 1930.

Defines flat-rate and percentage-salary retirement plans, and outlines the arguments presented for and against each plan.


Similar figures in corresponding bulletins for previous years.


Cites facts and figures on relationship of teachers' salaries and retirement allowances under the flat rate and under the differential plan. Calls attention to the variance of living costs and purchasing power of the dollar under the flat rate plan.


GENERAL THEORY

See also Pensions, Teachers, General Treatment


Information and suggestions by a consulting actuary, principally for cost phases, for employers desiring to establish pension systems in accordance with actuarial principles.


MILLER, WILLIAM O. Pensions and insurance. Association of university and college business officers of the Eastern States, 1926. Appendix K. Outlines a plan for meeting pension and insurance needs of educational institutions under three headings: Providing relief for temporary troubles, providing for the needs of the personnel and the family of the individual in case of death, and insuring the welfare of the pension during old age.

A theoretical treatment with practical illustrations of why pensions should be regarded an retirement pay and how to administer them effectively on this basis.


Retirement and savings plan of U. S. rubber company dated May 1, 1931. Personnel, 8: 5-11, May 1931.


Contains percentage cost figures, ways of estimating costs and numerous examples of how actual differed from estimated costs in various companies, both in this country and England.


Library


The 1930 situation with regard to annuities or pensions for librarians in the United States and Canada, by States alphabetically, showing the general situation with regard to library pension legislation, pensions for State-employed librarians. State teachers pensions that benefit librarians, and the particular situation with regard to public libraries in the State.


Quotes from the State laws of Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin in the United States, and from British Columbia, Manitoba, and Ontario, in Canada, relating to pensions for librarians.

Budget preparation a scientific job. School review (Denver), 11: 3, March 1929.

Outlines the administration of a plan for retiring annuities for librarians, including the legal aspects of the problem, particularly as they affect public libraries. Recommendations of the American Library Association.


Outlines the administration of a plan for supplying retiring annuities for librarians and the legal aspects of the problem, particularly as they affect public libraries. Recommendations of the American Library Association.

Teachers' Allowances


Data on amounts withdrawable when teacher leaves a system (p. 247) and upon teacher's death prior to regular retirement (p. 248), on allowances by State retirement systems (p. 251), on disability allowances (p. 255), and options at retirement (p. 261).


Teachers, Foreign


— Brock, M. W. The Ontario pension system. A. T. A. magazine, 6: 24, 26, 28, December 1924.

— Hulme, James T. The retirement fund. Manitoba teacher, 10: 11, December 1930.


— Pensions are being provided for Nova Scotia teachers. A. T. A. magazine, 8: 15, June 1928.

— Stephenson, E. S. Superannuation. Saskatchewan teacher, 2: 3-4, February 1928.
The pension scheme. Saskatchewan teacher, 2:9-12, December 1927.


Departmental committee on superannuation. The Emmott committee's report. Scottish educational journal, 6:744, October 12, 1923.


Describes the plan of government pensions for teachers of English private schools which conform to the national efficiency regulations. Teachers pay 5 per cent of their salaries and the proprietor or governing body pays the same amount. The effects and objectives of the plan are included in the discussion.


The status of educational pensions in England, France, and Germany. Discusses the principles of the several plans and formule for their administration and notes certain advantages of the German pension, salary, and tenure system.

Germany. Wiere, H. H. Teachers' retirement and pensions in Germany. Los Angeles school journal, 14:15-16, January 12, 1931.


Philippines. The teachers' pension law should not be amended. Philippine education, 29:401-2, 441, January 1924.

Describes the provisions of the Philippine teachers' pension law and argues against the proposition to change from length-of-service provision to retirement at 60 years of age, chiefly upon the grounds that frequent amendment undermines the stability of the pension provision and decreases the confidence teachers will place in it.

Scotland. The education (Scotland) superannuation bill. Scottish educational journal, 7:470-9, 478-83, May 16, 1924.

The Emmott report. Scottish educational journal, 6:753, October 12, 1923.


Superannuation of teachers. Scottish educational journal, 9:266-9, February 20, 1926.

TEACHERS, GENERAL TREATMENT

See also Pensions, General Theory


Bray, M. Mr. Pensions for those long employed in schools for the deaf. American annals of the deaf, 69:201-23, May 1924.


An argument to the effect that, since a teacher retirement fund would facilitate the removal of superannuated teachers, attract persons of better character and ability to the profession, and provide an inducement for continued service, the National Government should give financial assistance to teacher retirement. Examines the status of international, State, and local teacher retirement provisions, suggests a form of national aid, outlines the essential features embodied in the plan, and marks them supplementary recommendations.


Pensions. In Carnegie foundation for advancement of teaching. Twentieth annual report of the pres-


Presents a selective reading list on teachers’ retirement and outlines the fundamental principles of a teacher retirement system. Also reviews teacher retirement in the several States.


Describes the development and status of teacher pension provisions at the time the book was published. Presents 7 economic and social advantages of an effective pension plan and 14 principles underlying a teacher retirement system.


It states the problem, gives an analysis of the equalizing effect of economic forces as tendencies or qualifying factors, and suggests methods in applying payments.


Henion, Telfair. Teachers retirement. New Mexico school review, 8: 20, February 1929.


To make teachers familiar with the principles of a sound retirement system, to acquaint them with costs, and to unify legislative action of teachers, this article discusses membership, benefits, guarantees to teachers and the public, rights under previous annuity systems, credit for past service, the reserve basis, basis of contribution, actuarial valuations, changes in rates, amendments, and the administration of desirable legislative provisions for teacher retirement.


Lists States which have teacher retirement systems in force and lists those States which have separate retirement plans. Summarizes from questionnaires the legislation relating to teacher retirement already passed, together with proposed changes. Proposes a national all-State establishment.


Includes fundamental principles of retirement allowance and a general statement concerning the amount of such allowance. The list of issues discussed includes teachers’ deposits and allowances as related to salary. Presents a statistical table showing the nature of the provisions for retirement under 24 State-wide teachers retirement systems.


A presentation of material on the principles of teacher retirement systems, reported by the committee of the National Education Association, on retirement allowances. Includes arguments in favor of such measures and retirement provisions in the States, data on income and outgo of retirement funds, text of the Vermont retirement act with explanation, and an annotated bibliography.


The committee on retirement allowances presents a revised and extended...
statement of the "Fundamental" Principles of a Teacher Retirement System. In this bulletin. Includes data on a number of teacher retirement systems, plans for retirement legislation in various States, reasons for the support of retirement measures, and an annotated bibliography of 71 references.


State and local retirement systems now in effect. Washington, D. C., National education association, 1924, p. 82-83. (Research bulletin, vol. 2, no. 3, 1924.)

Selected references, pages 87-88.


Briefly describes and contrasts the flat-rate and per-cent-of-salary retirement systems. Presents certain facts and suggests certain principles to be used as bases for appraising values of the two types of systems.


Powell, M. A study of different types of financial assurance for teachers secured by the work of teachers' voluntary organizations.

PITTINGER, Osa M. "Pensions as applied in various States for schools for the deaf. American annals of the deaf, 72: 185-202, March 1927."

Powell, Margaret. A study of different types of financial assurance for teachers secured by the work of teachers' voluntary organizations.


Discusses pension or retirement funds, voluntary relief societies, benefit funds, credit unions, and group insurance as types of financial security resulting from voluntary cooperation of teachers.


Gives a specific résumé of the work accomplished, planned, and adopted since 1928, on teacher retirement objectives, principles drafted, and data on recent legislation. Lists States and cities having retirement systems in effect and recommends inclusion of staff under retirement plan.


Analyzes 11 questions concerning the legality of various phases of teachers' pensions. Formulates conclusions on the basis of school laws and court decisions. Discusses the legal right of States to pension teachers and the power of school boards and State legislatures to compel teachers to contribute to retirement funds.

State systems


Public school teachers’ retirement salary fund. Teachers journal of northern California, 3: 4-5, 26-28, September 17, 1928.


The retirement bill introduced. Colorado school journal, 44: 10-12, March 1929.

A description of the provisions of the 23 sections of a teacher retirement bill proposed before the Colorado State Legislature.


Dodge, C. C. The emeritus suit and the Miller law. Chicago principals’ club reporter, 18: 4-8, October 1928.


The Chicago teachers’ pension system. Chicago schools journal, 6: 236-302, April 1924.


E. O. Clarida, Secretary, Springfield, Ill.


Massachusetts. Governors address and report. Report on old-age pensions by the commission on pensions. To the State document of governors address, Boston, Mass. State printing house, 1925. (Document, no. 5, November 1925.)


Discusses such phases of teacher-retirement allowance in Minnesota as, permission to withdraw entire amount upon leaving the profession, optional entrance provision for beginning teachers, percentage rate of the proposed bill of 1931, and methods of paying arrearages and averages.


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**STATE TEACHERS' ASSOCIATION.**


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Ohio. *Barber, Mary.* The Ohio State teachers' retirement system. Akron, Ohio; University of Akron, 1927. 30 p. (Educational research bulletin, no. 1, 1927.)

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State teachers retirement system. *Ohio schools*, 5:181, June 1927.

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The State teachers retirement system. *Journal of the Ohio State teachers association*, 3:10-17, July 1925.

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*Poten, Marion.* A study of the age, salary, prior service, and deposit of the teachers in the State teacher retirement system of Ohio. M. A. thesis, 1931. Ohio State University, Columbus, Ohio.


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HARRIS, J. D. The proposed retirement law; some of the main features briefly stated. Virginia journal of education, 22: 400-1, May 1929.


FLEMING, S. E. Benefits under proposed new retirement fund. Washington education journal, 8: 159-58, January 1929.

— Figure it for yourself: status of teachers now in the State in the proposed retirement system. Washington education journal, 9: 137-38, January 1930.


— LOVELAND, R. E. Wisconsin State retirement system. Wisconsin journal of education, 60: 31, September 1927.


STATUTES
See also Pensions, State Systems


PYBLE, E. RUTH. Report of committee on retirement allowances. In National education association. Addresses and proceedings, 1928. Wash-

States the retirement committee's objectives. Shows that 23 States and the District of Columbia have State-wide retirement laws and 15 laws applying to certain cities only. Ten other States are working on retirement legislation. Outlines the general progress of the retirement movement.

SUPPORT


JUSTESEN, V. Where the money comes from. Wallace's farmer and Iowa homestead, 55: 906-7, March 22, 1930.

NATIONAL EDUCATION ASSOCIATION. RESEARCH DIVISION. Principal sources of teacher retirement funds. Washington, D. C., National education association, 1930. Table 1. p. 236. (Research bulletin, vol. 8, no. 5, November 1930.)


PERSONNEL

See also headings naturally connected with Personnel as: Pensions; Salaries; Contract Teachers; Teacher Supply and Demand; Cost of Living

BUDGET

See also Business Management, Personal: Pay Roll

BEEL, A. HOWARD. Administering the school budget and pay roll. American educational digest, 48: 105-7, November 1928.

BRENSEN, H. B. Budgetary control as an aid to personnel administration. American management review, 13: 8-6, February 1924.

GENERAL


A report of a questionnaire study to determine the amount and character of work required per janitor, type of equipment provided, how supplies are obtained, and certain facts on janitor tenure. Several tables are included to show variety and tendency in practice.

CARR, WILLIAM G. Recent laws that affect the teacher directly. Nation's schools, 5: 53-55, May 1930.

A description of the significant laws directly affecting teachers enacted since 1926, including State tenure laws, and campaigns to secure State-wide teacher retirement legislation.


A study made of facts submitted by superintendents of schools in 836 cities, 2,500 to 10,000 in population in 1924-25, which attempts to facilitate financial planning and accounting. Analyses the personnel of the 836 cities and the duties performed by each type of employee in an effort to find what seems to be an efficient and economical organization.


A theoretical treatment with practical applications of ways of estimating costs and managing expenditures for personnel. Chapters on economics of personal service, determination of salary and load, the administration of retirement pay, and overhead.


From 1,832 replies to a questionnaire sent to 2,860 cities by the National Education Association, this bulletin presents a study of various factors affecting teacher personnel. Analyses the effects of salary schedules, training requirements, absence of leave for study and travel, recognition of additional training, provisions for sick leave, efficiency ratings and the supermaximum, equal salaries for men and women, and the number of monthly salary payments, upon the composition, morale, and efficiency of the teaching personnel.

Two chapters on teachers' salaries and pension or retired pay for teachers to cover researches to November, 1930.

Bibliographies.

PHYSICAL EDUCATION
See also Athletics; Health; Higher education; Physical education; Playgrounds; Stadia

BETTING, P. E. Finance. In University of Iowa, Division of physical education. First annual report. 1925. University of Iowa, Iowa City, 1925. Chapter II.

PLACEMENT
See also Teacher Placement; Vocational Guidance, Placement

PLATOON SCHOOLS


Compares the use of teacher time, the number of pupils per teacher, the relative attendance, the cost of supplies and textbooks, the actual costs per pupil per year, corrected costs per pupil, costs per pupil hour, and the cost of buildings, in six nonplatoon schools of Iwawa, with similar items in platoon schools. The platoon schools show a considerable saving. Building economies loom greatest.


Compares offerings with costs of this platoon school system in detail. Costs are presented in 18 different units.


Shows, using relevant tables, costs of the platoon school in comparison with the regular type organization. Shows savings which result from platoon organization under various items of school cost.

DETROIT, Mich. The platoon school in Detroit. Detroit, Mich., 1923. (Detroit educational bulletin, 1923, no. 2.)


Points out the following advantages of the platoon school organization plan to pupils: Open air; shorter periods of sitting and standing; diversified interests; less nervous and mental strain; and the fostering of initiative and independence. Shows the economic advantages; questions certain objections as contrary to experience.

RILEY, JAMES H. Advantages of the platoon type of elementary organization. School executives magazine, 49, 556-57, August 1930.

A section of this article explains how the entire building is utilized during the entire school day, assuming a saving.

ROSSMAN, JOHN G. Comparative costs and work-study-play organization. American school board journal, 68: 53-54, June 1924.


Shows that with the platoon system, as exemplified in Detroit, existing buildings can be used and at the same time the building capacity and number of pupil hours of instruction may be increased without additions to the cost of teacher service.


Traces evolution of the modern school. Shows economy resulting from platoon type of organization. Presents statistical tables showing costs per pupil of new building organized on the platoon and nonplatoon basis. Points out graphically and statistically savings in instructional space of the platoon school over the traditional school.


PLAYGROUNDS
See also Athletics; Physical education; Stadia


Cost of construction and operation of outdoor pools for schools. Playground, August 1929.

DAVIS, L. W. An investigation into the conduct and financial support of playground and recreational activi-
PROPERrTY VALUE FOR SCHOOLS, STATISTICS

See also Building Costs, Statistics: Wealth

[These will be found in the State and city school statistics bulletins of the United States Office of education. See State statistics and city school statistics. Similar data frequently appear in the research bulletin of the National Education Association, traceable through the index at the end of each volume.]

PUBLIC RELATIONS ON SCHOOL FINANCE

For public relations on any item, e.g., salaries, see that head and its subhead of Public Relations. See also Reports; Value of Education.


A discussion of a bulletin entitled "Sanitized Squander," which was issued by the association for retrenchment in public expenditures. Bulletin, no. 7.

An example of extremely hostile publicity directed toward public school expenditures. Quotes from many and various sources.


A discussion of a bulletin entitled "Sanitized Squander," which was issued by the association for retrenchment in public expenditures. The bulletin makes an attack on the schools of the country, charging them with extravagant expenditures for fads and frills. Building programs and the curriculum seem to be the chief sources of contention.

BAILLIE, W. F. Achievement of American education: Finance. In National education association. Pro-
CARR, WILLIAM G. Public education in the South. School and society, 33: 488-95, April 11, 1931.

An analysis of the educational opportunities in Southern States as shown by various items of expenditures, attendance percentages, length of school terms. Discusses the probability that these opportunities may be further curtailed through ill-advised legislation and warns against those who would use the present economic depression as an excuse for retarding the development of public education.


Education demands consideration; first things first. Georgia education journal, 19: 24, April 1927.


Indicates the fallacies underlying the common attacks on the schools and these issues which must be clearly understood and intelligently defended. The average citizen and school board member does not know the relative value of the school services, but is more interested in times of crises than ever before.


Chapter 20 discusses the purposes of financial accounting to the public and to school boards. Kinds of financial reports essential to effective accounting, advantages, of uniformity of reports, 6 principles basic to preparation of financial reports, 13 principles governing the preparation of annual statements, and 8 techniques which will facilitate State and Federal financial reports. Chapter 21 presents 34 actual accounting forms which may be used in various phases of school accounting.


An unusually comprehensive chapter, presenting in detail, publicity techniques that may be used to gain public support for school building programs. Gives examples of successful methods for the advertisement of bond issues and tax needs. Reviews various plans for the organization of publicity campaigns, and these issues for publicity. Discusses continuous publicity, and the testing of public attitudes. Analyzes the results of school bond issues and lists 48 common reasons for failure.

States that rising school tax rates and rising school costs indicate that the general property tax will not stand the strain of supporting a much larger educational program and that unless the educational program is to be curtailed a new source of revenue must be developed.


The Superintendent at Cleveland, Ohio, makes a forceful reply to the original pamphlet, with some telling, humorous touches.


Keeping up with the schools. School and society, 33: 334, March 7, 1931.

In relation to current economic conditions in the South, the National Education Association analyzes the professional effect threatened by closing schools this year would have upon teachers, and the social injustice of such action to the children of the State. Analyzes the importance of continuous school operation.


LEEDS, D. R. Who should pay for the schools? Nebraska Education Journal, 10: 122, March 1930.


Covers the methods of money-getting and money-spending activities for publicity within the school system and the effect of maintaining proper relationship between the school and the public on school financing.


MONTANA TAXPAYERS' ASSOCIATION. Where the Montana tax dollar goes. Helena, Mont., Montana Taxpayers' Association, 1925.


An editorial on the opposition to a program for progressive, constructive, and adequate educational opportunities for all. While educational expenditures increased 112 per cent, 1913-1925, they have not increased as much as the average income.


An attempt to find out whether or not education pays the State. Compares expenditures for education in 1910 with apparent results as shown in terms of the relative amount of illiteracy in 1910 and 1920. Objective data indicate that expenditures for education tend to increase income and wealth, to decrease illiteracy, and to raise standards of living.


HAMMONDS, CARSE. Who should pay for education? Kentucky high school quarterly, 12: 77-79, April 1928.


The necessity for well-trained leadership and specifically what it can do to secure more public confidence in schools in these trying times.


States that rising school tax rates and rising school costs indicate that the general property tax will not stand the...

A consideration of conferences of international officials, councils of State educational associations, conventions, lay organizations, and informal methods and agreements. Discusses these questions in relation to importance as forces facilitating the fiscal articulation of educational units.


A study of expenditures for education; expenditures for candy, tobacco, soft drinks, cosmetics, confections, luxury services, joy riding are compared with those for education and with National wealth and National income in an attempt to answer the charge of extravagant educational expenditures. Analyzes reasons for increased school costs are analyzed. Tabulates statistics of school enrollment increases and money depreciation.


Facts concerning school costs and the ability of the Nation as a whole to support education, as indicated by wealth, income, and certain other considerations based on data for the years 1913 to 1926, inclusive.


In an attempt to ascertain how and in what terms good schools pay, this article investigates the educational attainment, interest in public affairs, general intelligence, persons of leadership, earnings, savings, and social progress of the populations of the various States. Facts force the conclusion that those States with good schools rank highest in every respect mentioned.


A rather extensive study of the wealth, income, and school support in the United States. Tables show tax collections, income, and school costs in individual States, 1928.


Good general article stressing the conservation of educational resources by the schools, legitimacy of school costs, the small and stationary percentage of income devoted to schools, reasonableness of costs in relation to size and character of work expected, and the fact that so far no way has been found to decrease school costs materially without threatening the integrity of the school itself.

One hundred and twenty-two reasons why taxpayers boost school costs; 30 ways educators may reduce them. Public service, 376, March 25, 1924.


POLL, Whitton. How to make and use financial statements. Ithaca, N.Y., New York State College of Agriculture, 1928. 53 p. (Cornell extension bulletin, no. 174, October 1928.)


Points out need for proper publicity concerning the aims, the needs, the management, and the accomplishment in order to insure adequate financial support.


Set a woman to catch a fly. American school board journal, 77: 12, 128, August 1928.

Describes a method used to interpret school costs to the public and contends that each school board should have one woman member.


Gives five principles of financial accounting in relation to publicity purposes and types of financial statements which will serve for both accounting and pub-
Purchasing Economies


Pupil Cost Accounting


A discussion covering the requirements, fundamentals, importance, and analysis of an accurate per-pupil cost system, properly supported with data in scientific and accurate form.


A uniform financial procedure for the public schools of Michigan having a population of 2,000 or less. Lansing, Mich., State teachers association, 1924. 16 p. (Bulletin, no. 4, pt. 2, April 1925.)


This committee, at work on a report already drafted for preliminary criticism, aims to coordinate the work of previous investigators, to test and apply the principles of school accounting authorities, and to amplify and clarify where this is deemed helpful.


The methods of deriving the cost of equilizing a minimum program of education are outlined and presented informally to the public in a diagram and graphically.

RECORDS

Material on records for any financial procedure, e. g., Payroll Accounting will often be found in references under that head. See also Reports.


A description of the forms for the minute book unusual budget, initial records, pay rolls, distribution of expenditures, general ledger, property ledger, treasurer's register, revolving fund accounts, stores accounting, indebtedness, and internal accounting which have been recommended by the U. S. Office of Education and the National Association of Public-School Business officials.

RECREATION


A graph shows the increase of per capita expenditures for recreation in cities of more than 30,000 population from 4.95 in 1911 to $3.40 in 1927.

REPORTS

Material on reports for any financial procedure, e. g., Cost Accounting will often be found in the references under that head. See also Public Relations; Records.

ALEXANDER, CARTER. Index for a school report. New York, N. Y., Teachers college, Columbia university, 1927. Useful as a check list of finance items that should go into such a report.

CLARK, ZENAS R. The recognition of merit in superintendents reports to the public. New York, N. Y., Teachers college, Columbia university, 1930. (Teacher's college, Columbia university. Contributions to education.)

Analyses 56 city school superintendents reports and evolves criteria and principles of school reporting which will make financial reports effective and appealing to the public. Makes specific recommendations for improved reports.

A brief treatment of comparable school statistics emphasizing the need for uniform financial reports. Quotations are given from United States Office of Education, Bulletin 1929, no. 24, Report of Committee on Uniform Records and Reports.


Discusses the need of clear financial statements regarding school debt, 12 essential features of school bonded debt statements, 7 features of sinking fund statements, important funded debt ratios, the relationship between debt plans and current educational programs, some case studies, and statements of temporary loans.


Discusses financial conditions, annual financial reports, the balance sheet, funds, the general fund, building funds, the assets of a school district, property as an asset, assets and liabilities of the general fund, building fund balance sheet, bonded indebtedness and the balance sheet, and the consolidation of the balance sheet. Some balance sheet forms are reproduced.


Presents a complete set of forms for reporting receipts and expenditures.


Analyzes the purpose of the balance sheet and the value of liability records. Explains how the balance sheet and complete liability records constantly clarify the financial status of the school system.


The historical development and purpose of school reports, chiefly of annual and biennial reports of State departments of education. Views of their present status, analyzes and critically evaluates them. Includes and presents in a readable form, criteria for judging their merits.


Discusses in detail the principles and techniques of coordinating school financial reports with publicity programs. Analyzes State laws relative to school reports and types of financial statements and presents five principles of financial reporting. Lists and evaluates effective agencies of school publicity. Outlines a model publicity program and gives a selected bibliography.


Techniques

See also Costs, Methods of Calculating and Index Numbers. For research techniques for any specific phase, e. g. Budget, see references under that head, some of which are likely to include discussions of pertinent techniques.


Running review and bibliography of research and survey techniques used in school finance between 1923 and 1931.

Barr, A. S. and Rudhill, Mabel. An annotated bibliography on the methodology of scientific research as applied to education. Madison, *University of Wisconsin*, 1931. 130 p. (Research bulletin no. 13.)

More than 600 selected general and topical references, including measurement and statistics, well annotated, classified, and arranged. Valuable for all interested in conducting sound research in school finance.
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Types of surveys as to the personnel employed are discussed and evaluated. The survey by a staff from the State department of education is favored and the author outlines its operation in the State of Ohio during the past year. The details in collecting, organizing, and interpreting data are explained.

STRATAt, GEORGE D. The work of the Division of field studies. Teachers college record, 33: 113-13, November 1931.

Birds-eye view of the aims and methods of work of the school survey activities of the Division of field studies of Teachers college, Columbia university, for the past, 10 years.

REVENUES

CITY SCHOOL.

See also Revenues, School, Statistics


FEDERAL

[Data on federal revenues appear in publications of the United States Treasury Department, such as the annual report of the Secretary of the Treasury or Statistics of Income]


A discussion of education in relation to contemporary civilization. Describes the methods used to force the National Congress to guarantee the Western States the income from their school lands regardless of whether those lands were mineral or not.

NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. Proposals for changes in the Federal internal revenue system. New York, N. Y., National industrial conference board, 1927.

GENERAL

See also Taxation, General


Running review and bibliography of researches in this field, stressing those from 1923 to fall of 1931.


Considers the source, the volume, and the distribution of funds. The study also attempts to clarify our thinking concerning the sources of school support, and the exigencies and problems that attend such support.

CALLAHAN, JOHN. Sources of income for the public schools. Wisconsin journal of education, 58: 309-10, April 1926.

CLARK, H. F. The effect of population upon the ability to support education. Bloomington, Ind., University of Indiana, 1925.

Points out that the percentage of population, which is of school age is a major factor in the effort a district will have to make to support an adequate program of education. Includes data to show the varying percentages of children of school age in the various States.


Deals with Federal, State, and local participation in school finance and describes methods of taxation and distribution of funds. Suggests the injustice of existing taxes and remedies, and outlines a model State financial policy.


Discusses the history of early endowment funds, evolution of school taxation, the rise of taxing inequalities, the necessity and advantages of larger units, new forms of taxation, modification of State tax systems, the "model plan"
of the National Tax Association, methods of State aid, the State's share of educational costs, budgets, tax levies, fiscal independence, and recent studies in an effort to devise an effective theoretical and technical basis for the administration of a State school taxing system.

Education given greater support since the world war. *Nation's schools*, 3:41, May 1929.


Makes a general examination of State subventions, Federal funds, local taxes, tuition, private contributions, school fees, service charges, and bonds as sources of school revenues.


Presents evidence and arguments to support a recommendation for a revised tax system which will tap all the resources of the various States, and a consolidation of State resources into a state-wide educational program.


Reviews the economic and financial foundation of the school. Its historical relations to the State, sources of school revenues; the theory of the State as the financial and administrative unit of education, attempts at equalization, Federal, State, and local educational obligations, and kinds of taxation. Includes the definition that taxation is a payment for service rendered to society by the State and includes property, income, excises, corporation, capitulation, inheritance and service taxes, customs, duties, licenses, assessments, and public service charges. Points out the place of the property and income tax in a sound taxation system.


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- D. C., National education association, 1926. p. 32. (Research bulletin, vol. 4, pt. 1, no. 3.)


Strayer, George D. Administration and support. *American educational digest*, 44:549-51, 596, August 1925.

Reviews the development of the county unit, the junior high school, compulsory attendance, better buildings, broadened curriculum, and vocational education, as significant educational developments. Discusses tenure, pensions, supervision, surveys, research, financial support, accounting, and public confidence, as guiding principles of further progress.

Supporting public education and distributing school funds in an attempt to help schools through their financial crisis. *School executive magazines*, 51:76, October 1931.


Gives information and evaluation of practices in raising school revenues that are invaluable for all who are to determine State and Federal policies on financing education. Covers the field thoroughly for both past and present, with separate chapters on typical systems, of school support in Arkansas, Delaware, Massachusetts, Utah, and Wisconsin. The presentation is true and fair, although many of the data are several years old.


Discusses the merits and weaknesses of new types of taxes for school revenue and names States having such taxes. Asserts that the graduated net personal income tax is required by all authorities in the field of public finance as one of the greatest and soundest taxes in existence.

Tidwell, R. E. The fiscal aspects of articulation. *In National education association*. Department of super-
REVENUES


Investigates the extent to which Federal, State, and local funds contribute to the support of public education at its various levels. Finds great divergencies among the States.


MANAGEMENT

See also Business Management; Safeguarding Funds


This chapter presents nothing revolutionary, but deals only with the steady extension of tax policies already agreed upon generally by students of municipal finance.

LOVEJOY, P. C. Administering revenue funds other than taxes. Nation's schools, 5: 81-82, February, 61-64, March, 1930.

These articles discuss policies, forms, and procedures useful in accounting for and administering internal accounts (often called extracurricular activity funds). Gives detailed suggestions of a practical plan.


Discusses per-capita wealth, using four methods to show what population a community will have and the application of each to school revenue. Describes three methods of property valuation forecasts.


NONPUBLIC

See also Foundations; Tuition

Bequests and gifts for education and other public purposes. School and society, 33: 81, January 17, 1931.

Analyzes the distribution of philanthropic bequests during 1930 in New York City. Of $36,983,396 bequested to all cultural interests, education received $25,784,500.

EMMAN, EDWIN R. Julius Rosenwald fund: A review to June 30, 1928.

Chicago, Julius Rosenwald fund. 1928. 47 p. illus., map, tables.

A statement of the history of this philanthropic fund. Includes a summary of the work accomplished by State. Diagrams of buildings recommended. During the year 1927-28 the fund assisted in the building of 369 schools, 46 shops, and 27 teachers' homes.

Funds in honor of Dr. Cabot. School and society, 32: 555-56, October 25, 1930.

JAGGERS, W. E. and others. Financing the rural schools of Kentucky through local community effort: a survey of the funds raised through extracurricular and intracommunity effort in 1923-24. Kentucky high school quarterly, 11: 3-18, October 1925.


Gives figures of contributions in a typical American city (New Haven, Connecticut) for all kinds of philanthropy by separate activities, including secular education and recreation. Compares volume of giving with the community's wealth.


Table 3, p. 13 gives similar data for Alabama.

ODELL, WILLIAM R. Gifts to public schools. Doctor's dissertation, Teachers college, Columbia university. (To be published in 1933 as a bulletin of the United States Office of education.)

Acceptability and extent of gifts to public schools at the elementary and secondary levels, and standards by which donations to the public schools can be judged. Extensive compilation of such gifts throughout the country and case studies of 13 communities with outstanding gifts.


Proposed gifts of Mr. DuPont to the schools of Pennsylvania. *School and society*, 81: 559–60, April 26, 1930.


Expresses the appreciation of the Department of Research of the Training School at Vineland, N. J., for the generous gift (by Mr. and Mrs. McDonnell) of a complete set of Bell and Howell Motion Pictures which will be used in photographing objective evidence of the progress made in the treatment of motor features of children.


An examination of the legality of various incidental fees of public schools through an analysis of school laws and court decisions. The legality of matriculation, tuition, heat, light, water, laboratory, library, Y. M. C. A., and athletic fees is discussed. The status of illegal fees is also discussed.

**WILLIAMS, PIERCE, and CROXTON, F. E.** Corporation contributions to organized community welfare services. *National bureau of economic research*, 51 Madison Avenue, New York City. 347 p.

Covers proportions going to different interests in nearly 160 American cities, gives relative contributions to community chests by various industries, considers contributions in cities in which corporations have interests, and presents data on corporation donations to war service appeals.

**PUBLIC RELATIONS**


A comprehensive history of methods and theories of public-school support and attitudes toward taxes, reviewing the extended use of lotteries, the charity and the rate bill, and the 1835 speech of Thaddeus Stevens. Discusses the importance of enlightened leadership, recent legislation, school costs, and national ability to pay, with respect to present discussions and tendencies.

**MARTIN, JAMES W.** Possible attitudes toward the purposed gasoline tax system. *Texas outlook*, 11: 12–13, January 1927.

Describes a publicity program to secure public support for the adoption of a State gasoline tax for the support of public schools in Texas. Discusses three attitudes which the public may adopt and charges teachers and school boards with the responsibility of seeing that they adopt the right one.


Explains to teachers that problems of class size, teacher-load, and salaries are outgrowths of the taxation problem and that their problems of low salaries and crowded classes will be solved when the public is informed of the values of education and that taxation laws which provide adequate school funds will then be rationally and deliberately supported.


A school board member explains that whether school costs are too high is a moot point, and whether a policy of expansion or retrenchment shall be pursued, depends almost entirely upon the relative values of the population places upon education and other social activities.

**STEVENSON, P. H.** Campaign publicity for schools. *Columbus, Ohio, Ohio State university*, 1926. 60 p. Chapter III. Bulletin (Ohio State university), 1926.

Presents detailed illustrative material and suggestions for organizing and conducting campaigns for better school support. Considers the amount and source of funds for financial support of the campaign.


Examines the ability of communities to support education, the relation of taxes to the wealth of the community, the percentage of total taxes absorbed by school expenditures, and the values of education, to reveal the relationship between taxation and county school support.

**SCHOOL STATISTICS**

School income and revenue statistics classified by sources for individual States and cities appear regularly in bulletins of the United States Office of education. See State School Statistics; City School Statistics. Many valuable statistics of yields from various taxes, both actual and potential, appear from time to time in the research bulletins of the National Education Association. Example, page 51 of vol. 6, no. 1, January 1927. The items can be located through the index issued at the end of each volume. The United States Bureau of the Census gives school revenue statistics in its Financial Statistics of Cities (latest in print, 1938) and Financial Statistics of States (latest in print, 1938).
STATE, GENERAL


Two articles outline some fundamentals of taxation theory, discuss the reasons for the failure of the property tax, propose the income tax as a source of State revenue, and treat its administration.


Explains that schools can not rely upon the general property tax to support their program, enumerates various supplementary taxes, and investigates the status of these taxes in various States.


Indicates by States a wide variety of recent educational activities, experiments, and plans for school support.

McQuiston, Fred. Financing schools in the South. *Nashville, Tenn., George Peabody College*, 1930.

Data regarding sources, amounts, and distribution of public-school revenue in the Southern States, 1930. Tabulates amounts of Federal, State, county, and local income for public elementary and high schools in Southern States, 1929-30, and analyzes expenditures.


A presentation with a theoretical discussion of 17 principles governing the collection and apportionment of school revenues.


Covers such issues as taxation, legislative appropriations, and the State permanent school fund. Each of these topics is represented in an annotated bibliography of 56 references, alphabetically arranged and indexed 1-56. The material included from 1914-1929 covers text books on public finance, theoretical discussions of taxation, and reports of State school and financial surveys.

State revenue for public education. In Bibliographies on eight problems of school legislation.


An annotated bibliography of 34 references from 1911-1930 alphabetically arranged and indexed, including many types of material. Gives theoretical discussion of taxation, description of some of the more recent developments in methods of taxation, reports of State financial and school surveys and a brief list of sources of statistical information on economic resources and public expenditures.


Stresses the need for scientifically derived standards for selecting, collecting, and distributing State sources of revenue.


Discusses State tax collection machinery and explains that since most of our State wealth is composed of income and intangible property, we can not expect to collect adequate revenue from a tax on tangible property and real estate which represents only a fraction of our ability to pay. Recommends income taxes.


A presentation of some of the more important findings with respect to the general property tax as a source of school revenue in 48 States of the Union. Enumerates the status of the State school (nine types of school taxes) and shows the number of States using each type of tax.


The responsibility of the State for education. The three major sources of State school revenue. State permanent school fund, Appropriations, taxes versus appropriations, the general property, poll, and miscellaneous taxes. Urgent need for new sources of school revenue, assessment evils, inevitable inequalities of assessments.

INDIVIDUAL STATES

See also Finance, Public, States; State Support; Taxation, States, Individual.

Alabama. Noble, M. C. S. The support of public schools in Alabama.
Arkansas.

Arizona.

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Phoenix, Ariz.,

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A statement as to local and State sources of revenue for public schools in Delaware. Legal provisions; amount raised; methods of collection and distribution of local and State school funds. Also reference materials. On reference at State department of public instruction. Not for distribution.

School support, its sources and distribution in the State of Delaware. Education bulletin, New Jersey, 10: 180-82, April 1924.


Georgia's support of education. Georgia educational journal, 22: 26, February 1930.

McNutt, Paul V. Public support of education. Georgia educational journal, 21: 37, April 1929.


A statement as to local and State sources of revenue for public schools in Georgia. Legal and State school funds. Also reference materials. On reference at State department of public instruction. Not for distribution.


Discusses why education costs more. Idaho's well-balanced system, the State's selective process, sources and amounts of income, what State institutions are doing, growth of institutional needs, budget recommendations, and vocational education. Brief conclusions.


Some miscellaneous comments upon school revenues in Illinois. Illinois teacher, 14: 10-17, 14: 28-33, 14: 42-48, September, October, and November, 1925.

State department of research and statistics. School revenues in Illinois; some miscellaneous comments upon the origin, administration, and use of the public-school funds in this State, 1925.


State teachers association. Research department. School revenues in Illinois; some miscellaneous comments upon the origin, administration, and use of the public-school funds in this State. Based upon the findings of the Research department of the I. S. T. A., 1925. (n. p. 1925) 30 p. incl. tables, diagrams.

Reprint of three articles on the problem of public-school finance, published in the Illinois teacher for September, October, and November, 1925.

Swift, F. H. Studies in public-school finance. The middle West: Illinois, Minnesota, South Dakota,


Mort, Paul R. Improvement of the Kansas plan of financial support for common schools. Kansas teacher and western school journal, 28: 17-21, November 1928.

Some problems confronting the school code commission together with supporting data. Topeka, Kansas, State code commission, 1928. 88 p.


A study of Kentucky's rate and amount of taxation to determine if an increase in the present tax rate for school purposes is the thing that is needed for the proper financing of public education in Kentucky. Questionnaires which were filled out by all the county superintendents of Kentucky relative to revision and redistribution of school funds, higher standards and better qualifications for teachers, removal of a limit on local taxation are considered.

Report of committee on educational finance of the Kentucky educational association. Kentucky school journal, 4: 19-25, December 1925.

Smith, Bent R. Sources of revenue necessary in an equal distribution program. Kentucky school journal, 6: 14-17, January 1928.


Recommends general sales tax, admissions taxes, the income tax, inheritance and estate taxes as sources of revenue which will relieve property of a portion of its burden.


A statement as to local and State sources of revenue for public schools in Maryland. Legal provisions, amount, raised, methods of collection and distribution of local and State school funds. Also reference materials. On reference at State department of public instruction. Not for distribution.


A progressive diagram indicating the 12 steps of the legal process by which a district school-board in Michigan secures its funds. The diagram is one of a series in the chapter entitled "Cost accounting."


State department of Montana. 1931 legislation budget of the State of Montana, showing actual receipts and disbursements of all funds and departmental costs for years 1928-29, 1929-30, and estimated revenues and expenditures for 1931-33. Helena, Mont., 1931.


Suggestions for the revision of the New Jersey system based on presented statistics relative to the yield of different forms of revenue and a description and criticism of these various forms.

—Comparison of the receipts of the various school districts from the State, district taxes and other sources. Education bulletin, 17: 69-98, October 1930.


Discusses wealth, duty, and effort as revealed by an investigation of the economic resources of the various counties of New Jersey, the assessed valuations, methods of assessment, true valuation, income, bank resources and value of products per pupil, and examines economic factors as a basis of taxation. Includes a plan for general property tax, personal income tax, and a business tax in the recommendations.


A statement as to local and State sources of revenue for public schools in New Jersey. Legal provisions; amount raised; methods of collection and distribution of local and State school funds. Also reference materials. On reference at State Department of Public Instruction. Not for distribution.


Statistics of various forms of revenue, particularly local ones, for 1928. Describes and criticizes these forms. Makes suggestions for revising the revenue system and especially for tax equalization through disposition of new avenues.


A statement as to local and State sources of revenue for public schools in North Carolina. Legal provisions; amount raised; methods of collection and distribution of local and State school funds. Also reference materials. On reference at State Department of Public Instruction. Not for distribution.


— Report to commission of school finance of Ohio State, Columbus, Ohio. Ohio institute, January 1926. 51 p.


A statement as to local and State sources of revenue for public schools in South Carolina. Legal provisions; amount raised; methods of collection and distribution of local and State school funds. Also reference materials. On reference at State department of public instruction. Not for distribution.


—— State high school funds. Tennessee educational bulletin, 7: 1-2, April-May-June 1926.


Revenue receipts from State sources; per pupil in average daily attendance in elementary and high schools. Texas outlook, 13:17, December 1929.


Investigates State and local contributions to school support and makes recommendations by which the State shall assume a greater share of the burden. Includes data on Federal, State, and local sources of school support.


Analyzes in considerable detail sources of Wisconsin school revenue. Shows sources of school revenue in a number of other States. Compares cost of schools with other expenditures.


STATISTICS

Tax revenue statistics, as such and without reference to the purposes for which they were levied, appear regularly in the standard Cost of Education series of the National Industrial Conference Board. The latest, issued in 1931, covers the latest feasible years for the various items. Amounts, percentages, and per capita figures are included. Each volume gives important figures for several previous years. Sources of data indicated.

RETIRED COSTS

See Retirement Costs

AID

See State Aid, Rural

COSTS

See also Consolidation Costs; Instruction Costs; Rural; Rural, County Unit Costs; Supervision Costs; Transportation Costs

Alabama. McAdory, Margaret. The cost and direction of art education
In rural schools. *Journal of rural education*, 5: 45-54, May-June 1926.

An analysis of the relationship the art supervision bears to the administration in Jefferson County, Ala., at a per-pupil cost for art supervision of 9 cents a year.


Includes activities for financing rural schools during 1926-28, such as the creation of building funds, funds for the education of the children of migratory families, increases in county superintendents' salaries, consolidation and transportation costs. Discusses equalization activities in Connecticut and New York.


Expenditure for teaching and supervision per child enrolled in rural schools, 1924-25. *University of North Carolina news letter*, 12: 1, August 12, 1926.


COUNTY UNIT, COSTS


Explanations of need for county unit in purchasing school supplies. Information concerning practices in the various States. Tables showing possible saving in an Alameda County, Calif. Recommendations.


Louisiana. Richardson, E. S. How the county unit system enables the board to save money. *The Nation's schools*, vol. III, no. 4, April 1929. p. 27-32.

Summarizes the financial economy accomplishments in Webster Parish, La., since the adoption of the county unit. The county unit method of operating schools is simply the application of business methods to school procedure.

McClellan, Edward Earl. Possible economies in a county administration of schools. M. A. thesis, 1930. *Ohio State University, Columbus, Ohio.*

Ohio. Wood County. County supervision and school costs; attendance and school costs; cost of school su-
supervision in the Wood County school district; supervision program for 1923-24.


Shows the essential features of the plan (p) permissible in Oregon) to make the county the unit for the support of schools. The expense of education in Crook County, Oreg. which has the county unit plan in less than it was under the district plan.


Compares, in graphic form, cost of various items of general control in Chester County, P.a. and in Baltimore County, Md. Concludes county unit would be less costly for Pennsylvania than the township system.


A general discussion of the administrative advantages in costs of a larger unit (county) as contrasted with a smaller unit or units, such as those controlled by a local board. Points out that there are variations in costs wherever small units of administration exist. Uses conditions in Pennsylvania as an example.

Turner, H. L. Tentative standards for the distribution of expenditures in county school systems in the South. Nashville, Tenn., George Peabody college for teachers, 1929. 81 p. (Contributions to education, no. 52.)

Determines how a given amount of money should be distributed among the various phases of a county educational program in the southern States. Uses data for 1921-1924 to show the distribution of expenditures for the major items of total and current school costs, expenditures for the main subdivisions of general control, instruction, and auxiliary agencies, expenditures for elementary and high schools, and for white and Negro schools in 60 counties of Louisiana, Tennessee, Maryland, and North Carolina. Draws 34 conclusions.

COUNTY UNIT, GENERAL


A section deals with school finance.


Describes the various relationships existing between State and county budgets and between county and lesser district budgets in regard to building programs, budgets, taxation, and consolidation.


Cites specific examples of efficiency and economy arising from consolidation.

Hart, F. W., and Peterson, L. H. School district system in California. The tax digest, August 1928, p. 267; California taxpayers' association, Los Angeles.

Statistical summary of the school district situation in California with interpretations of the difficulties and methods of improvements explained by authorities.

Tocson, Frank C. Basic principles embodied in the tentative draft of the proposed county and city district plan of school administration bill. Sierra educational news, 15:1, January-1929.

Cyberluky, E. P. Outgrown district school system impedes educational progress. The tax digest, May, 1929, p. 152; California taxpayers' association, Los Angeles.

One of the best non-technical accounts of the need for and operation and advantages of county unit of operation of school systems. Explains how savings are effected while increasing facilities.

Dietert, C. C. County unit system of school organization. Elementary school journal, 27:209-11, November 1926.


Sets forth briefly the general history and theory of educational inequalities of support and opportunity as related to districts and county educational organization in Florida in 1925-27, and measures objectively the extent of the actual inequalities accompanying the development of the special tax school districts.


Shows that the range in taxable wealth per school child between counties is about 1 to 6, as compared to a range of 1½ to 19 between school districts. The leveled tax rate would be even less between counties.


Presents budget data showing resources per child by county.


Smart, Thomas J. A proposed larger school unit for an area in northeastern Kansas. Lawrence, University extension division, University of Kansas, 1927. 117 p. (University of Kansas studies in education, vol. 1, no. 8, July 1, 1927.)

A detailed study of the factors involved in the administration of 5 rural high-school districts, including valuations, school tax levies, present school costs (in relation to enrollment and size of plant), and buildings with view of improving the administrative unit for the 5 schools.


Richardson, E. S. The county unit and the consolidated school. Journal of rural education, 5: 12-16, September-October, 1925.

Describes the work of the county board of education in Louisiana, including those in relation to school expenditures.


Shows what the effect would be if the county were made the unit for school administration and for raising school taxes. Presents data showing resources per child by county.


A study of the inauguration and conduct of the county unit of school administration in New Mexico. Contains a section on pages 7 and 8 which shows the effects of county levies covering the district before the county became the unit for administration.


A study of the inauguration and conduct of the county unit of school administration in New York. Contains a section on pages 17 and 8 which shows the effects of county levies covering the district before the county became the unit for administration.


Discusses the relation in North Carolina between the county board of education and the board of county commissioners of which the county superintendent and the county accountant are respectively agents. A common board for understanding the interest of the taxpayer is the end in view.


Presents budget norms for 31 items of school expenditures as found in three types of county school districts. Discusses different budgetary provisions essential to the individual needs of different types of districts and budget items which usually show the greatest variability. Makes a few comparisons between State, county, and city systems.


A detailed study of rural and village school districts in Ohio and shows the effects of districting on finan-


Relates the improved education made possible by consolidation while reducing expenditures.


Presents detailed data comparing the expense of administering schools in Utah with that in a number of other States. Analyzes district superintendents' salaries in Utah and includes recommendations for increasing same to correspond to salaries paid to superintendents of cities.

COUNTY UNIT SUPPORT


Data showing inequalities in school burden and arguments for a county unit organization.


Includes the county's part in public school support.


Presents data showing provisions for county school funds in 21 States. Shows a high correlation between county unit and counties having county school taxes. More than one-fourth of the States levy county taxes in sufficient amount to make a third or more of their total school money.


Some problems of the larger school units in Illinois. Springfield, Ill., Illinois State teachers association, 1923. 21 p. (Department of research and statistics. Illinois State teachers association.)


Facts relating to the peculiarities of taxing provisions for school support in...
Kansas prepared by the State school code commission in 1928. School districts show decided overlapping in taxing units. In certain counties property is assessed to pay a county-wide high-school tax, a local high-school tax, and an elementary school tax. Suggests larger taxing units as a remedy.

Louisiana. Richardson, E. S. The county-unit plan in Webster Parish. *Journal of the National education association,* 18: 103-4, April, 1929.

Discusses the county school system from many aspects, particularly that of school finance. Shows savings resulting from the county unit organization.


A study to show the need of the county unit in Missouri, with statistics on costs and overhead outlay per teacher. Rural schools graduate fewer pupils than urban schools but costs are greater.


Discusses school finance and the county unit law in Montana. Only 3 of the 54 counties came under the law which is optional.


Three hundred and thirty-two rural schools in 11 typical rural counties visited. Study made of houses, grounds, and equipment; health, attendance, taxation, and administration. Indicates how the county unit for Pennsylvania would be more efficient than the present plan in use.

Texas. Blodson, J. M. Selection of county superintendent and levy of county school tax; expert opinion gathered from every section of the United States. *Texas outlook,* 10: 10-12, September, 1926.

A discussion giving four reasons for increasing the size of taxation units and the status of the county-wide school tax. The data were obtained from questionnaires answered by the State superintendents of 46 States. Twenty-five States have a county-wide school tax.


Discusses the reasons for county unit, including that of raising revenue in a larger taxing unit. Discusses county school system's expense account.

GENERAL


State provisions for special aid for small schools, consolidation, transportation and board, high schools, tuition of nonresident pupils, rural supervision, rural and consolidated buildings, and salaries are summarized in Part II.

Boraks, J., and Selke, G. A. Rural school administration and supervision. *D. C. Heath and co.,* 1926. Chapter VIII.


Campbell, Macy. Rural life at the crossroads. *Boston, Glenn and co.* [1927.] x, 482 p. illus., tables.

A description of rural life as the author saw it. The discussion dwells on the economic phase of the problem. It argues that education must solve the farmer's problems.


Discusses the economic importance of meeting rural school needs.
COMPTON, Ralph Theodore. Fiscal problems of rural decline; a study of the methods of financing the costs of government in the economically decadent rural areas of New York State. Doctor's dissertation, Yale university. Albany, N. Y., J. B. Lyon co., 1929. 283 p. (Also New York State Tax Commission special report no. 2.)


Includes financial provisions in certain States.


Has a section on finance.

An annotated list of studies regarding the Onaga rural high school, in rural and small population centers. Washington, U. S. Government printing office, 1929. (U. S. Office of education. Rural school circular, no. 34, April 1929.)

Includes finance problems in a number of the studies of legal provisions.

Hanna, G. W. High-school privileges for the rural child. North Dakota teacher, 10:10, January 1931.


Lowden, F. O. Rural school improvement. Illinois teacher, 18:266, April 1930.

Massachusetts. Reports of the committee on progressive movements in rural education in Massachusetts. Massachusetts, Department of education, 1925. (Conference of superintendents of school series.)


General effective treatment with statistics and citations from authorities to show for rural education that: Methods of raising public revenues are antiquated and inefficient; wealth is unevenly distributed and state-aid distribution provisions often fail to recognize this; the units of administration are too small for effective financial management.


Discusses, among other problems of rural education, economic factors of rural life, and methods and guiding principles in the financing of rural education.


Smith, S. L. Rosenwald schools in 1926-27, the progress of rural schoolhouse construction work under the Rosenwald Fund. School board journal, 75:120, September 1927.


One section of the bibliography relates to studies on rural school finance.
West Virginia. School survey of type counties of West Virginia. Charles-
ton, W. Va., State department of
ural schools, normal schools, col-
eges and universities, 1923. 77 p.

**PUBLIC RELATIONS**

**ALEXANDER, CARTER.** Publicity work
for better support of rural schools.
*Journal of educational research*, 7:
1-13, January 1923.

Discusses fundamental considerations
that should direct publicity work to se-
cure better financial support for rural
schools. Lists with evaluations by ex-
perienced field workers 10 common edu-
cational interests of rural people which
may be stimulated to secure school finan-
cial support.

**COOPER, W. M. JOHN.** Some suggestions
for improving rural school adminis-
tration and support. *School life*,
14:141-43, April 1929. (See also
National education association pro-
cedings, 1929, p. 501-4.)

The United States Commission of Ed-
ucation recommends a larger unit of rural
school administration, modified systems
of apportionment, improved personnel,
State definition of standards, and State
and county supervision of rural schools
as movements which will improve rural
school administration and support.

**PECK, R. R., and STEVENSON, P. R.**
Rural publicity. *Educational re-
search bulletin*, Ohio State univer-
sity, 2:315-20, November 28, 1923.

A schedule in the form of a check list
prepared from a study of the method
used in city publicity was sent to people
experienced in rural school financial prob-
lems to determine what has been suc-
cessful and what unsuccessful in rural
school publicity campaigns. The most
common purpose for campaigns was cap-
tial outlay, the most effective means of
publicity was the personal interview and
ignorance was a cause of failure in 100
per cent of those cases that failed.

**SELLERS, D. H.** Some concrete prob-
lems in financing rural schools. In
Ohio State educational conference.
Proceedings of the fifth annual ses-
sion, 1925. *Columbus, Ohio, Ohio
2. p. 176-82.

By an examination of certain general
facts involved in rural school finance
problems, such as tax duplicates, tax
rates and tax returns, causes for in-
creased costs and the effect of building
programs, this article reasons its way to
plausible solutions. Concludes that ad-
imistrators must provide the public with
the facts to prevent the operation of un-
reasonable emotional oppositions to the
maintenance of educational programs.

**SOUTHWICK, EDWARD.** Financing pub-
lic education from the viewpoint of
the farmer. *Utah educational re-
view*, 18:180, 178, December 1924.

Reviews the distribution of educa-
tional opportunity and points out the
impracticalities of the urban curriculum
when carried into rural districts. Calls
attention to the need for a practical
curriculum and an equitable distri-
bution of the tax burden.

**SUPPORT**

See also Rural County Unit. Support;
Rural, General; Taxation; Support

**BALDWIN, ROBERT DODGE.** Adequate
financing of rural schools: is it solely
the farmers' problems? *School and

As the article implies, adequate financ-
ing of schools implies a sufficiency of funds
to maintain a high standard educational
program, an equity of tax burden, and
riches of educational benefits, and points
out that an adequate rural education
program is fundamental to the long-
sequent development of rural and urban
culture. Presents a model plan for the
apportionment of State school funds.

**CLARK, H. F.** Measuring the ability
of poor townships to support schools.
*American school board journal*, 75:
69, 143-44, August 1927.

Also in Indiana university, school of
education. Thirteenth annual con-
ference on educational measurements,
1926. p. 73-78. (Bulletin, vol. 2, no. 5.)

Examines the wealth of some rural dis-
tricts obviously too poor in natural re-
sources to support schools or any other
public enterprise and contends that ap-
portionment of State aid to such districts
actually encourages people to live there.
When, as a final solution of the difficulty,
they should be encouraged to move to a
more fertile district.

**HERBERT, P. A.** Better rural schools
and lower taxes. *Education*, 61:
245-49, December 1930.

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**Rural school finance and or-
ganization. School executives mag-
azine, 50:172-73, December 1930.

Emphasizes Federal aid as a boon to
education in rural communities. Ex-
penditures should be placed in competent
hands and the property tax remitted.
The burden on local real estate can be
lightened, yet revenues increased for edu-
cation and the cost of education be-
reduced without reducing its quality.

**INDIANA. Report of Indiana rural education survey committee. In-
dianapolis, Ind., State, 1926. p. 58-
65, 92-96.**

**KANSAS. MAST, T. J. A proposed
larger school unit for an area in
Northeast Kansas. *Lawrence, Kan-
s., University of Kansas*, 1927.
117 p. (Kansas studies in educa-
tion, vol. 1, no. 8.)

Discusses financial economies of a
larger unit in relation to the economic
and social conditions prevailing in the
districts under consideration and in
terms of modern educational practices
and objectives. Administrators will be
interested in the analysis of tax burdens.
Kentucky. JAGGERS, R. E., and others. Financing the rural schools of Kentucky through local community effort: a survey of the funds raised through extracurricular and intracommunity effort in 1922-24. Kentucky high school quarterly, 11: 3-18, October 1925.


A fundamental and comprehensive discussion of the problems involved. Examines the obsolete property tax, the more modern income tax, and outgrown districts of taxation. Analyzes methods for distributing State aid and equalization funds. Recommends a program of equal State support as an immediate solution of rural school finance problems. A measure of educational load as a basis on which to distribute Federal aid to the State is necessary for an ultimate solution.

Oregon. RAINEY, Homer P. The problems of financing the rural schools. American school board journal, 75: 55, 130, 133-34, August 1927.

Discusses the problems of readjusting tax levies and the reapportionment of State funds in order to equalize opportunities among the rural districts of Oregon. Includes tables showing the school income of ten Oregon districts in relation to their educational burden.


Problem of adequate financing for the rural school. Nation's schools, 2: 72, December 1928.

Shows that adequate financing of education implies a sufficiency of funds to maintain a high standard educational program and equity of the tax burden necessary to maintain this program.


Problems 12, 13, and 15 concern the financial organization and support of township schools, county school units, and consolidated schools. Bibliographies are appended. No definite solutions are given. Problems 16 and 17 consider State aid to all schools, including rural and suggest principles and plans for effective apportionment.


A review of the methods and rates of rural taxation, and Alabama's equalization plans. Outlines tax reforms for the benefit of rural taxpayers and suggests large national equalization funds.


A section discusses the outstanding developments relating to educational finance with particular attention to State equalization and increased State funds in general. Relevant data supplement the explanation of progress.


Discusses rural educational finance, methods of administering the various phases of equalization plans, and the advantages that can be expected to accrue from these plans.

SURVEYS


The report contains many data relative to consolidation and transportation. Average cost for the year 1923-24 per elementary pupil in townships having only 1-room schools was $42.62 and in other townships it was $61.56; less transportation cost in each case. These costs are $40.86 and $43.74, respectively.


In this volume of the survey report the committee recommends a larger unit for taxation which does not necessarily mean consolidation. The community plan is proposed.

North Carolina. Morrison, F. W. State educational commission. Report on the public-school system of
SAFEGUARDING FUNDS

North Carolina. State educational commission, Raleigh. N. C., 1927. A detailed study of the educational finances by counties. Shows school tax levies in relation to length of terms where the schools are administered by county boards of education.


Three hundred and thirty-two rural schools in 11 typical rural counties visited. Includes taxation. Indicates how the county unit for Pennsylvania would be more efficient than the present plan in use.


SAFEGUARDING FUNDS


A brief historical sketch (1791 to the present time) as a preface to a description of the policy of the United States Treasury Department regarding the deposits of public money. Considers the present policy in three phases: 1. The period ushered in by the establishment of the Federal Reserve System. 2. The period after the entry of the United States into the World War; and 3. The period covered by the inevitable readjustment.


Fowlkes, J. G. Protecting public-school funds at all times. Nation's schools, 7: 50, April 1931.

Fraser, Henry S. Safe deposit companies and the law. Bankers magazine, CX: 819-21, May 1925.


Practical suggestions and citations from authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Considers the practical and economic limitations of reserve funds (interim reserve, building reserve, sinking fund reserve, insurance reserve, and contingency reserve) for financing education from the standpoint of business management of the reserve funds and the difficulties evolved in safeguarding such funds.


Analyses the bonding of school officials with special reference to weaknesses and limitations in the law, types of bonds, broad liability under law, personal versus corporate surety bonds, and presents authoritative opinion regarding the use of personal bonds.


A rather technical treatment of bonding with special reference to legal aspects. Limitation on liability, approval of bonds, termination of liability, receipts versus expenditures, and the amounts for which bonds should be written are some of the questions considered.


Methods for safeguarding school funds are analyzed in a series of three articles considering the dangers of bank failures, the basis for selection of public depository, the liability of public officials, and methods and types of financial security. Guaranty funds and sinking funds as means of financial protection, and various legal rights of preference in the liquidation of the funds of solvent banks are examined, as a result of which four principles for the protection of public deposits are listed. Tables charting the number of bank failures in various States, 1921-1929, and analyzing the legislative provisions for the security of school funds supplement the discussion.


Analyses causes for school fund losses, makes a thorough research into the legal
procedures of using surety bonds as safeguards for school funds, and designs a procedure for selecting sound depositories for school funds. Makes seven definite recommendations and suggests further research.


Estimates the amount of school funds deposited in banks and examines various statutory provisions for payments of interest on school money. Argues for a uniform rate of interest on school deposits and presents a plan for depositing school funds to yield the best interest return.


MACKAUL, LUTHER E. A handbook on fidelity and surety bonds. New York, N. Y., Metropolitan casualty insurance co., 1924. 133 p.


Surveys legal provisions of various State constitutions and school laws for the custody of public secondary school funds and the protection of such funds against diversion and squander. Finds and lists 27 legal provisions in various State constitutions and school laws. Numbers States making such provisions.

PETERSON, J. A. Should a bank cashier act as a school treasurer? American school board journal, 83:24, 90, December 1931.

Relates the interesting and unfortunate experiences of a school district in failing to safeguard its funds properly.

Protecting public-school funds at all times. Nation's schools, 7:90-92, April 1931.

A detailed account of an actual situation in which school-board funds and school children's savings deposits were threatened with loss. Complications were encountered in trying to find a means of safeguarding that would be fair to the school and to the depositor. The various plans considered and the final adopted plan are described.

QUENELLE, BERTRAM P. How to protect school funds. School executives magazine, 51:302-5, March 1932.

Significant critical evaluation of current practices in bonding school officials, and the selection of reliable depositories for school funds. Pertinent statistics on bank failures and operations.


SALARIES

This section contains only references giving more than statistical data. Salary statistics on city teachers, higher education, and teacher training are noted under these subheads in this section. For statistics on other different classes of workers, e. g., business managers, superintendents, or music supervisors, see Salaries, Statistics.

ATTENDANCE OFFICERS


BIBLIOGRAPHY

CARR, WILLIAM G. Teachers' salaries: A guide to literature and problems. Sierra educational news, 26:22-27, June 1926.

This bibliography on salaries of teachers, consisting of 71 articles and books published previous to June, 1928, is classified under 10 subheadings, and constructed as a guide for research workers and teacher study groups.


Selected and annotated bibliography of 25 articles relating to current thought and research on teachers' salaries published during 1924-25.


Covers researches to November, 1930, to find out and report the prevalent situation and to improve schedule making. Has a bibliography and cites previous bibliographies.
CITY STUDIES
See also Salary Schedules


Includes teachers' salary schedules, improvement of teachers in service, sabbatical leave, and improved housing conditions. Points out progress.

Los Angeles Board of Education. Teachers' salaries in Los Angeles city elementary and high school districts. Los Angeles, California, Board of education. 1931.


This is the mayor's committee study, directed by W. C. Bagley, instituted as a check on the citizens' committee study entered under McLaughy, J. B.


This outstanding salary study, made for the citizens' committee on salaries, had as its purposes to determine the facts, take salary adjustments out of politics, and recommend "fair and equitable schedules which could be accepted by citizens and teachers alike." Noteworthy for the bases used and for those discarded. For each schedule the basis group used was "the indispensable professional group whose living cost was highest." Complete description of organization, work, and public relations.


Quotes New York Times on report of mayor's committee advocating better salaries for good of the child.

--- The report of the New York citizens' committee on teachers' salaries. School and society. 24: 614, 419-20; October 2, 1926.


Discussion of the techniques for studying salary problems. Treats specifically of the methods used in Pasadena schools.


Details on salary schedule and plans for administration with extremely brief statement of basic principles used. Unique feature of a personnel department to furnish the superintendent with full and accurate information as a basis for salary schedule policies.


Describes program followed in Springfield, Mass., in increasing salaries of teachers without increasing school costs and without decreasing school efficiency.
Teachers' salaries in seven large cities. American school board journal, 73: 86. September 1926.


CITY TEACHERS, STATISTICS
See also Salary Schedules


ECONOMIES
See also Economics, General: Instruction Costs: Teaching Load: Salaries, Public Relations


The economics involved in the rise and fall of teachers salaries, school board policies, and readjustments of class loads, as regulators of school expenditures.

ELEMENTARY PRINCIPALS


NATIONAL EDUCATION ASSOCIATION. Department of elementary school principals. The seventh yearbook. The elementary school principalship. The economic position of the elementary school principal. Washington, D. C., Department of elementary school principals of the National education association, 1928. p. 408-95.

Tabulates annual salaries paid 614 city supervising principals and to a number of elementary school principals in cities of various sizes in 1926-27. Median and average salaries paid supervising elementary school principals throughout the United States, and the distribution of elementary school principals' salaries in United States. Shows the maximum salaries provided in 1927 schedules for supervising elementary school principals.


Describes the four principles of the Pittsburgh salary schedule for elementary school principals: Provision of rewards for service, adaptability to the local cost of living, provision of superior personnel for principalships, and the tax-paying ability of the community.


Explains that if the public is concerned with keeping capable and trained educational leaders in the field, it will have to provide salaries for those leaders which are commensurate with salaries of other vocations requiring equal training and ability. Present salaries of superintendents are compared with reasonable salaries.


Discusses the single salary schedule for all school principals. Defends the importance of elementary education and the complex skills required to administer an effective, elementary educational pro
gram as a basis upon which a salary schedule should be built. Maintains that a single salary schedule for principals is just as reasonable as one for teachers.

**ELEMENTARY TEACHERS**

Ohio. Anderson, Earl W., and Foster, Richard R. The salaries of elementary classroom teachers newly appointed in 1929-30. In Teacher supply and demand in Ohio. 1929-30. p. 77-85. (Ohio State University, Columbus, Ohio, Bureau of educational research monograph no. 11.)

Median salaries for the State for various groups classified by experience, county, and city for 1928-29 and 1929-30.


Examines costs of living and the relative economic position of teachers in an attempt to determine scientifically a reasonable salary schedule for teachers. Gives particular attention to the matter of securing and retaining the quality of individual necessary for the efficient and effective administration of modern elementary schools.

**GENERAL**

See also Salary Schedules, Salaries, City Studies

Baer, Joseph A. For what is the teacher paid? Educational research bulletin (Ohio State university), 7: 221-30, May 30, 1928.

Bunk, Joseph E. How can we induce a satisfactory per cent of the best potential teachers to undertake preparation for this service? National education association proceedings, 1930: 829-35.

Carruthers, George E. The physical efficiency of teachers. New York, N.Y., Teachers college, Columbia university, 1924, p. 61-78. (Teachers college, Columbia university, Contributions to education, no. 155.)


Discusses teachers' salaries in relation to national wealth and income. Contends that wages of teachers are not controlled by law of supply and demand nor value of economic returns, but by ability of community to pay tradition, purchasing power of the dollar and professional opinion. Lists indications of adequate salaries in school systems.


Develops and applies, particularly in Chapters IV and V, the theory that occupational distribution is correct when people of the same level of ability receive the same wages in all occupations.


Dix, Lester. The economic basis for the teachers' wage. New York, N.Y., Teachers college, Columbia university, 1931. 114 p. (Lincoln school research studies.)

Shows the extent to which teachers' salaries approach the level required under the Pigou theory that teachers should receive the same compensation as their equally scarce native abilities receive in other occupations. Finds teachers' salaries for 1928 were a third short on this basis and discusses implications of this finding.


Presents reasons why teachers' salaries should not be reduced because of the current economic depression.


Discusses the problem of adequate salaries for teachers and points out the economic factors which influence salary fluctuation.


Analyzes and evaluates various types of salary schedules and discusses the principles of salary schedule construction and the law of salaries in relation to the wages of labor and general economic considerations such as the cost of living and supply and demand. Includes salary schedules for school engineers, janitors, and clerks.


CONTENDS that salaries determine the quality of people attracted to and remaining in the teaching profession, that salaries determine the quality of preparation of teachers, and, more than any other factor, the board's chances of obtaining the services of capable teachers, and that indirectly teachers' salaries determine the child's outlook on life. Defends these contentions as a basis for salary schedules.


INVESTIGATES teachers' salaries in the several states. Calls attention to recent increases in salaries in various groups, but concludes that such salaries are still comparatively low, and that further increases are necessary to put them at a point on the economic scale which will attract capable and well trained individuals.


INVESTIGATES wealth, income, and school costs in the United States from 1890 to 1920 and total current income and average income per person gainfully employed from 1890 to 1920. Concludes that the United States has ability to give more adequate support to public schools.


DEVELOPS a method for measuring the cost of living in various localities and an index of the cost of living and recommends that cost of living be considered in the construction of equalization programs. Shows that in New York State the index can safely be based upon food and rent only.

North Dakota. PICKLES, C. E. Salaries and professional growth of teachers in North Dakota. The North Dakota teacher. April, 1925. 4: 4-7.


COMPARES salaries paid to those in educational work in 1924-25 with increases in costs of living, wage rates, and public school salaries from 1913 to 1925. Urges the entire profession to unite in securing increases in teachers' salaries.


THE RAW TOTALS for each city and for all cities in each county for government and schools separately for 1928. School attendance data in a previous chapter could be used for computing per capita salary payments.

Ohio. The minimum salary law. The Ohio teacher, May 1926. 46: 897.

Relative value of teachers' salaries. South Carolina education, January 1925.


Advocates adjusting teachers' salaries in proportion to value of professional work done.

Considers raising professional requirements the simplest method of regulating teacher supply.

HIGH-SCHOOL PRINCIPALS


A study of the college training, salaries, and professional training of principals of 608 high schools of different sizes. Opportunities of women in high-school principalships were also considered.

Wisconsin. Harriman, Celia. Salaries of high-school principals and city superintendents of schools in Wisconsin cities. In Report of municipal information bureau, Madison, Wis., University of Wisconsin, 1930. (Document no. 8.)

Wisconsin. Lewis, L. L. Salaries of high-school principals and city superintendents of schools in Wisconsin cities. In Report of municipal information bureau, Madison, Wis., University of Wisconsin, 1928. (Municipal information bureau series, no. 63.)

HIGH-SCHOOL TEACHERS


HIGHER EDUCATION

See also Salaries, Junior and Senior Colleges

The most recent data usually are those in the mimeographed bulletin of the United States Office of Education's Division of Higher Education Statistics on Colleges and Universities and are issued about December of the odd-numbered years, teacher-training data in the even-numbered years.


Arnett, Trevor. Teachers' salaries in certain endowed and State-supported colleges and universities in the United States, with special reference to colleges of arts, literature, and science. 1926-27. New York, N. Y., General education board, 1928. 83 p. (Occasional papers, no. 8.)

Presents status of salaries of teachers in institutions of higher learning and extent of increase since 1920, based on data from questionnaires to financial officers and to teachers. Cites data on total and average salaries paid, number employed at each unit salary, salary scales, and tuition fees. The teachers' answers give data on salary, marital state, character and extent of supplementary salary, and whether from choice or necessity.

Bell, Spurgeon. Prof. Spurgeon Bell, of the Bureau of business research, Ohio State University, Columbus, Ohio, has extensive data on university salaries ready for publication. They cover professional salaries and cost of living for some 25 or 30 large and some smaller State universities comparable with Ohio State university.

Bohn, Frank. $50,000 for professors. Forum, 74: 491-501, October 1925.

A plea for higher salaries for university professors.

Carnegie Fund for the Advancement of Teaching. The notable rise in college salaries. In Carnegie fund

Makes theoretical analysis of the economic and social basis of wages and salaries and tabulates statistical evidence, which reveals that the purchasing power of educational salaries increased between 1914 and 1928.


Average teaching loads and typical salaries for various position levels for many individual institutions and for groups of colleges, using 1927-28 data. Excellent summaries and comparative figures.


Discusses the economic implications and values of keeping able men on university faculties. Claims that such men must be as well paid as men of equal ability in other fields and contends that the social economic dividend will likely be larger.


Contains 22 unannotated references on college teachers, salaries and living expenses of, to be located under that head in the index.

University teachers' salaries in Great Britain. School and society, 31: 50, January 11, 1930.

Discusses briefly the condition of university teachers' salaries in Great Britain and estimates the chances for immediate improvement.

JANITORS

See also Salaries, Other School Employees.


Outlines a plan for payment of janitors in large city systems.


The writer reviews briefly the results of two investigations on salaries paid to janitors. His article is chiefly concerned with discovering trends and practices with reference to service loads, tensions, problems of absence and substitutions, variations in cost of janitorial service, period of service or employment, and salary schedule.


Presents a scientific basis for determining the salaries of school janitors. Outlines work schedules and salary schedules used in Minneapolis. Presents nine factors which affect the amount of money legitimately spent for janitorial service in a school system.

JUNIOR AND SENIOR COLLEGES

See also Salaries, Higher Education.

Most, DYKEMA, WAHLQUIST, of Negroes for 1925-28 men and States 1931. groups of cities.


A study based on 111 questionnaires answered by members of the American association of junior colleges, showing median salaries, and tenure of faculty members and the status of retirement provisions for junior college faculties.

KINDERTAGEN TEACHERS


MUSIC SUPERVISORS


Approximate salaries for supervisors and special teachers for four size groups of cities.

NEGRO


--- Number and salaries of colored teachers by counties, 1929-30. Raleigh, N. C., State department of education, 1931.

Shows number and salaries of colored teachers in North Carolina in terms of the state salary schedule, including experience rating. Not available for distribution.

NURSES

U. S. OFFICE OF EDUCATION. School nurse administration. Washington, U. S. Government printing office, 1925. 10 p. (School health studies, no. 11.)

The duties, supervision, and salaries of school nurses in representative cities of all States in 1924-25.

OTHER SCHOOL EMPLOYEES

See also Salaries, Janitors


Good general treatment of the bases which should determine salary schedules for these employees. Practical suggestions for working out and adjusting such schedules.

PHYSICAL EDUCATION DIRECTORS


From the results of a questionnaire answered by 178 directors of physical education in State, private, and denom-
national colleges, this study analyses the probable maximum and minimum salaries of directors of physical education and judged by data submitted, shows their usual rate of promotion.

PUBLIC RELATIONS


A philosophical treatment of teachers' salaries in relation to the cost of living. Includes such topics as: Basis for computing salaries, salary requirements, salary schedules, merit factors, controversial elements, and salary campaigns.


Describes campaign for adoption of salary schedule including pertinent data in a readable form.

How much is a teacher worth? Sierra educational news, 21: 657, December 1925.


Compares the values of periodic and continuous publicity for the purpose of maintaining or raising teachers' salaries.


Describes in detail a circular distributed to school patrons of New York City in 1925 as an agent to gain public support for a better salary schedule for elementary school teachers. Outlines the daily work of the elementary school teacher, estimates her influence upon the personality of the child, and compares her training and salary with that of clerks and stenographers.


Describes the organized efforts by which a teachers' committee and the superintendent of schools of Cincinnati, Ohio, used data compiled by the National Education Association to induce the citizens of that city to vote the largest special tax ever voted there for the purpose of increasing teachers' salaries.

RESEARCH DIRECTORS


RURAL, GENERAL


RURAL SUPERINTENDENTS


WASSON, A. W. Who should support the office of county superintendent? Texas outlook, 14: 55-56, October 1930.

RURAL SUPERVISORS


RURAL TEACHERS

The comparison of salaries among urban and rural teachers. School and society, 34:253–54, August 22, 1931.

An advance summary of a few of the important facts revealed by a forthcoming study in salary trends. Total salary figures and percentages are given to show contrasts between salaries of urban and rural teachers from 1921 to 1931.


STATE DEPARTMENTS


Examines legal bases for the creation of office of State high-school supervisor, qualifications of the incumbents of the office, legal methods of selecting the incumbents, and legal fixation of salaries, and investigates the scope of the activities of the incumbents of the office.


Salary distributions and salaries of certain staff members in Connecticut, Massachusetts, New Jersey, New York, and Pennsylvania in 1923.


STATE REGULATIONS


STATE STUDIES


Missouri, Kansas, Iowa, and Nebraska are the States studied in this article.
Florida.  

**Spencer, Paul R.** State minimum teachers' salary schedule; a part of Florida's minimum educational program. Doctor's dissertation. (In press at Teachers College, Columbia University, New York.)

Iowa.  

**Greene, H. A. and Doran, D. T.** Factors affecting public-school teachers' salaries in Iowa. *Iowa City, Iowa, University of Iowa.* (University of Iowa extension bulletin, no. 5.)

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**Rogers, Don C.** Trend of teachers' salaries. *Iowa City, Iowa, University of Iowa,* 1923. 29 p. (University of Iowa extension bulletin, no. 88, April 1, 1923.)

Kansas.  

**O'Brien, F. P.** Salaries of teachers in Kansas. *University of Kansas, Lawrence, Kansas,* 1927.

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Louisiana.  


Maine.  


Massachusetts.  

**Salaries of teachers in public day schools of Massachusetts,** 1926. *Boston, Department of education,* 1926, 46 p. (Bulletin, 1926, no. 5, whole no., 170.)

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Tabulates salaries of all types of principals and teachers in Massachusetts towns and cities.

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**Salaries of teachers in public day schools of Massachusetts,** 1931. *Boston, State department of education,* Bulletin, 1931, no. 9, whole no., 229.

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Tabulates salaries of all types of principals and teachers in Massachusetts towns and cities.

Michigan.  

**Diamond, Thomas.** A study of the teachers of industrial arts and industrial education in the State of Michigan. *Ann Arbor, Mich., School of education, University of Michigan,* 1927. 52 p. (Vocational education department. Special studies no. 3, June 1927.)

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Minnesota.  


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Analyzes teachers' salaries in considerable detail. Considers such factors as training, experience, type of school, and class size.

Missouri.  


New Mexico.  

**Fickinger, Paul L. and Sanchez, George I.** Analysis of teachers' salaries in New Mexico with a comparison of salaries paid other public servants. *New Mexico school review,* 10:18-25, March 1932.

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Takes into account training and experience of teachers. Shows that the common laborer gets $82.32 per month as compared to $81.14 as the average for all elementary teachers and $73.68 for rural teachers.

New York.  

**Harry, David P.** Cost of living of teachers in the State of New York. *New York, N. Y., Teachers college, Columbia university,* 1928. (Teachers college, Columbia university. Contributions to education, no. 320.)

North Carolina.  

**State department of education.** Comparison of salary cost (State schedule) 1929–30—present term (not exceeding eight months) with uniform eight months term. *Raleigh, N. C., State department of education,* 1931.

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**Number and salaries of white teachers by counties, 1929–30.** *Raleigh, N. C., State department of education,* 1931.

Oregon.  

**Huffaker, C. L.** Statistical studies of teachers' salaries are to be found in "Teacher supply and demand in Oregon." *Eugene, Ore., University of Oregon, education series,* vol. 2, no. 5, p. 99–106, 1931.

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Utah.  

**Parratt, J. Easton.** Utah teachers salaries for 1930–31. *Utah educational review,* 25:269–63, February 1932. (See also the March number of this journal for a similar article by the same authority.)

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A statistical study including a frequency distribution of the salaries paid all Utah public-school teachers.
SALARIES -

Washington. Marsh, Arthur L.
Teachers' salaries in Washington.

**STATE SUPERINTENDENTS**

*See Salaries, State Departments*

**STATISTICS**

The following research bulletins of the National Education Association at some time give salary statistics (for city schools throughout the series) for the classes of workers listed. Beginning in 1927, the data have been for city school systems only, classified by size groups.

- Data for 1922-23 in vol. 1, no. 2, March 1923.
- Data for 1924-25 in vol. 3, nos. 1 and 2, January and March 1925.
- Data for 1926-27 in vol. 5, no. 2, March 1927.
- Data for 1928-29 in vol. 7, no. 3, May 1929.
- Data for 1930-31 in vol. 9, no. 3, May 1931.

- Americanization Directors or Supervisors.
- Art Directors or Supervisors, Assistant.
- Attendance Officers.
- Atypical (Special Class) Teachers.
- Buildings and Grounds Superintendents.
- Business Managers.
- Clerks in Administrative and Supervisory Offices (See also Secretary).
- Clerks of Board.
- Continuation School Directors or Supervisors.
- Continuation School Directors or Supervisors, Assistant.
- Directors, Miscellaneous.
- Elementary Principals, Supervising.
- Elementary Principals, Teaching.
- Elementary Principals, Assistant.
- Elementary Supervisors.
- Elementary Teachers.
- Evening School Directors or Supervisors.
- Evening School Directors or Supervisors, Assistant.
- Health Directors or Supervisors.
- High School Deans.
- High School Department Heads.
- High School Principals.
- High School Principals, Assistant.
- High School Supervisors.
- High School Supervisors, Assistant.
- Janitors, Head.
- Janitors, Head, Assistant.
- Janitors.
- Junior High School Deans.
- Junior High School Principals.
- Liberal Arts Directors or Supervisors.
- Liberal Arts Directors or Supervisors, Assistant.
- Junior High School Supervisors.
- Junior High School Supervisors, Assistant.
- Kindergarten Teachers.
- Kindergarten Teachers, Assistant.
- Music Directors or Supervisors.
- Music Directors or Supervisors, Assistant.
- Nurses, Head.
- Nurses.
- Other School Employees.
- Part Time School Principals.
- Part Time School Teachers.
- Physical Education Directors or Supervisors.
- Physical Education Directors or Supervisors, Assistant.
- Primary Supervisors.
- Primary Supervisors, Assistant.
- Principals.
- Principals, Assistant.
- Research Directors.
- Research Directors, Assistant or Supervisors.
- Rural Principals.
- Rural Superintendents.
- Rural Supervisors.
- Rural Teachers.
- Secretary of the Board.
- Secretary of the Superintendent.
- Secretary of the Superintendent, Assistant.
- Special (Atypical) Class Teachers.
Substitute Teachers
Superintendents
Supervisors, Associate or Assistant.
Supervisors, Miscellaneous.
Supervisors, Miscellaneous, Assistant.
Vocational Education Directors or Supervisors.
Vocational Education Directors or Supervisors, Assistant.

NATIONAL EDUCATION ASSOCIATION.


Similar data in corresponding bulletins for previous years.


A table, with brief text, showing the median salaries of elementary and high-school teachers by States, and cities of more than 100,000 in population, 30,000 to 100,000, 10,000 to 30,000, 5,000 to 10,000, and 2,500 to 5,000 in population.


SUBSTITUTE TEACHERS


Investigates the practices found in 185 cities of various sizes in the United States in an attempt to discover the prevailing practices with respect to amount of sick leave granted to teachers in the United States, and the payment of substitutes.

SUPERINTENDENTS

See also Salaries, Rural, Superintendents.

KIDD, DONALD M. and CLEM, O. M. The salaries of superintendents of schools and mayors in cities of 100,000 population and over. American school board journal, 73: 49-50, September 1926.

A comparison of the salaries of the school superintendents and the mayors of 82 cities of 100,000 population and more. Reveals a range of $4,000 to $15,000 for school superintendents and $1,500 to $25,000 for mayors, a median of $8,000 for superintendents and $6,000 for mayors, and an average of $8,549 for superintendents and $7,147 for mayors.


Shows that from 1869 to 1914 the average salary of superintendents of schools in 18 representative cities increased from $2,520 to $6,736 and on up to $8,780 by 1923.


LEWIS, E. L. L. Salaries of high-school principals and city superintendents of schools in Wisconsin cities. University of Wisconsin, Madison, Wis., 1928. (Municipal information bureau series, no. 63.)
SUPervisors

See also Salaries, Rural, Supervisors


A section of this book deals with plans now existent for fixing the salary of supervisors. Recommends a progressive salary schedule.

TEACHER TRAINING

[The U. S. Office of education issues mimeographed bulletins giving salary data, in December of the even-numbered years]


SALARY SCHEDULES

GENERAL

See also Salaries, City Studies; Salaries, General


Discusses the factors which should determine the amount and rate of salary increments. These include: Faithful service, experience, difference in increments, arguments for variations in salaries, the problem of junior high-school salaries, the single salary schedule, need for cultured teachers in all grades, the value of advanced degrees and in-service training, the value of travel, and the difficulty of recognizing merit, in relation to teacher salary increments.

--- Principles underlying the minimum teachers' salary. American school board journal, 80: 55, February 1930.

--- Presents seven principles underlying the determination of a minimum salary figure for teachers—a living wage, attraction of desirable personalities, common practice, preparation, capability, and the discrepancies between the salaries of men and women.

--- The principles underlying the maximum salary. American school board journal, 80: 47, May 1930.

Discusses the living wage, limitations on maximum salary, examples of ability to pay, equal compensation for men and women, and the preparation of a salary schedule, in relation to a maximum salary schedule and its influence in attracting capable and well-trained men and women to the teaching profession.

--- When the teacher is sick. American school board journal, 80: 98, June 1930.

Lists 13 prevailing practices in regard to granting sick leave to teachers. Discusses the social and economic advantages of employing teachers on an annual professional salary. Suggests physical examinations, nursing service, reasonable teaching load, provision for recreation, healthful buildings and sympathetic supervision as measures for the reduction of loss of time by teachers.

CONRAD, C. B. Salaries or wages? American school board journal, 74: 45. 1927.


Discusses the low level of pay for teachers and the efforts of a few States to remedy the situation by adopting State salary schedules. Outlines the principles and problems of salary schedule construction and explains the various methods of basing salary increases on teaching efficiency.

CULP, V. H. Superintendent standard and the salary schedule. American school board journal. p. 34, November 1924.


-- Discusses economics of teachers' salaries, equal pay, types of salary schedules, rating for salary schedules, formulation of salary schedules, estimating cost of salary schedules, ability of communities to support salary schedules and salary schedule campaigns.


--- Discusses the polls system, teachers' salaries, building salary schedules, the cost-of-living index, and the growth of a single salary basis. Cites examples.


--- Gives the basic principles of salary schedules.

Discusses the advantages of a salary schedule founded upon the principles of minimum, equality of opportunity, advancement, training, experience, and sex.

MOELLMAN, ARTHUR B. Some considerations in building salary schedules. *Journal of educational research.* 14: 256-69, November 1926

Discusses some of the essentials which enter into building a salary schedule. Explains the apparent relationship between the wages of labor and the salaries of teachers. Calls attention to differences in standards of living and type of service. Develops an index as a basis for salary schedules.


A theoretical treatment with practical applications of the elements to be considered in adjusting salaries, retirement pay, and teaching load.

MUNZENMAYER, LESTER HENRY. Greater equalization of educational opportunity through a salary schedule. Ph. D. thesis, 1928. *Ohio State University, Columbus, Ohio.*


Presents and defends five theses: (1) Teachers' salary schedules, more than any other factor determine the quality of people attracted to the teaching profession; (2) the quality of preparation of teachers; (3) the quality of human material that continues in the profession; (4) a school board's chances of obtaining the services of capable teachers; and (5) teachers' salaries indirectly determine a child's outlook upon life.


Also suggestive schedules in operation in 1923 (pages 58-70) and city salary schedules in 1923 (pages 35-47).


After an examination of the Nation's ability to lift teachers' salaries to a professional level, this bulletin compares the income and economic position of the teaching group with other gainfully em-

ployed groups. Discusses classification of school employees, the single salary schedule, bases for fixing the rates of salary schedules, and the scientific procedures of scheduling salaries, as guides to salary scheduling.


Unjust discrimination between teachers in the elementary schools and teachers in the high schools. *Journal of National education association,* February 1923.


Discusses planning, emphasis on training, increasing the period of increments, adjusting to teaching efficiency, and increase toward a professional level.


The author, reasoning that unusual work should receive higher compensation than ordinary work, has devised a salary schedule which will provide increase beyond the automatic maximum and several double increments for outstanding work of teachers. The article describes the schedule.

SPENCER, PAUL R. State minimum teachers' salary schedule; a part of Florida's minimum-educational program. (Doctor's dissertation in Teachers college, Columbia university, in press at Teachers college.)


Considers competent supervision and a supernmaximum for superior service as better than regular salary scheduling.
SALARY SCHEDULES

MERIT SYSTEMS


The plan includes merit along with training as a basis for paying teachers. States that it is equitable toward the taxpayer and safeguards the children's welfare.


Analysis and evaluation with 13 criteria of all cities reported by the National Education Association as using merit rating in salary schedules in 1928. Summarizes practices in detail as justifiable and unjustifiable, and lists the specific minimum procedures to be followed by any school administrator attempting to use a merit-type salary schedule. Stays clear of question as to whether such a schedule should be used. Bibliography of 40 unannotated references.

SINGLE SALARY


An outline of the underlying principles covering case of administration, impartiality, encouragement for teachers to stay in positions for which they are fitted, and an incentive for further training. Some advantages accredited to the single salary schedule. Includes a plan for the grouping of teachers in all grades as service, journeyman, graduate, and master teachers.


Discusses the decision of the New Jersey State commissioner of education that Perth Amboy reconstruct its salary schedule for 1929-30 to incorporate the principle of equal compensation for men and women high-school teachers doing equal work and having equal training and experience.

HOY, JAMES F. The single salary schedule in practice. Teachers college record. p. 228. December 1924.

Increments. The school index, 12: 33, October 2, 1925.

SUMMARY OF REPORT BY E. S. BRIDGES TO ELEMENTARY PRINCIPALS' CLUB OF CINCINNATI. Recommends: fewer but larger increments, based on additional training. Argues for single salary schedule. (Annotation from N. E. A. Research division.)


After defending "the basic single salary schedule," which in this paper means a schedule of salaries covering all classroom teachers in kindergarten and grades 1 to 12, inclusive, regardless of sex, position, grade, or subject taught, this article discusses minimum requirements, equality of opportunity to reach high economic level, advancement, training, sex and training as the factors composing the principles that support the single salary schedule.


Discusses the development of a complete basic single salary schedule for all classroom teachers, kindergarten to grade 12 included, regardless of sex, position, grade, or subject taught, based on a minimum age, certificate, amount and kind of training required for all beginners. Gives nine arguments upholding the plan.

MORRISON, O. D. Single salary schedules. Texas outlook, 14: 51, July 1930.


An analysis, using data from 68 cities, of the status of the single salary schedule in the United States in relation to its effect on the training and experience of teachers, annual increases, current expenses, number of pupils per teacher, percentage of men and women teachers, and training teachers in service. Includes methods for the improved administration of salary schedules.

MORRISON, CORA B. Single salary schedule. Colorado school journal. 40: 5-12, October 1924.


Brief summarisation of data on replies to a questionnaire regarding the single salary schedule. Includes the reasons given for, the approval or disapproval of the plan by those operating it or advocating its installation. Finds the cost of the single salary plan the biggest objection to it.


A study of cost and factors involved in the adoption of single salary schedule, with special reference to California. Grants that service given by elementary school teachers is on a par with that of high-school teachers, but questions whether returns to society would justify increases in school expenditures. Concludes that more than three years' training beyond high school is unnecessary for elementary teachers, therefore a policy of requiring preparation equal to that of high-school teachers is unsound.


Philosophical discussion of a single salary schedule for all school principals. Defends the importance of elementary education and the complex skill required to administer an effective elementary educational program as a basis upon which such a schedule will be built, and claims that a single salary for principals is just as reasonable as a single salary for teachers.

Youngblood, G. W. The Peru, Ind., single salary schedule. American school board journal. 69: 37, December 1924.

Justifies the single salary schedule, giving reasons.

SAVINGS ACCOUNTS

[Statistics of savings accounts as related to school costs appear in research bulletins of the National education association, e. g., vol. 5, no. 1, January 1927, pages 15 and 16. Data may also be found through the index at the end of each volume. Sources given]

SCIENCE COSTS

Carpenter, Weston W. Certain phases of the administration of high-school chemistry. New York, N. Y., Teachers college, Columbia university, 1926. 74 p. (Teachers college, Columbia university. Contributions to education, no. 181.)

Evaluates present practices of purchasing and accounting for high-school chemistry supplies and equipment, and suggests desirable practices in a number of city school systems.

Lindsay, E. E. Laboratory costs in State institutions of higher learning. School and society, 20: 337–42. October 25, 1924.

SECONDARY EDUCATION

AID

See State Aid, High Schools; State Aid, Junior Colleges

BUDGET


Using a survey of 522 schools as a basis for conclusions drawn, this article examines and analyzes the common practices of secondary school budget-making and administration. Explanations and statistical tabulations, arranged by sizes of school enrollments, give the number and percentage of schools practicing various procedures.

COSTS

See also Junior College Costs; Secondary Education Economics. For the secondary education costs on any particular item, e. g. Buildings or Instruction, see that item and its subdivisions of High-Schools, Junior High Schools, etc.

COSTS, HIGH SCHOOL

For high-school costs of any item, e. g. Instruction, see High School as a sub-head of that item. See also Secondary Education Economics.

— High schools cost $192 per pupil; elementary schools show 10 per cent increase in three years. Tax digest, 8: 102-4, March 1930.


This study establishes per-pupil costs based on total high-school expense of secondary education in Minnesota. Schools are grouped according to population in 216 cities ranging from 2,000 or less to those having fewer than 2,000. High schools in small villages show greatest variation in median salary costs per secondary pupil. Bring out that children do not receive equal educational opportunities under present circumstances and that the burden of school support is unequal and unjust.


Contains many detailed data relative to the operating costs of Minnesota high schools of the grades indicated.


Similar figures every year in corresponding bulletins.


This study presents data with respect to the per-pupil yearly cost of high schools, and of various high-school subjects. In both cases the data are segregated by the size of communities within the State. In addition, it investigates the school factors which have a bearing on high-school costs, and the abilities of communities of all types to support secondary schools.


Proposes a technique for computing unit costs in high schools of Ohio. Applies this technique to the financial data of a large cosmopolitan high school and a town high school in Ohio.


Examines the relationship of the number of classes offered for full or part-time credit, number of periods, instruction per week, number of supervised study periods per week, and the length of the school day in minutes to total school costs and to unit costs. The investigation indicates that a program of giving quality and efficiency will cost approximately the same in all schools. Excluding extravagance, school costs indicate the service the school renders.


An argument to the effect that the increasing costs of secondary education are justified by the results. Explains that the preparation of a greater number for college and the development of skilled tradesmen account for rising secondary school costs. While 1918-1926 secondary education costs increased 159 per cent from 1918 to 1926, bank deposits increased 253 per cent, electric meters 324 per cent, and telephone connections, 157 per cent.


Wide range in high-school cost. School, 42: 3, September 4, 1930.

Shows per pupil costs of large high-school buildings in New York, Buffalo, Toronto, Detroit, and Chicago. These costs range from $857 to $1,750. Tabulates actual costs.


Cites specific reasons why secondary education is increasing in cost, and suggests six questions needing attention so that justification of this increase may allay criticism.

COSTS, JUNIOR COLLEGE

See Junior College Costs

COSTS, JUNIOR HIGH SCHOOL

For Junior High School Costs of Any Item, e. g., Instruction, look for Junior High Schools as a subhead of that item


A statistical study of the relative costs in 1926-28 of the elementary, junior high, senior high school grades in 15 cities of 100,000 population and more, and in 33 cities having fewer than 100,000 population each. Includes a discussion concerning values of educational undertakings and when to estimate them.

ECONOMIES

See also Secondary Education, Costs; Teaching Load; Waste

California. FORD, WILLARD S. Necessity of larger school units revealed by cost of small high schools. The tax digest, July, 1928. p. 222; California taxpayers' association, Los Angeles.

Shows the trend of decreasing unit costs in California high schools as the size increases. Groups of schools ranging from fewer than 100 enrollment to 600 pupils are used.


A highly technical statistical study with readable summaries. Concludes that a school of 550 pupils has more curricular and extracurricular offerings, costs less than smaller schools, and approximately the same as schools with 1,400 enrollment.


Points out relative importance rating of the 14 factors basic to school efficiency in opinions of the author and 43 other school men. Findings as to 4 most vital ones and suggestions for avoiding reduction in these factors by the administrator forced to cut expenditures. Gives table of choices of 43 schoolmen as to where to economize last.


Investigates the use of blackboards in 294 regular and special classrooms of junior and senior high schools during an entire school week. Reveals that in 59 per cent of rooms no pupil used the blackboard during the week, in 30 per cent not more than 5 pupils were at the blackboard at any one time, in 14 per cent not more than 10 pupils were at the blackboard at any one time, and in only 6 per cent of the rooms more than 11 pupils used the blackboard at any one time.

Oregon State Teachers Association.

Report of committee to measure certain factors of efficiency in Oregon
SECONDARY EDUCATION


Reviews 10 causes of increased costs, and suggests remedies whereby administrators can effect economies without lowering standards of scholarship or impairing the instructional program.


Reports of a comparative study of small high schools. Shows their inadequacies and suggests remedial measures for their improvement. Recommends consolidation, since financial outlay necessary to bring small schools up to standard is not justified.

FOREIGN

Canada. County contributions to secondary education. Canadian school board journal, 6: 7-11, December 1926.

— The cost of secondary education: the repeaters are simply parking in the grades. Canadian school journal, 9: 15-6, July-August 1931.


Discusses the financial implications and the social values of the recent movement in England to provide all children a secondary school education.


GENERAL


Discusses the practice of charging unauthorized purchases to school accounts, delinquency in paying and verifying bills, overemphasis of certain activities, straining of worthy enterprises, poorly planned use of money, muddled accounts, and lack of community feeling. As common weaknesses of high-school finance. Questions the effect of such practices upon students who come in contact with them and suggests methods for improvement.


New Mexico. Diefendorf, J. W. The high-school situation in New Mexico. Albemarle, N. Mex., University of New Mexico, 1931. 68 p. (University of New Mexico bulletin, vol. 5, no. 1, 1931.)

Thiel, R. B. The fiscal administration of the high school. (Doctor's thesis), 1926. Madison, Wis., University of Wisconsin, 1926.


SECONDARY EDUCATION


This annotated bibliography of 287 references on secondary education, published previous to 1927 contains a section on school finance and costs and numerous other articles dealing directly and indirectly with secondary education finance.


JUNIOR HIGH SCHOOL


STATISTICS

[Finance statistics are to be sought in the city school statistics bulletins of the United States Office of Education. See City Schools, Statistics. A few statistics on the values of high-school libraries appear in the Statistics of public high schools. 1927-28. United States Office of education. Bulletin, 1929, no. 35. The great trouble with most of the statistics in these publications is that they lump elementary and high schools together. Often the statistics of the State departments, like New Jersey, Illinois, Indiana, and California which keep high-school finances separately, are preferable].

SUPPORT


This outstanding lecture develops, with special reference to secondary education, the thesis that "the State supports free public schools to perpetuate itself and to promote its own interests. Education, then, is a long-term investment that the State may be a better place in which to live and a better place to make a living."


Discusses special State aid and supervision, county aid, stimulation and measurement of effort, free high-school privileges, State aid for special purposes, and sources and forms of secondary educational funds in relation to the State's obligation to provide an adequate program of secondary education.

California. SEARS, J. B. Survey of Marysville, Calif., Union high school. Marysville, Calif., Board of education, 1925. 51 p.


A discussion of the increasing costs of education. States that the United States has just begun to spend for education, that in the near future secondary education must be financed and equalized on the same principle that has been applied to the support of elementary education, and that the additional tax burden inherent in this expanded educational opportunity must be carried by gross production, income, and sales taxes in order to avoid further taxation of already overtaxed sources of revenue. Abstract in Proceedings National Education Association 1930, p. 385-39.


Finds and synthesizes constitutional and statutory provisions relating to the financial support of public secondary education in the various States, and the decisions of the courts interpreting these provisions.


Surveys legal provisions of various State constitutions and school laws for
the custody of public secondary school funds and the protection of such funds against diversion and squander. Lists 27 legal provisions in various State constitutions and school laws. Numbers States making such provisions.


Explains how the citizens of Point Marion, Pa., organized a private holding company under a legal State charter and issued $188,000 worth of bonds to finance the construction of a school building, and how the building was rented at a rate which would pay the interest and retire the bonds upon maturity to the school board which had previously assumed its legal limit of bonded indebtedness.


A discussion of the subject of larger high-school taxing units and school costs. Reports that since high-school education is a matter of general concern larger units of taxation should be established, and discusses plans for Federal, State, and county aid for secondary education and a school efficiency bureau.


SWIFT, F. H. What we may learn from California and Massachusetts regarding high-school support. In National association of secondary school principals. Eighth yearbook, 1924. p. 196-209. (See also Journal of educational research, June 1925 for a discussion of this subject by the same author.)

Describes in detail methods of collecting and distributing school taxes, and the use of various school funds, for high-school support in California and Massachusetts. Analyzes the relationship of local and State support in both outlines and comments for the exact amounts contributed by the various taxes and funds.


Analyzes Utah's ability to support education as compared to that of other States, current school costs, distribution of the school funds, bonded indebtedness, and other features of the State's program for financing the elementary and secondary grades.


SICK BENEFITS FOR TEACHERS

See also Pensions


SOCIAL STUDIES, COSTS


Lists of minimum equipment for the social studies laboratory in grades 4-8, junior high schools, and senior high schools separately, but no prices.


Discusses the amount, type and use of visual education equipment in several cities. A comparative cost study is made for Cleaveland, St. Louis, Chicago and Pittsburgh showing the relative costs of salaries and equipment in those cities and the amounts of various types of visual education equipment owned and used in those cities.

Discusses the problem of map equipment selection, and advocates the elimination of waste by a selection based on analyses of map values made under expert guidance. Includes criteria for map selection.

TEXAS. Cost of teaching the social science subjects. *Austin, Tex., University of Texas*, 1923. (Conference upon problems of education administration in Texas series.)


Points out the importance of geographical elements in the teaching of history. Lists 675 available historical maps, and charts the publisher and price of each. Maps and charts may usually be bought singly or in any desired combination.

SPECIAL CLASSES, COST

See also Blind, Schools for: Cripples, Schools for: Deaf, Schools for: Indian School Costs


Briefly discusses expenditures for this type of education. Shows that costs for educating the blind in different localities varies from $100 to $450, for the deaf from $135 to almost $500, and for the subnormal from $70 to over $300.


Per pupil costs range from $52.77 to $380, with an average of $175 per annum. The cost per pupil in A. D. A. aids from teaching costs ranges from $29 to $263 with an average of $33.

WHITE HOUSE CONFERENCE. Special education, the handicapped and the gifted. p. 5-6. *New York, N. Y., Century Co.*, 1931.

Gives blind, deaf, and crippled school costs.

STATE AID

STADIA

See also Athletics, Costs: Playgrounds


Analyses data with regard to 69 stadia in the United States, showing aggregate structural cost of those in municipalities and those in connection with universities and colleges. Data on 69 stadia, college and university, show the relative use of the various methods of financing (bond issues, other types of loans, popular subscription, and gift). Data on 10 stadia, some municipal and some college and university, show total expenditures for current operation and maintenance.


Discusses need for community interest and school board cooperation in planning the financial program for the erection of high school stadia. States that steel or steel and concrete stadia can be erected at a cost varying from $8 to $10 per seat.


The cost of the complete stadium, considering only construction estimate but no land costs or professional fees, involves many items the cost of which can only be estimated. Gives two estimates to indicate the method of computing the cost per seat. Includes a list of university, high school, municipal, and private stadium, showing date of construction, seating capacity, cost, and cost per seat for the years 1923-1925.

STATE AID

BUILDINGS


Lists and discusses provisions made by the State school laws of Alabama, Delaware, Minnesota, Missouri, Nevada, New York, North Carolina, Oklahoma, South Carolina, and Wisconsin for aiding local and county districts with rural school building construction. Concludes that the North Carolina plan seems to have had the best effects.

Delaware. DuPont, Pierre S. How Delaware can finance a State school building program. Wilmington, Del., Delaware school auxiliary association, 59 p. (Bulletin of the service citizens of Delaware, vol. 6, no. 3.)


Presents a technique which will enable a State to equalize the burden of capital outlay for educational purposes, based on data secured in the State of New Jersey for the 10-year interval from 1919 to 1928. Gives a general equation by means of which the amount of debt service to be provided for a minimum capital outlay program corresponding to the minimum current program, can be determined.


An examination of democratic theory and a historical review of State support of education in Alabama. Concludes that the State should provide school buildings which give all the children of the State an educational program and environment of acceptable standard.


COLLEGES
See State Aid, Higher Education; State Aid, Junior Colleges; Higher Education. Revenues; Higher Education, Support

CONSOLIDATION
See also State Aid, Transportation


Presents a technique which will enable a State to equalize the burden of capital outlay for educational purposes, based on data secured in the State of New Jersey for the 10-year interval from 1919 to 1928. Gives a general equation by means of which the amount of debt service to be provided for a minimum capital outlay program corresponding to the minimum current program, can be determined.


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COLLEGES
See State Aid, Higher Education; State Aid, Junior Colleges; Higher Education. Revenues; Higher Education, Support

CONSOLIDATION
See also State Aid, Transportation

California. LENTZ, ALFRED E. California elementary school district support. Sierra educational news, 26: 50-52, 64, November 1930.

A statement concerning California laws relating to collection of school taxes and a recommendation for several changes in these provisions which should increase State and county support of education.


GENERAL

See also Equalization; State Support


CAPLINGER, WILLIAM J. State aid for various school projects in twenty-four States. M. A. thesis. 1924. Ohio State University, Columbus, Ohio.


Examines the wealth of some rural districts which are found obviously too poor in natural resources to support schools or any other public enterprise and contends that apportioning State aid to such districts actually encourages people to live there, when, as a final solution of the difficulty, they should be encouraged to move to a more fertile district.


Deals with the State's responsibility toward administration and support of elementary and secondary education in the equalization of the tax burden and educational opportunity. Twenty-four States have adopted some type of equalizing measures. The trend is toward more State participation in school support.


Examines the various single bases used at present for the apportionment of school funds, and those which might better be used, as a method of formulating some principles which should control the distribution of State school subsidies. Evaluates various apportionment plans in the light of these principles.


Finds State and National participation in the support of public schools increasing. Contrasts plans of allocating State aid according to ability and effort.


KOEHL, J. W. Constitutional provisions for permanent common school funds in the several States. M. A. thesis 1930. Ohio State University, Columbus, Ohio.


The fourth of a series of articles by this author dealing with state aid. Presents an appraisal of the effectuality of state aid for special school projects in six States, with special reference to Wisconsin.

— How State funds are spent for local activities. Nation's schools, 7: 61-65, February 1931.

Figures for general and special project aid by States for 1925-26, funds as shown in legislation for 1925-26, and roster by State of special projects authorized but not carried out. Finds no unanimity of opinion in the States and a need for a scientific investigation to show just how State aid for a special school project may be safely abandoned.


MORT, PAUL B. Needed research in the field of state aid. Teachers college record, 27: 707-12, April 1926. Shows the need of research into the findings of the Educational Finance Inquiry, relating to equalization, reward for effort, unit cost of minimum educational offerings, an index for measuring transportation burdens, the cost of living effect upon educational need, and equalization for capital outlay.

— State support for public schools. New York N. Y., Teachers college, Columbia university, 1929. 104 p. (School administration series.)

Sets up criteria for adequate system of State support, defines a measure of local educational need and ability to support education and outlines a plan for equalizing the burdens of support among the various localities of a State.

— The measurement of educational need. New York N. Y., Teachers college, Columbia university, 1924. 84 p. (Teachers college, Columbia university. Contributions to education, no. 159.)

This outstanding pioneer study defines the relation of the measurement of need to educational administration and describes the weighted pupil plan and standards for measuring educational need. Develops size standards for one teacher schools and a more accurate method of measuring the ability of districts to support education. Applies these techniques to measuring the financial needs of the various New York State school districts.

— What the State owes to public schools, Illinois teacher, 16: 6-7, 24-25, May 1928.

An outline of the essential elements of State support and a State equalization fund. Includes techniques for defining a State educational program, methods of distributing the tax burden equally by means of either a large or small State fund, and the implications of an equalization program.


Gives reasons for fixing minimum local school tax rates, for establishing an equalizing apportionment which recognizes differences in local financial ability to support schools, for State apportionment of at least 20 per cent of the operating costs of public schools, for abolishing census and enrollment statistics as bases of apportionment, and for a continuous study of the State apportionment system.


Gives concise and usable objective evidence of current and general practice in undertaking educational projects, together with objective results of such practices in the 48 States.

NOBLE, jr., M. C. S. Teacher load as a basis for distributing State school aid in the United States. Raleigh, N. C., State department of education, 1930.


Discusses the necessity and the cost of changing the curriculum of modern schools in accordance with present day needs. Pleads for the financial support of a school that will train individuals for industrial and social efficiency. Asserts that the preservation of the State demands that education be inclusive, rather than exclusive.


SLAS, A. B. The financing of a State school system. Doctor's dissertation, Stanford University, Calif., Leland-Stanford University, 1929.


Running review and bibliography of researches in this field, stressing those from 1923 to the fall of 1931.


This article questions the attitude that fiscal policies have failed to keep pace with progress in other fields of educational effort. The discussion of achievement in this field centers about the increasing generosity toward public schools, new conceptions of State responsibilities, rise of equalization funds, progress in tax policies, budget systems adopted, and progress in Federal policies.

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**State school funds and their apportionment.** *American school board journal*, 76: 39-41, February 1928.

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**State school funds and their apportionment.** *American school board journal*, 78: 43-5, February 1929.

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A comprehensive compilation of the types of taxes the States levy and to what extent the proceeds of such taxes are devoted to public school support. Explains in great detail school funds provided in each State and the principles governing their apportionment. Tabulates many relevant data.


TEELOR, W. M. BUTLER. State aid for various school projects in twenty-four States (Nebraska to Wyoming) incl. M. A. thesis, 1926. Ohio State University, Columbus.


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A critical examination of the New York plan of equalizing educational opportunity. Maintains that a refusal on the part of the State to give financial encouragement to local educational effort may be fundamentally unsound, so far as effort is probably a basis for educational progress.


A study of data from New York cities and villages which shows that State aid for special phases of education has produced no greater expenditures and no better results than have come about in similar special phases receiving only general State aid.

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**HIGH SCHOOL**

BROG, CLAUDE. State support of public elementary and high schools in

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Discusses special State aid and supervision, county aid, stimulation and measurement of effort, free high school privileges, State aid for special purposes and sources and forms of secondary education funds in relation to the State's obligations to provide an adequate program of secondary education.


Recommends State guarantee of sufficient funds to support a minimum high school program, the levy of new taxes for the support of secondary education, studies of the influence of real estate and relative importance of various taxes now used in the support of public education within a State, better administration of present personal taxation, and more effective allocation of corporation taxes.


Surveys the legal provisions made in various State constitutions and school laws for the custody of public secondary school funds and the protection of such funds against diversion and squander. Lists 27 legal provisions found in State constitutions and school laws with the number of States making such provisions.


Wisconsin. Fowlkes, J. G. and Jones, L. F. State support for public high schools in Wisconsin. Madison, Wis., University of Wisconsin. 1931. 82 p. (Bureau of education, University of Wisconsin, research bulletin, no. 12.)

HENDERSON, H. L. A plan for reorganizing Wisconsin's system of education. Madison, Wis., State Department of education, 1931. p. 182-208. (Chapter 7.)

Discusses a proposed plan for State aid to high schools and tabulates statistics showing amounts of State aid due each high school district under the provisions of the plan.

HIGHER EDUCATION
See also State Aid, Junior Colleges; Higher Education, Support


Says that a study of all the different forms of fiscal support given by States in their higher educational institutions shows that 63 institutions of 84 investigated receive State aid through annual or biennial appropriations.

JUNIOR COLLEGES
See also Higher Education, Support


A short unfavorable editorial discussion of a proposed Indiana law to establish a junior college in each city having a school population of 2,000 or more. Includes provisions of the proposition.


Discusses State aid for municipal higher education as applied to the municipal university and outlines State support of junior colleges in seven States and in city teacher-training institutions.


Reviews and summarizes legislation in various States for financial aid of junior colleges.

MORT, PAUL R. State participation in the financing of junior colleges. Teachers college record, 30: 745-51, May 1929.

Examines the relative importance of junior college demands on a compensative system of school finance. Makes suggestions for the allocation of State aid, and presents age data for junior college students.

ROBBINS, C. L. Small junior colleges and adult education. The junior college journal, 1: 557-58, June 1931.

LIBRARIES
See also Library, Support


STATE AID


State and county grants for school libraries. Elementary school journal, 29: 733-34, June 1929.

- Presents United States Office of Education statistics for State and county grants for school libraries 1914-24. Shows that the establishment and maintenance of school libraries in rural communities is provided for by law in 16 States and county grants for similar purposes are authorized by statutes in 12 States. Quotes various maximum yearly amounts granted by counties.

RURAL

See also State Aid Buildings; State Aid Consolidation; State Aid Transportation.


- Analyzes provisions in the several States for general and special State aids for small schools including those for consolidation, transportation, high schools, tuition of nonresident students, rural supervision, rural buildings, and teachers' salaries. Suggests three plans for State school financing.


Excerpts from the school laws of California, Connecticut, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Rhode Island, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin revealing legal provision for State financial aid for rural school supervision are reproduced. Explanatory statements accompany the citations.


- A Congressman explains that rural wealth is being drained into cities by young people who after being educated by rural money in rural schools, take positions in cities. An annual Federal aid fund of $100,000,000 for rural elementary education is proposed as a just method of redistributing the tax collections.


This article describes briefly the financial and educational implications of supporting a 1-teacher school in a sparsely populated rural district and suggests some financial and social advantages of consolidation.


- State aid has advanced Texas rural schools. Texas outlook, 10: 80, September 1926.


- Analyzes, with respect to school problems in Texas, the effects of the proposed $100,000,000 Federal fund to aid in the reduction of taxes on farm lands, and to promote elementary education in rural areas of the United States. Texas would receive approximately $7,000,000.

- and ATWELL, S. Concerning State aid for training in agriculture, farm mechanics, and home economics in rural schools. Austin, Tex., State department of education, 1929. 16 p. (Bulletin, no. 258, 1929.)


WITMER, JOHN W. Distribution of the equalization fund within the county school district. Ohio schools, 5: 139, 144-45, May 1927.


This bulletin contains a concise but complete outline of the State school finance systems of each of the 48 States. It may be added as a reference to each State.


Description of school support in Alaska prepared in 1917 and revised in 1920.


Substantially a condensation of the scholarly finance section of the United States Bureau of Education’s Arkansas Survey, showing conditions in 1926 in a very low school-expenditure State. Recommends more county and State support. State severance and income taxes, and a modern system of State aid.


The State is described as one with strong State and county support of schools, and the policy of financing education by projects with a new source of revenue for each new project. Recommends more State support and a raising of current salaries and qualifications through its use.


The State is described as one with enormous school revenues at her command, but with educational opportunities and burdens disastrously unequal. Recommends better administration of the extensive State lands, more State and county school support, and a scientific use of State aid.


Hartford, Conn. State board of education, 1926. 74 p. (Connecticut bulletin, no. 4. Series 1925-26.)


--- Using the situation in typical States and Idaho, shows the losses in such funds and the great need for safeguarding them in Idaho.


The plan is presented by the Illinois State teachers association, Department of research and statistics.

--- DEPARTMENT OF PUBLIC INSTRUCTION. Results of State distribution of $8,000,000 to public schools, January 1923. In Equalizing educational opportunity in Illinois. Results of State distribution of $8,000,000 to public schools, January 1930. Springfield, Ill., Department of public instruction, 1925. 7 p.


--- Reviews the development and status of the Illinois school district, examines sources of school revenues, reveals inequalities in the burden and the economic consequences of an unsound tax base and suggests remedies. Analyzes the State school indebtedness. Discusses the need and processes of taking some account of terminal costs.


--- Realizing State's financial responsibilities toward common schools. Illinois teacher, 16: 2-5, November 1927.


Outlines and discusses an effective method for the distribution of the Illinois State school fund under six general headings. These are: Education as a function of the State; distributive fund laws and the disposition of the services of our Government; an outline of statements concerning the need for equalization; determining the purpose of a State distributive fund; conclusions; and a proposed plan of distribution.

--- State aid claims by various types of districts. Illinois teacher, 14: 164-69, May 1926.


--- The funds of Illinois. State superintendent of education, 1931. 208 p. (State publications, vol. 22, no. 3.)

--- White, William E. Directions and suggestions to school officers on how to apportion and distribute the common school fund; by the budget plan of distribution. Springfield, Ill., Department of public instruction, 1925. 9 p. (Circular, no. 185.)

Iowa. Department of Public Instruction. Distribution of State school funds in Iowa. Des Moines, Iowa, 1930. (Department of public instruction. Research bulletin, 1930, no. 2.)

Describes the distribution of State school funds in Iowa, and the principles upon which such distribution is made.

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Iowa. Department of Public Instruction. Distribution of State school funds in Iowa. Des Moines, Iowa, 1930. (Department of public instruction. Research bulletin, 1930, no. 2.)

Describes the distribution of State school funds in Iowa, and the principles upon which such distribution is made.

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Williams, R. C. Public school finance in Iowa. Des Moines, Iowa, 1930. Chapters V-VII. (Department of public instruction. Research bulletin no. 6.)

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Dowd, J. H. Should the State or the local support of schools in Kentucky be increased. Kentucky school journal, 4: 19-26. January 1926.

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Outlines the unique features of the Maryland plan of school support and the bases upon which that State makes grants for public schools. Discusses the origin, calculation, distribution, and effects of the equalization fund. States that the free school fund, the general State school fund, and the equalization fund are derived from general property, corporation, inheritance, and license taxes.

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Examines the 1923 school finance situation in Massachusetts, investigates the amounts of school revenues coming from Federal, State and local sources describes methods of apportioning State school monies and resulting educational inequalities, and submits 13 definite reconstructive recommendations.

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Recommends greater equalization and more State aid.


State Department of Education. School money apportionment. Jefferson City, the department, 1932. 98 p. (Department of education bulletin, vol. 6, no. 2, February 1932.)

Examines principal features of Missouri's new school revenue law and shows how various types of school districts will be affected by it.

Montana. State Department of Montana. 1931 legislation budget of the State of Montana, showing actual receipt and disbursements of all funds and departmental costs for years 1928-29, 1929-30, and estimated revenues and expenditures for 1931-33. Helena, Mont., 1931.


Should the State assist in supporting the public schools? A symposium by leading Nebraskans. Nebraska education journal, 10: 58-60, February 1930.

Mont, Paul R. The status of taxation in Nebraska. Lincoln, Nebr., State Teachers association, 1928. 16 p. (Research bulletin, no. 4, November 1928.)


Similar data in previous years in same periodical.


Reports data concerning New Hampshire's aid to elementary education as result of investigation authorized by legislative enactment.


Examines 1918 school finance situation in New Jersey, investigates sources, distribution, and management of State aid.
school funds, sets up criteria for evaluating State systems of public school finance, and suggests some needed reforms.


Message from the Governor relative to financing education in cities, with report of special commission appointed to study the subject. Albany, N. Y., The Commission. 1926. 146 p. (Legislative document, no. 92, 1926.)

A study made in response to Governor Smith's message on the inability of cities in New York to finance their expanding school needs. Compares State and local school taxation. State aid, local administration of educational funds, fiscal control, methods of school board selection, and certain legal aspects of capital outlay and bonded debt.


A valuable study in educational finance of the relation between local and State support for education in New York from 1926 to 1930. Attempts to ascertain to what extent the new State aid since 1926 has contributed to educational expansion to tax relief.


Pond, Chester Baldwin. Full value real estate assessment as a prerequisite to State aid in New York. Albany, N. Y., J. B. Lyon and co., 1931. (Special report of the State tax commission, 1931, No. 3.)

Examines State aid programs of ten States. Recommends assessment of real estate at full valuation as a means for increased State aid.


This is the report that made possible the noteworthy New York Equalisation Law on the Mort plan. Includes sections on State school aid, local taxation, and revision of the State tax system.


Examines the 1923 school finance situation in New York, and investigates the sources and distribution of school revenues and the educational and tax inequalities resulting from the system.


Morrison, F. W. Equalization of the financial burden of education among the counties of North Carolina. Columbia university contributions to education, no. 184.


— State property tax to aid in the support of an eight months school term. Chapel Hill, N. C., University of North Carolina, 1925. 107 p. (University of North Carolina. Extension bulletin, vol. 5, no. 6, November 16, 1925.)

STATE TEACHERS ASSOCIATION. School finance study no. 2; submitted by the school finance committee of the educational council. Ohio State teachers association, 1924. Columbus, Ohio.


WINTER, T. W. Ohio Plan of State Aid. Ohio schools, 8: 59, February, 1930.


Final victory for school finance program. Oklahoma Teacher, 8: 10-11, April 1927.


The distribution of school funds in the State of Oregon. Eugene, Oreg., University of Oregon, 1926. 48 p. (University of Oregon publication, vol. 1, no. 1, 1926.)


Principles of State appropriations for education and their distribution.


South Dakota. ST. JOHN, C. G. State aid for schools should be continued. South Dakota education association, 2: 296, January 1927.


Sources of revenue and methods of collection and distribution of local and State funds.


Recommends increased State support to be derived from new taxes, a lessening of the several property taxes, strengthening of the county unit and a better system of State aid.


An analysis of the distribution of State funds to elementary and secondary schools. Compares Tennessee and North Carolina systems.


Compares school expenditures and costs of Texas with those of other States, examines sources of support, suggests changes in basis of apportionment of State school funds and sets up standards for local financial management.


This study shows an urgent need for a plan of State support for local public
high schools in Wisconsin. To meet this need certain standards of State support are set up and a specific technique in the way of a formula is then developed on the basis of these standards. It is shown how the plan would have operated during the year 1930-31.


Makes statistical review of past 10 years of Wisconsin's educational expenditures to reveal need for readjustment, opposes property tax, and recommends new taxes and lumped appropriations. Discusses a proposed plan for State aid to high schools and tabulates statistics showing amount of aid due each high school district under provisions of the plan.


TRANSPORTATION

See also State Aid, Consolidation; State Aid, Rural


A discussion of certain practices found in providing funds for transportation which arise in connection with the activities of supervisors.


Discusses a program of State aid based on the principle of equalization of educational opportunity demanding an index of transportation which will enable the State to distribute the burden of transportation costs equally.


Examines the extent to which States have provided legal financial support and encouragement for the building and administration of consolidated schools and for rural school transportation. Treats the purposes of such State aid and the bases upon which it is apportioned.


Develops the thesis that if a State accepts the theory of equalization of educational opportunity the use of school funds for pupil transportation is illegal.


On basis of information, lists six principles to be observed in granting State aid.

JOHNS, ROE LYELL. State and local administration of school transportation. New York city, Teachers college, Columbia university, 1928. (Contributions to education, no. 830.)

The first part covers the development of a new technique for the measurement of transportation need and administering of State aid for transportation. Makes application to the transportation needs in selected States. Sets up six standards as the determinants of the validity of the proposed scheme.


Maintains that an adequate system of State support for school transportation should be based on the relative needs of different communities and the cost distributed with respect to the abilities of the various communities to support education. Transportation needs of the communities should be calculated by a technique involving a prediction of that need by a factor beyond the control of the community which produces the need. The predictive factor selected is percent of nonrural population.


Examines tax legislation in Nebraska, the equalization machinery, extent of property tax, land assessments, exempted property, Federal collections, total appropriation of the State, percentage of State and local expenditures going to education, possible sources of additional revenue and State aid for transportation.
VOCATIONAL


Georgia. Brief statement concerning the request for State funds to be used in developing and maintaining Georgias's state-wide program of vocational education. Atlanta, Ga., State board of vocational education, 1929.


STATE CONTROL, FISCAL

See Fiscal Control, State

STATE COSTS, SCHOOLS

See also State Statistics

[Many valuable data on the cost of education in the individual States appear in the research bulletins of the National Education Association, traceable through the index at the end of each volume]

California. California and public school costs. Santa Barbara, Calif., Teachers' club bulletin, 3: 8-10, January 1927.

Carr, William G. Twenty-five years of California school costs. Sierra educational news, 24: 16-20, May 1928.

A study of the cost of maintenance, average daily attendance, per capita maintenance, index of school costs, and the length of school term, Index of school costs for California for 1901 and 1928. Depreciation of the dollar, increased attendance, lengthened school term, expanded school service, and wages are cited to account for increasing expenditures.

Comparison of educational expenditures in California; fiscal years 1918-17 and 1926-27. Tax digest, 6: 313, September 1928.


Economic resources and school costs by States in 1926. Journal of the National education association, 17: 56, February 1928.

Florida. Smith, Charles A. Some relationships existing in school expenditure among Florida counties. New York, N. Y., Teachers college, Columbia university, 1929. 64 p. (Teachers college, Columbia university. Contributions to education, no. 352.)

An attempt to find the variation in per pupil expenditures for current expense among Florida counties and to determine the causes of such variations. Finds two general causes: (1) Conditions under control of school boards such as the length of term and number of teachers in the school, and (2) conditions beyond the control of boards such as wealth, number of districts into which county is divided, and density of population.


Indiana. Department of Public Instruction. Statistical abstract of schools in Indiana cities. Indianapolis, Ind., Department of public instruction, 1931.

Tabulates enrollment, daily attendance, assessed valuations, school tax rates, transfer receipts, expenditures, per capita enrolled costs, per capita A. D. A. costs, pupils completing school, bonded debt, and value of school plant from annual statistical reports of Indiana cities for the year ending July, 1931.

Another angle on Indiana school costs. Indiana teacher, 74: 16, May 1926.


Detailed costs from regular State sources for all phases of the public school system, chiefly, 1924 to 1930, with recommendations for economies and a better financial organization.

School costs. Education bulletin, 15: 397-407, April 1929.

Similar items in corresponding numbers for other years.


Discusses the trend of costs of public instruction in New York State from 1915 to 1923, by means of index numbers with 1923 as the basic date.


Discusses increased attendance, change in materials and methods of instruction, expansion and enrichment of programs, and increased teachers salaries as causes in increased educational costs. Includes relevant statistical data on instructional costs in Ohio from 1900 to 1927.


STATE DEPARTMENT


Total and per pupil enrolled figures for salaries and operation within the department itself for each State for 1922-23 or 1923-24.


Various cost and total salary figures for different members of State departments in various years from 1900 to 1923. Salary distributions and salaries of certain staff members in five eastern States in 1923. Bibliography.


Valuable distribution tables of salaries for different positions for 1925 and some previous years, and the cost of staff salaries $1,000 per year on education, by individual States for 1920.

STATE, GENERAL


A study of the growth and purpose of the expenditures of the State, county, city, and other local subdivisions, with constructive criticism. Analyzes State bond issues. Discusses proper relations between Federal and State government, and between the States in regard to inheritance, income, corporation and excise taxes, as well as State taxation of personal property, corporations, incomes and inheritances. Includes suggestions for the collection of excise taxes, for the exemption of certain property from taxation, and from State and local sources of revenue, and the administration of a State taxation system.


Jensen, Jens P. Problems of public finance. New York, N. Y., Thomas G. Crowell co., 1924. 606 p. Discusses problems arising in connection with the State's fiscal activities and solutions which have been offered.


Assuming the State to be the primary unit of educational control, this chapter discusses State sources of school revenue, methods of distribution, laws regarding school finance, local fiscal responsibility, sources and limitations of local or county revenues, nonrevenue school funds, and the legal expenditure of school funds.


This is a compilation of 15 check lists for appraising the efficiency of various phases of State educational administration. Includes salary laws, retirement systems, revenue sources, and apportionment of school funds.


A series not yet completed in March, ranking the States by indexes on the Ayres and Phillips methods, both of which include finance items for various years. Each index gives rank on total and on each financial item. The two methods differ on the financial items included, and the Phillips procedure takes into account the changing value of the dollar. References to publications giving these indexes in previous years.


An analysis of the State's legal right to provide funds to secure sites, equipment, and teachers for schools. Includes an explanation of the legality of State and local taxation for the support of public schools. Defines the legal relationships of the State and the locality to the school, and their relative rights and obligations to support the schools.
STATE SUPPORT


Readable articles and news notes on financial problems and activities of the state governments.


Covers 1890 to 1930. Shows that the increases in school costs have been accompanied by vast increases in national income. Urges the working out and adoption of scientific programs of taxation and distribution of school funds. Includes many relevant data.


Treatments of status and problems of school finance to 1921 for typical Western States: California, because it had strong State and county support of schools; Colorado, because it granted little State aid.


Individual studies of the four States named, of all their important school finance problems because they all represent low school-expenditure States. Much of the material was previously printed elsewhere.


Treatments of school finance problems in Eastern States at various recent dates. Examines school finance situations then existing in Massachusetts, New York, and New Jersey, investigates sources and distribution of school revenues and the educational and tax inequalities resulting from those conditions, and presents numerous definite reconstructive school finance recommendations.


Treatments of status and problems about 1924 for typical middle west States: Illinois because it has regarded permanent school funds as belonging to the localities; Minnesota because it has developed a large State school fund by taxes on natural resources; South Dakota because nearly all State school income is from the permanent school fund; Alaska is added. For details see sections on individual States, e.g. Illinois.

STATE STATISTICS

[Finance statistics are to be sought in the bulletins of the United States Office of education. The latest in print. Bulletin, 1930, no. 5, Statistics of State school systems, covers 1927-28. Bulletins for the earlier years can be located through the list of educational publications of the United States Office of education, or under the head of State school systems in Carter Alexander's Educational research.]

third edition, 1931. The statistics include such items as salaries, value of school property by classes, school expenditures, debt, receipts by amounts and percentages for sources, expenditures by amounts and percentages for functions. Figures are for continental United States, for each State and for each outlying part of the United States. The financial statistics of States series of the United States Bureau of the Census gives finance material comparing schools and other governmental services. The cost data for schools are subdivided into supervision, State institutions, appropriations to minor civil divisions, and all other. The latest number in print is for 1929]


The data selected cover the years 1918, 1919, 1920, and 1921.


STATE SUPPORT

See also Equalization; Revenues, State; State Aid; Taxation


This outstanding lecture develops, with special reference to secondary education, the thesis that "the State supports free public schools to perpetuate itself and to promote its own interests. Education, therefore, is a long-term investment that the State may be a better place in which to live and a better place to make a living."


California. EGGERS, H. L. State finance of public education as operating in California. Texas outlook, 10: 7-8, October 1926.


Chapter XVI deals with school funds and appointment. Presents many relevant data in graphic and tabular form.


A general discussion of State school finance including such topics as proportion of school support, sources of revenue, methods of distribution, State school finance laws, fiscal responsibility, limitations of State school revenue, nonrevenue school funds and legal expenditure of school funds.


Indicates by States a wide variety of recent educational activities, experiments, and plans for school support.


Mississippi. MISSISSIPPI'S ability and effort to support education. Mississippi educational advance, 16 : 254-56, May 1927.


A discussion of the problem of State support for public schools, involving a minimum educational program to be guaranteed all children, equalization of the burden of support of this program in accordance with each community's ability to pay, the provision of unlimited opportunity for providing educational facilities above the minimum program, and the encouragement of local effort by providing adequate State leadership and an efficient system of school organization.


Discusses the type of support the State should give the schools.


A study of the Federal, State, and local tax collections in the various States for 1928. Shows the percentage of those collections which was spent for education. Includes the State's educational expenditures with their expenditures for life insurance, building construction, automobiles, and various luxuries. Discloses ample ability to pay for education.


New York. MOTT, PAUL R.; SIMPSON, ALFRED S.; LAWLER, EUGENE S., and ESSEX, DON L. State support for public schools in New York as re-

A valuable study in educational finance of the relation between local and State support for education in New York from 1926 to 1930. Attempts to ascertain what the new State aid since 1925 has contributed to educational expansion and to tax relief.


Valuable pioneer study comparing the States on economic resources in 1922 using wealth and income as measures. Compares the educational lead in each State and relates this to the State's ability to support schools. Discusses accompanying factors in ability and unmeasured factors affecting it. Bibliography of 75 annotated references.


State Department of Education. Data relating to the ability of Pennsylvania to support education. Mimeographed by the Pennsylvania State department, 1931.

A statistical study pertaining to school administration in Pennsylvania. Compares the wealth and income per pupil in average daily attendance in Pennsylvania with similar data from eight other States, shows resources and expenditure of the revenue both local and State for 1927-1928, analyzes school costs in relation to total public expenditures, and shows cost of tax collections.


State school support. Sierra educational news, 28: 49, January 1899.


A plan for equalizing educational opportunity by complete State support with the exception of capital outlay and debt service. Gives seven essential steps involved in the administration of such a plan, and an alternative plan to bridge any necessary period of transition.


FOREIGN

Canada. Latte, S. J. The problem of financing the public schools of Saskatchewan. Canadian school board journal, 3: 8, September 1924.

STATE SURVEYS


Advocates a plan for equalizing through State aid, and a larger administrative unit, based on a published study of Prof. F. M. Tarun and an unpublished one of Prof. Paul K. Mort.


Contains a chapter on larger administrative units for rural schools and many data showing present costs and educational opportunity for education in rural districts, estimating the increase in cost necessary to bring improvement.

Strayer, George D. and Englehardt, N. L. A preliminary report of the survey of the public schools of Missouri Institute of edge
national research, Division of field studies, Teachers college, Columbia university, New York city. 1929, vol. i, 206 p.


Porto Rico. A survey of the public educational system of Porto Rico. Made under the direction of the International institute of Teachers college, Columbia university; authorized by the University of Porto Rico. New York city, Teachers college, Columbia university, 1928. 463 p. (Studies of the International institute of Teachers college, Columbia university, no. 8.)


Presents detailed data comparing the expense of administering schools in Utah with that in a number of other States. Analyzes district superintendents' salaries in Utah and includes recommendations for increasing same to correspond to salaries paid to superintendents of cities.


Report of the commission to survey the educational system of Virginia, submitted to the general assembly, January 1928.


Annual cost of serial bond issue, taxable wealth per capita and per pupil, school tax rates compared with total tax rate, bonded school debt per $1,000 wealth and in relation to the value of the school plant, expenditures per pupil enrolled, and running expenses per $1,000 of wealth are investigated and tabulated for representative districts of West Virginia.

STATES, INDIVIDUAL

[This section duplicates without annotations all references specifically bearing on a particular State and also includes other references so bearing. Annotations for the more important references may be expected in the other parts of the bibliography where a given reference appears, alphabetically by its State name under a pertinent head. Thus, P. R. Morton's Kansas equalization study appears with annotation under Equalization, States, Individual, Kansas]

ALABAMA

COSTS, ECONOMIES, AND EXPENDITURES


Alabama's expenditure of the current expense fund; eighty-one per cent for instructional service. Alabama school journal, 48: 16, January 1929.


**MISCELLANEOUS**


**PERSONNEL**

Alabama salaries should be raised. *Alabama school journal*, 46:21, 22, October 1928.


**REVENUES, SUPPORT, AND TAXATION**


**STATE AID AND EQUALIZATION**

**ALABAMA STATE DEPARTMENT OF EDUCATION.** How the State aids in building schoolhouses. Division of schoolhouse planning. Montgomery, 1930.


**STATE DEPARTMENT OF EDUCATION.** Apportionment and distribution of Alabama’s equalization fund. Division of research and information, 1930. *State of Alabama, Montgomery*.


ALASKA


HAGEN, C. E. The cost of education per pupil in Alaska towns. Alaska school bulletin, 8: 7, April 1928.


ARIZONA

Educational costs in Arizona. The tax digest, October, 1927, p. 112; California taxpayers’ association, Los Angeles.


ARKANSAS

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

Dawson, Howard A. Bonded indebtedness for schools in some Arkansas districts. Journal of Arkansas education, 6: 7-10, March 1928.


HIGHER EDUCATION

Junior college recognition (on a bequest of $2,000,000 to junior college of Little Rock, Arkansas). School executives magazine, 49: 32-33, September 1929.

LOCAL SCHOOL FINANCE


MISCELLANEOUS

Four years with the public schools in Arkansas, 1923-1927. State department of education, Little Rock, Ark., 1928: (Bulletin no. 12.)


REVENUES, SUPPORT, AND TAXATION


STATE AID AND EQUALIZATION


CALIFORNIA

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

Asplund, Rupert F. Mechanics and operation of successful school budget control. Tax digest, September 1929, p. 314; California taxpayers' association, Los Angeles.


Buckalew, Harry L. The purchase of school supplies. M. A. thesis, 1925. Berkeley, University of California. (Study confined to Alameda county, Calif.)


California Taxpayers' Association Reports, Los Angeles.


No. 178, May, 1931. Purchase of Supplies in Kern county. 6 p. ms.


HANNON, WILLIAM H. Centralized purchasing plan worked out; *The tax digest*, January 1928. p. 11.


HALL, M. D. Centralized school purchase act; *The tax digest*, March 1927. p. 80-83.


--- BOARD OF EDUCATION. Rules for conducting student or school funds and certain activities in all day and evening, elementary, junior and senior high school, and junior college. *Los Angeles, Los Angeles city school district*. Special volume, no. 4.


OSMAN, R. Schools and their fiscal problems; *The tax digest*, June 1931. p. 208.


--- Presents detailed forms for complete school budget.


--- School bond law improved; *The tax digest*. December 1931, p. 424.

--- School finance; *The tax digest*; June 1931, p. 203.
--- Ups and downs in school bonds. The tax digest, 8: 215-17, June, 1930.

--- What is expected of educational research. The tax digest, 8: 21, January 1930.


COSTS, ECONOMICS, AND EXPENDITURES


California and public school costs. Teachers' club bulletin, Santa Barbara, 5: 6-10, January 1927.

California schools, a $160,000,000 enterprise. The tax digest, 4: 202-6, June 1927.


--- School costs and income in California. Sierra educational news, 25: 35, September 1929.

--- Twenty-five years of California school costs. Sierra educational news, 24: 10-20, May 1928.

Comparison of educational expenditures in California; fiscal years 1918-17 and 1928-27. The tax digest, 6: 313, September 1928.


--- Economy in schools; possible savings in Contra Costa County schools. The tax digest, 9: 240-43, July 1931.

Evans, F. O. Your money's worth in education. The tax digest, September 1930, p. 331.

Farley, B. M. California's investment in public education. Sierra educational news, 26: 35, December 1930.

Fletcher, F. H. Why the mounting costs of schools? The tax digest, September 1929, p. 312.

Fresno. Schaeffer, J. Reed. School purchases in Fresno County—savings reach 50 per cent. The tax digest, July 1930, p. 244.


Lacy, James Samuel. The depression and school costs: The tax digest, March 1932, p. 83.


Santa Barbara County. School supply purchases in Santa Barbara county; economy of centralized purchasing shown. *The tax digest*, 7: 267-72, August 1929.


—— Trend of educational costs in California: *Tax digest*, February 1930, p. 68.


COUNTY ORGANIZATION, CONSOLIDATION, AND TRANSPORTATION


—— and Ray, A. W. Outline of a plan to effect further development and adjustment of the California public school system: *Public school journal of California*, 4: 3-4, 9-11, January 7, 1929.


Purdum, Ernest R. Legal aspects of the county unit bill; *The tax digest*, April 1929, p. 123.

SUZZALLO, HENRY. Education specialist favors county unit plan; only way to bring about equal educational opportunities in California. The tax digest, 7: 75, March 1929.

JUNIOR COLLEGE

CALIFORNIA TAXPAYERS' ASSOCIATION. Report No. 114. Junior colleges in California. Los Angeles, Calif., (Not published.)


— National junior college convention; California's contribution. Sierra educational news, 28: 28, January 1930.


HILL, MERTON E. Junior colleges. Sierra educational news, 19: 15-17, November 1923.


LOCAL SCHOOL FINANCE

See also Business Management and Cost heads under California

Alhambra. HULL, GEORGE R. and FORD, WILLARD S. Survey of the Alhambra public schools, housing, finance, business management. Los Angeles, Calif., University of Southern California, 1928. 107 p. (Studies, second series, no. 5.)


— Schools spend $800,000 annually. The tax digest, June 1930, p. 212.

Contra Costa County. HART, F. W. and PETERSON, L. H. Cost of education in Contra Costa County and the ability of the county to finance an adequate educational program. In their A school building survey and school housing and consolidation program for Contra Costa County, Calif. Richmond, Calif., Independent print, 1924. Part 5, p. 121-99.

Eureka. HART, F. W. and PETERSON, L. H. School costs and ability to finance a school building program in Eureka. In their A school building survey and school housing program for Eureka, Calif. Eureka, Calif., Board of education, 1924. Chapter 4, p. 29-61.


Modesto. BAXLEY, J. H. A study measuring the ability of Modesto to support all governmental activity, particularly its public schools, 1929. Mimeo.


Santa Barbara County. The findings of the Santa Barbara County study. The tax digest, 7: 151-159, May 1929.

Santa Monica. Hull, Osman R. and Ford, W. S. The ability of Santa Monica to finance a building program. In their School housing sur-vey of the Santa Monica city schools. University of Southern California studies, second series, no. 4. Los Angeles, University of Southern California, 1927. Chapter 5, p. 57-66.


Sierra Madra. Preliminary survey of the city of Sierra Madra. Los Angeles, California taxpayers' association. Report no. 185, August 1931. 32 p. Section on education, p. 23-32. (Mimeographed.)


MISCELLANEOUS


PERSONNEL


CALIFORNIA DEPARTMENT OF EDUCATION. Compilation of laws dealing with the California teachers' retirement salary as amended by the legislature of 1925. Sacramento, Calif. State printing office, 1926.


CLOUD, Roy W. Group insurance. Sierra educational news. 24: 14, May 1928.

Compilation of laws dealing with the California teachers' retirement salary as amended by the legislature of 1925. State printing office. Sacramento, 1926.


EVANS, F. O. Teachers' load and the school budget. The law digest, 8: 205-7, June 1930.

GRIDLEY, E. G. California teacher retirement salaries. Sierra educational news, 24: 6-8, November 1928.


— Comparative study of salaries paid teachers and other school employees. Pasadena, Calif., Education research bulletin of Pasadena. September 1925.

— Comparative study of teachers' salaries of Pasadena and other California cities. Pasadena, Calif., Bureau of research and service, board of education, 1927. 27 p. (Bulletin of research, personnel and service, vol. 5, no. 2, 1927.)


KEELING, H. A. Some typical California high school salaries. Sierra educational news, 22: 411, June 1926.


— Teacher salary liability. Sierra educational news, 26: 66, 68, 76, April 1930.


PUBLIC SCHOOL TEACHERS' RETIREMENT SALARY FUND. Teachers' journal of Northern California, 3: 4-5, 26-28, September 17, 1928.


**REVENUES, SUPPORT, AND TAXATION**


—— The severance tax idea applied to California mineral production. *Sierra educational news*, 25: 30-34, September 1929.

**STATE DEPARTMENT OF EDUCATION**

SWIFT, F. H. New sources of school revenue needed. Sierra educational news, 26: 22-26, November 1930.

——— Studies in public school finance, the West: California and Colorado. Minneapolis, University of Minnesota, 1922. (Minnesota University. Research publications, education series, number 1.)

Tax commission meeting. Sierra educational news, 26: 32, January 1930.


TRENHAM, N. B. Educational bills. The tax digest, March 1931, p. 95.


SECONDARY EDUCATION


Los Angeles County. THURMAN, WESLEY B. Unit costs of supplies in the four-year high schools of Los Angeles county. M. A. thesis, 1931. University of Southern California, Los Angeles. (Unpublished.)

Marysville, Calif. Marysville union high school. A report of an investigation of the physical needs of the school and a plan for financing the proposed program of development, by Jesse B. Sears. Marysville, Calif., Board of education, 1925. p. 15-20, 22-23, 30-33, 35-40.


——— SECONDARY EDUCATION IN CALIFORNIA. Report of a preliminary survey. Sacramento, California state printing office, 1929. (Leonard V. Koos, director.)


STATE AID AND EQUALIZATION


EGGER, H. L. State finance of public education as operating in California. Texas outlook, 10: 7-8, October 1926.


See also Sierra educational news, 27: 25-30, April 1931.


SWIFT, F. H. Shall California establish a State public school equalization fund? Sierra educational news, 29: 12-14, October 1930.


COLORADO

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


LOCAL SCHOOL FINANCE


SARGENT, C. G. Better country schools in Colorado. A first-class district to replace the third-class school districts of each county. Denver, Colo., Eames bros., printers, 1925.


Weld County. HUNTER, W. F. Finances in consolidated schools of Weld county, Colo. Educational administration and supervision, 12: 491-96. October, 1926.


PERSONNEL


The retirement bill introduced. Colorado school journal, 44: 10-12, March 1929.


REVENUES, SUPPORT, AND TAXATION


Questions and answers concerning the financing of schools in Colorado. Colorado school journal. 45: 35-40. April 1930.


STATE AID AND EQUALIZATION


CONNECTICUT

COSTS, ECONOMICS, AND EXPENDITURES


Thompson, Roger M. Per-pupil costs. Division of research and surveys of the State board of education, Hartford, Conn.

(Research reports prepared annually.) (Mimeographed.)
LOCAL SCHOOL FINANCE


MISCELLANEOUS


PERSONNEL

Thompson, Roger. Teachers' salaries, 1929-30. Division of research and surveys of the State board of education, Hartford, Conn., 1930. 21 p. ms.

REVENUES, SUPPORT, AND TAXATION


Thompson, Roger M. Percentage of local tax receipts devoted to schools. Division of research and surveys of the State board of education, Hartford, Conn.

(Research reports prepared annually.) (Mimeographed.)


STATE AID AND EQUALIZATION


State aid to schools. Connecticut schools, 10: 3-4, June 1929.


DELAWARE


SWIFT, F. H. State school funds and their apportionment. *American school board journal*, V. 30-41, February, 1928 (See also the April, June, September, and following February issues of this publication).


**FLORIDA**

**Business Management**


**Costs**


**LOCAL SCHOOL FINANCE**


**MISCELLANEOUS**


Instruction unit becomes law. *Journal of the Florida education association*, 8: 3-5, June 1931.


**State Department of Public Instruction.** Consolidation of schools. *Tallahassee, Fla., State department of public instruction*, 1924. 27 p. (Florida school bulletin, vol. 1, no. 5, September 1924.)


STRAYER, G. D., ENGELHARDT, N. L. and MOST, P. R. Official report of the educational survey commission,

The educational survey commission authorized by the Florida State legislature directed the division of field studies to undertake the educational survey work for this report.


PERSONNEL


SPENCER, PAUL R. State minimum teachers' salary schedule; a part of Florida's minimum educational program. Doctor's dissertation, Columbia university. In press at Teachers college, Columbia university, New York, N. Y.


REVENUES, SUPPORT, AND TAXATION

CAWTHON, W. S. The financing for public education in Florida as the State superintendent sees it. Journal of Florida education association. 7 : 8-9, 19-29, October 1929.


NORTON, JOHN K. Florida's effort and ability to support education. Journal of the Florida education association. 4 : 6-8, March 1927.


STATE AID AND EQUALIZATION


WASHINGTON CORRESPONDENCE. Supporting public education and distributing school funds in an attempt to help schools through their financial crisis. School executives magazine, 51: 76. October 1931.

GEORGIA

MISCELLANEOUS


PUSEY, EDWIN D. Per pupil costs in the public schools of Georgia. Athens, Ga., Association of superintendents of Georgia education association, 1931. 23 p.


REVENUES, SUPPORT, AND TAXATION


McNUTT, PAUL V. Public support of education. Georgia education journal, 21: 37, April 1929.

NOBLE, Jr., M. C. S. Public school finance in Georgia. Raleigh, N. C., State department of education, 1931.


School finances in Georgia. Elementary school journal, 30: 484-86. March, 1930

UNIVERSITY OF GEORGIA. The university and the State: a comparative study of the support of American State universities. University of Georgia, Athens, Ga., 1926. 24 p. (Bulletin of the University of Georgia, vol. xxvi, no. 2a, February 1926.)

STATE AID

Brief statement concerning the request for State funds to be used in developing and maintaining Georgia's State-wide program of vocational education. Georgia State board of vocational education, Atlanta, 1929.


— Financial situation of Georgia public school system. Georgia department of education, Georgia department of education, Atlanta, 1929.


Give justice and opportunity to all; not charity to a few. Georgia education journal, 22:32-33, November 1929.

GRIESE, B. M. How to secure financial help from the community for our schools. Georgia education journal, 23: 21-24, December 1930.


SWIFT, GORDON G. State responsibility for the support of education in Georgia. New York, N. Y., Teachers college, Columbia university, 1925. 56 p. (Teachers college, Columbia university. Contributions to education, no. 181.)

WADER, RALPH E. Should Georgia school funds be equalized? Home, school and community, 17: 8-11, May 1925.


IDAHO


**ILLINOIS**

**BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION**


**COSTS, ECONOMIES, AND EXPENDITURES**


Exhibits 1, 11, and 111. Published tables of Illinois school statistics showing data as reported over a five-year period, from 1921 to 1925, inclusive. Educational press bulletin, No. 218. Springfield, Ill., Department of public instruction, October 1926. p. 2.

**GRIMM, L. R.** Why our schools are costing more. *Illinois teacher*, 13: 4-7, September 1924.


LOCAL SCHOOL FINANCE, CITY


BEHR, D. J. The finances of the Chicago board of education. Chicago principals' club reporter, 18: 3-7, March 1929.

DOORN, CHESTER C. Chicago's financial muddle. Chicago principals' club reporter, 19: 3-5, April 1930.


Report of the secretary of the committee on finance to the Chicago board of education, 1924.


KELZER, E. L. Facts and figures; the financial situation of Chicago's educational fund. Chicago principals' club reporter, 17: 7-9, November 1927.

CHICAGO. ROGERS, DON C. Financial condition of the Chicago public schools. Chicago, Ill., Chicago principals' club, 1926. Up. (Service bulletin, no. 6, June 1926.)

"Some slants on Chicago school finance." Chicago principals' club reporter, 14: 7-19, October 1924.

The Chicago finance predicament. Phi Delta Kappan, 14: 79, 81, October 1931.

Why have Chicago school costs increased? Chicago, Ill.: Public schools, 1929. 15 p.

School finances. School and society, 32: 580-81, November 1, 1930.


LOCAL SCHOOL FINANCE, RURAL


ILLINOIS STATE TEACHERS ASSOCIATION.

Are consolidated schools really expensive? Springfield, Ill., Illinois State teachers association, Research department, 1928. (Mimeographed.)


MISCELLANEOUS


Educational progress in Illinois as shown by more direct and scientific measures. Educational press bulletin, No. 253. Springfield, Ill., Department of public instruction, March 1930, p. 3.


Some problems of the larger school unit in Illinois. Department of research and statistics, State teachers association. Springfield, Ill., 1926. (Multigraphed.)


DOEGE, C. C. The emeritus suit and the Miller law. Chicago principals' club reporter, 18: 4-8, October 1928.


— The Chicago teachers' pension system. Chicago schools journal, 6: 300-302, April 1924.


Teachers' retirement law. Chicago principals' club reporter, 19: 5-6, January 1930.

Teachers' salaries and the cost of living. The Illinois teacher, 14, no. 9., 103-64, May 1926.


REVENUES, SUPPORT, AND TAXATION


How one community met its problem for increased financial support. American school board journal, 78: 96, June 1929.

ILLINOIS STATE TEACHERS ASSOCIATION.


— Research Department. School revenues in Illinois; some miscellaneous comments upon the origin, administration, and use of the public school funds in this State. Based upon the findings by the research


Taxation inequalities and their results. Illinois teacher, 14: 19-20, September 1925.

Taxation in Illinois, Educational press bulletin, No. 204. Springfield, Ill., Department of Public Instruction, October 1925. p. 3.


STATE AID AND EQUALIZATION

A square deal and the rural child. Illinois teacher, 17: 4-7, 30-31, September 1928.

Comparison of amounts received by counties under former methods of distribution with amounts they would receive under method proposed in Senate bill No. 454. Educational press bulletin, No. 206. Springfield, Ill., Department of Public Instruction, June 1925, p. 2-3.


Equalizing educational opportunities: the primary purpose of the State school fund. Illinois teacher, 15: 4-5, 9-11, September 1926.

Equalizing educational opportunity in Illinois. Results of state distribution of $8,000,000 to public schools in 1923. Springfield, Ill., Department of public instruction, 1923.


— Equalizing to higher levels. Illinois teacher, 19: 85-87, November 1930.


— Ranking of counties of Illinois in ability to support education, in effort, and in the efficiency of their school systems. Springfield, Ill., Illinois State teachers association, 1929. 18 p. (Manuscript.)


ILLINOIS STATE TEACHERS ASSOCIATION. Equalization of educational opportunities: the major problem of State school fund. Illinois State teachers association, Springfield, Ill., 1926.


Inequalities in educational opportunities in one room schools in Illinois. State Department of education, 1924. 15 p. (Reprint from Illinois teacher—November 1924.)


MOORE, R. C. State is responsible for school system. Illinois teacher, 16: 8-10, October 1927.


— The general assembly and the schools. Illinois teacher, 18: 2-7, September 1929.


Slants on State's interest in school. *Illinois teacher*, 16: 2-4, October 1927.


We are a State. *Illinois teacher*, 17: 259-60, May 1929.


Where our school "system" breaks down. *Illinois teacher*, 17: 80, November 1928.


INDIANA

BUSINESS, MANAGEMENT AND FINANCIAL ADMINISTRATION


KIRKIN, CURTIS D. The administration of athletic funds in Indiana high schools. *Indiana university, Bloomington*, 1930.

ORR, LAWRENCE F. Budget classifications for counties, townships, civil and school corporations. 1929 revision. *Indianapolis, Indiana State board of accounts*, 1929. 130 p.


COSTS, ECONOMIES, AND EXPENDITURES


BURRIS, B. J. Cost of instruction in Indiana high schools. *State department of public instruction*, Indianapolis, 1924. (Bulletin no. 71.)

—— Variation in high school cost of instruction, causes and suggestions for improvement. *Bloomington, Ind., School of education, University of Indiana*, Bulletin, vol. 1, no. 4, 1925. p. 21-29.


DEPARTMENT OF PUBLIC INSTRUCTION. Statistical abstract of schools in Indiana cities. Indianapolis, Ind., Department of public instruction, 1931.


Per-pupil costs in Indianapolis. American school board journal, 78: 72, February 1929.

PUCKETT, ROSEWELL C. Comparison of actual classroom salary costs in the Boisse high school, Evansville, Ind. American school board journal, 69: 56, 130, September 1924.


LOCAL SCHOOL FINANCE


Marion. Cole, M. S. A descriptive research investigation and study of the commercial educational needs of Marion, Ind., based on the tabulated results of a questionnaire. Ball state commerce journal, 2: 19, 25, May 1931.


Muncie. Calvert, T. B. A brief review of the education program in the Muncie city schools, with the financial plan for supporting it. Public schools, Muncie, Ind. Muncie, Indiana, Public school board, 1930. (Bulletin, 1930, no. 46.)


MISCELLANEOUS


PERSONNEL


REVENUES, SUPPORT, AND TAXATION


JUD, C. H., KEITH, R. H., McVey, F. F. Survey commission to investigate the State supported institutions of higher learning in Indiana. *Indianapolis, Ind., Board of public printing, State house, 1926. 206 p.*

KEENES, F. W. Survey commission report on State supported institutions of higher learning. *Indianapolis, Ind., Board of public printing, 1926.*


The school tax problem: a symposium by a number of Indiana's educational leaders. *Indiana teacher, 74: 10-15, January 1930.*

Visher, Stephen S. Indiana's ability to support liberally, higher education; analyzed and compared with that of Michigan, Wisconsin, Minnesota, Iowa, Illinois and Ohio. *In Indiana academy of science. Proceedings of the forty-second annual meeting, 1926. p. 93-101.*

STATE AID AND EQUALIZATION


STEWART, HENRY NOBLE. Equality of educational opportunity. *Indianapolis, Ind., Department of public instruction, 1928. p. 1-10.* (Department of public instruction. Bulletin, no. 82.)


IOWA

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

MAYO, MILTON CHARLES. Public school bonding in Iowa. *State university of Iowa, Iowa City, 1926.* (University of Iowa studies, series 1, no. 113. Studies in education, vol. 3, no. 5, July 1926.)


SLATER, C. P. and GREENE, HARRY A. Administration of the school budget. *University of Iowa, Iowa City, 1926.* (University of Iowa bulletin no. 122. College of education series no. 12), April 1925.


COSTS, ECONOMIES, AND EXPENDITURES

Consolidated school costs in Iowa. *American school board journal, 70: 65, April 1925.*


LOCAL SCHOOL FINANCE


Cedar Rapids school plant program, 1924. Studies in school plant costs. *University of Iowa, Iowa City.*

Davenport. School plant program for Davenport. *University of Iowa, Iowa City, 1925.*

DEPARTMENT OF PUBLIC INSTRUCTION.

Consolidated schools of Iowa. *Des Moines, Iowa, State department of public instruction, 1929.*
Des Moines, Statement of policies and manual of business procedures, records and accounts for junior and senior high schools. Board of education, Des Moines, Iowa. 1926.

Marshalltown, Iowa. School building program, 1925. Iowa City, Iowa, University of Iowa, 1925.

MISCELLANEOUS


Houle, Harold L. A comparative study of the legal aspects of tuition charges in the public schools of U. S. Iowa City, Iowa, University of Iowa, 1931. 104 p. (College of education series no. 28, Extension bulletin, no. 203. April 1, 1931.)


PERSONNEL


Group insurance. Midland schools, 44: 11, September 1929.

Houle, L. C. History of the teachers' annuity movement in Iowa. University of Iowa: Iowa City, 1926. (Extension bulletin no. 145. College of education series no. 20, April 26, 1926.)

Rogers, Don C. Trend of teachers' salaries. Iowa City, Iowa. University of Iowa. 1923. 20 p. (University of Iowa extension bulletin, no. 88. April 1, 1923.)

REVENUES, SUPPORT, AND TAXATION


Samuelson, A. S. and Williams, R. C. Public school finance in Iowa, preliminary report. Research Bulletin no. 6—Department of Public Instruction, 1930.


Williams, R. C. Taxes in consolidated school districts, State department of public instruction, Des Moines. Research bulletin no. 7. 1831.

STATE AID AND EQUALIZATION

DEPARTMENT OF PUBLIC INSTRUCTION.

Distribution of State school funds in Iowa. Des Moines, Iowa, Department of public instruction, 1930. (Research bulletin, 1930, no. 2.)


Williams, R. C. Public school finance in Iowa. State department of public instruction, Des Moines. (Research bulletin no. 6, 1930.)

KANSAS

COSTS, ECONOMIES, AND EXPENDITURES


S. Art, T. J. How better schools for less money may be made available for a Kansas community. University of Kansas bulletin of education, 3: 3-19. February 1931.


LOCAL SCHOOL FINANCE


Dodge City. OBRIEN, F. P. School survey and building program for Dodge City, Kansas. 70-1, 73-78, 80-98. University of Kansas, Bureau of school service University of Kansas, Lawrence, 1923.


KISSICK, CLAUDE. The county unit plan of financial administration desirable for financing the high schools of Kansas. M. A. thesis, 1931. University of Wisconsin, School of education, Madison, Wis.

Lawrence. SMITH, HARRY P. Financing education in Lawrence; a financial report for Lawrence, Kansas. Lawrence, Kansas, 1927. 31 p.


SMITH, M. L. and WILLOUGHBY, WILL W. A survey report concerning the 172 Kansas consolidated schools.

Kansas State teachers college. Emporia. Department of consolidation, 1926. (Mimeographed.)


MISSISSIPPI


PERSONNEL


REVENUES, SUPPORT, AND TAXATION


— Some facts regarding economic conditions in Kansas and their relation to financing the public schools of the State. Kansas State Teachers Association, Topeka, Kansas, 1932. p. 32.

— The trend of school taxes in Kansas. University of Kansas, Lawrence, 1930. (Bulletin of the university of Kansas, vol. 31, no. 7, April 1930.)


HAWKINS, PAUL. A proposed system of finance for Kansas schools. Technique, 12: 19-20, September, October 1928.

— Proposed system of finance for Kansas schools. Texas outlook, 18: 17, January 1929.

KANSAS STATE TEACHERS' ASSOCIATION. Questions and answers concerning the tax limitation amendment and other materials. Topeka, Kans., 1932.


STATE AID AND EQUALIZATION


MORT, PAUL R. Improvement of the Kansas plan of financial support for common schools. Kansas teacher and western school journal, 28: 17-21, November 1928.

--- Report of the State school code commission of Kansas. A plan for providing equality of educational opportunity in Kansas. Topeka, Kans., State printing plant, 1928. 100 p. (Supplement to volume II, October 1928.)


STATE BOARD OF EDUCATION. Practical application of the financing plan. State board of education, Topeka, Kans., 1930.


KENTUCKY

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

CAMMACK, JAMES W. Safeguarding school funds in Kentucky. State department of education, Frankfort, Ky. 1931. (Unpublished.)


MISCELLANEOUS

BOWEN, J. W. The salaries and qualifications of Kentucky teachers in the high schools of the independent graded districts. University of Kentucky, Lexington.

RESEARCH COMMITTEE OF KENTUCKY EDUCATIONAL ASSOCIATION. County school administration in Kentucky. 1930.


REVENUES, SUPPORT, AND TAXATION


DOOD, J. H. Should the State or local support of schools in Kentucky be increased? Kentucky school journal, 4: 18-21, January 1926.
JAGGERS, R. E. Financing the rural schools of Kentucky through the local community effort. University of Kentucky high school journal, 11: 3-18, October 1925.


Report of the committee on educational finance of the Kentucky educational association. Kentucky school journal, 4: 19-23, December 1925.

Report of the committee on educational finance of the Kentucky educational association. Kentucky high school quarterly, 11: 56-63, April 1925.


STATE AID AND EQUALIZATION


CAMMACK, JAMES W. Equalization of educational opportunities in Kentucky. State department of education. Frankfort, Ky., 1931. (Unpublished.)

Comparison of rural and city expenditures for building and maintenance, for salaries and per student expenditures—need for equalization. Biennial report of superintendent of public instruction. State department, Frankfort, Ky., 1928.

SMITH, BEN R. Sources of revenue to equalize educational opportunity in Kentucky. Kentucky school journal, Vol. VI, no. 5, January 1928.


LOUISIANA

COSTS, ECONOMIES, AND EXPENDITURES


LOCAL SCHOOL FINANCE


MISCELLANEOUS


PERSONNEL


REVENUES, SUPPORT, AND TAXATION


STATE AID AND EQUALIZATION


MARYLAND

MISCELLANEOUS


PERSONNEL

Circular of information setting forth privileges and obligations of teachers under the provisions of the teachers' retirement system of Maryland issued by the board of trustees, May 1927. 14 p.

Law relating to teachers' retirement and relief fund of Allegany County, Md., as passed by legislature of 1912 and amended 1924. Allegany County Md., 1924.

OFFUTT, T. SCOTT. The law relating to the teachers' retirement fund of Baltimore County, Md. Towson, Md., The Jeffersonian, 1924.

Report on a proposed plan for the retirement of teachers in the State of Maryland, submitted by the committee of county superintendents on a teacher's retirement plan for Maryland after receiving the advice of George B. Buck, consulting actuary. State department of education, 1926. 65 p.
STATE COOK, ALBERT


MASSACHUSETTS

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

DEPARTMENT OF EDUCATION. Division of vocational education. Administrative forms used in the establishment and administration of State aided vocational and continuation schools including directions for keeping financial accounts for purposes of reimbursement. Boston, Mass., Division of vocational education, 1925. 44 p.


COSTS, ECONOMIES, AND EXPENDITURES


LOCAL SCHOOL FINANCE


Finances of Boston school systems. School and society, 31: 498, April 12, 1930.


PERSONNEL


Salaries of teachers in the public day schools of Massachusetts, 1928. Boston, Mass. 1929. p. 45. (Bulletin of the department of education, no. 5, 1929.)


REVENUES, SUPPORT, AND TAXATION


———. What we may learn from California and Massachusetts about high school support. Journal of educational research, 12: 17-30, June 1925.

See also Eighth year book national association of secondary school principals. 1924.


STATE AID AND EQUALIZATION


MICHIGAN

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


COSTS, ECONOMIES, AND EXPENDITURES


Flint. A five-year study of the cost of school supplies. Flint bulletin of education, 2: 11, June 1926.


LOCAL SCHOOL FINANCE


—— Richter, C. E. How Detroit's ten-year financial program was prepared. National municipal review, 15: 108-114, February 1926.

—— Spain, C. L. The platoon school in Detroit. Detroit educational bulletin, no. 2. Detroit, Mich., 1923.


MISCELLANEOUS


PERSONNEL


Existing insurance for Detroit teachers; third report of insurance committee of the administrative division


**REVENUES, SUPPORT, AND TAXATION**


**STATE AID AND EQUALIZATION**


**MINNESOTA**

**BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION**

A brief summary of financial operations for the year ended 6-30-30, prepared by the office of the comptroller to promote a better understanding of the finances of the university. *University of Minnesota bulletin*, 33: 46. Publications of the University of Minnesota. *Minneapolis*, 1930.


**COSTS, ECONOMIES, AND EXPENDITURES**


Minneapolis school authorities reduce cost of building 50 per cent per cubic foot: The tax digest, March 1928, pp. 85-86, *California taxpayers' association, Los Angeles.*


**STATE DEPARTMENT OF EDUCATION.** A study of elementary and secondary school costs in districts maintaining class B and C four-year high schools and class B and C junior high schools and senior high schools. *St. Paul, Minn., State department of education, 1930.* 98 p.

Study of elementary and high school costs in districts maintaining class A high schools and high-school departments. *Statistical division, St. Paul, Minn.* 1930.

VON HOERNER, FRED. Unit costs of instruction in the college of education, University of Minnesota, 1924-25. *University of Chicago, Chicago, Ill.*

**LOCAL SCHOOL FINANCE.**


**MISCELLANEOUS.**


**HUTSON, P. N.** The training of high school teachers of Minnesota. *University of Minnesota education monograph, no. 3. University of Minnesota, Minneapolis, 1923.*

**Meeker, Royal.** A study of costs and standards of living of Minneapolis teachers in relation to their salaries. *Minneapolis, Minn., Central committee of teachers' associations, September 1928.* 36 p.

Outline of group life insurance for the employees of the University of Minnesota. *University of Minnesota, Minneapolis, 1929.*

**Overn, A. V.** Supply and demand of teachers in Minnesota. *University of Minnesota Press, 1931.*


Teacher retirement fund: explanation and summary. *Journal of the Minnesota education association, 7: 104-6, April 1927.*
REVENUES, SUPPORT, AND TAXATION


McCONNELL, J. M. School support in Minnesota. Journal of the Minnesota education association, 8: 4, 6, 7, 8, 9, November and December 1924.

OVERT, A. V. The control of the tax income of school districts in Minnesota; a comparison with methods of other States. American school board journal, 74: 47-48, April 1927.


TAX COMMISSION REPORT. Comparative study ... amount of taxes for school district purposes in each city and total taxes for such purposes, and per capita of the same. State department of education, St. Paul, Minn., 1929.

STATE AID AND EQUALIZATION


MISSISSIPPI

LOCAL SCHOOL FINANCE

Moffitt, M. E. and Broom, Mrs. J. W. A study in educational finance; municipal separate school districts with population less than 1,000; session 1925-26 white race, only. Educational finance series, circular no. 6, March, 1927. State department of education. Jackson, Miss.

— A study in educational finance; municipal separate school districts with population 1,000 to 2,500; session 1925-26, white race only. Educational finance series, circular no. 5. February 1927. State department of education. Jackson, Miss.

— A study in educational finance; rural separate school districts, session 1925-26, white race only. Educational finance series, circular no. 7. State department of education. Jackson, Miss. April 1927.

MISCELLANEOUS

The minimum financial goal for agriculture project work in Mississippi. Mississippi, Board for vocational education, 1923. 8 p. (Board for vocational education. Bulletin, 1923, no. 34.)

NEGO EDUCATION

Hilburn, B. C. A. Semi-consolidation without transportation for negro schools in Coahoma county. Mississippi-educational advance, 18: 228, April 1927.

Negro common schools in Mississippi. Crisis, 33: 90-102, December 1926.


PERSONNEL

Group life insurance for teachers. Mississippi educational advance, 18: 72, December 1926.

What teachers want to know about their insurance. Mississippi educational advance, 21: 27, October 1929.
REVENUES, SUPPORT, AND TAXATION

BROOK, KNOX M. Introduction; the problem of finance in modern education. Mississippi, educational advance, 20: 5-6, October 1928.

Mississippi’s ability and effort to support education. Mississippi educational advance, 18: 254-56, May 1927.

OSHEA, M. V. and others. Public education in Mississippi. State of Mississippi, Jackson, 1926.


STATE AID AND EQUALIZATION


GANLEY, ANDREW G. Mississippi’s equalizing school fund. Mississippi educational advance 15: 16, January 1924.


MISSOURI

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


ROGERS, T. H. The budget system in Missouri. School and community, 12: 404-6, October 1926.


COSTS, ECONOMIES, AND EXPENDITURES


HIGHER EDUCATION

BROOKS, S. D. The place of a university in the type of reorganization of State government known as consolidation. The Missouri Alumnus, 14: 103-04, 106, December 1927.


McReynolds reports for survey commission on University development and needs. The Missouri Alumnus, 18: 126-128, January 1930.

President Williams protests an additional appropriations cut. The Missouri Alumnus, 20: 68, November 1931.

STRAVER, G. D. AND ENGELHARDT, N. L. Preliminary report on publicly supported higher education in the State of Missouri. A report to the survey commission, supporting data to the report of the State survey commission to the Honorable Henry S. Caulfield, Governor of Missouri, State of Missouri, November 30, 1929. 575 p.

University board visitors recommend definite substantial support by State. The Missouri Alumnus, 17: 131, January 1929.
University of Missouri needs help. The Missouri alumnus, 15: 60, October 1926.

LOCAL SCHOOL FINANCE


Garnett, R. L. An administrative survey of the schools of each county in the State of Missouri, 1932. Approximately 20 pages are devoted to each county. These are published separately as bulletins and will also be combined for the State into one report as a supplement to Eightieth annual report of the public schools of the State of Missouri, 1932.


Pettis County. Associated industries of Missouri. Taxation and expenditures in Pettis county and the City of Sedalia. Associated industries of Missouri, December 15, 1931.


MISCELLANEOUS


The educational problem in Missouri. School and community, 15: 21-23, January 1929.

The governor's address to his survey commission. School and community, 15: 332-33, June 1929.

PERSONNEL


REVENUES, SUPPORT, AND TAXATION

BRAFIELD, W. L. Taxation and finance. Chapter 6 of the Missouri county courts. University of Missouri, Columbia, Mo. (University of Missouri studies, a quarterly of research. 7: 90-142, April 1, 1931.)

BRANNEN, C. O. and GROMER, S. D. Taxation of farms in Missouri. Missouri research bulletin, no. 95, 1926.


The present school situation in Missouri. School and community, Columbia, Mo., 14: 331-43, June 1929.


The Missouri farmer's tax position. College of Agriculture University of Missouri, Columbia, Mo. (Agricultural experiment station bulletin no. 291, August 1930. 28 p.)


REHDER, HUGH J. and GRIFFENHAGEN, E. O. The taxation system of Missouri; supporting data to the report of the State survey commission to the Hon. Henry S. Caulfield, governor of Missouri. State of Missouri, November 30, 1929. 112 p.


Report of the legislative committee and the committee on sources of larger revenue to the Missouri State teachers' association. School and community, 16: 538-39, December 1930.


STATE SURVEY COMMISSION. Recommendations of the State survey commission. Warrensburg, Mo., Central Missouri State teachers college, 1929.
MONTGOMERY, McClure, Lee, Charles
Equalizing
CARPENTER, W. W.
WALTZ, W. E.
Swim, F.
STEELE, F.
thesis, 1929. The proposed
specific
December
School and
Missouri.
Columbia, Mo.
STATE AID AND APPORTIONMENT
Equalizing educational opportunities. School and community, 12: 497-503, December 1926.
Lee explains survey equalization plan. Kansas City teachers' journal, 12: 1, 4, January 1931.
SITGES, Roscoe V. The history of the state school fund in Missouri. M. A. thesis, 1925. University of Wisconsin, School of education, Madison, Wis.
Unequal educational support. School and community, 13: 26, January 1927.
MONTANA.
LOCAL SCHOOL FINANCE
MISCELLANEOUS

**PERSONNEL**


**REVENUES, SUPPORT, AND TAXATION**

Brannon, M. A. The case of the one and one-half mills levy. *Montana education*, 2: 6-9, April 1926.


**MONTANA TAXPAYERS’ ASSOCIATION.**


The referendum measure for the five mill state-wide levy to equalize school taxes and school opportunities. *Montana education*, v. 2, no. 6, February 1928.

**STATE AID AND EQUALIZATION**


**NEBRASKA**

**BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION**


**COSTS, ECONOMIES, AND EXPENDITURES**


Rodker, Elmer F. Expenditures applied to education. *Nebraska educational journal*, 7: 426, October 1937.

**LOCAL SCHOOL FINANCE**


**PERSONNEL**


**NEBRASKA STATE TEACHERS ASSOCIATION.**


Shankel, C. W. Status of the science teacher in Nebraska high school. *State university library, Lincoln, Nebr.*

**SPECIAL RESEARCH COMMITTEE, NEBRASKA STATE TEACHERS ASSOCIATION.**

REVENUES, SUPPORT, AND TAXATION


Mott, Paul R. The status of taxation in Nebraska—State aid for transportation. (Research bulletin legislative committee, Nebraska State teachers association, no. 4.) Nebraska State teachers association, Lincoln, Nebraska, November 1928.


Why school taxes are high; funds derived from indirect taxes diverted from schools. Nebraska educational journal, 6: 274-75, June 1928.

STATE AID AND EQUALIZATION

A plan equalizing educational opportunity. Nebraska educational journal, 8: 584-86, November 1928.


Mott, Paul R. A plan for providing equality of educational opportunity in Nebraska. Nebraska State teachers association, Lincoln, Nebr., 1928. (Bulletin no. 3.)


NEVADA


— Nevada educational bulletin, 12: 4-5, September 1929.


NEW HAMPSHIRE


Swift, F. H. and Zimmerman, B. L. State school taxes and school funds and their apportionment. Washington, U. S. Government printing
NEW JERSEY

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


How the New Jersey governmental dollar was spent in 1928-29. Education bulletin, Trenton, N. J., 16: 638-46, May 1930.


A plan for the distribution of expenditures for city school systems. State department of public instruction, Trenton, N. J., 1925.


A system for keeping interal school accounts in public school districts in the State of New Jersey. Education bulletin, Trenton, N. J., 14: 49-64, October 1927.


COSTS, ECONOMIES, AND EXPENSES

Comparison of educational and municipal expenditures in the various communities of the State and the average capital outlay for schools from 1920 to 1925 per pupil in average daily attendance. Education bulletin, New Jersey, 12: 496, 507, June 1926.


DEPARTMENT OF EDUCATION. Cost of transportation in New Jersey.

Trenton, N. J., Department of education, 1928.

Instructional costs per pupil in average daily attendance. Education bulletin, Trenton, N. J., 16: 245-61, January, 1930.

Per capita high school costs for tuition purposes for the school year 1929-1930. Education bulletin, Trenton, N. J., 17: 198-211, December 1930.


School costs. Education bulletin, Trenton, N. J., 15: 397-407, April 1929.


LOCAL SCHOOL FINANCE


Newark. O'Shea, M. V., and others. All year schools of Newark, N. J. Board of education, 1926. 96 p.


MISCELLANEOUS


Report to the legislature commission on Rutgers and the State university. State of New Jersey. Trenton, 1929.

PERSONNEL


REVENUES, SUPPORT, AND TAXATION

COMMISSION TO INVESTIGATE COUNTY AND MUNICIPAL TAXATION AND EXPENDITURES. A report on educational services and costs. Trenton, N. J.

The Commission, 1932. p. 154. (Report no. 8 of the legislative commission to the governor and legislature.)


Comparison of the receipts of the various school districts from the State, district taxes and other sources. Education bulletin, Trenton, N. J., 17: 69-98, October 1930.

Horstick, Simon M. An investigation of degree to which school districts of New Jersey are supporting secondary education in accordance with financial ability. University of Pennsylvania, 1927.


**STATE AID AND EQUALIZATION**


NEW MEXICO


**NEW YORK**

**BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION**

BRUBACHER, JOHN S. The judicial power of the New York State commissioner of education; its growth and present status, with a digest of decisions. *Finance 78-86. New York, N. Y.* Teachers college, Columbia university, 1927. (Contributions to education no. 296.)


YOUNG, DALE S. Control of available public-school income with special reference to cities of New York State. New York, N. Y., Teachers College, Columbia University, 1928. 110 p. (Contributions to education no. 305.)

COSTS, ECONOMIES, AND EXPENDITURES


WILEY, GEORGE M. Instructional school costs in cities and villages of New York State. Albany, N. Y., University of State of New York, 1925. 24 p. (University of State of New York. Bulletin no. 84.)

LOCAL SCHOOL FINANCE


COLK, E. A. A word about nonresident tuition. New York State education, 14:4-5, September 1926.


Message from the Governor relative to financing education in cities, with report of special commission appointed to study the subject. Albany, N. Y., The Commission, 1926. 146 p. (Legislative document, no. 92, 1926.)

Newburgh, N. Y. STRATER, GEORGE D. and ENGELHARDT, N. L. Report of the survey of the schools of Newburgh, N. Y. Institute of educational research, Division of field studies, Teachers college, Columbia University, New York City, 1929. 312 p.
New York State Department of Education. Fiscal problems of city school administration: a report by the special joint committee on taxation and retrenchment. Albany, N. Y. (Legislative document no. 66.) 1927.

Nonresident academic pupils. Albany, N. Y. University of the State of New York press, 1930. (University of the State of New York. Law pamphlet, no. 5.)


Miscellaneous


Personnel


Elshere, Willard S. Teacher turnover in the cities and villages of New York State. Teachers college bureau of publications, Columbia university, New York, N. Y., 1928. (Teachers college contributions to education, 300.)

Harry, D. P. Cost of living of teachers in New York State. New York, N. Y. Teachers college, Columbia university, 1928. 184 p. (Contributions to education, no. 320.)


The report of the New York citizens' committee on teachers' salaries. School and society. 24: 614, 419-20, October 2, 1926.

Yonkers, N. Y. Strayer, George D., and Elshere, Willard S. Teachers' salaries in Yonkers. Institute of educational research, Division of
field studies, teachers college, Columbia university, New York city, 1929. 49 p.

Appropriations recommended by Governor Roosevelt for the New York State department of education. School and society. 29: 186-87, February 1929.


Kendrick, M. S. The collection of taxes by the State government and the division of these revenues, with emphasis on New York. Journal of political economy, February 1931. p. 25-47.


Some recent and impending legislation with particular reference to laws enlarging the area of administration and taxation, and financial relief to cities. Twenty-second annual report of State department of education. State department of education, Albany, N. Y. 1928.


State Aid and Equalization


The measurement of educational need. New York, N. Y. Teachers college, Columbia university, 1924. 84 p. (Teachers college. Columbia university. Contributions to education no. 150.)

Recent school legislation—continuance of effort to equalize support of rural schools and to grant more freedom to cities in taxation. Twenty-fourth annual report of the State department of education, V. 1. State department of education, Albany, N. Y., 1929.


NORTH CAROLINA

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


COSTS, ECONOMIES, AND EXPENDITURES


Cost of operating school busses, 1926-27; average annual cost per bus operated. University of North Carolina news letter, 14: 1 August 29, 1928.

Cost of transporting pupils to school, 1926-27; average annual cost per white pupil transported. University of North Carolina news letter, 14: 1, August 15, 1928; 14: 1, August 22, 1928.


— Cost of transportation. State school facts, vol. 5, no. 15, April 15, 1929. Raleigh, N. C. (See also vol. 1, no. 20, July 1, 1925, for 1924-25 statistics.)


— Expenditure for teaching and supervision per child enrolled in rural schools, 1924-25. University of North Carolina news letter, 12: 1, August 18, 1926.
LOCAL SCHOOL FINANCE

Buckingham County. Promoting education in Buckingham County, N. C. Southern workman, 58: 373-76, August 1929.


STATE DEPARTMENT OF EDUCATION. Comparison of transportation allotments, 1929-30. Raleigh, N. C., State Department of education, 1931.


MISCELLANEOUS


NEGRO EDUCATION


PERSONNEL


STATE DEPARTMENT OF EDUCATION. Comparison of salary cost (State schedule) 1929-30—present term (not exceeding eight months) with uniform eight months’ term. Raleigh, N. C., State department of education, 1931.

Some essentials of a sound tax system. High school journal, 14: 87-8, February 1931.

State property tax to aid in the support of the eight months school term. Extension bulletin, 6. University of North Carolina, November 16, 1925.


STATE AID AND EQUALIZATION


Public laws, 1925. In an act to provide a special building fund to be loaned to county board of education to aid in erecting schoolhouses. Raleigh, N. C., State publishing house, 1925. 8 p. (Educational publications, no. 90.)


University of North Carolina. Apportionment of equalizing fund, for 1928-29, as compared with that of 1927-28. University of North Carolina news letter, 14: 1, June 20, 1928.
NORTH DAKOTA

BERG, P. S. North Dakota teachers' insurance and retirement fund. School of education record, 13: 91-93, June 1928.

IVerson, P. J. An equalized and equitable system of taxation in North Dakota. North Dakota teachers, 10: 10-12, 25, October 1930.


Pickles, C. E. Salaries and professional growth of teachers in North Dakota. The North Dakota teacher. April, 1925. 4: 4-7.


OHIO

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


Bency, Wilbur E. Funding operating expenses. Ohio schools. 4: 75, March 1926.

Drake, W. V. The insuring of school property in Columbus. Seventh annual proceedings of Ohio State educational conference. Ohio State university bulletin, v. 32, no. 3. 1927.

Duckworth, Benton Raymond. The business management of extracurricular activities in city and exempted village, junior and junior high schools of Ohio. M. A. thesis. 1926. Ohio State university, Columbus, Ohio.

Dyer, C. A. Ohio tax districts on pay-as-you-go basis. Tax digest. 5: 180, November 1927. (California taxpayers' association, Los Angeles, Calif.)


—and Sutton, D. H. The disposition of school bond issues and special levies submitted in Ohio cities and exempted villages, November 4, 1930. ( Mimeographed by the Bureau of education. Research.)


Miles, Rufus E. Fiscal control in Ohio. Annals American academy. 113: 106-12, May 1924.


—and The mounting indebtedness for schools in Ohio. Educational research bulletin, 4: 1-4, January 1926.


Sutton, David H. Fines and penalties in Ohio. Educational research bulletin. 8: 301-3, September 1929.


— The trend of school bonding in Ohio. M. A. thesis. 1924. Ohio State university, Columbus, Ohio.

WHITCOMB, J. W. and others. The steps required in issuing bonds and completing a school building program in Ohio. Educational research bulletin. 5: 255-57, September 1929.

Will pay-as-you-go pay? Toledo city journal. 11: 377, August 7, 1926.

ZELLNER, HARRISON CARL. The probable effect of pooling the bonded indebtedness of county districts, Erie County, Ohio. M. A. thesis. 1927. Ohio State university, Columbus, Ohio.

COSTS, ECONOMIES, AND EXPENDITURES

BAER, JOSEPH A. Transportation of pupils in Cuyahoga county, Ohio. [By the assistant county superintendent.] Journal of rural education, 5: 16-21, September-October 1925. [See also 12-page mimeographed report by same author.]

Cleveland. BAIN, C. L. Data relative to the current expenditures of the Cleveland public schools, 1922-23. Cleveland, Ohio, Board of education. (Bulletin, no. 65, February 23, 1924.)

— Bureau of statistics and child accounting. The expenditures for teachers' salaries distributed on a subject taught basis. Cleveland junior high schools, 1922-29. — Cleveland, Ohio, Board of education, 1929.


— Hopkinson, H. M. Economics in Cleveland school budget plans. Architectural forum, 37: 2, 81-84, August 1924.

— Measuring the current expenditures of the Cleveland public schools, 1910-1922. Cleveland public schools, Cleveland, Ohio, 1923.


Cost of educating a child in one Ohio city. Journal of the Ohio State teachers association, 2: 3, February 1924.

Cost of government in Ohio, 1916 to 1929. Fourth preliminary report of the committee on research submitted to the Governor's taxation committee. State department, Columbus, Ohio, 1930.


DONELLY, ALICE M. Some economies which have been effected in administration of home economics in public schools of Ohio. Educational research bulletin, 4: 272-73, 1925.

EDUCATIONAL COUNCIL. Analysis of increased school costs. Ohio educational association. Ohio school, 7: 4, February, 1929.

ESTEP, PAUL CANNON. A study of unit costs of city schools in Ohio of over 10,000 population in 1926. M. A. thesis, 1927. Ohio State university, Columbus, Ohio.


FRANCE, OTTO C. Final costs of public-school buildings in Ohio, 1920-1924, as compared with estimated costs. M. A. thesis, 1925. Ohio State university, Columbus, Ohio.

GARVER, VERNON AUGUSTUS. Unit costs of instruction in the high schools of six Ohio counties. M. A. thesis, 1925. Ohio State university, Columbus, Ohio.

HARTZELL, MABEL. Public-school costs in a group of Ohio cities; data for the school year 1922-23. Educational research bulletin 3: 339-48, November 26, 1924.

HOLY, T. C. Financial data for Ohio cities, as of September, 1928. Bureau of educational research, Ohio State university, 1929.

Hudson, C. A. School costs in a group of Ohio villages ranging in population from approximately one thousand to three thousand. *Educational research bulletin*, 5:175-79. April 28, 1926.

Riedy, Ward and Paislet, Ethan A. Trends of school costs in Ohio. *Ohio State university studies*. *Ohio State university*, Columbus, Ohio, 1926. (Contributions in school administration, no. 3.)

State reporting of the financial statistics of public schools in Ohio. Prepared by the Ohio Institute for the Ohio State teachers association. 1927. (Columbus, 1927), 35 p.


LOCAL SCHOOL FINANCE


MARIETTA.


MARIETTA, Ohio. Institute of educational research, Division of field studies. Teachers college, Columbia university, New York city. 1929. 226 p.

Marietta. Building program for Marietta, Ohio. Bureau of educational research, monograph no. 1. Ohio university, Columbus, Ohio. 1924.

PETERS, DONALD ARTHUR. Proper determination of the boundaries of certain village and rural school districts in Ohio. M. A. thesis, 1925. Ohio State university, Columbus, Ohio.


Springfield. Holy, T. C. Survey of the schools of Springfield, Ohio. Chapter V. The financial program. 1931. p. 53-64. Columbus, Ohio. Ohio State university. (Bureau of educational research. Monograph no. 10. 84 p.)


MISCELLANEOUS


PERSONNEL


——and Foster, Richard R. Teacher supply and demand in Ohio, 1929-30. p. 3-170. (Ohio State university, Columbus; Ohio, Bureau of educational research. Monograph no. 11.)


Baugh, Clemens E. Factors in the distribution of the proceeds of the two and sixty-five hundredths mills levy for transportation in Portage county, Ohio. M. A. thesis. 1931. Ohio State university, Columbus, Ohio.


Commercial teacher-training standard suggested by commercial teachers of Ohio. Bliss college, Columbus, Ohio. 1928.


——State teachers' retirement system of Ohio. Ohio schools, 4: 104-5, April 1926.


MYERS, ALONZO FRANKLIN. A teacher training program for New York. N. Y. Teachers college, Columbus university; 1927. 144 p.

POVENMINRE, MAHLON A. A study of the age, salary, prior service and deposit of the teachers in the State teachers' retirement system of Ohio. M. A. thesis, 1931. Ohio State University, Columbus, Ohio.

SHELB, OMER EARL. Effects of training and experience on the salaries of public school administrators in Ohio. M. A. thesis, 1930. Ohio State University, Columbus, Ohio.

State teachers retirement system. Ohio schools, 5: 181, June 1927.

The minimum salary law. The Ohio teacher, 46: 387. May 1926.

REVENUES, SUPPORT, AND TAXATION


COMMITEE ON RESEARCH. GOVERNORS' TAXATION COMMITTEE. The committee on research and preliminary report of personal income taxes of the various states and probable yields of such taxes if applied. Columbus, Ohio, 1930.


KOH, WILLIAM M. History, administration, and present status of ministerial land grants in Ohio. M. A. thesis, 1930. Ohio State University, Columbus, Ohio.

LAPPE, JAMES L. Ohio's support of higher education. Educational research bulletin, 7: 177-84, May 2, 1928.


MOODY, ANCIL EARL. The general property tax of Ohio should be supplemented by a severance tax. Ph. D. thesis, 1931. Ohio State University, Columbus, Ohio.


School finance study no. 2; submitted by the school finance committee of the educational council. Ohio State teachers association, 1924.


SUTTON, DAVID H. Sources of school revenue in Ohio from 1803-1927. M. A. thesis, 1929. Ohio State University, Columbus, Ohio.

The acquisition, management, and disposal of federal land grants for the support of public schools in Ohio, 1803 to 1931. Ph. D. thesis, 1932. Ohio State University, Columbus, Ohio.

TEAL, HARVEY DON. The administration of federal aid for education in Ohio. M. A. thesis, 1928. Ohio State University, Columbus, Ohio.

The school taxation question in Ohio. American school board journal, 68: 107, June 1924.
WATSON, J. P. Soundings in the general property tax. Ohio Institute, Columbus, Ohio, 1929.


STATE AID AND EQUALIZATION

Braught, Ellis O. Supplying equipment to schools that are participating in Ohio's educational equalization and rehabilitation fund. M. A. thesis, 1930. Ohio State university, Columbus, Ohio.


--- Report of the educational equalization and rehabilitation fund. Columbus, 1931. Prepared under the direction of J. L. Clifton, director of education. Columbus, Ohio, the F. J. Heer printing co., 1931. 28 p.

Reeder, Ward G. and Whitmer, J. W. The county tax as an equalizer of educational opportunity in Ohio. Educational research bulletin, 4:177-82, April 1925.


Whitmer, John W. Distribution of the equalization fund within the county school district. Ohio schools, 5:139, 144-45, May 1927.

--- How best distribute the educational equalization fund within the county school district in Ohio. M. A. thesis, 1928. Ohio State university, Columbus, Ohio.

Wickham, William Terry. The possibility of equalizing the financial burdens of several school districts of Cuyahoga county, Ohio. M. A. thesis, 1927. Ohio State university, Columbus, Ohio.

Winter, T. H. Ohio plan of State aid. Ohio schools, 8:59, February 1930.


MISCELLANEOUS


REVENUES, SUPPORT, AND TAXATION


STATE AID AND EQUALIZATION

Bennett, Henry C. A new plan for State aid. Oklahoma teacher, 12: 8-9, 12, November 1930.

Curley, Guy. The $15.00 amendment: equalizing the burdens of taxation. Oklahoma teacher, 6: 5, 39-31, April 1925.


OREGON

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


COSTS, ECONOMIES, AND EXPENDITURES

BENJAMIN, HAROLD. Subject and grade costs in Oregon high schools. *Educational administration and supervision, 11*: 231-37, April 1925.

Teaching costs in Oregon high schools. *High school, 3*: 11-15, November 1925.


HUFFAKER, C. L. Neglected aspects of common school costs in Oregon. *University of Oregon publication, v. 2*, no. 3, April 1930.


STETSON, F. L. Factors of variation in high school organization and costs. *High school, 6*: 75-82, February 1929.

MISCELLANEUS


PERSONNEL


HUFFAKER, C. L. Statistical studies of teachers' salaries are to be found in Teacher supply and demand in Oregon. *University of Oregon, education series, vol. 2, no. 5*, p. 99-156, 1931.


REVENUES, SUPPORT, AND TAXATION


STATE AID AND EQUALIZATION


Swift, F. H. Does Oregon need a State public school equalization fund and how shall it be provided? Oregon education journal, 5: 7-8, 24-26, March 1931.


PANAMA


Pennsylvania

Business management and financial administration


A uniform 'accounting system' for school districts. Harrisburg, Pa., Department of public instruction, 1930. 20 p. (Bulletin, no. 50.)

Costs, economies, and expenditures

Clock hour costs at the University of Pennsylvania. School and society, 19: 126-27, February 2, 1924.


Higher education


Local school finance, city


LOCAL SCHOOL FINANCE, RURAL


MISCELLANEOUS


MYERS, C. E. Measuring educational efficiency. Pennsylvania State education association bulletin. 3: 559-60, April 26, 1930.


PERSONNEL


— Recommended salary schedule and plans for its administration. Pittsburgh, Pa., Citizens’ committee on teachers’ salaries, 1928. 48 p.

REITELL, CHARLES. Elementary principals’ salaries in the proposed Pittsburgh schedule. Washington, National education association, 1929. p. 106-09. (Bulletin of the Depart-


REVENUES, SUPPORT, AND TAXATION

COMMONWEALTH OF PENNSYLVANIA.


Data relating to the ability of Pennsylvania to support education. Pennsylvania State department of public instruction, Harrisburg, 1931.


MacDonald, Austin F. Sources of State revenue. In Fifteenth annual schoolmen's week proceedings, 1928.


STATE AID AND TAXATION

Anderson, C. A. Financial phases of the report of the committee on State


DEPARTMENT OF PUBLIC INSTRUCTION. Educational surveys, appropriations and subsidies—high schools, normal schools, rural schools and teacher institutes. Department of public instruction, Harrisburg, Pa., 1925.


Murt, Paul R. Report of committee to study the present plan of financing the public schools and related matters. Harrisburg, Pa., Department of public instruction, 1929. 263 p.

Pennsylvania committee on appropriations and subsidies; educational surveys. Department of public instruction, Harrisburg, 1925.


PHILIPPINES


PUERTO RICO


A survey of the public educational system of Puerto Rico. Made under the direction of the International Institute of Teachers college. Columbia university; authorized by the university of Puerto Rico. New York city, Teachers college, Columbia university, 1926. x, 453 p. front. (map), tables, diags. (Studies of the International institute of Teachers college, Columbia university, no. 8.)

RHODE ISLAND


South Kingston, R. I. Survey of public schools of South Kingston, R. I. Providence, R. I., State board of education, 1927. 15 p. (Rhode Island education circulars.)

SOUTH CAROLINA

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

Derrick, S. M. Bond issue for permanent improvement of State institutions; selected argument and bibliography for the South Carolina high school league debate, 1926-27. Columbia, University of South Carolina, Bureau of publications, 1928. 308 p. (On cover: Bulletin of the University of South Carolina, no. 187. September 15, 1928.)

COSTS, ECONOMIES, AND EXPENDITURES

Per capita expenditures for white public schools in South Carolina by counties, 1926. South Carolina University weekly news, 11: 1, February 16, 1927.


LOCAL SCHOOL FINANCE


Watkins, Isabel. County unit of school administration. University of South Carolina bulletin no. 149. University of South Carolina, Columbia, 1924.

MISCELLANEOUS


PERSONNEL


Group disability insurance for members of the South Carolina teachers association. South Carolina education, 12: 260, April 1931.

Group insurance. South Carolina education, 11: 17, September 1929.

Insurance. South Carolina education, 10: 22, October 1928.


REVENUES, SUPPORT, AND TAXATION


Public school support in South Carolina. Raleigh, N. C., State department of education, 1931.

STATE AID AND EQUALIZATION


Inequality of educational opportunity. University of South Carolina, university weekly news, 11: 1, February 16, 1927.


**SOUTH DAKOTA**

**LOCAL SCHOOL FINANCE**


**MISCELLANEOUS**


Eastman, Harry R. The administration and organization of extra-curricular activities in the senior high schools of South Dakota (Questionnaire study). Master's thesis, 1924. *University of Wisconsin, School of education, Madison, Wis.*


**REVENUES, SUPPORT, AND TAXATION**


**STATE AID AND EQUALIZATION**


St. John, C. G. State aid for schools should be continued. *South Dakota education association journal, 2: 290, January 1927.*


Vocational agriculture in South Dakota operating under the Smith Hughes law. Pierre, S. Dak. 1923. 60 p.

**TENNESSEE**

**LOCAL SCHOOL FINANCE**


Union County. Educational economic, economic, and community survey of Union county, Tenn. (University of Tennessee record. Extension Bulletin vol. 1, no. 2.) *University of Tennessee, Knoxville*, 1924.
MISCELLANEOUS


JENKINS, JOE. A study of the relative elementary and high school cost per pupil in thirty Tennessee schools. Peabody journal of education, 1: 228-32, January 1924.


Tennessee. State salary schedules. Nashville, Tenn., Tennessee educational bulletin, 7: 3-4, April, May, June 1926.


REVENUES, SUPPORT, AND TAXATION


STATE AID AND TAXATION


State high school funds. Tennessee educational bulletin, 7: 1-2, April, May, June 1928.


TEXAS

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION

JONES, T. N. Financing an efficient school system. Texas outlook, 12: 9-11, July 1926.


COSTS, ECONOMIES, AND EXPENDITURES

Cost of teaching the social science subjects. Conference upon problems of educational finance in Texas. University of Texas, Austin, 1923.


JUNIOR COLLEGES


Reid, J. R. Texas municipal junior colleges. *Austin, Tex., Department of education, 1929.* 63 p. (Bulletin, vol. 5, no. 5.)


LOCAL SCHOOL FINANCE


121755—32—20


MISCELLANEOUS


NEGRO EDUCATION


PERSONNEL


REVENUES, SUPPORT, AND TAXATION


— and ATTWELL, SELBY. Concerning State aid for training in agriculture, farm mechanics, and home economics in rural schools. State department of education. Austin, Tex., 1929. (Bulletin no. 258.)


PITTENGER, B. F. Some principles underlying State support of Texas public schools. Texas outlook, 11: 7-9, April 1927.


Plans and suggestions made by the State educational campaign commission and constitutional amendments proposed by the legislative committee of the Texas survey commission. Texas education survey commission. Fort Worth, Tex., 1926.

Revenue receipts from State sources: per pupil in average daily attendance in elementary and high schools. Texas outlook, 13: 17, December 1929.

ROGERS, L. W. High school tuition charges. Texas outlook, 11: 46-47, November 1927.


TEXAS EDUCATIONAL SURVEY COMMISSION. Report to the governor and the fortieth legislature, including proposed legislative measures. Texas outlook, 10: 8-12, 18, 20, 22-23, 25-28, December 1926.


STATE AID AND EQUALIZATION


BORDEN, L. D. State aid has advanced Texas rural schools. Texas outlook. 10: 50, September 1926.


ROGERS, W. J. Larger units of school administration to eliminate inequalities. Texas outlook, 14: 66, February 1930.

SWIFT, F. H. Sound methods of school finance as a means of equalizing educational opportunity in Texas. Texas outlook, 8: 8-12, February 1924.


UTAH


DEPARTMENT OF PUBLIC INSTRUCTION.

A study of transportation in the schools of Utah. Revised edition. Salt Lake City, Department of public instruction, 1926. 57 p. (See also similar study published 1926.)

— Preliminary statement regarding a plan for equalization of educational opportunities in Utah. Salt Lake City, Utah, State superintendent of education, 1930. 11 p.


VERMONT


VIRGINIA

LOCAL SCHOOL FINANCE


Charlottesville. SANGER, W. T. Memorandum of the Charlottesville high-school situation. Charlottesville, Va., 1924.


MISCELLANEOUS

COMBS, M. L. Efficiency in relation to size of high school. State department of education, Richmond, Va., 1927.


The Virginia high school literary and athletic league. A bond issue to meet the capital needs of the State institution of higher learning in Virginia. Charlottesville, Va., University of Virginia, 1925. 81 p. (University of Virginia record. Extension series, vol. 9, no. 6, February 1925.)

PERSONNEL


WASHINGTON

COSTS, ECONOMIES, AND EXPENDITURES


LOCAL SCHOOL FINANCE


PERSONNEL


— Figure it for yourself; status of teachers now in the State in the proposed retirement system. Washington education journal, 9: 137-38, January 1930.

— Sources of support of the new retirement plan. Washington education journal, 8: 111-12, December 1928.

— Tentative plan for new State retirement fund. Washington educational journal, 8: 10-17, September 1928.


Marsh, Arthur L. Teachers salaries and living costs in 1929-30. Washington education journal, 10: 200-01, March 1931. (Similar articles in previous years.)


REVENUES, SUPPORT AND TAXATION


— Our parlous times. Washington education journal, 10: 5-6, September 1931.


RICHARDSON, Dr. Help pass the amendment. (Tax classification.) Washington education journal, 10: 41, October 1930.


STATE AID AND EQUALIZATION

BRECKNER, ELMER L. Again the Showalter bill. Washington education journal, 10: 3-4, September 1930.


WEST VIRGINIA


COOK, WILLIAM C. A proposed State-wide relief and equalization program. West Virginia school journal, 59: 80-81, November 1930.

— Problems in school finance. West Virginia school journal, Vol. 60, September, October, November, December 1881-February 1882. These are to continue in March, April, and May 1932.
WISCONSIN

BUSINESS MANAGEMENT AND FINANCIAL ADMINISTRATION


School costs in Wisconsin for the school year ending June 30, 1930. Wisconsin journal of education, 1931.

VIECH, ARNOLD A. Teacher cost per 1,000 pupil hours of instruction in 165 Wisconsin high schools. M. A. thesis, 1925. University of Wisconsin, School of education, Madison, Wis.
LOCAL SCHOOL FINANCE


Milwaukee. School building program, 1924. Milwaukee, Wis., Board of education, 1924.


Racine. BAKER, A. S. The Racine school survey, Racine, Wis., Board of education, 1928. 10-40 p.


MISCELLANEOUS


PERSONNEL


HARRIMAN, CELIA. Salaries of high school principals and city superintendents of schools in Wisconsin cities. In Report of municipal information bureau. Madison, Wis., University of Wisconsin, 1929. (Document no. 8.)

LEWIS, L. L. Salaries of high school principals and city superintendents of schools in Wisconsin cities. University of Wisconsin, Madison, Wis., 1928. (Municipal information bureau series, no. 63.)

LOVELAND, R. E. Wisconsin State retirement system. Wisconsin journal of education, 60:30 September 1927.


REVENUES, SUPPORT, AND TAXATION


WISCONSIN'S POLICIES IN RURAL SCHOOL FINANCE. Wisconsin journal, vol. 6, November 1928.


HENDERSON, H. L. A plan for reorganizing Wisconsin's system of education. Madison, Wis. State department of education, 1931, p. 167-208. (Chapters 6-7)


NORTON, JOHN K. Wisconsin's ability to support education. Wisconsin journal of education, 59: 116-17, November 1926.


STATE AID AND EQUALIZATION


FOWLES, JOHN GUY and JONES, LEE FRANCIS. State support for public high schools in Wisconsin. Madison, University of Wisconsin, 1931. 82 p. (Bureau of educational research. Bulletin no. 12, January 1931.)


POTTER, MILTON C. What city schools can do to aid rural schools. Nation's schools, 2: 66-71, August 1928.


WYOMING

Are Wyoming schools extravagant? Wyoming educational bulletin, 6, November 1924.


Departmental costs in education in Wyoming in the twenty-nine schools offering work in vocational agriculture. Wyoming educational bulletin, June, 1931.

Pertinent facts about school taxes and Costs of schools in Wyoming. Wyoming educational bulletin no. 6, January 1928.
SUPPLIES


STATISTICS, SCHOOL

Look for these as a subhead of the item on which data are desired, e.g., City schools, costs, statistics

SUMMER SCHOOL COSTS

See also Vacation School Costs

[A few cost data appear regularly in the bulletins of the United States Office of education on State school systems and city school systems]


Contains some data on fees, costs, and salaries. Advocates making the work free.

SUPERVISION COSTS

See also Supply Costs


Analyzes the extent and significance of variations found in the per-student cost of supplies for various subjects in a given school, and variations in the cost of supplies for a given subject in various schools of Philadelphia. Discusses the relationship between costs and efficiency of instruction. Includes supplementary graphs.


A section discusses the financing of supervision in rural schools. Tabulation of salaries of rural supervisors in 19 states.

WOOD COUNTY (OHIO). SUPERINTENDENT. County supervision and school costs; attendance and school costs; cost of school supervision in Wood county school district; supervision program for 1923-24.

WRIGHTSTON, J. WAYNE. Dissertation in press, Bureau of publications, Teachers college, Columbia university, New York City, 1932

Exact title not chosen in April, 1932.

Showing, among other things, that the right kind of supervision and stimulation from a State department is more effective in promoting special phases of education than any form of special State aid for these phases.

SUPPLIES

ACCOUNTING


ENGELHARDT, FRED and VON BORGERS-BOESE, FRED. Accounting procedure for public school systems. New York, N. Y., Teachers college, Columbia university, 1927. Chapters V, X (School administration series)

A comprehensive treatment of the problem of handling school supplies, including requisition, purchase, storage, use, and distribution, with facsimile copies of various necessary forms.
LINDGREN, G. O. Accounting for the use of supplies in a school. American school board journal, 81: 42, November 1930.

BUDGET


Statistics showing current practices in school supplies with special reference to instructional and janitorial-engineering supplies; and amount per unit of cost of equipping a given school unit.


In defense of the thesis that a teacher should be permitted to exceed the standard quota of supplies if her method calls for an excess, this article contends that waste lies not in the use, but in the careless purchase of supplies and recommends some research that will tabulate and provide cost trends to school purchasing agents.


How the principal should formulate his budget for supplies systematically, basing needs upon past use and anticipated wear or depreciation upon furniture.

School budgeting of supplies and equipment. American school board journal, 72: 74, April 1928.

Short editorial pointing out the advisability of budget control by school administrators and anticipatory assembling of supply items for purchasing school supplies and equipment before summer vacation. The latter procedure insures prompt service and lowest market price.

SUPPLY COSTS

See also Supervision Costs


Reviews prices and sets up standards of distribution for the use of janitorial-engineering supplies.


LAPOR, JAMES L. The cost of adequate intermediate-grade reading materials in Allegheny county, Pennsyl-


Determines the amount of time necessary for a normal child reading at a uniform rate to read all the material now furnished his grade, estimates the amount of material that should be provided and the cost in dollars and cents, and determines the additional levy necessary to meet such cost. Shows the amount and cost of reading matter supplied to intermediate grade children, and the cost of certain other books. Includes an explanation of the statistical devices and many data used in the investigation.


Covers building, general, kindergarten, grades 1 to 6 separately, and special classes. Gives detailed and easily accessible information on exact kinds and amounts needed, prices, and vendors.


ECONOMIES

See Supply Purchasing

MANAGEMENT


Discusses such phases of competitive buying as securing bids, deliveries, securing prices for material other than that carried in the general storehouse, purchase orders, confirmation orders, and inventories.

ATKINSON, C. County superintendent as a school supply distributor. School executives magazine, 50: 413-14, May 1931.

*An argument for the buying of supplies for all the rural schools in a county by the county superintendent, or through his office. This system eliminates wasteful methods of individual purchasing and at the same time gives the smaller communities more educational service for the money expended.


A part of an investigation to determine the most efficient and economical
PROCEDURE TO BE FOLLOWED IN THE ADMINISTRATION OF SCHOOL SUPPLIES. THE RECOMMENDATIONS AND SUGGESTIONS SUBMITTED ARE BASED UPON THE OPINIONS OF A LARGE NUMBER OF INDIVIDUALS DIRECTLY AND INDIRECTLY CONNECTED WITH SUPPLY MANAGEMENT.

GRILL, GEORGE W. PURCHASE, STORAGE, AND DISTRIBUTION OF SUPPLIES. AMERICAN SCHOOL BOARD JOURNAL, 73: 71, JULY 1926.


HAMTRAMCK, 1929.

ANALYZES THE CURRICULUM OF THE MODERN SCHOOL, NOTING THE NEED FOR A DIFFERENT TYPE OF SUPPLIES IN KEEPING WITH NEW SUBJECT MATTER AND THE INDIVIDUAL NEEDS OF VARIOUS LOCALITIES, ESTIMATES THE COSTS OF SUCH EQUIPMENT, AND SUGGESTS METHODS FOR SECURING THE CHANGES.

POINTS OUT DETAILS FOR PROCEDURE IN HANDLING SCHOOL SUPPLIES. USES FIGURES FOR ST. LOUIS SCHOOLS TO ILLUSTRATE THE PROCEDURE.


MCKLINTON, J. W. LABELING PLAN FOR JANITOR SUPPLY PRODUCTS. AMERICAN SCHOOL BOARD JOURNAL, 81: 49, JULY 1930.

STIMULATING THEORETICAL TREATMENT WITH PRACTICAL ILLUSTRATIONS. INCLUDES WAREHOUSING, PURCHASING.


— SELECTION, PURCHASE, STORAGE AND DISTRIBUTION OF PUBLIC SCHOOL SUPPLIES. IN NATIONAL ASSOCIATION OF PUBLIC SCHOOL BUSINESS OFFICIALS. PROCEEDINGS, 1930. P. 74-84.


— DESCRIBES THE POLICIES IN SELECTING, PURCHASING, AND ACCOUNTING FOR SCHOOL SUPPLIES AND THE ADMINISTRATIVE SET-UP FOR THE EXECUTION OF THOSE POLICIES.

NASH, R. W. GETTING FULL VALUE IN SCHOOL SUPPLIES. AMERICAN SCHOOL BOARD JOURNAL, 76: 40, JULY 1928.


STOUTER, S. M. ECONOMICAL ADMINISTRATION OF SCHOOL SUPPLIES IN SMALLER CITIES—ABSTRACT. IN NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE OFFICIAL REPORT, 1932. WASHINGTON, NATIONAL EDUCATION ASSOCIATION, FEBRUARY 1932. P. 243-44.

— SUGGESTED LIST OF SUPPLIES AND EQUIPMENT FOR UNGRADED CLASSES. UNGRADED, 9: 87-90, JANUARY 1924.

TAYLOR, R. B. PRINCIPLES OF SCHOOL SUPPLY MANAGEMENT. NEW YORK, N. Y., TEACHERS COLLEGE, COLUMBIA UNIVERSITY, 1929. P. 64-86.

— DISCUSSES AN EFFICIENT AND ECONOMICAL PROCEDURE IN THE ADMINISTRATION OF SUPPLIES APPLICABLE TO THE PUBLIC SCHOOL SYSTEMS. RECOMMENDS THAT THE SUPERINTENDENT OF SCHOOLS SHOULD BE RESPONSIBLE FOR THE MANAGEMENT OF SCHOOL SUPPLIES.

WEDNER, H. C. JANITORIAL SUPPLIES FOR SCHOOLS. AMERICAN SCHOOL BOARD JOURNAL, 77: 46, DECEMBER 1928.

PURCHASING
See Also Purchasing Economics

ATLANTA, GA. BOARD OF EDUCATION. CATALOGUE OF SUPPLIES. A LOOSE LEAF VOLUME LISTING ALPHABETICALLY UNDER MAIN HEADS ALL ITEMS OF SUPPLIES WITHOUT REGARD TO WHERE THEY WILL BE USED. USEFUL AS A CHECK LIST FOR THE PURCHASING AGENT OR BUSINESS MANAGER.


Points out the advantage of the county unit in purchasing school supplies. Includes information concerning practices in the various states and tables showing possible saving by the county plan in Alameda County, Calif.


Describes the law passed in California in 1927 which charges county boards of education with the establishment of rules and regulations whereby elementary school districts may purchase standard school supplies and equipment through the county superintendent of schools or through the county purchasing agent. Points out that the county board of education must list as standard school supplies and equipment those which may be advantageously purchased in quantity.


Summarizes primary studies on equipment and supplies made in the school systems of Berkeley, Calif., and Atlanta, Ga.


Touches upon the establishment of standards, the cutting down of supply varieties, purchasing in large lots, and adequate records for the department.


HANLON, WILLIAM H. Centralized purchasing plan worked out; *The Tax digest*, January 1928, p. 11; *California taxpayers' association*, Los Angeles.

How the county school superintendent of Contra Costa County set up the administration of the centralized school supply purchasing act.

HENZIEK, F. E., RICHARDS, W. M., and others. Practical economies in school administration. Chapter IV. The purchasing, handling, and utilization of supplies. *University of Nebraska, extension division, Lincoln*, 1932, p. 76-81, 173-77. (University of Nebraska publications, educational monograph no. 3, 1932. 212 p.)

Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


A sensible article by a publisher discussing uniformity, samples, mimeographing, budget percentages, and economy in seat work materials.


Presents reasons and arguments for centralized purchasing of standard school supplies with examples of wide variations in unit prices paid under the old system.


This is a series of two articles discussing the reorganizing of the finance and purchasing departments of the Hamtramck, Mich., public schools. Article 1 deals with the techniques of developing a method of tabulation to provide a complete history and inventory of any item. Article 2 concerns transmittal records necessary between the central office and the individual schools.
Laying in the winter's coal supply for the school system. Nation's schools, 4: 79-81, August 1929.

The need and advantages of scientific coal purchases, reproducing the contract and specification blanks used by the Hamtramck, Mich., school system as illustrations. This system makes a chemical test to determine the British thermal-unit value, ash content, sulphur content, percentage of volatile matter, moisture, and the percentage of fixed carbon in each purchase of coal.

Why superintendents should plan their buying now. Nation's schools, 5: 88-90, April 1930.

An argument for the elimination of procrastination in the matter of buying school supplies for the maintenance and operation, citing the procedure followed in the Hamtramck, Mich., school system as an example. Includes facsimile of an objective maintenance check sheet for a high-school room.


A brief analysis of some of the more widely used methods in purchasing school supplies and equipment. Several concrete examples illustrate abuse of bidding and sampling.


Supplies—their purchase and distribution. American educational digest, 48: 8-10, September 1928.


Paternalism in the purchase of school supplies and equipment. American school board journal, 75: 45-46, November 1927.

Payne, A. C. Buying supplies on scientific lines. School executives magazine, 51: 16, 33, 34, September 1931.

A description of a practical experiment to determine the relative merits and costs of the folded versus the roll towel.


Outlines a need for research into the standard necessities in school supplies, standards for janitor supplies, standards of quality in supplies, standards of quantity, the costs of production, and a scientific list of supplies and equipment.


Savage, W. J. Cooperative purchasing of school supplies. Sierra educational news, 23: 532, November 1927.


Compares unit prices paid for standard school supplies in 1927 with the average for the three following years. The three years of operation of centralized county purchasing resulted in a decrease of 45.58 per cent in the unit cost of supplies. Fresno County has more school districts than any other county in the State (about 175).


School supply purchases in Santa Barbara county; economy of centralized purchasing shown. The tax digest, 7: 267-72, August 1929.


Facts to show how the purchase of school supplies in large quantities and the standardization of supplies result in economy and convenience to a school system.

Spears, M. S. Purchasing and distributing supplies and equipment. Nation's schools, 2: 62-64, July 1928.


In this article the San Joaquin county purchasing agent tells how county centralized purchasing of standard school supplies sponsored by California taxpayers' association in 1927 is now saving from one-third to one-half on the cost of school supplies in his county. His remarks on organizing for cooperative purchasing are useful.


Considers the competitive system as the weakest link in school purchasing. Emphasizes the necessity of adequate specifications and inspection in the purchasing of supplies.

SUPPORT, SCHOOL

Look for this as a subhead under the schools to be supported, e.g. Secondary Education, or Higher Education. See also State Support.

SURVEYS, GENERAL

(The finance sections of most of the surveys up to 1926 are listed in A Topical Analysis of 234 School Surveys published as School of Education, Indiana University, Bloomington, Ind., bulletin III, no. 4, March, 1927. Accordingly this bibliography lists only surveys beginning with 1926. A similar bulletin for later surveys is under way at the same institution. See the Smith and O'Dell reference in this section)


Sample of a check list and suggested sources of data to be used in school-survey work. Very suggestive and possibly adequate in a general way, but not sufficient in detail for specific application or for placing in the hands of inexperienced workers.


Types of surveys as to the personnel employed are discussed and evaluated. The survey by a staff from the State department of education is favored and the author outlines its operation in the State of Ohio during the past year. The details in collecting, organizing, and interpreting data are explained.


Discussion of the techniques for studying salary problems. Treats specifically of the methods used in Pasadena schools.


Lists 1,733 surveys by State, city, county, State and higher institutions indicating type of contents. Special surveys on "finance" are so listed. Many of the "comprehensive surveys" have chapters on finance. The references on school surveys number 225, listed by authors and classified under seven useful headings.

School surveys by the division of field studies. Teachers college record, 33: 116-28, November 1931.

Good brief treatment of effects of school surveys and bibliography of twenty-eight surveys, conducted by the division of field studies of Teachers college, Columbia university, in the past decade.


Part I Higher educational surveys, 1922-28; Part II City school surveys; Part III Rural education surveys.

TAXATION

See also Revenues

ASSESSMENT


Discusses organization and personnel, administrative policies, the valuation of land by tax maps and analysis of sales and lease data, the valuation of buildings, re-assessments, review of assessments, equalization of assessments, and office administration as the principal elements of a modern assessing system.


Matthews, Winifred. Relation of taxation to the problems of the teacher. National league of teachers' associa-

Discusses the forces which worked against legitimate and equitable assessments in Chicago, to show the effect non-assessment has on teachers' salaries. Includes a description of the work of collecting a $100,000 fund from teachers to procure just reassessments of property.


Pages 50-60 outline the methods of state and local tax assessment, with these steps: listing the property, revision of assessments by the local board of review, and equalization by the state tax commission. Assessments are finally adj usted by the state boards usually form the basis for both local and state taxes.

Pages 61-70 are a study of the works of boards of review and equalization on assessments by local, county and state boards. The provisions for review vary considerably from state to state. Equalization usually implies adjustment of relative aggregate valuations between counties and cities by a state equalization board or tax commission. Detailed provisions of various states for assessment, equalization, and review.


Author is located at State teachers college, Springfield, Missouri.


Considers all value relative, and approaches the problem of valuation on a scientific basis, using methods which will accurately measure this relativity. Discusses these methods and their application.


(National Municipal League. Technical pamphlet series. no. 1.)

Discusses the best form for the administration of the assessment of real estate, maps, field books, land value maps, determination of values, appraisal of buildings and other improvements, and the relation of assessors to the public.


Discusses principles and techniques which will secure more accurate valuation of land.

COLLECTION


Stresses the need for scientifically derived standards for selecting, collecting and distributing State sources of revenue.


An analysis of the processes by which 14 States collect school taxes and the cost and efficiency of various collection procedures. Includes some standards for the construction of tax collection machinery and a technique for determining the approximate cost of collecting school taxes. Shows some present collection costs in Minnesota and reproduces diagrams of tax collection procedures in Michigan, Wisconsin, New York and Minnesota.


Shows that excessive costs of tax collections in third and fourth class Penn-
Collecting taxes with the obsolete tax machinery in use today is like milking cows with a clothes wringer. *Nation's Business*, 19:29-31, 203, February 1930.

An examination of the need for new methods of tax collection, and new sources of revenues, and of the common practices of tax evasion. Points out that an exchange of tax information between States is essential to equitable taxation.

**EQUALIZATION**

See also Equalization


**CHAMBER OF COMMERCE OF THE U. S. TAXATION DIVISION, FINANCE DEPARTMENT.** Greenwich chamber obtains reassessment; tax inequalities eliminated and $70,500,000 in property added to tax roll. *The Public Dollar*, 4:1, 2, April-May 1931.

**Henzl, F. E., Richards, W. M., and others.** Practical economies in school administration. Chapter XIII. Equalizing the tax burden of education. *University of Nebraska, extension division, Lincoln, Nebraska*, 1932. p. 159-182, 200-201. (University of Nebraska publications, monograph no. 3, 1932. 212 p.)

Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.

**HOLY, T. C.** Taxpayers' load; is it properly distributed? *Nation's School*, 3:33-36, April 1929.

Describes the property tax as unjust in many respects and shows urban properties are usually assessed at a higher per cent of their true sales value than are rural properties.

**MOSSelman, H. T.** Calling a halt in the tax exemption craze. *Texas School Journal*, 44:7, 8, April 1927.

An argument against the practice of exempting businesses or industries from tax burden. States that it is economically unsound, for those industries which have a sound reason for existence are well able to pay taxes, and those which are too weak to exist should not be encouraged by tax exemptions.

**NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION.** Is the percentage of school money raised in the local community too great in your State? *Washington, National Education Association*, 1923. p. 273-98. (Research bulletin, vol. 1, no. 4, September, 1923.)


Recommends centralization of taxing power in State tax commissions as a means of relieving general property of its unjust tax burden.

**GENERAL**

See also Finance, Public; Revenues, General


An outstanding example of a description and evaluation of a State tax system on the basis of general considerations and where the taxes should be placed.


Four recommendations of a nation-wide conference on taxation held by business and farm groups and nine methods for improvement in county bond procedures. The Minneapolis City Council examines tax increases and extravagant construction and business men encourage efforts to insure wiser spending. Notes highways and education as the two major causes of high taxes.

Traces the history and function of endowment funds and early taxation for education, reviews the development of tax inequalities, and reveals the necessity of larger tax units and new forms of taxation. Outlines and diagrams a plan for financing a state school system.


Opinions concerning the property tax, the income tax, and the single tax and the probable advantages of each tax to the adequate support of education.

Fowler, John Guy. Measuring present-day taxes by "ability to pay." Nation's schools, 7: 52-54, February 1931.

This article presents a detailed table of the distribution of the burden of individual income and real estate taxes among 11,640 taxpayers to show to what extent the burden of the income tax has been assumed by those already paying high real estate taxes. The data are offered as an argument for a shifting of the basis of school support from the general property tax to the income tax.


Discusses the canons of taxation as they affect public education, using Wisconsin data for illustrations.


Discusses the economic strength and vigor of the people, the disposition of the people toward the fruits of education, the manner in which the tax is directed and the manner in which educational functions are distributed, the confidence which the people of the community have in the skill with which the school system is organized, the efficiency with which the Government interprets the desires of the people, and the character of the tax system as factors determining what a state can and will spend for education.


Demands a retrenchment of governmental activities and a reduction of tax rates. Analyzes results of high business taxes upon prices, wages, and production and charges business men with the responsibility of tax reduction.

Moore, Paul R. Tax relief in the financing of public schools. Teachers college record, 32: 628-34, April 1931.

Shows how the reconstruction of the system of financing public schools now in process over the nation bids fair to play an important role in the whole movement for tax reform and tax relief.


Tabulates the tax collections of Federal, State, and local governments in 1924 for the various States. Gives examples of antiquated taxation systems and four constructive suggestions for improvement. Seven principles and the sources of revenue for a sound taxation plan are presented. Recommends a combination of the property tax, the income tax, the corporation tax, the mineral tax, and the tobacco tax as a just plan of taxation.


Discusses the various types of taxes, the relation of taxation to the public welfare, and what is considered a good tax system. Lists six types of taxes and gives the amount allocated from their proceeds by various States to educational purposes. Includes a table of revenue various forms of taxes would yield by States and an annotated bibliography of 89 references.
NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. Tax burdens and public expenditures. New York, N. Y., National industrial conference board, 1925. 70 p.


Considered the serious crisis in taxation and school finance which is the result of two pronounced, although unrelated, tendencies—a constantly mounting school cost and the antiquated and inequitable general property tax.

RIGGEL, VERNON M. School taxes bulkwork the nation. Mississippi educational advance, 28:81, December 1930.


An authoritative treatment of various special problems revised from the original 1896 and later editions.


A treatment of the mismanagement and theft of original public school land endowments in connection with the cause of present high school taxes. Recommends readjustment and equalization and utilization of the inheritance, the income and severance taxes.


Presents data relating to the various legal limitations in the forty-eight States; also, factors affecting the development of school building programs, the limitations of school indebtedness reduced to a common denominator, and a summary chapter.

Some essentials of a sound tax system. High school journal, 14:87-88, February 1931.

Some thought on taxation and school support. Educational news, 4:6-7, March-April 1929.


Defines the most important legal principles of taxation, their application to school revenues and points out the rights and limits of school officials in matters of taxation. See next item.

—Legal limitations on the rights and powers of school boards with respect to taxation. New York, N. Y., Teachers college, Columbia university, 1929. 124 p. (Teachers college, Columbia university. Contributions to education, no. 349.)

Deals with only the legal principles as derived from court. Makes two widely different applications; namely, the erection of danger signals beyond which boards of education and school administrators should not venture, and the construction on improved highways reaching to new points not at present utilized by school authorities, but entirely within their rights and powers.
for exemption, tuition as a use of property for profit, exemption of trust or endowment funds, taxation of property rented to maintain schools, and the taxation of property used for incidental purposes.


RURAL
See also Rural Support

BLEDSOE, J. M. Selection of county superintendents and levy of county school tax. Texas outlook, 10: 10-12, September 1926.

Shows extent of legal provision in the United States for the levying of county-wide taxes for public school support.


Discusses the problems of taxation in relation to rural conditions, illustrated by means of data for 1926 on equalities found in North Carolina between rural and urban communities.


States the problem of rural school administration in relation to size of taxing units: (a) scope of field, (b) present conditions, (c) unsatisfactory conditions, (d) measures recommended, (e) State and national legislation needed. Presents data showing extent of support for rural schools. Illustrates inequalities in abilities of counties within a State to support schools.


Sets forth by tables and graphs inequalities in school district tax rates, in educational offerings, and in attendance. Tax rates are 11 times higher in some districts than in others due to unequal distribution of wealth.


Recommended a larger unit for taxation which does not necessarily mean consolidation, the community plan.


Compares urban and rural taxation or real estate values from a National rather than a State view point, on five bases: the place of taxes on real estate in the system of State and local taxation method of levying these taxes, the assessments of the property, the trend of real estate taxes, and the relation of these taxes to income from real estate.


Presents data and a formula showing how the proposed plan would operate is the distribution of county school funds.


The ability of communities to support education, the relation of taxes to the wealth of the community, the extent of legal devices which affect the amount of support for schools, the values of education are examined to reveal the relationship between taxation and school.

SCHOOL STATISTICS

These for schools will be found in the State and city statistics bulletins of the U. S. Office of Education. See State Statistics: City School Statistics. Many school tax data appear in the research bulletins of the National Education Association and may be located through the index at the end of each volume.

STATES, INDIVIDUAL

References here given cover general taxation systems. For references on specific taxes in a given state, see Taxes and its Sub-heads. See also Revenues, States Individual: Finance, Public; States.


Reveals that in California the State, which taxes corporations, is paying in 1930 a smaller percentage of public school costs than it did 25 years ago, while school districts, which tax general property for their funds, are paying a larger percentage than they did 25 years ago, thus imposing an increased burden on the farmer.


TAXATION


An outstanding example of a description and evaluation of a State tax system on the bases of general considerations and where the taxes should be placed. Special attention is given to taxation of public utilities and corporations of all kinds.

Tax commission meeting. Sierra educational news, 26: 32, January 1930.


Illustrated with charts showing the increase in educational costs in that State.


KLEMMEDSON, G. S. Taxation, and public school finance in Colorado. Fort Collins, Colorado agricultural college, May 1931. 33 p. (Bulletin no. 576.)

Presents many pertinent data chiefly for the years 1927-28 to show sources of educational revenue in Colorado. Recommends graduated income tax plus some special tax as a means of relieving localities with unreasonable tax burdens.


Theoretical and statistical description of taxation and revenue in Georgia.


Investigates the amounts of land incomes and reveals that land owners in Illinois are paying from 30 to 80 per cent of their land income for taxes, and makes constructive suggestions for desirable tax reforms.


TAXATION

IOWA. WILLIAMS, R. C. Taxes in consolidated districts. Des Moines, Iowa, State department of public instruction, November 1931. 69 p. (Research bulletin no. 7.) Analyzes in detail the taxes paid and the cost of education in Iowa's 287 consolidated school districts.

Public school finance in Iowa. Preliminary report. Des Moines, Iowa, 1930. 56 p. (Department of public instruction. Research bulletin no. 6, 1930.) Report of a fact finding survey authorized by the Iowa legislature. Presents many data on school finance. Points out that district school taxes are 43 percent of all direct property taxes in Iowa.


Some valuable material for theory and statutes on tax limitation in other States as well.

WOODRING, Harry H. and Newman, P. G. The proposed tax limitation amendment. The Kansas teacher, 35: p. 9-15, April 1932. The governor favors, and a member of the State board of education opposes, this proposed amendment to limit dramatically, the taxation on property, which would seriously curtail school revenues at the start and perhaps permanently. Mr. Newman's paper is also printed in pamphlet form by the Kansas State teachers association, Topeka, Kans.


MINNESOTA. Owen, A. V. The control of the tax income of school districts in Minnesota; a comparison with methods of other States. American school board journal, 74: 47-48, April 1927.

Mississippi. Rhodes, M. C. History of taxation in Mississippi. Nashville, Tenn., George Peabody college for teachers, 1930. 298 p. (Contribution to education no. 79.)


Montana. Brannon, M. A. The case of the one and one-half mills levy. Montana education, 2: 8-9, April 1926.


—— Why school taxes are high: funds derived from indirect taxes diverted from schools. Nebraska educational journal, 6: 214-75, June 1929.
MORT, PAUL R. The status of taxation in Nebraska—State aid for transportation. Lincoln, Nebr., Nebraska State teachers association, 1928. 18 p. (Nebraska State teachers association. Research bulletin, no. 4.)

Examines tax legislation in Nebraska, the equalization machinery, extent of property tax, land assessments, exempted property, Federal collections, total valuations of the State, percentage of State and local expenditures going to education, possible sources of additional revenue, and State aid for transportation.


A brief discussion of the railroad tax in New Jersey, showing the amount of money derived from the State tax on railroads in this State during the period 1907-1928, and the manner of disbursing such funds.

—COMMISSION TO INVESTIGATE COUNTY AND MUNICIPAL TAXATION AND EXPENDITURES. A report on educational services and costs. Trenton, N. J., 1932. p. 154. (Report no. 8 of the legislative commission to the Governor and legislature.)


Contains explanation of provisions in the State for financing the schools and shows tax limits for education.

New York. KENDRICK, M. S. The collection of taxes by the State government and the division of these revenues, with emphasis on New York. Journal of political economy, February 1931. p. 25-41.

—MORT, P. R. and others. State support for public schools in New York State as related to tax relief and educational expansion. Report of New York State tax commission, 1931. Memorandum no. 2. 81 p.


Recent school legislation—continuance of effort to equalize support of rural schools and to grant more freedom to cities in taxation. Twenty-fourth annual report of the state department of education. V. 1. State department of education, Albany, N. Y., 1929.


Reproduces charts as of January 1, 1932, of the Federal tax system, of the systems in each of the 48 States, of local tax systems in this country, and of Canada, Europe, and other countries. Outlines the legal and statistical status of certain tax matters in the various States, telling where and how jurisdictions tax and what revenues the taxes produce. Similar charts have been issued for several years.


Issues affecting North Carolina's plan for complete State support for the six month school term required by State constitution.

—CARRICK, CHARLES FISHER. Taxation supplementary to State support of schools in North Carolina since 1868. Raleigh, N. C., State Department of Education, 1930.


Ohio. Foster, R. R. Proposed tax limit amendment. Educational research bulletin, Ohio State University, 8: 333-41, October 1929.


TAXATION

Purposed on the grounds that the function of government is not only protective and repressive but also creative.


Shows with tables and graphs pertinent data on farm and urban incomes and the relation these bear to taxation burdens. Farmer's tax was 13.6 per cent of his income while the non-farmer's tax was 9.5 per cent of his income.


Presents accurate and detailed charts of the tax systems of the Federal government, the 48 States, the Territories, and several foreign nations.


Determines amount Texas should spend on schools by comparisons with other States, discusses the ad valorem tax, and outlines a program of State aid.


Analyzes in detail public school finance in Utah. Considers the type of tax, total expenditure for schools as compared to total government costs, and values versus cost.


Wisconsin.


Discusses the fixation of millage rates and some current higher education tax problems in Wisconsin. Various forms of taxation are appraised in an effort to determine their applicability to the finance problems of the State.


Statistics.


Includes an evaluation of the model plan of the National tax association, a statement of some fundamental principles of educational taxation, and of the sources of school revenue in Wisconsin, and a recommendation for some needed tax and finance studies. Shows the distribution of the Madison, Wis., tax burden among 11,840 taxpayers.


A clear description of Wisconsin's taxation plans for raising school revenue. Includes the various taxes and contributing to educational revenue and criticises each.


Statistics

Statistics for taxation for all governmental purposes appear regularly in the standard Cost of Government series of the National Industrial Conference Board, the latest being issued in 1931 and covering the last two years feasible for the various items. Amounts, percentages, and per capita or data from which these amounts may be calculated appear regularly for Federal, geographical sections, State, local, and individual State and local taxes. Each volume gives important figures for several previous years. Sources of data indicated. Many tax statistics showing amounts raised by various taxes appear in the research bulletins of the National Education Association. The data may be located through the index at the end of each volume. Sources indicated.

Taxes


The section of this study devoted to a proposed business income tax levy recommends a plan based on a prepared model. Gives business incomes and federal collections of income taxes in various States in 1924. Suggests a State levy of from 2 to 5 per cent on corporation incomes.


Deals with the tax burdens carried by business corporations, including manufacturing, mercantile, commercial, and amusement enterprises. Outlines the present status of taxes on corporations and indicates briefly the historical development and position in State revenue systems. Describes in detail the extent and character of various forms of corporate taxation, including organization and entrance charges, taxes on capital stock, net income, and property and special business and occupation taxes that apply to incorporated concern. Analyzes the economic effects of the resulting tax burden.


An annotated copy of the model personal income tax act prepared in 1921 by a special committee of the National tax association. In legal form ready for enactment with good notes for profitable discussion on many points.


A comprehensive review, with many relevant data, of the growth and influence of the chain store in the United States. Cites many State provisions for taxing these establishments and explains the purpose and the results of these various laws.

TOLMAN, William A. The gross sales tax in Kentucky. *Tax magazine.*


A comprehensive study of widespread interest, primarily concerned with the Kentucky tax but including a general survey of taxes on sales in the United States and other countries.


Many statistics to support the position that corporations are unfairly taxed as compared with individuals in business and that the corporations can not stand increased taxation.

GASOLINE

CRAWFORD, F. G. Administration of the gasoline tax in the United States. *New York, N. Y.*, Municipal administration service, 1928. 26 p. (Municipal administration service, no. 7.)

This pamphlet, with its historical approach, compactly summarizes the existing practices and procedures in the various States in collecting and distributing the gasoline tax, and discusses the constitutional issues involved. Considers the probable future of the tax.


Discusses the history of the gasoline tax, the gross gasoline tax yield 1921-29, the responsibility of States for collection, exemptions and refunds, distribution of the tax, States in relation to the tax, and its constitutionality, includes many relevant data.

MARTIN, James W. Possible attitudes toward the proposal to raise gasoline tax rates. *Texas Outlook*, 11: 12-13, January 1927.

Estimates the tax burden and the effects upon education of a State tax on not only gasoline but all internal combustion fuels and outlines a publicity program to gain public support. Considers the gasoline tax a very plausible source of school revenue, and discusses these attitudes the public may assume toward the adoption of such a tax.


SPECIAL JOINT COMMITTEE ON TAXATION AND RETrenched of NEW YORK STATE. Gasoline tax widely adopted by States. *National municipal review*, 13: 207-211, April 1924.

UNITED STATES. OFFICE OF EDUCATION. New sources of revenue for education. In Biennial survey of educa-
INCOME


Considers the efficiency, as a revenue producer, of the State income tax laws in force now and during the period since 1918 in the various States of the United States.


Accepts as principles that every person having taxable ability should pay some sort of tax, that property should be taxed by the jurisdiction in which it is located, and that business carried on for profit should be taxed for the benefits it receives. Discusses a presumptive income tax, the avoidance of double taxation, and exemptions and abatement in an effort to reveal the need of an income tax to support public schools.


Gives present status in State laws and outlines model personal and corporation tax laws, showing effects of present statutes.


Popular presentation with special reference to Kansas. Income tax map of United States, by States, on March 1, 1932.


Examines the uses and extent of income taxation in various States with special reference to a proposal for its use as a source of school revenue in Illinois.

NATIONAL EDUCATION ASSOCIATION. Business income tax and school support. Washington, National education association. (In preparation.)

RESEARCH DIVISION. Income and taxes collected in the States, 1928.


A study of State income taxes discussing tax rates, methods of collection, and allocating a portion of the resulting revenue for educational support. Tabulates for each State statistics of the Federal income tax returns and the possible returns of State income taxes.

Permanently available and have a new method of taxation. Washington, National education association, 1930. p. 3. (Studies in State educational administration, no. 2.)

Discusses the theory of taxing incomes, and analyzes the administration of income taxes in Arkansas, Delaware, Georgia, Massachusetts, Mississippi, North Carolina, and Wisconsin in relation to the support of education.

NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. Proposals for changes in Federal income tax administration. New York, N. Y., National industrial conference board, inc., 1923.


Vol. I presents the historical development of State taxation based on net income, tracing the significant events in the development of the law in each State in considerable detail. Vol. II deals with the subject topically and analytically. Gives a comprehensive account of the important features of State income taxes, and considers such points as legal bases, exemption, characters of the rates proposed, treatment of nonresidents and details of administration.


This first of a series of studies of the shifting and effects of some of the taxes of our Federal and State systems explains with numerous examples, the in-
cidence and distribution of the burden of the Federal tax on corporation income and its effect on business enterprise in manufacturing and mercantile corporations. According to those responsible for this study the Federal tax on corporations is not shifted by manufacturing and mercantile business except under rare circumstances.


An annotated copy of the model business income tax act, prepared in 1921 by a special committee of the national tax association. In legal form ready for enactment with good notes for profitable discussion on many points.


Brief summary of situation in the U. S. with description and evaluations by experienced tax commission men of laws in Wisconsin, Massachusetts, North Dakota, and New York.

Ohio. COMMITTEE ON RESEARCH. GOVERNOR'S TAXATION COMMITTEE. Second preliminary report to the Governor's taxation committee. In A study of personal income taxes of the various States and probable yields of such taxes applied in Ohio. Columbus, Ohio. The committee on research, October 15, 1930. 68 p.

Once more income taxation and school administration. American school board journal, 68:66, February 1924.


Status of the State income tax in 1928 in the 14 States then having it.

The personal income tax and our public schools. School and society, 32:402-404, September 1930. Also published in Indiana teacher 75:8-10, December 1930.

Advocates the use of the personal income tax as a source of school revenue. Includes a discussion of the income tax provisions in several States. Calls particular attention to the features of the Georgia income tax law.

The status of the income tax as a source of school revenue. American school board journal, 81:60-61, 125, October 1930.

An arrangement of the general property tax and a picture of the income tax as a source of school revenue. Recommends the income tax as truest, fairest and more defensible form of taxation. Lists the States which allocate all or part of income tax proceeds to schools. Points out provisions of the tax in Massachusetts, North Carolina, New York, Tennessee, and Wisconsin.


INHERITANCE


Discusses the 1929 Wisconsin reciprocal inheritance tax which avoids double taxation by those States reciprocating with Wisconsin. Considers law may stand but thinks it does not give citizens of nonreciprocating States equal privileges with those of reciprocating States.


Provides information regarding the movement to abolish the taxation of the same inheritance by two or more States. Discusses reciprocity as a method of simplifying tax collections and abolishing unjust double taxation. A committee consisting of State and local officials studying taxation and expenditures, presents four recommendations for improvement of inheritance tax provisions.

NATIONAL EDUCATION ASSOCIATION. School revenues and new methods of taxation. Washington, National education association, 1930. 7. (Studies in State educational administration, no. 2.)

Considers theory, extent, and status of inheritance taxes in various States. Outlines legal provisions by which education may receive partial support from inheritance taxes in Kentucky, Michigan, Montana, and Virginia.

WISCONSIN. NATIONAL INDUSTRIAL CON-
ERENCE BOARD, INC. Inheritance tax
in Wisconsin—comparison with
neighboring State. In The tax prob-
lem in Wisconsin. New York, N. Y.,
National industrial conference board,

LUXURY

California. Staffelbach, Eimer H.
Tax reform in California; luxury
taxes. Sierra educational news, 26:
33-36, January 1930.

COOMBS, WHITNEY. Tax on nonessen-
tials. In State consumption taxes on
nonessentials. National tax as-
sociation, 1929. p. 138-41. Docu-
ment, no. 14.

Summarizes State provisions for taxing
sales of tobacco products, admissions to
game fairs, theater admissions, soft
beverages, ice cream and confections, and
miscellaneous articles. Presents informa-
tion concerning the administration of
such taxes and use of the proceeds.

NATIONAL EDUCATION ASSOCIATION. RE-
SEARCH DIVISION. Major issues in
school finance. Washington, Na-
tional education association, 1929.
Table 13. p. 48-49. (Research bul-
letin, vol. 5, no. 1, January 1927.
pt. 2.)

Appraises possibilities of the tobacco
tax as a source of revenue. Presents
statistics of expenditures for tobacco in
the various States during 1924, and in-
dicates the revenue a proposed 6 per-
cent State tax on the retail sales of this
product would yield.

School revenues and new meth-
ods of taxation. Washington, D. C.,
National education association, 1930.
p. 4. (Studies in State educational
administration, no. 2, January 1930.)

Discusses the theory, extent, and status
of luxury taxes in various States. Out-
lines legal provisions by which education
receives partial support from luxury taxes
in Alabama, Arkansas, South Dakota,
Tennessee, and Louisiana, and from gas-
oline taxes in Florida, Georgia, and
Texas.

TOWER, RALPH B. Notes on the inci-
dence of State tobacco taxes. Tax
magazine, 10: 87-88, March 1932.

Considers the parts paid by the manu-
facturer, the wholesaler, the retailer and
the consumer, concluding that in the end,
the consumer pays the most and the
retailer next.

PROPERTY

DAVIS, JOHN W. The income vs. the
property tax as a source of school
revenue. American school board
journal, 77: 43-44, 116, 118, Decep-
ember 1928.

Develops the principles that every
person having taxable ability should pay
some sort of tax, that property should
be taxed by the jurisdiction in which it
is located, and that business carried on
for profit should be taxed to pay for the
benefits it receives. Discusses a pre-
sumptive income tax, the avoidance of
double taxation, and exemptions and
abatement in an effort to reveal the need
of an income tax to support public
schools.

ELY, R. T. Taxing land values and
taxing building values. Annals of
American academy of political sci-
ence, 145: 165-69, March 1930.

Shows, by means of concrete illus-
trations, why it is impossible to lay down
one general rule for taxing land values
and another rule for taxing building
values.

EVANS, C. E. The general property
tax. Texas outlook, 14: 67-68, Janu-
ary 1930.

LELAND, S. E. Classified property tax
in the United States. New York,
N. Y., Houghton Mifflin co., 1928.
492 p.

Discusses the history of the movement,
gives arguments for and against, de-
scribes comprehensive and partial State
systems, and concludes that in every case
the classified property tax has been a
distinct improvement over the old gen-
eral property tax. Separate applications
to land and to intangible property.
Bibliography of over a thousand unanno-
tated references.

MORRISON, H. C. School revenue. Chi-
cago, III., University of Chicago
press, 1930. p. 131, 143, 146-47,
242 p.

Defines and evaluates the property tax
and analyzes the personal, economic and
social effects of unwise property taxation
which tends to force property out of ex-
istence as a tax base.

The financing of public schools
in the State of Illinois. New York,
N. Y., Macmillan co., 1924. p. 60-
69. (Educational finance inquiry
commission series, vol. IX.)

Investigates the amounts of land in-
come and reveals that land owners in
Illinois are paying from 30 to 80 per cent
of their land income for taxes.

NATIONAL EDUCATION ASSOCIATION. RE-
SEARCH DIVISION. Major issues in
school finance. Washington, Na-
tional education association, 1927.
p. 43-46. (Research bulletin, vol. 5,
no. 1, January 1927, pt. 2.)

A study of the limitations and frail-
ties of a tax on tangible property and the
uses of property tax for school support
in 20 States. Tabulates statistics of
property values and amounts raised by
tax on tangible property in 1924 for the
various States.

School revenues and new meth-
ods of taxation. Washington, Na-
tional education association, 1930.
p. 2. (Studies in State educational administration, no. 2, January 1930.)

Points out the injustices and weaknesses of the general property tax. Discusses classification of property for taxation, the separation of sources of State and local revenue, and the equalization of assessments, as techniques for making general property taxes more equitable and efficient.


Pages 15-49 discuss the property tax provisions of various State tax systems. Pages 71-75 describe machinery for collection of taxes, and pages 76-85 review tendencies toward centralization of administrative control of property tax as a device for overcoming unjust inequalities of assessments.


Points out the inequity of the general property tax, citing land values and total wealth from 1850-1925. Discusses the graduated income, the inheritance, the gasoline, automobile, severance, corporation, and various kinds of sales taxes. Calls attention to the increasing demand for State aid for public schools.

SWIFT, FLETCHER H. State taxes as sources of public school revenue. Pt. I. The general property tax. Bulletin of the national tax association, 14: 69-77, December 1928. A description with comment on the major State school taxes in 1923, covering all States, with special attention to the general property tax. Finds this tax very bad, tending to pass or to be levied so as to raise a certain sum per pupil and not at a fixed rate.


WATSON, J. P. Soundings in the general property tax. Columbus, Ohio, Ohio Institute, 1929. 70 p.


SEVERANCE

California. STAFFELBACH, ELMER H. The severance tax idea applied to California mineral production. Sierra educational news, 25: 30-34, September 1929.


Statistics showing the value of mineral products in the various States in 1924 and the tax yield of a proposed 8 per cent levy on same are tabulated to reveal the untapped sources of school revenue.


Discusses the theory, extent, and status of severance taxes in force in various States. Outlines legal provisions by which education gains partial support from severance taxes in Alabama, Arkansas, Louisiana, Minnesota, Montana, and Oklahoma.

Ohio. MOODY, ANCIL EARL. The general property tax of Ohio should be supplemented by a severance tax. Ph. D. thesis, 1931. Ohio State University, Columbus, Ohio.


Analyses the severance tax in force in seven States for the production of school revenue. Shows proceeds by State from this source of revenue.

STATE

See also Finance Public: Taxation, General.


Deals with national fiscal habits of the postwar years by stating and analyzing those postwar tendencies in taxation which show signs of permanence in European countries and the United States.

FERTIG, J. H., GREY, R. S., and GILDER, R. R. A compilation of laws relating to State taxation and reve
U.S. OFFICE


Presents seven general principles of taxation and discusses the revenue raised by various forms of taxation. Notes some failings of present taxation systems. Considers a desirable combination of tangible property tax, progressive personal income tax, corporation tax, mineral tax, and tobacco tax, and estimates the revenue each tax would yield in the various States.


An exhaustive study of the legal and practical provisions and methods for collecting and apportioning school taxes and school funds in each of the 48 States.


STATISTICS
See Taxation; Statistics

TEACHERS ASSOCIATIONS

CRAWFORD, A. B. Anchorage, Ky.
Has under way a dissertation, in connection with the University of Kentucky, on finance in State teachers’ associations.


A tabular report of the financing of State teachers’ associations, covering the ratio of dues paid in various State associations, the percentage of teachers enrolled in such organizations, and the rate of salaries paid to secretaries and officers.


Covers all procedures, duties of officers, classifications of receipts and expenditures, and reports.

NATIONAL EDUCATION ASSOCIATION.

Shows collection of dues involves considerable expense, cites State associations, using a budgeting procedure and reproduces card used in Pennsylvania.

WILLIAMS, R. E. Executive secretary of Kentucky education association.
Has been assigned the chapter on financial service in a projected source book on professional organizations to be published under the auspices of the national association of secretaries of State education associations.

CONTRACTS


Chapter 7 discusses teaching qualifications essential to receipt of compensation, rights of teachers to compensation under variously disturbed financial conditions, methods for determining rate or amount of compensation, fiscal methods of making payments, and rules governing actions of teachers to recover compensation.

71-73. 117, 121-22. (Teachers college, Columbia university. Contributions to education, no. 246.)

Refers to the items included in teachers’ contracts and discusses the legal phases of teacher status with illustrations from various States.


PLACEMENT


Results from questionnaire to all State higher education institutions. Gives time of directors to placement work, cost per candidate, maintenance costs per registration, cost per student placed and fees charged students, all for 1925-26.


Theory and practice on such fees in 1929 based on questionnaire to State universities, teachers colleges, and major private and endowed universities.


A very comprehensive study, including such costs as it was possible to secure.


Describes a method of rating teachers by a combination of experience and the ratings of superintendents and critic teachers. Defends the Ohio State University policy of placing good teachers in positions which pay well and attempting to keep good teachers from accepting poorly paid positions. Poor teachers are placed in poorly paid positions and an attempt is made to protect superintendents who pay high salaries from securing poor teachers.

SUPPLY AND DEMAND


A report of the committee on the economic status of the teacher. Discusses the problems of supply and demand, functions of teacher education, and the principles underlying the solution of problems related to the general and professional education of teachers.


Using data from State education departments, sets forth major State problems in teacher supply and demand and the methods by which these problems are being met in various States. Sets up a technique by which State departments may attempt to coordinate teacher supply with demand.

Ohio. ANDERSON, EARL W. A study in supply and demand. Educational research bulletin, 8: 399-403, December 4, 1929.

A comparison of the number of students trained to teach English by the colleges of Ohio in 1927-28 and the number of inexperienced English teachers hired in 1924-29, according to this study, reveals a 40 per cent waste in English teacher training for that year. The extent to which teachers teach subjects in which they had no training and the various combinations of teaching subject assignments are investigated. Gives some salaries of beginning English teachers.

and FOSTER, RICHARD R. Teacher supply and demand in Ohio. 1929-30. p. 3-170. Ohio State university. Columbus, Ohio. (Bureau of educational research monograph no. 11.)

Good separate studies well interpreted for elementary teachers and high-school teachers.
TEACHER TRAINING

COSTS


Magee, Herman J. Unit costs of salaries in teachers colleges and normal schools. New York, N. Y., Teachers college, Columbia university, 1931. 107 p. (Teachers college, Columbia university. Contributions to education, no. 489.)

Analyzes the salary expenditures of certain representative normal schools and teachers colleges for 1929. Uses two unit cost bases, per student credit hour and per student clock hour, in determining the relative costs of instructional service for subject departments, various types of curricula, and years (freshman, sophomore, junior, senior and graduate). Produces a more adequate cost accounting procedure than is now found in most teacher training institutions.


Per capita costs on the basis of a 36 weeks year for current expense only, for individual teachers colleges and for state normal schools with central tendencies for these two groups. Indicates when an institution includes expenditures for a model school, dormitory or cafeteria, and extension work. (Similar figures for 1925-26 appear in statistical circular, 1927, no. 8.)


TENURE


Discusses the lack of tenure of office as a factor in school expense. The lack of guaranteed tenure does not attract the most efficient administrators and instructors, handicaps the superintendent, and adds nothing to the wealth of the community.


Discusses certain factors which tend to produce instability among the teaching group. Among these factors are salary schedules and current expense per pupil.


Discusses the needs for better salaries, retirement allowances, and tenure. Notes the extent of annual teacher turnover, and studies tenure legislation and provisions.


TEACHER TRAINING
FEDERAL AID

See Federal Aid and Vocational Education, Federal Aid

FISCAL ADMINISTRATION

AGNEW, W. D. The administration of professional schools for teachers. Baltimore, Md., Warwick and York, 1924.


The Colorado State teachers college methods of obtaining money, budget making, finance accounting, and financial reporting are outlined by the president of the institution. Lists items falling under the several budget headings and describes nine types of reports.


A systematic treatment of financial problems found in the teachers college field. Includes concrete illustrations of theories and shows how principles of administering finance may be applied in the management of such colleges.


RUTLEDGE, SAMUEL A. Finance. In his The development of guiding principles for the administration of teachers colleges and normal schools and the development of administrative practices consistent with these principles. New York, N. Y., Teachers college, Columbia university, 1930. p. 33-45. (Teachers college, Columbia university, Contributions to education, no. 449.)

Shows the principles of general administration, including fiscal administration, applicable to the successful operation of teachers colleges or normal schools and the nature of administrative activities which should be performed.


GENERAL

WHITNEY, F. L. The social and economic background of a teachers college and university students. Education, 47: 449-50, April 1927.

HIGH SCHOOL


PUBLIC RELATIONS


Discusses levels of publicity, the need for publicity, timeliness, continuity, simplicity and inclusiveness as principles of publicity, executive and extra-mural reporting, direct and indirect publicity, and personal and impersonal publicity for teachers colleges.

STATES, INDIVIDUAL

COLORADO. STATE TEACHERS COLLEGE. Sources of income for State teachers and State normal schools. Greeley, Colo., State teachers college, 1929. 68 p. (Research bulletin, 1929, no. 14.)

LOUISIANA. STATE DEPARTMENT OF EDUCATION. Survey of Louisiana State normal college, the Louisiana polytechnic institute and the southwestern Louisiana institute. Baton Rouge, La., State department of education, 1924. 223 p.


SUPPORT


Reviews teachers' college costs, incomes, property values, and salaries of teacher training institutions since 1927. Finds constant increase.

HAMILTON, F. R. Fiscal support of State teachers colleges. New York, N. Y., Teachers college, Columbia university, 1924. 51 p. (Teachers college, Columbia university. Contributions to education, no. 165.)

Compares per student costs of teachers colleges with those of other institutions of higher learning. Studies the effect of the size of institutions on cost, the effect of fiscal support upon equipment and the relation of budget preparation and appropriation procedure to proper fiscal support. Five recommendations.


STRICTURES

Finance statistics appear in the bulletins of the United States Office of Education, the latest in print being for 1929-30. Bulletins for the earlier years can be located through the price list of educational publications of the United States office of education. Also, under the head of Teacher training institutions in Carter Alexander's Educational research, third edition, 1931. The statistics include such items as value of property, receipts classified by sources, and expenditures classified by character. Data appear also for State, and for individual institutions. Data on income, attendance, salaries, and legislative budget requests for State institutions are collected by the office of education in even-numbered years and issued shortly thereafter in mimeographed circulars.

TERMINAL COSTS


A keen, theoretical treatment with practical illustrations of methods of estimating the future costs of present policies and commitments. Considers it "far better to be assured of adequate schools for the next generation than to make such schools impossible by reckless expansions in the present.


A HIGH-SCHOOL PRINCIPAL. School costs and the teacher load. American school board journal, 83: 111-12, September 1931.

Actual western State case showing need of schoolmen having definite and defensible teacher load standards.


Analyzes the cost of reductions of teacher loads in Portland, Ore., and raises questions as to what types of taxation and what groups of people are to pay for these increased school costs.


Using studies revealing the relative efficiency of large high school classes as a basis, this article points out that if the high school classes in Ohio were reduced to 30 or 35 with 25 in laboratories, the State would save approximately $2,000,000 yearly without the loss of any educational efficiency.

TEACHERS TENURE

See Teacher Tenure; Teacher Contracts

TEACHING AIDS

See Supply and Equipment heads

TEACHING LOAD

TERMINAL COSTS
TEXTBOOKS

COSTS


Reproduces cost finding report submitted by the State printer in California and discusses valid cost accounting factors of State publications and valid cost comparison. Investigates hidden costs and points out possible savings of a State system of publication.


Material in various places on State regulations covering prices, costs, and free textbooks, with special reference to Florida.


Presents data to show the relative growth of textbook expenditures for the past fifteen years, the cost of textbooks in 13 free textbook States, the percentage of annual current expenditures spent for textbooks, the per capita cost of textbooks, and the cost of textbooks for various grades.


A sensible article by a publisher discussing uniformity, sampling, micrographing, budget percentages and economy in seat work materials.


ECONOMIES


A consideration of the educational and financial aspects of State publication of basal elementary textbooks in California. Findings: The existence of any financial saving to the State of California resulting from the state publication of textbooks is doubtful; the total cost of textbooks is relatively insignificant; the possibility of comparatively slight financial savings should not be permitted to curtail sound, regular, and unrestricted supply to the school of the best modern books produced; the policy of state printing operates in this State to curtail such a supply; and for these reasons state publication of textbooks in California cannot be defended upon financial or educational grounds.


Reveals that State publication of textbooks can save only a fraction of 1 per cent of the cost of education, and that such a niggardly saving jeopardizes the efficiency of our entire educational program.


Points out the need and desirability of reducing the loss through wasteful sampling of textbooks. The public pays 3 to 10 per cent of the cost of books for this practice. Some superintendents follow the practice of purchasing all sample copies of textbooks needed.


Practical suggestions and citations of authorities on how to secure economies in this field and a check list for knowing when such economies are secured.


Wells, D. N. How public schools reduced school book costs through a book repair department. American
TRANSPORTATION

The plan for reducing school book costs in Pueblo, Colo. The cost for repair amounted to an average of 26.8 cents as compared with 55 cents for each new book plus freight and drayage.

WHIPPLE, GUY M. The selection of textbooks. American school board journal, 80: 51–53, 158, May 1930. 10. A study of the increasing costs of textbooks previous to 1928. Discusses the selection of textbooks, a criterion to aid in such selection, and the relative merits of uniformity as shown in one State. Recommends printed texts with a more mobile plan of selection.

TOBACCO

See Luxuries; Taxes, Luxuries

TURNOVER

See Teacher Tenure

TRANSPORTATION

ACCOUNTING


HOWARD, GEORGE. A simple system of cost accounting for school transportation. American school board journal, 70: 54, 144, 146, 149, June 1925.


Determines some objectives of cost accounting for pupil transportation and presents suggestive legal and accounting forms and procedures for the administration of such a system.


School bus transportation accounting system. American educational digest, 47: 69–70, October 1927.

AID

See State Aid, Transportation

COSTS

See also Transportation Economics


Detailed data pertaining to pupil transportation costs, types of vehicles used, qualification of drivers, and related information. Tables.

ARKANSAS. DAWSON, HOWARD A. Transportation of pupils in consolidated schools of Arkansas. Little Rock, Division of statistics and information, State department of education, August 1928.

Compares school ownership with private ownership of conveyance as to costs.


Compares costs between districts, analyzes factors in cost and makes recommendations for betterment of service and elimination of waste.


Compares cost of school transportation and commercial transportation and develops norms for measuring transpor-
TRANSPORTATION

tation costs. Many data and a summary of findings which are in the nature of conclusions and recommendations for accounting and operation of pupil transportation systems.


COWET, TIMON. Average transportation costs per child per day per mile. In Rural school consolidation. Washington, U. S. Office of education, Circular no. 3, January 1930. (Multigraphed.) (For similar data for 1925-26 see Rural school circular no. 23.)

Consolidation of schools and transportation of pupils, 1927-28. Washington, U. S. Office of education, Circular no. 3, January 1930. (Multigraphed.) (For similar data for 1925-26 see Rural school circular no. 23.)

Shows numbers of school buildings, 1-room and consolidated schools, teaching positions, pupils transported, numbers of school buses used, and expenditure for transportation by States.


GREENE, HARRY E. The excessive cost of transportation under the contract system. American school board journal, 73: 70, October 1926.

IOWA. KELLOGG, GEORGE H. Tabulation of costs of schools of Story County, Iowa, and Second report on transportation, 1924. 2 p. (Mimeo-graphed.)

A concise presentation of statistics of each school of the county (5 city and town independent, 13 consolidated, and 11 one-room). Median annual per pupil costs in the different types of schools.


Compares the costs of operating school owned and contracted buses and discusses competitive bidding on contracts, initial costs of buses, costs of operation and depreciation, insurance costs, and the total general costs of transportation in various States.


Explains the legal phases of the purchase of equipment, notice to bidders, proposals, contract forms, safety bonds, specifications, lists of equipment for school shops, and some minimum essentials in relation to the selection and purchase of equipment for trade and industrial courses.


A description of the 21 rural schools, only 2 of which are 1-room type. Consolidated schools are organized on the 1-4 basis. Thirty-five school buses are used in transporting 1,400 pupils at a cost of 10 cents per day per child.

MASSACHUSETTS. Report of committee on school transportation. Boston, Mass., Department of education of Massachusetts, 1925-26. (Framingham conference report.)


Shows that 9 per cent of pupils transported were transported in horse-drawn, while over 50 per cent traveled in motor buses. Cost per mile is about twice as much by horse-drawn as by motor buses.

MINNESOTA. SELKER, GEORGE A. Transportation costs in Minnesota consolidated schools. Washington, Government printing office, 1924. 7 p. (U. S. Bureau of education. Rural school leaflet no. 29.)

A statistical study of transportation costs in Minnesota. The median number of pupils transported per school is 70. The median cost per pupil per mile is 32.46, per pupil per mile is 4 cents. Total number pupils transported, 27,668.

NEBRASKA. JOHN M. MATTEN. Transportation of pupils in Nebraska. State department of education, Lincoln, Nebr., 1924. 8 p.

A tabular arrangement of transportation information by districts with a summarization for the State on first page. Of the 98 consolidated schools 34 are in the open country and 60 schools furnish transportation. Transportation cost per pupil per mile is 2 cents.


DEPARTMENT OF EDUCATION. Cost of transportation in New Jersey. Education bulletin, 18: 349-


A comprehensive analysis of transportation costs in the public schools of North Carolina. Costs being calculated on the basis of separate counties, type of bus, type of road, size of load, type of school, etc. Study to be completed by July 1, 1932.

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Report of a study based on replies from 164 schools using transportation. Contains tables showing kinds of districts, types and ownership of vehicles, numbers of pupils transported and data relative to costs. Also contains suggested forms for transportation of pupils and contractor's bond.

Utah. Department of public instruction. A study of transportation in the schools of Utah. Revised edition. Salt Lake City, Department of public instruction, 1928. 57 p. (See also similar study published 1926.)

A study by a committee composed of 5 school officials in Utah to show how improvements may be made in pupil transportation service. All phases of transportation analyzed. Average yearly cost per pupil (elementary).


A statistical presentation showing value of convergencies, salary of bus drivers, and financial statement.

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ECONOMIES


Evans, F. O. Norms for evaluating school transportation expenditures; The tax digest, February, 1930. p. 61; California taxpayers association, Los Angeles.

Evaluates the factors that enter into the transportation dollar. Valuation tables are included. The wastes due to small schools and the separation of elementary and high school administration are exposed.

Henríquez, F. E., Richards, W. M., and others. Practical economies in school administration. Transportation. University of Nebraska, extension division, Lincoln, Nebr., 1932. p. 149-150, 198. (University of Nebraska publications, educational monograph no. 3, 1932. 212 p.)

Practical suggestions and citations of authorities on how to secure economies in
this field and a check list for knowing when such economies are secured.

Improving school transportation—how Sandusky county, Ohio, has set higher standards for rural bus transportation. *American School Board Journal*, 82: 45, May 1931.


Examines the legal responsibility of the State and the locality for providing school transportation. Discusses the status and extent of transportation in relation to modern educational requirements, tabulates the costs of various types of transportation, and outlines administrative procedures. Devises a statistical technique to reveal that density of school population is a valid independent variable for the prediction of per pupil costs of transportation.


LEGAL ASPECT


See also vol. 78, no. 3, no. 5, and vol. 79, no. 5, for articles in this series.

Cites typical examples of State supreme court decisions relative to the use of school funds for pupil transportation, thereby showing how this auxiliary service of the consolidated school has developed.


Reviews the history and analyses the status of school transportation in various States. Discusses ways in which transportation is established, manners of conveyance, distances of conveyance, substitution of board and lodging for transportation, methods of financing transportation and the progressive trends of transportation legislation.


Examines the legal responsibility of the State and the locality for providing school transportation. Discusses the status and extent of transportation in relation to modern educational requirements, tabulates the costs of various types of transportation, and outlines administrative procedures. Devises a statistical technique to reveal that density of school population is a valid independent variable for the prediction of per pupil costs of transportation.


Contains a section on consolidation and transportation. See Bulletin, 1931, no. 20, vol. I, chap. 23, by same author, for similar information for the biennium, 1929-1930.


State supreme court decisions relative to the constitutionality and legality of pupil transportation at public expense. Primarily a compilation of interpretations of decisions and citations. References given for all cases cited.


Discusses the 1929 civil code of California regarding the responsibility of a school district for accidents to pupils or
property as a result of the negligent operation of its motor vehicles and the provision of the law which allows the school district to carry liability insurance for such accidents.


A study of supreme court rulings in connection with laws governing the transportation of pupils.


Summarizes school laws and court decisions concerning the legal phases of transporting children to and from school. Discusses such items as free toll for students, special student rates, fraud in getting student rates, and a bus driver's rights to compensation when school is suspended.

STATISTICS


A statistical study of motor transportation of pupils presented in detail by States. For the United States in 1925-26 there were reported 13,874 schools to which pupils were transported; 32,778 motor buses used; 318,048 miles of route; 873,462 children transported; and $23,430,198 expended for this service.


An article dealing with the transportation of high-school pupils in California. Transportation in nine typical union high-school district is described accompanied with relevant data.

COVETT, TIMON. Schools spend $30,000,000 yearly to transport pupils. *Bus transportation, New York city*, vol. 5, no. 4, April 1928.

An article dealing with problems of pupil transportation. Contains many relevant data. Each of 10 States spent more than $1,000,000 for transporting pupils in 1924-25. The total amount reported that year exceeded $30,000,000. The number of consolidated schools was 15,500.


A description of the 21 rural schools, only 2 of which are 1-room type. Consolidated schools are organized on the 7-4 basis. Thirty-five school buses are used in transporting 4,600 pupils at a cost of 10 cents per day per child.


An interpretation of information concerning transportation of pupils in 180 schools of New York State.


Ohio. BAER, JOSEPH A. Transportation of pupils in Cuyahoga county, Ohio. *Journal of rural education*, 5:16-21, September-October 1925. See also 12-page mimeographed report by same author.

A detailed description of pupil transportation in this highly centralized county. Includes data in tabular form showing: Miles of vehicular travel, number of pupils transported, and cost for each of the 28 districts of the county. Cost in cents per pupil per day was 13.7.

TUITION

See also Higher Education, Revenues; Higher Education, Student Finance

Authority of the legislature to require school districts to provide instruction for nonresident pupils. Elementary school journal, 32: 90-93, October 1931.


A bird's-eye view of legal aspects of practical tuition problems with numerous citations of statutes in various States.


A study of the tuition problems of various States showing a need for statutes more clearly defining the residence of children and a uniform procedure involving the transfer of funds to enable children to attend school where most convenient. An analysis of various tuition case studies is included.

High school tuition outside the home district. School review, 35: 330-31, May 1927.

Houlé, Harold L. A comparative study of the legal aspects of tuition charges in the public schools of U. S. Jones City, Iowa. University of Iowa, 1931. 104 p. (College of education series no. 28, Extension bulletin, no. 265, April 1, 1931.)


——. The problem of tuition charges and collections. Nation's schools, 2: 44-48, August 1928.


New Jersey. Notice of increase in tuition rates necessary before enrollment of pupils for academic year. Education bulletin, 14: 61-43, November 1927.

——. Per capita high school costs for tuition purposes for the school year 1929-1930. Education bulletin, 17: 189-211, December 1930.

Similar figures yearly.


——. Non-resident academic tuition. Albany, N. Y., University of the State of New York, 1927. 6 p. (Bulletin no. 881, August 1, 1927.)


Variations in city school tuition policies and State regulations of interdistrict tuition payments of 85 cities of various sizes in 32 States. Tabulates and discusses exemptions from payment of tuition, rates of tuition, and methods of computing tuition rates as found in various cities and districts.
TABLE OF CONTENTS

337 VALUE OF EDUCATION


Texas Rogers, L. W. High school tuition charges. Texas outlook, 11: 46-47, November 1927.


--- Rural high school tuition. Texas outlook, 11: 23, August 1927.


Tuition fees a departure from cherished tradition. School life, 12: 110, February 1927.

Tuition fund brings money into treasury. School topics, 14: 3, October 9, 1931.


VACATION SCHOOL COSTS

See also Summer School Costs


Discusses the all-year school plan as used from 1916-1927, in Nashville, Tenn., and comments on the success of its operation, stating that it will probably become the American system of education.


George Peabody College for Teachers. Division of Surveys and Field Studies. The all-year schools of Nashville, Tenn., p. 49-53. (Field studies, no. 3, 1931.)

Compares costs of elementary and secondary white and Negro schools when run on part-time and all-year basis. Concludes that the summer quarter of the Nashville schools has affected neither educational nor financial economy.

Lane, Elias N. The all-year school—its origin and development. Nation's schools, 9: 49-52, March 1922.

Historical résumé, giving reasons for and against the lengthening of the school term. Short bibliography. Finance part only implied.


O'Shea, M. V., and others. All year schools of Newark, N. J. 1926. 96 p. Board of education, Newark, N. J.


Reviews the slow development of the all-year school concept since 1870. Assuming that a given instructional expenditure produces a uniform amount of education, the author asks if society can afford to have its huge investment in school plants lying idle during the summer.


The negative view declares this type of school inefficient and not economical, while the affirmative attempts to show that the all-year plan, which has been in operation in Newark, New Jersey, since 1912, is entirely satisfactory with increased enrollment, graduates and promotions.

--- Comparative costs of integrated all year schooling and of part time schooling. Educational method, 10: 350-58, March 1931.

Compares the cost of all year and part time schools by using official statistics. Includes the various types of schools for 1921-25, the per capita costs in 10-month and all-year high schools for 1922-30, and the achievement of pupils in the Newark, N. J., schools. Concludes that all year schooling gives more education, better social service, increased educational opportunity, more economical operation and construction costs, and a lower tax rate.


VALUE OF EDUCATION

See also Economic Phases: Wealth


This editorial states that the public school is an investment on the part of the public since it is the most effective conservator and developer of our most valuable source of wealth—the brains of the children.

A general review of social, economic and humanitarian effects resulting from the American investment in higher education.


Analyzes the economic and social values of education. Shows the need for more education in our increasingly complex society and, by an examination of the per capita wealth of various nations at different periods, compares the cost of education with the cost of ignorance.


A review of nation-wide surveys and investigations into the mounting costs of the expanding program of public education. Emphasizes services which education renders in creating and maintaining values in real and personal property.

BOYS IN INDUSTRY. School and society, 29: 60-61, January 12, 1929.


This outstanding lecture develops, with special reference to secondary education, the thesis that "the State supports free public schools to perpetuate itself and to promote its own interests. Education, then, is a long-term investment that the State may be a better place in which to live and a better place to make a living."


A general discussion of the economic value of higher education which considers the income of the various types of college graduates, the effects of the increasing number of graduates, and the need for vocational surveys and guidance at a college level.


An analytical and philosophical examination of the contributions of education to civilization. Points out that education has created material prosperity and a common morale in thinking and promoted international peace, a modified nationalism, and a refinement of government.


Attempts to prove statistically that properly applied expenditure for education is profitable to the State, since it tends to increase income and wealth, aids in the decrease of illiteracy, and gives the individual better opportunity for self-development and achievement as well as standards of living. Data showing income and expenditures, population and expenditures, and accumulated wealth in relation to expenditures for education permit comparisons between the various States.


How to strengthen the schools. Journal of the national education association, 14: 3, January 1925.

The relation of adequate salaries to an effective teaching force. Estimates annual economic losses due to illiteracy and preventable diseases.


This study concerns the graduates from 1880 to 1920 in a Nebraska town of 1,000 population and indicates a positive correlation between high scholarship and success as measured in terms of occupation and financial reward. High scholarship seems to indicate professional tendencies and power to accumulate wealth.

LORD, E. W. Relation of education and income. (A study made by the Alpha Kappa Psi fraternity for the year 1921-27.) 1050 North Delaware street, Indianapolis, Ind. Alpha Kappa Psi Fraternity, Inc.


A comparison of educational progress since 1867 with the rise in educational costs since that time. Attempts to measure costs in terms of products.


Analyzes the necessity of education to American society as an indication that money so spent is a wise investment. States that schools cost only 5 cents a day per capita.


Treats briefly some economic effects of education. That education is conducive to accumulation of wealth by the masses by development of natural resources is
ILLUSTRATED by several examples. Evaluates education as a force in modern civilization.


An inquiry concerning the effect of educational expenditures upon the wealth of the nation. Evaluates education in terms of its costs and its contribution to the economic power of the United States. Attributes a portion of the increase in the nation's savings and capital and our business expansion to education.


Compares salaries and possible savings of clerical workers and teachers to reveal a 16-year advantage on the part of the clerical worker. Existing teacher salary schedules do not give the teacher an adequate return upon her investment of time and money in a college education.


In reply to the charge that school costs are excessive, this article calls attention to the fact that the people of the United States annually expend three times as much for luxuries and six times as much for automobiles as for schools.

States that education is the fundamental investment of our civilization and that to starve education financially is to jeopardize our civilization.


Reviews some of the economic returns of America's education program. Points out that education is necessary to the maintenance of the present standard of living.


From this study involving 66 high-school graduates, the writers conclude that apparently scholastic success in high school and financial success later are results of different sets of abilities.

STEWART, P. B. The legal and financial relationships of the results of engineering research to the University. The association of university and college business officials. Minutes of the eighteenth annual meeting, 1928. p. 28-42.

The extensive list of noteworthy cooperative achievements between various industries and college and university research departments discussed in this article is indicative of the confidence industry has in the value of education.


A plea for adequate support of our schools and the improvement of educational services.


An appraisal of the economic returns from investments in education. Asserts that profits from school building and farming raised standards of living, increased agricultural efficiency and production, and stimulated business activity. All effects of education which must be accounted for as dividends from the investment made in education.


An argument to the effect that the increasing costs of secondary education are justified by the results. Explains that the preparation of a greater number of college and the development of skilled craftsmen account for rising secondary school costs. While 1916 to 1926 secondary education costs increased 159 per cent from 1916 to 1926 bank deposits, it points out, increased 293 per cent; electricity meters 524 per cent, and telephone connections 157 per cent.

WARREN, JULE B. Dividends on our educational investment. Raleigh, N. C., State department of education, 1931.

A study of (1) the relationship between investment in education and growth in wealth of a state, and (2) between per capita investment and school efficiency.


An argument in defense of the A. B. degree, holding that it represents genuine professional training. Argues that the A. B. from a teachers' college is frequently carried into fields of service where distinction is rarely conferred.

When is education too costly? Nation's schools, 4: 72-73, October 1928.

A short editorial upholding the rising cost of education. Notes the aesthetic and realistic in the schools. Argues that
any system doing a thorough and complete job is cheap, no matter what the price.

FOREIGN


A statistical analysis of expenditures for education in England, in an attempt to account for the money value of an education. Discusses the problem under the following headings: Traditional mis-givings, the expenditure for which value is demanded, the cost of housing pupils, the cost of mental and physical defects, medical inspection and treatment, free meals, cost of administration, teachers salaries, maturity's debt to youth, the cash value of health, the businessman's demand, and incalculable returns.

VISUAL EDUCATION COSTS

See also Social Studies, Costs

ARNOLD, E. J. Wanted, State owned visual aid collections. Ohio schools, 8:382, November 1930.


Points out the need of visual instruction departments and shows how economy and efficiency would result through centralized effort and intelligent organization. Gives a brief outline of the procedure followed in Berkeley, Calif. in establishing a center on a budget of $4,500 and a list of rules governing the service and minimum operating equipment needed.


REITZ, A. W. The organization of a city department of visual aids. The educational screen, p. 4-6, January 1932.

Explains how a city can provide a visual education program most economically.

Trade directory for the visual field. The educational screen, 220, September 1931.

A list of 51 corporations which supply visual education equipment.

VOCATIONAL EDUCATION ACCOUNTING

Massachusetts. Department of Education. Administrative forms used in the establishment and administr-
VOCATIONAL EDUCATION 341

first congress. Third session. Document, no. 309.) An analysis of Federal, State, and local expenditures for various types of vocational education in the United States and a comparison of the effects and values of vocational education with its costs. Includes agricultural education, industrial, and commercial education and the rehabilitation program.


FEDERAL AID
See also Federal Aid; Federal Policies.


A short discussion of the permanent annual and continuing $4,000,0000 annual appropriation for vocational training under the Smith-Hughes Act of 1928.


Gives rulings relating to qualifications of teacher trainees and the use of Federal teacher-training funds for qualified local supervisors in agricultural, trade and industrial, and home economics divisions.

INDUSTRIAL ARTS AND VOCATIONAL EDUCATION. Federal aid limited to vocational training. Industrial arts and vocational education, 2: 73, February 1931.

Attempts to dispel the conflict found between the general conception of vocational training and vocational guidance. Vocational guidance is a function of the general public school and cannot be supported by Federal aid, which is appropriated purely for the support of vocational training.


A statistical presentation showing that in a majority of cases the States have shifted the responsibility that the Government has placed upon them to local communities.

NATIONAL ADVISORY COMMITTEE ON EDUCATION. Federal relations to education. Part I. Committee findings and recommendations. 140 p. Part II. Basic facts. 448 p. 744 Jackson Place, Washington, D. C.

Part I has good but scattered theoretical discussions traceable through the index head vocational education. Part II has the same, together with valuable recent financial statistics traceable through the same index head.


Reviews needed reorganization in the field of commercial education and attempts to show that if commercial education is going to train the type of worker needed in modern industry it must be given the Federal aid to which it is entitled as a phase of vocational education.


A short comment on a proposition introduced in Congress January 1931, to appropriate $10,000,000 to be distributed over a period of four years for the development of vocational education among the States.


An analysis of Federal, State, and local expenditures for various types of vocational education in the United States and a comparison of the effects and values of vocational education with its costs. Includes agricultural education, industrial and trade education, commercial education, and the rehabilitation program.


GENERAL
See also Agricultural Education; Home Economics; Industrial Education.


The financial provisions and the probable educational effects of the George-Reed Act and the use of funds in Georgia. Asserts that assistance is given to 50 agricultural departments and 100 home economics departments.


FEDERAL BOARD FOR VOCATIONAL EDUCATION. Rooms and equipment for the teaching of vocational agriculture in secondary schools. Washington, U. S. Government printing office. (Agricultural series, no. 12.)

HALLEN, GEORGE F. Selection and purchase of equipment for trade and industrial classes. Berkeley, Calif., University of California, 1927. 35 p. (Division of vocational education.
WASTE

Bulletin, no. 22. Trade and Industrial Series, June 1927, no. 7.)

Discusses legal phases of the purchase of industrial-school equipment, notices to bidders, forms for proposals, contracts and safety bonds, specifications, lists of equipment for school shops, and some minimum essentials in relation to the selection and purchase of equipment for trade and industrial courses.

STATISTICS

(The annual reports of the Federal Board of Vocational Education give figures for receipts, expenditures, amounts from Federal, State, and local sources separately, and the like for agricultural work, trade and industrial education, home economics, and continuation schools and teacher training that are for vocational work and receive Federal aid. All figures are on a State basis only and of little value except for use with the accompanying enrollment data, to compute per student costs by States. Each report works out the State amounts from Federal, State, and local sources for the current year, with some figures for previous years)

VOCATIONAL GUIDANCE

COSTS

ALLEN, RICHARD D. Assistant superintendent of schools, Providence, R. I.

Has probably the best cost figures on vocational guidance costs. In using such figures, however, care must be exercised to make sure to what extent educational costs are included.


Contains some salary and budget figures on the problem of getting the New York City school system to introduce vocational counseling into the junior high schools. The salaries to be supplemented by the outside organization.

GENERAL


PLACEMENT


Includes cost of placement.

WAGES


A statistical and graphical analysis of the wages paid in manufacturing industries, public utilities, first-class railroads, building trades, and agriculture during the period 1914 to 1930. Notes wage trends and the purchasing power of wages. Sources indicated.


See index, p. 897-98 for references to wages in specific industries. Similar volume yearly.

WASTE

See also Economics: Value of Education


Defends the thesis that the greatest waste in education is the traditional repetition of outworn subject matter which has little or no significance to the temporary purposes of education, and is irrelevant to the needs of modern civilization.


Develops the thesis that unless the high school guides the pupil into the vocation for which he is personally suited and in which he is interested, the investment of money and time which society has made in him is ultimately wasted.

An editorial dealing with the dollar costs of poor English and the more human costs of other social failures. As a means of saying society from these immense human and economic wastes suggests some curriculum reorganizations and a broader and more systematic course of training for teachers.


The wastage in secondary schools. Scottish educational journal, 14: 352, March 27, 1931.


A survey of New York City schools indicating that one out of each five pupils seems unable to benefit from high school training. Estimates the waste of money and of youthful energy accompanying this condition.


A summarization of the results of an extensive investigation of teachers college courses of study. Finds an excessive amount of repetition and a surprisingly large number of duplications. Recommends that courses be organized with greater individuality in order to conserve the energy of college and student.