

A COMPARATIVE STUDY OF SCHOOL SUPPORT
IN FORTY-ONE MISSOURI CITIES

by

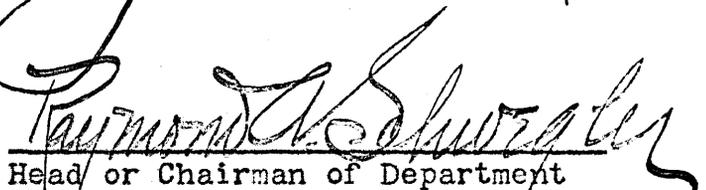
John Clarence Godbey

B. S. in Education, Missouri University
Columbia, Missouri

Submitted to the Department of Education
and the Faculty of the Graduate School
of the University of Kansas in partial
fulfillment for the degree of Master of
Science in Education

Approved by


Instructor in Charge


Head or Chairman of Department

August 3, 1926

ACKNOWLEDGEMENTS

Acknowledgements are due to
Dean Ramond A. Schwegler and
Dr. J. W. Twente for their kind
suggestions and valuable help.

TABLE OF CONTENTS

Chapter I		Page
Introduction		1
Present Status of the Problem		3
Specific Field of This Study		6
Chapter II		
Data Presented and Interpreted		9
Interpretations of Tables 1, 2, and 3		16
Interpretations of Tables 4, 5, and 6		23
Interpretation of Table 13		28
Interpretations of Tables 14, 15 and 16		33
Interpretation of Chart 1		38
Chapter III		
Conclusions and Summary		41

LIST OF TABLES

Table		Page
1	Assessed value of real and personal property, money and credits, and market value of real and personal property in 14 Missouri cities, population 2,000 to 7,000	10,11
2	Assessed value of real and personal property, money and credits, and market value of real and personal property in 10 Missouri cities, population 1,500 to 2,000	12,13
3	Assessed value of real and personal property, money and credits, and market value of real and personal property in 17 Missouri cities, population 1,000 to 1,500	14,15
4	Amount raised for schools per \$1,000 of real wealth	17
5	Amount raised for schools per \$1,000 of real wealth	18
6	Amount raised for schools per \$1,000 of real wealth	19
7	Amount raised for schools per pupil in average daily attendance	21
8	Amount raised for schools per pupil in average daily attendance	22
9	Amount raised for schools per pupil in average daily attendance	23
10	Amount raised per \$100 of real and assessed values	24
11	Amount raised per \$100 of real and assessed values	25
12	Amount raised per \$100 of real and assessed values	26
13	Comparison of a Missouri group of cities with a Kansas group of cities	27

Table		Page
14	Scores of 14 Missouri cities studied	30
15	Scores of 10 Missouri cities studied	31
16	Scores of 17 Missouri cities studied	32
17	Order distribution of the 41 Missouri schools per \$1,000 of real wealth	34
18	Order distribution of the 41 Missouri schools for amount raised per pupil	35
19	Scores of Tables 17 and 18	36
	A chart showing the Level of Opportunity	37
	An Index of Opportunity table	40

CHAPTER 1

Introduction

The Problem. A Comparative Study of School Support in Forty-one Missouri Cities.

Leading educators in Missouri have come to feel that a State should guarantee equal educational opportunities to all of its citizens. The great diversities of land values in different parts of the State make different communities differ greatly in their ability to support schools. This is especially true in the rural districts, as revealed by studies recently made in this field. Without doubt, the same inequality, also, exists among the cities and towns of the different sections, although specific studies have not been made to date to ascertain just how this difference is. It is not necessary, however, to make a detailed study to note that they do exist. Plattsburg, a city of Clinton County, has a valuation of \$2,400,000, and an enrollment of 385 pupils, while Lockwood, a city of Dade County, has a valuation of \$615,000 and has 328 pupils to educate. Plattsburg, with the same levy as Lockwood, will have nearly four times as much money to spend per pupil on its schools as will Lockwood.

There have been three possible plans for equalizing educational opportunities in the State suggested. The first is by granting State aid to weak districts in order to give each district a certain amount per each pupil

enrolled. A plan for aiding weak rural districts is in operation in the rural schools in Missouri now, but instead of being on a pupil basis, it is on a teacher basis and the salary fixed for the teacher is low, as compared with rural salaries at large in the better schools of the State. No plan exists for equalizing the burden of all of the schools in the State.

By the second plan the county would be made the unit for administering the schools of the State. The Legislature enacted a County Unit Law in 1923, but the foes of the measure invoked the referendum and took the question before the people, where it was defeated.

The third plan, and one that is favored by many school men, would have the State finance the schools, or at least pay all of the salaries of the teachers.

The comparisons to date have been made, as a rule, by comparing the assessed value of the districts studied and the number of pupils to be educated. A better way of making comparisons would be to secure the real value of property in the districts studied and make a comparison on the basis of real values. It is quite possible for a weak district to have a poor school and still spend more dollars per thousand dollars of real wealth than a wealthy district that has one of the finest schools in the State.

A comparative study of the effort put forth for their schools by the various cities, showing the differences in effort, if any exist, will serve (1) as an argument for

larger administrative units, (2) as one important basis on which to build a system of State aid, and (3) as the real measure of the interest of a community in its schools.

Present Status of the Problem

Studies of this nature are somewhat limited in numbers, but the ones listed have a very definite value and have determined very largely the method that will be used in this study.

Mr. Earnest Bayles, in a thesis submitted in August, 1922, made a comparative study of school support in the city and rural districts of the State of Kansas. His study included six-hundred rural districts, ninety-three third class cities, seventy-four second class cities, and ten first class cities. He used the "Average daily attendance" of pupils as a unit for his comparisons and found, (1) the cost per pupil in each of the city groups studied, and (2) the cost per pupil in the rural districts. Comparing the two groups, he found that the median yearly cost per pupil was approximately the same for the city district as for the rural district, the city median being slightly higher. The median rural district, however, had only thirteen pupils, while the median for the cities was much higher. In comparison he found, (1) that the median city district is making over two and one-half times the effort of the median rural district which does not support a rural high school. (2) That the city districts

are crowding the limits set by the State in regard to the school levy, while the rural districts are keeping well within a much lower limit set by law.

Mr. A. K. Loomis, formerly Superintendent of Schools at Hiawatha, Kansas, made a comparative study of the High Schools in Kansas in 1923. His study, like that of Mr. Bayles, was in the form of a survey, but had to do with high school costs, only. His comparisons were made on the basis, (1) of average cost per pupil, and (2) on cost as reckoned on the basis of the mill levy.

He found, (1) That the small and medium high schools were costing too much. (2) That the most economically organized schools were frequently making the highest levies on the tax-payers. (3) That the burden of High School support is very unevenly divided under the prevailing system.

The investigation that bears most directly on this study, however, is a study made by Dr. William F. Russell, together with a number of his students, at the University of Iowa in 1920. The purpose of their study was to discover how school expenditures compared with the actual wealth and attendance in the cities of Iowa. The survey method was used in the study, and most of their data were secured from the records of the State Department of Public Schools, but in computing actual values of property they resorted to the questionnaire method, and sent one to the County Auditor in each of the counties

studied, in order to get the ratio of assessed value to the real value of property. They then proceeded to find school costs, using two units. They, first, found the amount of money raised for schools per \$1,000 of real wealth in the various cities studied. They, next, found the amount raised per pupil in school attendance.

The first table was used to measure the financial burden that the schools placed on a community, while the second represented a measure of the results achieved. By this method they found that certain cities have distinct opportunities for improvement, while others have a very limited opportunity for improvement.

Specific Field of This Study

In this study it is proposed to determine:

- I. The financial burden placed on a community by its schools, a measure of effort.
- II. The amount of money raised for each pupil in school attendance, a measure of the efficiency of the school.
- III. By a comparison of I and II to determine a measure of the opportunity of the various city systems to improve their schools.

The cities studied include all of the cities in the Maryville State Teachers' College District having a population of over one-thousand people, and less than seven-thousand people. The district includes nineteen

counties, and each county is represented, except Buchanan, which has no cities of the size studied.

In addition to the cities in the Maryville District, the study includes, for the sake of comparison, ten cities in the southern part of the State. Lamar, Nevada, and Liberal are in the Southwest part of the State. Charleston, East Prairie, Piedmont, Seymour, and Hayti are in the Southeast part, and Marshfield, and Salem are in the Southcentral part of the State.

The Method

The study is in the form of an investigation, a survey of the status of the various schools studied.

An attempt was first made to secure the information needed by sending out a questionnaire. The questions asked were as follows.

- (1) What is the amount of Moneys, Mortgages, Bonds, and Credits taxed in the school district of _____? \$_____.
- (2) What is the ratio of Assessed to Real value of property in the same district? _____%
- (3) What is the assessed value of the Merchants in the same district? \$_____.
- (4) What is the ratio of the Assessed to the Real value of the Merchants? _____%

The amount of moneys and credits called for in question one are listed as separate items on the Assessment sheet in the office of the County Clerk. These items are hard to get, as the books have to be gone

through and the items tabulated. Two questionnaires were sent out, the first one to the County Superintendent of Schools, and the second one direct to the County Clerk, but only a few replies were received, and some of the replies were so incomplete that they were of no value.

When the writer took up his present work, he abandoned the questionnaire and went in person to the office of the County Clerk and secured the information that was needed.

The ratio of the Real to the Assessed value of property was arrived at by taking a number of pieces of property that had recently been sold, and comparing the assessed value with the amount received for the property when sold.

In determining the ratio of the assessed to the real value for the Merchants, it was necessary to accept the opinions of the County Clerks. This ratio cannot be as accurate as the ratio above, as the merchants value is always changing, and the best that can be done is to arrive at an estimated average.

The assessed valuation of each city, the number of children enrolled in the schools, and the tax levy for school purposes were taken from the "Seventy-Sixth Missouri Report of Public Schools" for 1925.

There will, necessarily, be some inaccuracies in a study of this type, for the problem of securing real values of property is a complicated one. The ratio of

Real to Assessed value will be fairly accurate for land, moneys, and houses, but there is no accurate way of arriving at values of household goods. The total real value of property will, perhaps, be low rather than high, as household goods are assessed very low. Since the data are to be used for comparisons, however, the comparative ranking of the schools should not be affected.

The amount of money raised per pupil by taxation in any city will not, of course, represent the total cost of any given school per pupil. It will represent the total cost per pupil for that part of the total funds that is raised by the tax payers of the community, and the measure of the financial load on the community is what we want. For this reason, State money, county and township money, taxes on railroads, telephone lines, etc., will not be considered. Railroad taxes in Missouri do not go to the district through which the railroad passes, but are distributed to all of the districts of the county on an attendance basis.

This study, while necessarily inaccurate, because of the impossibility of securing exact data in all cases, should be more exact and more valid than if the data had been secured by questionnaire.

CHAPTER II

Data Presented and Interpreted

The study will call for finding, (1) The Real value of property in all of the cities studied. (2) The amount of money raised for school purposes per \$1,000 of Real wealth. (3) The amount of money raised for \$100 of Real wealth. (In Missouri the tax-levy is thought of in terms of so many cents per \$100 of valuation, so that this table will be given in order to interpret the tax-levy on the assessed value in terms of the Real Wealth.) (4) The amount of money raised for pupil in school attendance.

Each table, or series of tables, will be arranged in an order distribution and the median and quartile points determined. Finally, the data will be organized in two tables, one showing the "Level of Opportunity" of the schools, and a second table showing the same conditions, but in the form of an "Index of Opportunity."

The data for the forty-one schools districts follow in tabulated form.

Table 1

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 14 Missouri Cities Ranging in Size from 2,000 to 7,000, 1925

	Assessed Value Real and Personal (No. 1)	Moneys and Credits (No. 2)	Assessed Value Real and Personal less Moneys and Credits (No. 3)	Ratio of Assess to Real Value (No. 3)	Market Value of Real and Personal less Merchants	
Albany	\$1,750,000	\$239,052	\$1,510,948	50	\$3,021,898	\$3,260,950
Bethany	2,800,000	850,000	1,950,000	60	3,250,000	4,100,000
Cameron	3,074,485	526,640	2,547,845	50	5,095,690	5,622,330
Carrollton	3,628,218	254,080	3,374,138	50	6,758,276	7,012,356
Charleston	2,968,830	40,000	2,918,830	75	3,891,673	3,931,673
Chillicothe	6,990,214	308,984	6,681,230	60	11,135,383	11,444,367
Excelsior Spr	4,353,695	40,000	4,313,695	60	7,189,491	7,229,491
Lamar	1,454,000	178,415	1,275,585	70	1,822,264	2,000,679
Liberty	4,399,935	80,000	4,319,935	60	7,199,891	7,279,891
Maryville	5,537,259	66,106	5,471,153	70	7,815,832	7,881,938
Nevada	5,166,000	510,000	4,656,000	50	9,312,000	9,822,000
Richmond	4,640,965	500,000	4,140,965	50	8,287,930	8,781,930
Trenton	5,717,949	200,000	5,517,949	70	7,882,784	8,082,784
North Kas. Cy	6,500,000	10,000	6,490,000	50	12,980,000	12,990,000

Table 1 (Continued)

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 14 Missouri Cities Ranging in Size from 2,000 to 7,000, 1925

	Assessed Value of Merchants	Ratio of Assessed to Real Value	Real Value of the Merchants	Total Real Wealth in \$1,000	School Tax Levy in Cents	Amount Raised for Schools by Direct Taxes of the Real and Per- sonal Property
Albany	\$ 79,325	50	\$148,650	3,409	150	\$ 27,440
Bethany	107,895	70	154,121	4,254	85	24,716
Cameron	146,470	50	292,940	5,915	135	43,483
Carrollton	203,220	60	338,700	7,351	107	40,996
Charleston	27,779	60	46,298	3,978	100	29,466
Chillicothe	488,575	60	814,291	12,259	136	101,711
Excelsior Spr	166,250	60	277,083	7,507	125	56,499
Lamar	120,060	60	200,100	2,201	185	29,120
Liberty	192,200	60	320,333	7,618	125	54,402
Maryville	213,445	50	426,890	8,309	115	66,133
Nevada	417,010	60	695,016	10,517	180	100,494
Richmond	218,280	70	311,828	9,094	114	55,395
Trenton	292,532	60	487,553	8,570	140	84,147
North Kas. Cy	257,450	60	429,083	13,419	95	64,196

Table 2

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 10 Missouri Cities Ranging in Size from 1,500 to 2,000, 1925

	Assessed Value Real and Personal Property (No. 1)	Moneys and Credits (No. 2)	Assessed Value Real and Personal less Moneys and Credits (No. 3)	Ratio of Assessed to Real and Personal (No. 4)	No. 3 Raised to Real Value (No. 5)	Market Value of Real and Personal less Merchants
Gallatin	\$1,895,000	\$392,535	\$1,502,465	60	\$2,509,108	\$2,901,643
Hamilton	1,746,990	114,215	1,632,775	75	2,177,033	2,291,248
Hayti	1,316,407	21,567	1,294,840	70	1,849,771	1,875,338
Mound City	1,750,000	363,490	1,386,570	60	2,310,850	2,674,340
Plattsburg	2,400,000	482,010	1,917,990	50	3,835,980	4,317,990
Princeton	1,225,263	281,670	943,543	50	1,887,086	2,168,756
Salem	1,164,241	186,034	978,207	70	1,397,438	1,583,472
Savannah	2,336,915	474,540	1,862,375	50	3,724,750	4,199,290
Stanberry	931,930	45,637	886,293	50	1,772,586	1,818,223
Tarkio	2,383,000	118,145	2,264,855	60	3,774,758	3,892,903

Table 2 (Continued)

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 10 Missouri Cities Ranging in Size from 1,500 to 2,000, 1925

	Assessed Value of the Merchants	Ratio of Real to Assessed Value	Real Value of the Merchants	Real Wealth in \$1,000	Tax Levy in Cents	Amount Raised for Schools
Gallatin	\$174,450	60	\$274,083	3,176	100	\$20,695
Hamilton	145,920	60	243,200	2,534	110	20,822
Hayti	93,575	60	155,958	2,031	150	21,150
Mound City	142,300	60	237,166	2,912	130	24,600
Plattsburg	146,470	50	292,940	4,611	110	28,012
Princeton	155,825	60	259,708	2,428	160	22,097
Salem	102,000	50	204,000	1,787	150	18,994
Savannah	80,740	50	161,480	4,361	120	29,012
Stanberry	62,325	50	124,650	1,943	100	9,942
Tarkio	117,995	60	196,658	4,090	140	35,014

Table 3

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 17 Missouri Cities Ranging in Size from 1,000 to 1,500, 1925

	Assessed Value Real and Personal (No. 1)	Moneys and Credits (No. 2)	Assessed Value Real and Personal less Moneys and Credits (No. 3)	Ratio of Assessed to Real Value	No. 3 Raised to Real Value (No. 5)	Market Value of Real and Personal less Merchants
Braymer	\$1,981,810	\$479,025	\$1,502,785	75	\$2,003,713	\$2,482,738
Burlington Jc	1,014,883	74,700	940,183	60	1,566,971	1,641,571
Cainesville	800,000	100,000	700,000	60	1,166,666	1,266,666
East Prairie	822,000	20,000	802,000	75	1,062,333	1,082,333
Grant City	1,629,105	218,330	1,410,775	70	2,015,392	2,233,722
King City	1,472,080	125,550	1,346,530	50	2,693,060	2,818,610
Liberal	422,605	29,195	393,410	70	562,014	591,209
Maysville	1,567,990	222,800	1,345,190	70	1,921,700	2,144,500
Marshfield	890,000	60,488	825,512	70	1,185,017	1,245,505
Norborne	1,442,037	104,355	1,337,682	50	2,675,364	2,779,729
Oregon	1,800,000	494,140	1,305,860	60	2,176,433	2,670,573
Pattonsburg	723,222	81,690	641,532	60	1,069,220	1,150,910
Piedmont	702,702	136,702	566,000	60	943,333	1,080,035
Platte City	924,200	83,350	830,850	50	1,661,700	1,745,050
Rockport	1,385,520	391,094	994,426	60	1,657,393	2,048,497
Seymour	580,000	38,380	541,620	70	773,742	812,122
Weston	1,100,000	173,010	926,990	50	1,853,980	2,026,990

Table 3 (Continued)

Assessed Value of Real and Personal Property, Moneys and Credits, Market Value of Real and Personal Property, and Amount Raised for Schools in 17 Missouri Cities Ranging in Size from 1,000 to 1,500, 1925

	Assessed Value of the Merchants	Ratio of Assessed to Real Value	Real Value of the Merchants	Total Real Wealth in \$1,000	Tax Levy in Cents	Amount Raised for Schools
Braymer	\$124,034	60	\$206,723	2,689	90	\$18,953
Burlington Jc	50,360	50	100,720	1,742	120	12,783
Cainesville	46,300	70	66,142	1,333	135	11,425
East Prairie	14,296	60	23,826	1,106	160	13,381
Grant City	110,530	70	157,900	2,392	110	19,136
King City	66,425	50	132,850	2,951	140	21,539
Liberal	39,955	60	66,591	658	205	9,482
Maysville	95,150	50	190,300	2,335	125	20,789
Marshfield	123,000	50	246,000	1,492	180	18,234
Norborne	115,195	60	191,991	2,972	100	15,572
Oregon	69,760	60	116,266	2,787	100	18,698
Pattonsburg	85,500	60	142,500	1,293	190	15,366
Piedmont	53,570	70	76,528	1,157	170	12,857
Platte City	59,700	50	114,400	1,864	80	7,871
Rockport	81,228	60	135,380	2,184	155	22,735
Seymour	78,600	50	157,200	969	195	12,843
Weston	80,540	50	161,080	2,188	95	11,215

The method of computing the Real Value of property was as follows. The assessed value of each school district was first secured, and from this amount the moneys and credits were subtracted. Moneys and credits are assessed at their real value, while other real and personal property is not. The amount remaining after the moneys and credits are subtracted is raised to real value, and the moneys and credits are again added, giving the Real, or Market value of all of the real and personal property, except that of the merchants.

The merchants' assessment is not a part of the assessed value published in the school report, but is made out later in the year. It is included, however, in the total, when the tax list is made up. To obtain the real value for the merchants, the assessed value is raised to real value by using the ratio listed. The total real value for the district is then computed by adding the total listed in column five with that of the merchants in column nine.

The total Real value is listed in \$1,000 of real wealth.

The amount of money raised for school purposes is based on the assessed value of property listed in the first column, together with that of the merchants, listed in column seven.

The amount raised for schools per \$1,000 of Real wealth is found by dividing the amount raised for schools by the real wealth in \$1,000.

Table 4

Amount Raised for Public Schools Per \$1,000 of Real
Wealth, in 14 Missouri Cities, 2,000 to
7,000 Population

Lamar	\$13.23
Trenton	9.81
Nevada	9.55
Chillicothe	8.29 Quartile 3
Albany	8.04
Maryville	7.95
Liberty	7.53 Median 7.525
Excelsior Springs	7.52
Charleston	7.40
Cameron	7.35
Richmond	6.09 Quartile 1
Bethany	5.81
Carrollton	5.57
North Kansas City	4.78

Table 5

Amount Raised for Public Schools per \$1,000 of Real
Wealth, in 10 Missouri Cities, 1,500 to
2,000 Population

Salem	\$10.62
Hayti	10.41
Princeton	9.10 Quartile 3
Tarkio	8.56
Mound City	8.44 Median 8.285
Hamilton	8.13
Savannah	6.65
Gallatin	6.51 Quartile 1
Plattsburg	6.07
Stanberry	5.11

Table 6

Amount Raised for Public Schools per \$1,000 of Real
Wealth, in 17 Missouri Cities, 1,000 to
1,500 Population

Liberal	\$14.41
Seymour	13.25
Marshfield	12.22
East Prairie	12.09
Pattonsburg	11.88 Quartile 3
Piedmont	11.11
Rockport	10.40
Maryville	8.90
Cainesville	8.57 Median
Grant City	8.00
Burlington Junction	7.33
King City	7.29
Braymer	7.05
Oregon	6.70 Quartile 1
Norborne	5.20
Weston	5.12
Platte City	4.22

Table 7

Amount of Money Raised for Public Schools Per Pupil in
Average Daily Attendance in 14 Missouri
Cities, 2,000 to 7,000 Population

North Kansas City	\$89.28
Chillicothe	78.72
Maryville	66.66
Liberty	55.46 Quartile 3
Nevada	52.55
Excelsior Springs	50.76
Albany	48.13 Median 46.63
Cameron	45.13
Lamar	44.16
Richmond	44.28
Carrollton	43.06 Quartile 1
Trenton	42.39
Bethany	42.18
Charleston	24.90

Table 8

Amount of Money Raised for Public Schools Per Pupil in
Average Daily Attendance in 10 Missouri Cities
1,500 to 2,000 Population

Tarkio	\$74.97
Plattsburg	72.75
Savannah	54.63 Quartile 3
Princeton	50.22
Hamilton	49.22 Median
Mound City	47.13
Gallatin	32.95
Hayti	30.08 Quartile 1
Salem	29.40
Stanberry	21.99

Table 9

Amount of Money Raised for Public Schools Per Pupil in
Average Daily Attendance in 17 Missouri Cities
1,000 to 1,500 Population

King City	\$67.94
Maryville	67.06
Rockport	63.50
Grant City	58.88
Braymer	58.86 Quartile 3
Burlington Junction	53.93
Oregon	51.51
Pattonsburg	45.59
Norborne	44.23 Median
Cainesville	43.77
Marshfield	40.43
Platte City	38.39
Liberal	38.08
Weston	35.26 Quartile 1
Piedmont	32.46
Seymour	29.27
East Prairie	25.93

In table 4 for the larger cities, it is interesting to note that the burden of school expenditure falls nearly three times as heavily on Lamar as it does on the citizens of North Kansas City.

In the cities of 1,500 to 2,000 in table 5 the range is not nearly so great as in table 4, still Salem is paying twice as much for schools, in proportion to its wealth, as is Stanberry.

In the cities of 1,000 to 1,500 the range is greater than it is in either of the other two groups. Liberal is paying more than three times as much for its schools, in proportion to its wealth, as is Platte City.

It is, also, interesting to note, that of the ten schools selected outside of the Maryville College District, one of them is at the head of table 4, two at the head of table 5, and four at the head of table 6. It seems that these schools, on the whole, have to put forth greater effort to have good schools than do those schools in the Maryville District.

Also, judging by the medians, school costs fall heavier on the small schools than on the larger ones.

Since in Missouri school taxes are thought of in terms of \$100 assessed valuation, tables 10, 11, and 12 are given for the purpose of showing the tax levy on the \$100 for both the real and assessed values.

Table 10

Amount of Money Raised per \$100 of Real and Assessed
 Values of Wealth for 14 Missouri Cities
 2,000 to 7,000 Population

	Real	Assessed
Lamar	\$1.32	\$1.85
Trenton	.98	1.40
Nevada	.95	1.80
Chillicothe	.82 Q 3	1.36
Albany	.80	1.50
Maryville	.79	1.15
Liberty	.75 M	1.25
Excelsior Springs	.75	1.25
Charleston	.74	1.00
Cameron	.73	1.35
Richmond	.60 Q 1	1.14
Bethany	.58	.85
Carrollton	.55	1.07
North Kansas City	.47	.95

Table 11

Amount of Money Raised per \$100 of Real and Assessed
 Values of Wealth for 10 Missouri Cities
 1,500 to 2,000 Population

	Real	Assessed
Salem	\$1.06	\$1.50
Hayti	1.04	1.50
Princeton	.91 Q 3	1.60
Tarkio	.85	1.40
Mound City	.84 M	1.30
Hamilton	.81	1.10
Savannah	.66	1.20
Gallatin	.65 Q 1	1.00
Plattsburg	.60	1.10
Stanberry	.51	1.00

Table 12

Amount of Money Raised per \$100 of Real and Assessed
Values of Wealth for 17 Missouri Cities
1,000 to 1,500 Population

	Real	Assessed
Liberal	\$1.44	\$2.05
Seymour	1.32	1.95
Marshfield	1.22	1.80
East Prairie	1.20	1.60
Pattonsburg	1.18 Q 3	1.90
Piedmont	1.11	1.70
Rockport	1.04	1.55
Maysville	.89	1.25
Cainesville	.85 M	1.35
Grant City	.80	1.10
Burlington Junction	.73	1.20
King City	.72	1.40
Braymer	.70	.90
Oregon	.67 Q 1	1.00
Norborne	.52	1.00
Weston	.51	.95
Platte City	.42	.80

Table 13

Comparison of the Missouri Group of Schools
with a Kansas Group of Schools

Missouri, 41 Cities 1,000 to 7,000		Kansas, 55 Second Class Cities, 1,000 to 12,000	
Per \$100 of Real Wealth			
Quartile 3	\$1.02	Quartile 3	\$1.03
Median	.80	Median	.88
Quartile 1	.66	Quartile 1	.76
Money Per Pupil			
Quartile 3	\$57.16	Quartile 3	\$80.25
Median	45.59	Median	67.90
Quartile 1	38.23	Quartile 1	56.75

1. Data for the Kansas comparison is taken from the Thesis of Mr. Earnest Bayles.

Judging from the data in table 13, Kansas is assuming a little heavier burden, financially, than Missouri, and at the same time is giving her pupils a better chance educationally.

These data cannot be taken as an accurate comparison of Missouri and Kansas schools, however, (1) Because the Missouri study takes into account only one section of the State (with the exception of the ten schools listed on page 6, while the Kansas study takes into account only the Second Class Cities. (2) The Missouri cities range from 1,000 to 7,000 in population, while the range in Kansas is from 1,000 to 12,000 with sixty-two cities of the group having a population of over 2,000 people, a much higher percentage than that represented by the Missouri group. (3) Mr. Bayles' study was based on figures for the year 1922, while the present study is based on figures for 1925.

It seems safe to assume, however, that the people of Kansas are assuming a somewhat heavier burden of taxation than the Missouri tax payers are doing, and at the same time are giving a somewhat larger opportunity to their boys and girls.

Another method of comparing cities as to their financial burden, and the chance that they are giving

the boys and girls of their community educationally, is to arrange the cities in an order distribution. In comparing the results of tables 4 to 9, each city is listed and given a score of either 1, 2, 3, or 4 according as it falls in the highest, upper middle, lower middle, or lowest quartile, giving the cities that fall at the median or the quartile, the score of the quartile immediately above it. The scores for the tables having to do with the amount of Real wealth per \$1,000 are listed in the first column, and those having to do with the amount of money raised per pupil in school attendance are listed in the second column.

Table 14, on the following page, will list the scores of tables 4 and 7.

Table 14

Scores of 14 Missouri Cities 2,000 to 7,000 Population
in Tables 4 and 7

	Table 4	Table 7
Lamar	1	3
Trenton	1	4
Nevada	1	2
Chillicothe	1	1
Albany	2	2
Maryville	2	1
Liberty	2	1
Excelsior Springs	3	4
Charleston	3	4
Cameron	3	3
Richmond	3	3
Bethany	4	4
Carrollton	4	3
North Kansas City	4	1

Read this table: Lamar is in the first quartile in amount voted per \$1,000 of Real Wealth and in the third quartile in the amount raised per pupil in average daily attendance.

Table 15

Scores of 10 Missouri Cities 1,500 to 2,000 Population
in Tables 5 and 8

	Table 5	Table 8
Salem	1	4
Hayti	1	3
Princeton	1	2
Tarkio	2	1
Mound City	2	3
Hamilton	3	2
Savannah	3	1
Gallatin	3	3
Plattsburg	4	1
Stanberry	4	4

Read this table: Salem is in the first quartile in the amount of money raised per \$1,000 of Real Wealth, and in the fourth quartile in the amount raised per pupil in average daily attendance.

Table 16

Scores of 17 Missouri Cities 1,000 to 1,500 Population
in Tables 6 and 9

	Table 6	Table 9
Liberal	1	3
Seymour	1	4
Marshfield	1	3
East Prairie	1	4
Pattonsburg	1	2
Piedmont	2	4
Rockport	2	1
Maysville	2	1
Cainesville	2	3
Grant City	3	1
Burlington Junction	3	2
King City	3	1
Braymer	3	1
Oregon	3	2
Norborne	4	2
Weston	4	3
Platte City	4	3

Read this table: Liberal is in the first quartile in amount of money raised per \$1,000 of Real Value, and in the third quartile for amount of money raised per pupil in average daily attendance.

As shown by table 14, Lamar, Trenton, Nevada and Chillicothe have a heavy tax burden in proportion to the other cities in the group, and Nevada and Chillicothe are giving their pupils a good chance educationally. Trenton with a relatively heavy burden is raising only a small sum per pupil. Cameron and Richmond are mediocre, while North Kansas City, apparently wealthy, in proportion to its number of pupils, could greatly increase its tax burden.

As shown by table 15, Salem and Hayti have a heavy financial burden, but are low in results as indicated by the amount of money raised per pupil. Plattsburg is getting results with a low financial burden, while Stanberry has a light tax burden but is also low in results.

In the third group of schools, Liberal, Seymour, Marshfield, East Prairie, and Piedmont all have a heavy tax burden, but are raising few dollars per pupil. Platte City and Weston have a real opportunity for improvement.

In the above comparisons, the results are of course conditioned by the size of the groups. Another way to show the same situation, but in comparison with a larger group is to rank all of the forty-one schools in an order distribution, and then arrange them in a diagram which will show the Level of Opportunity as shown on page 37.

Table 17

Order Distribution for 41 Missouri City Schools for Amount
Raised Per \$1,000 of Real Wealth

Liberal	\$14.41	Maryville	\$7.95
Seymour	13.25	Liberty	7.53
Lamar	13.25	Excelsior Springs	7.52
Marshfield	12.22	Charleston	7.40
East Prairie	12.09	Cameron	7.35
Pattonsburg	11.83	Burlington Jc.	7.33
Piedmont	11.11	King City	7.29
Salem	10.62	Braymer	7.05
Hayti	10.41	Oregon	6.70
Rockport	10.40 Q 3	Savannah	6.65
Trenton	9.81	Gallatin	6.51 Q 1
Nevada	9.55	Richmond	6.09
Princeton	9.10	Plattsburg	6.07
Haysville	8.90	Bethany	5.81
Cainesville	8.57	Carrollton	5.57
Tarkio	8.56	Norborne	5.20
Mound City	8.44	Weston	5.12
Chillicothe	8.29	Stanberry	5.11
Hamilton	8.13	North Kansas City	4.78
Albany	8.05	Platte City	4.22
Grant City	8.00 Median		

Table 18

Order Distribution for 41 Missouri City Schools for
Amount Raised Per Pupil in School Attendance

North Kansas City	\$89.28	Cameron	\$45.13
Chillicothe	78.72	Lamar	44.66
Tarkio	74.97	Richmond	44.28
Plattsburg	72.75	Norborne	44.23
King City	67.94	Cainesville	43.77
Maysville	67.06	Carrollton	43.06
Maryville	66.66	Trenton	43.39
Rockport	63.50	Bethany	42.18
Grant City	58.88	Marshfield	40.43
Braymer	58.86	Q 3 Platte City	38.39
Liberty	54.46	Liberal	38.08
Savannah	54.63	Weston	35.26
Burlington Jc.	53.93	Gallatin	32.95
Nevada	52.55	Piedmont	32.46
Oregon	51.50	Hayti	30.08
Excelsior Springs	50.76	Salem	24.40
Princeton	50.22	Seymour	29.27
Hamilton	49.22	East Prairie	25.93
Albany	48.13	Charleston	24.90
Mound City	47.13	Stanberry	21.99
Pattonsburg	45.59	Median	

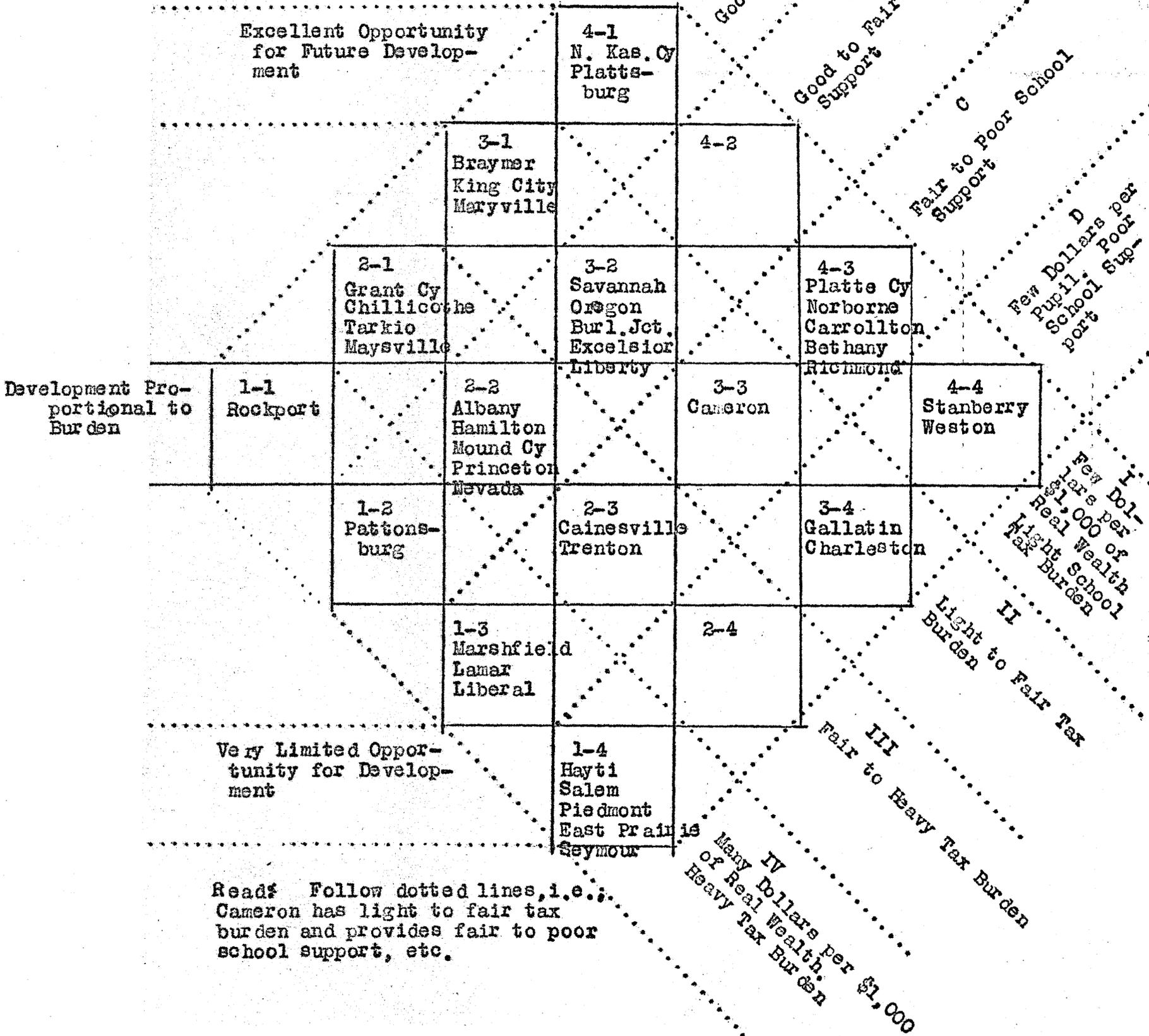
Table 19
Scores of Tables 17 and 18

	Per \$1,000	Per Pupil		Per \$1,000	Per Pupil
Liberal	1	3	Maryville	3	1
Seymour	1	4	Liberty	3	2
Lamar	1	3	Excelsior Spr.	3	2
Marshfield	1	3	Charleston	3	4
East Prairie	1	4	Cameron	3	3
Pattonsburg	1	2	Burlington Jc.	3	2
Piedmont	1	4	King City	3	1
Salem	1	4	Braymer	3	1
Hayti	1	4	Oregon	3	2
Rockport	1	1	Savannah	3	2
Trenton	2	3	Gallatin	3	4
Nevada	2	2	Richmond	4	3
Princeton	2	2	Plattsburg	4	1
Maysville	2	1	Bethany	4	3
Cainesville	2	3	Carrollton	4	3
Tarkio	2	1	Norborne	4	3
Mound City	2	2	Weston	4	4
Chillicothe	2	1	Stanberry	4	4
Hamilton	2	2	North Kas. City	4	1
Albany	2	2	Platte City	4	3
Grant City	2	1			

Read this table: Liberal is in the first quartile in amount of money raised per \$1,000 of Real Wealth, and in the third quartile in amount raised per pupil in average daily attendance.

CHART I

Level of Opportunity



In the chart of the "Level of Opportunity," if the first figure is 4 and the last one is 1 the city is low in its burden and high in results. If the first figure is 1 and the last one is 4, it is high in burden and low in results.

The diagonal columns lettered A, B, C, and D, group the cities according to the support given the schools in proportion to the number of pupils, a measure of the burden of the system. Following diagonal columns I, II, III, and IV, the cities are arranged according to the burden of school taxation. The horizontal columns give a good measure of the schools to improve. North Kansas City and Plattsburg have an excellent opportunity to improve, while Hayti, Salem, Piedmont, East Prairie, and Seymour will be hard pressed to raise funds for improvement.

Those cities above the middle of the diagram can make educational improvements more easily than those below the middle of the diagram.

Another way to show the same conditions is by the use of the "Index of Opportunity." Referring back to table 17, we find that the median amount for schools per \$1,000 of real wealth is \$8.00. Then referring to table 18, we find that the median amount raised per pupil is \$45.59. Thus the typical school system of the forty-one schools studied is raising \$45.59 per pupil per year, which represents the expenditure of \$8.00 per \$1,000 of real wealth.

On this basis, if a Missouri school is to tax itself the median amount to send one child to school a year, it will require a unit of real wealth amounting to \$5,687.50.

If then, we use the amount of money raised per pupil for each of the cities as the numerator; and the amount raised per \$1,000 for the same city, times the amount raised per \$1,000 for the median city, for the denominator, we will have a ratio which is the measure of opportunity for the community to improve. A ratio of 1 is the typical ratio, and means that a community is raising an amount for schools with the median amount of effort for the group studied. If the ratio is above 1, the community is not as heavily burdened as the typical school. If the ratio is below 1; as .5, the burden of taxation is heavier than the average school.

Those schools, where the ratio is greater than 1, bear their educational burdens easily, while those where the ratio is less than 1, have a heavy financial burden. In computing the "Index of Opportunity" on the following page \$5.70 has been used as the amount raised per \$1,000 for the median school.

Index of Opportunity
for the 41 Missouri Schools

North Kansas City	3.27	Rockport	1.071
Plattsburg	2.10	Hamilton	1.06
Chillicothe	1.67	Albany	1.04
King City	1.63	Mound City	.98
Platte City	1.59	Princeton	.97
Tarkio	1.53	Nevada	.96
Norborne	1.49	Cainesville	.89
Maryville	1.47	Gallatin	.88
Braymer	1.46	Trenton	.75
Savannah	1.44	Pattonsburg	.67
Carrollton	1.35	Lamar	.592
Oregon	1.34	Charleston	.59
Maysville	1.32	Marshfield	.58
Grant City	1.291	Stanberry	.56
Liberty	1.29	Piedmont	.51
Burlington Jc.	1.29	Hayti	.50
Richmond	1.275	Salem	.48
Bethany	1.27	Liberal	.46
Weston	1.24	Seymour	.38
Excelsior Springs	1.18	East Prairie	.37
Cameron	1.077		

CHAPTER III

Conclusions and Summary

In the First group of schools studied, it will be seen that Lamar is spending nearly three times as much per \$1,000 of real value as North Kansas City, and raising just one-half as much per pupil. It will be noted that Lamar is one of the schools selected from outside the Maryville State Teachers' College District. With Lamar eliminated, the difference is not so great within the District, although Trenton is spending twice as much as North Kansas City, and not raising one-half as much per pupil.

In the Second group of schools studied, Salem and Hayti are paying twice as much as Stanberry for school support, and raising about the same amount per pupil. In comparison with Plattsburg and Tarkio, they are raising about one-half as much per pupil, although they are putting forth a greater financial effort for their school. Eliminating these two schools from the group, the range in effort is still nearly two to one, and is three to one in amount raised per pupil.

In the Third group of schools studied, Liberal, Seymour, Marshfield, and East Prairie are paying

three times as much for their schools as Platte City, and still are raising only about one-half as much per pupil as King City and Maysville.

By referring to table 17, which is an Order Distribution of all of the forty-one schools for the amount raised per \$1,000 of real wealth, you will find that five of the schools of the group of ten outside the Maryville District are the first schools listed, and excepting Pattonsburg, the first eight are from outside the District.

Table 18 shows a measure of the results obtained, and one finds six of the ten schools at the bottom of the list, excepting Stanberry, and seven of them in the lowest quartile.

These comparisons justify the following conclusions. (1) That the burden of school support falls very unevenly on the different cities of the Maryville College District, the range being from \$4.22 to \$11.88 per \$1,000 of real wealth. When the ten cities from outside the District are included in the group, the range for the entire group is from \$4.22 to \$14.41. (2) That the results obtained, as judged by the amount raised per pupil, also, varies greatly for the different cities, ranging from \$21.99 per pupil to \$39.28. (3) That all of the ten cities from outside of the Maryville District, except Nevada, are putting forth a greater effort for school support and getting less returns than the cities of the District.

In Missouri the State Constitution sets a limit on taxation on schools for teachers and incidentals above which they may not go. This limit is 100 cents on the \$100 of assessed valuation. Beyond this, a district may vote bonds for building purposes up to a limit of 5% of the assessed valuation of the district.

All of the schools in the First group, cities 2,000 to 7,000, are voting the maximum provided by law for school support, except Bethany, Charleston, and North Kansas City. All of the group are paying off bonded indebtedness, except Bethany. The Kansas City District is wealthy, in proportion to its number of pupils, and does not have to vote even the 100 cents, and at the same time can afford a large building program.

In the Second group, cities 1,500 to 2,000, six of the cities are voting the maximum for school support, and all of the ten have a bonded indebtedness.

In the Third group, cities 1,000 to 1,500, twelve of the seventeen schools are voting the maximum for school support, and all have a bonded indebtedness, except Burlington Junction and Weston.

To summarize, twenty-nine of the forty-one schools studied are voting the maximum sum provided by the Constitution for school purposes, and thirty-eight are paying off a bonded indebtedness.

In the Third group of schools it will be interesting to note, that Liberal pays a school tax of

205 cents, Seymour 195 cents, Marshfield 180 cents, Pattonsburg 190 cents, Piedmont 170, and East Prairie 160 cents on the \$100 assessed valuation. There is only one explanation for these high rates, since the bonded indebtedness of any one of the schools is not high, and that is that the tax-payers of these cities have, by unanimous consent, voted taxes above the limit set by the law. This speaks well for the educational sentiment of a community, for any one person can protest and undo the situation.

In comparing the First group, cities 2,000 to 7,000, with the Third group, cities 1,000 to 1,500, we find that the median amount raised per \$1,000 of real wealth for the First group is \$7.52, and for the Third group is \$8.57. For the First group, the amount raised per pupil is \$46.63 and for the Third group is \$44.23. It would seem from this comparison that the larger cities give their boys and girls better educational opportunities than the smaller cities, and do it with less financial effort.

The foregoing data seem to justify the following statements:

(1) That the burdens of school support fall very unevenly on the different cities of the forty-one schools studied.

(2) That educational results, also, vary greatly among the different cities.

(3) A comparison of the ten schools outside of the Maryville District with those schools in the District, indicates that the Northwest Missouri Cities are securing good schools, and with less effort, than are the cities of the South Missouri group.

(4) That the larger cities support their schools more easily, and still give their pupils better educational opportunities than the smaller cities.

(5) That a majority of the cities are crowding the limit of taxation for school support, as fixed by the State Constitution.

As stated above, the basis for comparison in this study has been the typical school for the group of forty-one schools studied. The fact that a city ranks high in comparison with the typical school in the group, does not necessarily mean that it is financially overburdened, because taxes as a whole, may be low for the group, as compared with other groups, or with a neighboring State. Sufficient comparisons have been made to lead us to believe that taxes for the Northwest group will compare favorably with other groups of the State, and table 13 was included in the study to serve, in a way, as a basis for comparison with a group of cities of another State. While this table has some limitations, still there is sufficient evidence to merit the statement

that Kansas is putting forth a little greater effort for her schools, and at the same time giving her pupils somewhat better educational advantages than the Missouri group studied. Missouri cannot afford to let down at all in her support for her schools, if she wishes to continue to compare favorably with her neighbors.

The fact that so many of our city schools are crowding the limit in taxation, leads to the conclusions, that (1) Valuations in Missouri must not be further reduced, if its schools are to hold their present position and ranking. (2) In case the valuations are reduced, the schools will suffer, unless the Constitutional limit on taxation can be removed, and districts allowed to vote sufficient funds for their needs, or (3) That some plan of State Aid will be worked out which will equalize the burden of all schools in the State.

Any plan for equalizing educational opportunities must take into account the needs of all of the schools in the State. ¹ Mr. H. P. Smith, Superintendent of the Lawrence, Kansas schools, recommends the establishment of an Equalization Fund for his State. This fund is to be built up by a state income tax, a

1. From an article written by Mr. H. P. Smith in the July Kansan, 1926.

severance tax, and a tax on business, and would be distributed on a combination teacher and pupil attendance basis.

The above plan sounds logical. Missouri has never attempted to equalize the educational burden of all of her schools. She has tried to redistribute her available funds in a way to do the most good in the weakest spots, but the problem of equalizing for all the schools in a real sense, has never been attempted. Before anything can be attempted along this line, more State funds will be needed. Missouri is putting over a state-wide road program successfully. The next move should be to equalize the educational opportunities of the boys and girls for the whole State.

B I B L I O G R A P H Y

- Loomis, A. K., "The Financial Aspects of School Administration," Bulletin, Kansas University, Volume 24, No. 2.
- Bayles, Earnest, "Thesis, "A Comparative Study of School Support in the City and Rural Districts of the State of Kansas," 1922.
- Russell, William F., "School Finance in Iowa," University of Iowa Bulletin, No. 69, published August 1, 1920.
- Smith, Harry P., "The Financing of Education in Kansas," The Kansas Teacher for July, 1926.