A COMPARATIVE STUDY OF THE THREE TYPES OF HIGH SCHOOL LAWS OPERATIVE IN KANSAS IN 1930

A THESIS

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CHAPTER I

INTRODUCTION

THE NATURE OF THE STUDY

The main objective of this investigation is to study the status of the three types of high-school laws operating in Kansas by counties for the year 1930. The purpose of the investigation is to analyze the present status of the three types of laws and to make a comparison with the findings of a comparative study made in 1915 upon the three types of high-school laws operative in Kansas at that time by Carothers.[1] In order to make a study, which shall be comparable to the previous study for 1915, the same procedure has been used and the same seven tests of efficiency have been applied to the high schools of Kansas.

High-school education has made a very rapid growth in the United States during the last half century. During the last thirty-five years the number of public secondary schools in the United States has increased from 2,771 to more than 20,000. In 1890 the number of pupils enrolled in our public schools totaled 211,596.[2] Figures published by the United States Bureau of Education based upon data gathered in 1923-1924 indicate that there were at that time 2,538,381 boys and girls enrolled in public secondary schools.[3] State

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[1] W. H. Carothers: A Comparative Study of the Three Types of High Schools in Kansas by Counties. Unpublished Master's Thesis, Kansas University, Lawrence, Kansas, 1916, pp. 67.

[2] John Rufi: The Small High School. Teachers College, Columbia, New York, Contribution No. 236, 1926, p. 1.

[3] Statistics of Public High Schools. 1923-1924, United States Bulletin No. 40, 1925, p. 1.

departments reported the total public secondary enrollment in the four regular high-school years in 1928 as 3,911,279. The careful estimate from the census of 1920 shows that 40 % of the children of the ages 15-16-17-18 were enrolled in the public schools in 1923, and 50 % were enrolled in 1928. The rapid growth experienced between 1915 and 1925 followed by a decidely slower growth makes it difficult to say when an additional 10 % will be added to the high-school enrollment.[4] Kansas has kept pace with other states in this progressive advancement. The last fifteen years have been unparalleled in increase of buildings and enrollment as well as the number and quality of teachers. During the last twenty years, the total population of Kansas has increased only 10.9 %,[5] while the high-school enrollment for the last fifteen years has increased 55.3 %, which indicates a most remarkable social phenomenon in the history of high-school education in Kansas.

The three types of laws in Kansas have been due to the variation in the needs and financial resources of communities served by the different schools. Various subsidiary laws, such as provision for city schools, rural high schools, township and consolidated schools have been deemed necessary in order to provide for particular needs and improve the type of work applicable to certain localities.

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[4] Statistics of Public High Schools. 1927-1928, United States Bulletin No. 35, 1929, p. 4.

[5] World Almanac and Book of Facts. 47 th Issue, New York World Telegram, 1952, pp. 386-387.

To determine which of the three laws operating in Kansas serves the educational interest of the state to the best advantage, is the chief aim of this study and analysis of the high schools of each county in Kansas.

PREVIOUS STUDIES

W. H. Carothers has made the most extensive study on the status of the high school in Kansas.[6] His study was a Master's thesis at the University of Kansas for the year 1916. The seven tests applied to the high-school data of 1915 will be applied to the high-school data of 1930, a comparison made, and the historical data in connection with the three operating laws will be brought to date.

THE SCOPE OF THE STUDY

The scope of the investigation includes all the public high schools in Kansas. No school has been omitted. To every high school in each of the 105 counties of Kansas has been applied seven tests of efficiency in order to ascertain the strength and effectiveness of each law which provides for the establishment and maintenance of the high schools.

The state of Kansas has 40 counties operating under the Barnes law, 23 operate under the community-high-school law, and 42 operate as tuition counties or have special laws applicable

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[6] W. H. Carothers, op. cit., pp. 67.

to them. Special laws apply to Montgomery, Sumner and Stevens counties. For convenience, the three groups have been called Barnes, Community, and "General" and include all the 105 counties in Kansas.

METHOD OF PROCEDURE

The seven tests which have been used as a basis of comparison of the three types of laws operating in Kansas are as follows:

First. Percentage of the school population, in the counties, which is attending high school.

Second. Persistence of attendance or the percentage of high-school attendance which reached the third and fourth year of high school.

Third. The qualification of high-school teachers based upon their years of preparation.

Fourth. The average salary paid to the high-school teachers.

Fifth. The average salary paid to the high-school principals and superintendents.

Sixth. The library facilities or the "ratio of opportunity."

Seventh. The breadth of curriculum or the range of opportunity in selection of subject matter.

It is possible that other tests might be applied as effectively as the seven chosen but those seven tests are so vital and indispensable that they may be considered the chief and

most important factors which combine to produce an efficient secondary school. The tests are of such significance that additional tests or other tests, in all probability, would not effect the results to any great extent.

The seven tests were applied to the high schools by counties. The score for each test was found by combining the data of all the high schools in the county in regard to that particular test. The counties were then ranked according to each of the seven tests. After the counties were ranked according to all seven tests, the sum of the ranks for each county was taken to determine the final rank of the counties.

SOURCES OF DATA

Practically all of the information gathered for this study came from the "High School Principals' Reports," "Reports of first and second Class Cities" and "County Superintendents Reports" to the State Superintendent which were filled out by the high-school administrators or county superintendents and filed at the state superintendent's office at Topeka, Kansas. This information was secured by the state office at the beginning and at the close of each school year. These data were taken from the reports for the current year of 1929-1930.

The utmost courtesy was extended by the staff in the state superintendent's office at Topeka, Kansas in allowing access to the files for this information.

The Kansas Educational Directory,[7] 1928-1929, Revised School Laws of Kansas 1927,[8] World Almanac 1932,[9] and United States Bulletins were also used in connection with the data collected.[10-11]

TYPES OF DATA COLLECTED

The following were the types of school data collected for this study from the reports in the state superintendent's office, Topeka, Kansas.

1. School census.
2. School enrollment for the Freshman, Sophomore, Junior, and Senior years.
3. High-School law organization.
4. Preparation of teachers in number of years and kind of certificate.
5. Average salary of teachers.
6. Average salary of principals and superintendents.
7. Number of volumes in the library.
8. Number of subjects offered in high-school curriculum.
9. Number of high schools in the county.

PRESENTATION OF DATA

The original data for this study have been very carefully

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[7] Geo. A. Allen, Jr.: Kansas Educational Directory, Kansas State Printing Plant, Topeka, Kansas, 1929, pp. 49.

[8] Geo. A. Allen, Jr.: Revised School Laws of Kansas, 1927, Kansas State Printing Plant, Topeka, Kansas, 1928, pp. 281.

[9] op. cit., pp. 944.

[10] Carl A. Jessen: Biennial Survey of Education in United States. 1928-1930, Chapter III, Bulletin No. 20, 1931, pp. 23.

[11] op.cit., Bulletin No. 40, pp. 38.

and accurately collected, and classified and presented in statistical tables indicating the rank of each county with reference to the seven tables of efficiency. There are tables grouping the counties according to the three laws in the upper, middle and lower tertiles. The tables also show the fifteen-year trend by showing a comparison between tables for 1915 and tables for 1930.

CHAPTER II

LEGAL PROVISIONS

GENERAL LAW OF 1876

The first law relative to the organization of high schools in Kansas was of a general nature and is known as the General Law of 1876. Chapter 122, article 11, section 9 provides that:

> The board of education shall have power to elect their own officers, except the treasurer, to make their own rules and regulations, subject to the provisions of this article; to establish a high school when-ever in their opinion the educational interests of the city demand; and to exercise the sole control over the schools and school property of the city; and maintain such high school, in whole or in part, by demanding, collecting, and receiving a tuition fee for and from each and every scholar or pupil attending such high school.[1]

Although there was no definite provision made by the law to establish high schools in cities of third class, they were established quite early.

The 1923 revision of the law of 1876, Chapter 122, article 12, section 1 provided that:

> Public schools in cities of third class, if not otherwise provided for by law, shall be governed by the provisions of the law which apply to the organization and maintenance of district schools or of union or graded schools.[2]

Since the context of this law is quite general in scope and meaning, it has since been known as the "General" law.

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[1] Geo. A. Allen, Jr.: Revised School Laws of Kansas, 1927, Kansas State Printing Plant, Topeka, Kansas, 1928, p. 53.

[2] ibid., p. 58.

LAWS OF 1886 AND 1923

The next general law applicable to high schools by counties was the county high-school law of 1886. It provided that each county having a population of 6,000 or over, might establish a county high school for the purpose of affording better educational facilities for the more advanced pupils attending the district school and for those desiring to teach. The county high-school law was revised in 1897 so that counties having 2,500 or more could establish a county high school.[3] The county high-school law required three years of work for the completion of a general course, a normal course and a collegiate course. Tuition was free to all pupils residing in the county where a county high school was located. It was supported by a county-wide tax levy.

The law of 1923, Chapter 187, section 1, provided for county high-school disorganization and the creation of community high schools and was stated as follows:

> All county high schools in the state of Kansas, regardless of acts under which created, shall be disorganized and in their stead shall be created community high schools, whose territory shall include all the territory in the said counties not included in the territory of other accredited high schools.[4]

The county law did not restrict districts in the county from maintaining a separate high school. In case a district maintained a high school separate from the county high school

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[3] W. H. Carothers: "Growth of the Kansas High School" in TEACHING, Vol. 2, No. 3, p. 8, 1915, Kansas State Teachers.

[4] op. cit., Revised School Laws of Kansas, 1927, p. 134.

it did so at its own expense. The people of some districts, generally including a town, desired to have their children attend high school close to home and in their own community. This desire became a demand and high schools were built within the county in addition to the county high school. However, this meant double taxation. Finally, when expenses increased for both local high school and county high school to such an extent that it became a burden upon the taxpayers, a change was demanded. This resulted in the disorganization of the county high school and the creation of the community high school.

BARNES LAW OF 1905

The Barnes law has been known as the county aid law. It carries the name of representative T. S. Barnes, of Pratt, who introduced the bill to the Kansas legislative act in secondary education in Kansas. It was the first step against double taxation for both local and county schools. Many communities took advantage of the opportunity to build local high schools, and on account of the great number of Barnes high schools established, provision was made for easy access to secondary education for all boys and girls of Kansas. The law of 1905 provided that:

> In every county in the State of Kansas in which one or more school districts or cities of less than 16,000 inhabitants shall have maintained high schools with courses of instruction admitting those who complete the same, to the Freshman class of liberal arts and sciences of the University of Kansas, the county commissioners shall levy a tax each year . . for the purpose of creating a high-school fund. Said tax shall be levied and collected in the same manner as other county taxes, and when collected the county treasurer shall

pay the same to the treasurers of the school districts maintaining high schools, according to the provisions of the act.[5]

Tuition was free to pupils residing in the county where such schools were located. The Barnes law recognized the need for local high schools as well as county high schools. Its weakness was the fact that it brought upon itself "college domination." Before schools were entitled to use funds, they were required to meet university entrance requirements. As a result many courses were organized to meet college requirements rather than community needs. On the other hand, some supervisory power is necessary where public funds are used. The Barnes law officially recognized the University of Kansas as the head of the public secondary school system.

HIGH SCHOOL LAW OF 1915

Educators have watched with considerable interest the legislation of 1915, which has had an important bearing on high schools, first, through the transfer of the power of accrediting and administering high schools from the State University to the State Board of Education, and second, through the law providing for rural high schools.[6]

The rural high-school law of 1915 has had a desirable effect upon the liberalization of high-school education. It provided that:

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[5] op. cit., Revised School Laws of Kansas, 1927, p. 139.

[6] op. cit., Revised School Laws of Kansas, 1927, p. 9.

The legal electors residing in territory containing not less than sixteen square miles, shall have authority to establish rural high-school districts . . . to establish, locate and maintain therein a rural high school as hereinafter provided.

The law was revised in 1925 so that no high school district could be organized in Kansas, whose aggregate property value was less than $2,000,000. The rural high school has greatly extended high-school education throughout Kansas. It is stated in the Onaga school survey, for 1927, that there were at that time 284 rural high schools organized in Kansas.[8]

SUMMARY

Private academies were the first schools of secondary rank in Kansas. These appeared prior to the admission of Kansas to the Union. The first public high school was established at Lawrence in 1857. It was supported by private funds and subscriptions. The cities of the first and second class were the first to establish publicly supported high schools. The general law of 1876 provided officially for the organization, establishment, and maintenance of the first high schools. Soon thereafter, cities of the third class established high schools in connection with district schools. The first five schools on the accredited list of the University of Kansas were Atchison, Emporia, Lawrence, Winchester and Leavenworth. The first four were on the accredited list by 1876. There were 19 fully accredited high schools in 1890. In 1891 there were 49.

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[7] op. cit., Revised School Laws of Kansas, 1927, p. 146.

[8] F. P. OBrien: School Survey Report of Onaga Rural High School, Bureau of Service and Research, University of Kansas, 1927, p. 5.

The county high-school law of 1886 was the first marked step in connecting the common school and the University in Kansas. Tuition was free to all pupils in the county where the high school was located and the school was supported by a county tax. Dickinson county established the first county high school in 1889 which was followed by Atchison county in 1890. Twenty-seven county high schools were established by 1914. The community high-school law was created in 1923 and the county high school was disorganized by law in the same year. There were 23 community high schools in 1930. The Barnes high-school law provided secondary education for local communities and cities of the third class. The small high-school situation created a double taxation and was a significant factor in the elimination of the county high school. The Barnes high-school law provided a stimulus for a rapid growth of small high schools. In 1915, 39 counties maintained high schools under the provision of the general law of 1876, 39 counties had adopted the Barnes law, while the remaining counties operated under the county high-school law of 1886.[9]

In the year 1930, 40 counties were operating under the Barnes law; 23 counties were operating under the community high-school law and the remaining 42 were operating under "general"laws. The general laws are more specifically termed "Tuition and Special"laws.

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[9] W. H. Carothers: A Comparative Study of the Three Types of High Schools in Kansas by Counties. Unpublished Master's Thesis, Kansas University, Lawrence, Kansas, 1916, p. 11.

CHAPTER III

PERCENTAGE OF SCHOOL POPULATION ATTENDING HIGH SCHOOL

The information in this chapter is introduced by two tables which are necessary to show to which county each of the three high school laws apply. The information in Table I and Table II is used in drawing conclusions in each of the subsequent chapters.

GROUPING ACCORDING TO COUNTY LAWS

Were the groups of counties in 1915 and 1930 identically the same? Some counties have changed the law under which they operate, since 1915. In order to know which counties were operating under each of the three laws in 1915, Table I has been reproduced.*

Table I.-Classification of counties by laws under which high schools were organized in 1915.

County High Schools	Barnes High Schools	General High Schools
Column I	Column II	Column III
Atchison	Allen	Anderson
Chase	Barber	Bourbon
Cherokee	Barton	Brown
Cheyenne	Butler	Chautauqua
Clay	Clark	Cloud
Crawford	Coffee	Douglas
Decatur	Comanche	Elk
Dickinson	Cowley	Ellis
Grant	Doniphan	Ellsworth
Greeley	Edwards	Franklin
Haskell	Finney	Geary
Hodgeman	Ford	Gove

* The table above is reproduced in content from W. H. Carothers A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 11.

County High Schools	Barnes High Schools	General High Schools
Column I	Column II	Column III
Kiowa	Gray	Graham
Labette	Hamilton	Greenwood
Lane	Harvey	Harper
Montgomery	Jefferson	Jackson
Norton	Kearny	Jewell
Rawlins	Kingman	Johnson
Reno	Leavenworth	Linn
Scott	Lincoln	Marion
Sheridan	Logan	McPherson
Sherman	Lyon	Miami
Stanton	Marshall	Mitchell
Sumner	Meade	Morris
Thomas	Ness	Morton
Trego	Osborne	Nemaha
Wichita	Pratt	Neosho
	Rice	Osage
	Russell	Ottawa
	Saline	Pawnee
	Sedgwick	Phillips
	Seward	Pottawatomie
	Shawnee	Republic
	Stafford	Riley
	Wabaunsee	Rooks
	Wallace	Rush
	Wilson	Smith
	Woodson	Stevens
	Wyandotte	Washington

Read table thus: In 1915, the counties in Column I, were classed as "County High Schools"; those in Column II, as "Barnes" counties; those in Column III, as "General" counties.

How many counties are operating under each of the three types of laws? Table II reveals the number for 1930. It shows 40 counties operating under the Barnes law, 23 counties operating under the community high-school law and 42 counties under the "general" law of Kansas. The counties are grouped according to the grouping in the Kansas Schools Laws

for 1927.[1]

TABLE II.-Classification of counties by laws under which high schools were organized in 1930.

Community High Schools	Barnes High Schools	General High Schools
Column I	Column II	Column III
Atchison	Allen	Anderson
Chase	Barber	Bourbon
Cherokee	Barton	Brown
Cheyenne	Butler	Chautauqua
Clay	Clark	Cloud
Crawford	Coffey	Douglas
Decatur	Comanche	Elk
Dickinson	Cowley	Ellis
Greeley	Doniphan	Ellsworth
Hodgeman	Edwards	Franklin
Labette	Finney	Geary
Lane	Ford	Gove
Norton	Gray	Graham
Rawlins	Hamilton	Grant
Reno	Harvey	Greenwood
Scott	Jefferson	Harper
Sheridan	Kearny	Haskell
Sherman	Kingman	Jackson
Stanton	Leavenworth	Jewell
Thomas	Lincoln	Johnson
Trego	Logan	Kiowa
Wallace	Lyon	Linn
Wichita	Marshall	Marion
	Meade	McPherson
	Neosho	Miami
	Ness	Mitchell
	Osborne	Montgomery
	Pratt	Morris
	Rice	Morton
	Rooks	Nemaha
	Russell	Osage
	Saline	Ottawa
	Sedgwick	Pawnee
	Seward	Phillips
	Shawnee	Pottawatomie
	Stafford	Republic
	Wabaunsee	Riley

[1] Geo. A. Allen, Jr.: Revised School Laws of Kansas, 1927, State Printing Plant, Topeka, Kansas, 1928, p. 225.

TABLE II.-Continued-

Community High Schools	Barnes High Schools	General High Schools
Column I	Column II	Column III
	Wilson Woodson Wyandotte	Rush Smith Sumner Stevens Washington

Read table thus: In 1930, counties listed in Column I, were classified as "Community High School" counties; those in Column II, as "Barnes" counties; those in Column III, as "General" counties.

APPLICATION OF TEST NUMBER I

The first of the seven tests of efficiency to be applied to the high schools of Kansas may be stated in the following manner: What percentage of the school population in the counties attend high school and how does each group, according to the three laws operating, compare in this respect?

Table III for 1915 corresponds to Table IV for 1930. It is reproduced * to show a comparison between the per cent of attendance for 1915 and that of 1930.

TABLE III.-Percentage of the school population in the several counties which is attending high school in 1915.

County	Rank	School census	Number in high school	Percentage in high school
Douglas	1	6989	924	13.22
Butler	2	6353	822	12.93
Logan	3	905	117	12.92
Lane	4	678	85	12.55
Thomas	5	1128	136	12.05

*W. H. Carothers, op. cit., p. 12

TABLE III.-Continued-

County	Rank	School census	Number in high school	Percentage in high school
Clark	6	1304	148	11.34
Cowley	7	8465	955	11.28
Harvey	8	5551	623	11.23
Decatur	9	2477	278	11.22
Finney	10	1724	192	11.13
Rice	11	4299	508	11.12
Ness	12	1764	197	11.11
Osborne	13	4225	464	10.98
Sumner	14	8883	953	10.89
Barber	15	3068	331	10.79
Jefferson	16	4955	528	10.65
Marshall	17	6792	720	10.60
Osage	18	6243	662	10.58
Stafford	19	3574	375	10.49
Jewell	20	5320	558	10.48
Sedgwick	21	8512	1909	10.42
Harper	22	4308	447	10.37
Elk	23	2846	294	10.33
Scott	24	654	67	10.24
Dickinson	25	7296	742	10.16
Reno	26	11624	1156	9.95
Shawnee	27	17521	1742	9.94
Pratt	28	2267	222	9.79
Edwards	29	3435	336	9.78
Seward	30	1197	126	9.70
Nemeha	31	5842	555	9.51
Lyon	32	7587	721	9.50
Allen	33	7499	700	9.33
Mitchell	34	4425	411	9.28
Wabaunsee	35	3995	366	9.16
Marion	36	7334	660	8.99
Ford	37	3647	324	8.88
Kingman	38	4280	379	8.85
Comanche	39	1369	121	8.83
Franklin	40	6707	591	8.81
Johnson	41	5229	458	8.76
Saline	42	6271	549	8.75
Rooks	43	4575	304	8.74
Ottawa	44	3639	318	8.73
Greenwood	45	4969	434	8.72

TABLE III.-Continued-

County	Rank	School census	Number in high school	Percentage in high school
Wilson	46	6249	537	8.69
Phillips	47	4376	374	8.54
Barton	48	5277	450	8.52
McPherson	49	6399	543	8.48
Pottawatomie	50	5554	470	8.46
Pawnee	51	2365	199	8.42
Bourbon	52	6775	570	8.41
Norton	53	3418	287	8.38
Atchison	54	6881	569	8.26
Greeley	55	303	25	8.25
Gray	56	1158	95	8.20
Jackson	57	5030	412	8.19
Lincoln	58	3506	285	8.12
Hamilton	59	740	60	8.10
Montgomery	60	13590	1178	8.07
Wallace	61	610	49	8.04
Geary	62	3062	246	8.03
Woodson	63	2883	231	8.00
Labette	64	9008	720	7.99
Meade	65	1687	134	7.92
Brown	66	6423	508	7.90
Coffey	67	4844	381	7.86
Doniphan	68	4671	361	7.72
Linn	69	4445	341	7.67
Riley	70	4915	375	7.62
Wichita	71	489	37	7.56
Leavenworth	72	10489	792	7.55
Chase	73	2543	192	7.54
Sherman	74	1345	101	7.50
Clay	75	4989	374	7.49
Trego	76	1551	115	7.41
Miami	77	5730	435	7.40
Anderson	78	4164	298	7.13
Kearny	79	614	43	7.00
Russell	80	3606	251	6.96
Ellsworth	81	3193	220	6.89
Republic	82	5436	362	6.65
Hodgeman	83	875	57	6.52
Rawlins	84	2049	133	6.49
Chautauqua	85	3655	235	6.42

TABLE III.-Continued-

County	Rank	School census	Number in high school	Percentage in high school
Wyandotte	86	31510	2015	6.39
Smith	87	5035	317	6.38
Neosho	88	7152	450	6.29
Washington	89	6374	386	6.05
Rush	90	2797	169	6.04
Cherokee	91	12344	726	5.88
Cloud	92	6095	355	5.82
Sheridan	93	1497	87	5.81
Morris	94	3715	214	5.76
Stanton	95	262	15	5.72
Gove	96	1442	80	5.54
Grant	97	293	16	5.46
Graham	98	2602	136	5.22
Crawford	99	17012	986	5.20
Kiowa	100	2048	104	5.07
Cheyenne	101	1275	61	4.78
Haskell	102	312	11	3.52
Morton	103	510	17	3.33
Stevens	104	714	21	2.94
Ellis	105	4593	111	2.41
Totals		503011	42331	8.51

Read table thus: Column I designates the county; Column II, the rank of each county; Column III, the census of each county; Column IV, the number in high school in each county; Column V, the percentage of students in high school in each county. Percentage if found by dividing the number in high school by the census.

Table IV represents the counties in 1930 in order of their rank according to the percentage of attendance in high school. This percentage is ascertained by finding the total enrollment of high school students during 1930 for each county and determining the per cent this total enrollment is of the school census of that county.

TABLE IV.-Percentage of the total school population, in the several counties, which is attending high school in 1930.

County	Rank	School census	Number in high school	Percentage in high school
Comanche	1	1628	403	24.75
Clark	2	1449	353	24.36
Barber	3	3141	695	22.12
Stafford	4	3287	708	21.54
Rice	5	4172	889	21.31
Riley	6	5260	1119	21.27.
Edwards	7	2283	480	21.02
Chase	8	1963	411	20.94
Dickinson	9	7454	1550	20.79
Clay	10	4138	844	20.40
Sumner	11	8423	1714	20.35
Jefferson	12	4285	860	20.07
Osage	13	4916	984	20.02
Decatur	14	2625	515	19.62
Linn	15	3695	722	19.54
Wyandotte	16	42280	8179	19.30
Butler	17	10586	2041	19.28
Wilson	18	6006	1154	19.21
Labette	19	8878	1702	19.17
Morton	20	1192	227	19.04
Osborne	21	3668	695	18.95
Hamilton	22	1032	195	18.90
Morris	23	3599	675	18.76
Franklin	24	5995	1124	18.75
Reno	25	13602	2546	18.72
Jewell	26	4241	791	18.65
Sherman	27	2199	408	18.55
Cowley	28	11611	2153	18.54
Crawford	29	14879	2756	18.52
Lincoln	30	2946	541	18.36
Douglas	31	6491	1189	18.32
Atchison	32	5427	990	18.24
Kingman	33	3721	677	18.19
Harper	34	4033	733	18.18
Pratt	35	4107	764	18.16

TABLE IV.-Continued-

County	Rank	School census	Number in high school	Percentage in high school
Jackson	36	4312	783	18.16
Coffey	37	4120	746	18.11
Seward	38	2470	447	18.10
Norton	39	3614	653	18.07
McPherson	40	6770	1223	18.06
Mitchell	41	3787	684	18.06
Neosho	42	6653	1197	17.99
Meade	43	2211	396	17.91
Pawnee	44	2966	531	17.90
Johnson	45	6714	1198	17.84
Ellsworth	46	3198	568	17.76
Ford	47	5750	1019	17.72
Marshall	48	6768	1197	17.69
Greenwood	49	5644	995	17.63
Republic	50	4359	767	17.60
Ottawa	51	2785	489	17.56
Allen	52	6250	1090	17.44
Russell	53	3656	636	17.40
Pottawatomie	54	4729	819	17.32
Elk	55	2535	439	17.32
Gray	56	2140	368	17.20
Cloud	57	5203	893	17.16
Saline	58	7963	1355	17.02
Wabaunsee	59	3262	552	16.92
Lyon	60	8231	1391	16.90
Wallace	61	1006	170	16.90
Brown	62	6006	1014	16.88
Montgomery	63	15371	2572	16.73
Phillips	64	3598	595	16.54
Chautauqua	65	3458	568	16.43
Anderson	66	3872	627	16.20
Harvey	67	6702	1085	16.19
Kiowa	68	2069	332	16.05
Doniphan	69	4297	685	15.94
Ness	70	2977	469	15.75
Finney	71	3278	515	15.71
Woodson	72	2672	419	15.68
Thomas	73	2284	358	15.67
Gove	74	1851	290	15.67
Sedgwick	75	38587	6015	15.59

TABLE IV.-Continued-

County	Rank	School census	Number in high school	Percentage in high school
Logan	76	1451	226	15.58
Rooks	77	3410	529	15.51
Smith	78	4092	630	15.40
Cherokee	79	10057	1525	15.16
Kearny	80	972	145	14.92
Miami	81	5867	873	14.88
Geary	82	3440	496	14.42
Washington	83	5179	742	14.33
Scott	84	1292	184	14.24
Shawnee	85	23318	3286	14.09
Lane	86	1310	183	13.97
Grant	87	957	133	13.90
Barton	88	6676	922	13.81
Bourbon	89	6946	929	13.37
Leavenworth	90	8459	1129	13.35
Stevens	91	1607	213	13.25
Haskell	92	1018	133	13.06
Hodgeman	93	1346	193	12.85
Cheyenne	94	2299	290	12.61
Rawlins	95	2441	305	12.49
Nemaha	96	5867	732	12.48
Greeley	97	497	62	12.47
Rush	98	3002	370	12.33
Marion	99	10542	1279	12.13
Wichita	100	719	87	12.10
Graham	101	2567	294	11.45
Trego	102	2103	200	9.51
Sheridan	103	1997	187	9.36
Stanton	104	689	62	9.00
Ellis	105	5630	477	8.47

Read table thus: Column I designates the county; Column II, the order of rank, Comanche county ranked first in 1930; Column III designates the total school census of each county; Column IV, the number in high school in each county; Column V, the percentage of the total school census in high school in 1930.

SUMMARY

It is interesting to note that the percentage of students in high school in 1930 was much greater than in 1915. There was a larger high-school enrollment in 1930. There were 17.06 % of the total number of students of school age in the high schools of Kansas in 1930, while there were only 8.51 % of the total number of students of school age in Kansas high schools in 1915.

This may be due in some measure to the compulsory elementary-school laws providing ample foundation and incentive for higher education. However, it is more likely due to each locality affording facilities and opportunities for high-school education. The rural high school and the community high school have made it possible for small communities to furnish high-school education for their children.

In 1930, the highest per cent of enrollment was found in Comanche county. The lowest per cent of enrollment was found in Ellis county. The percentage ratio of enrollment to census ranged from 24.75 % to 8.47 % in 1930, while in 1915, the ratio of enrollment to census ranged from 13.22 % in Douglas county to 2.41 % in Ellis county.

GROUPING OF COUNTIES INTO TERTILES

In order to ascertain which of the three laws has produced the best conditiond for enrollment in 1915 and 1930, a comparison has been made by dividing the 105 counties into

three tertiles according to the Barnes, community and "general" laws. The division into tertiles consist of dividing the counties into three groups. The three groups consist of the upper, middle and lower thirds. Each tertile consists of 35 counties. The county law having the highest per cent of its counties in the first tertile, or in the first and second tertiles combined, should rank the highest with reference to the percentage of population of school age in the high schools.

Table V is reproduced* to show a comparison, with reference to the percentage of high-school students enrolled, between the tertiles of 1915 and the tertiles of 1930.

TABLE V.-Showing the number of counties, under the three laws in tertiles, when ranked according to the percentage of enrollment for 1915.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	20	15	4	39
County	7	5	15	27
General	8	15	16	39
Totals	35	35	35	105

Read table thus: In 1915, 20 counties under the Barnes law were in the first tertile; 15 counties under the Barnes law were in the second tertile; 4 counties under the Barnes law were in the third tertile.

* W. H. Carothers, op. cit., p. 16.

Table VI has been compiled to determine which law has the highest per cent of its counties in the first tertile, or in the first and second tertiles combined. A comparison of the number of counties in each tertile assists in determining which county law ranks the highest with reference to the percentage of population of school age in the high schools of Kansas for 1930.

TABLE VI.-Showing the number of counties, under the three laws in tertiles, when ranked according to the percentage of enrollment for 1930.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	16	15	9	40
Community	9	2	12	23
General	10	18	14	42
Totals	35	35	35	105

Read table thus: In 1930, 16 counties under the Barnes law were in the first tertile; 15 counties under the Barnes law were in the second tertile; 9 counties under the Barnes law were in the third tertile.

In 1930, the counties operating under the "general" law have of their number 24 % in the upper tertile and 67 % of their number in the first and second tertiles combined. The 24 % was obtained by dividing 10, the number of counties under the "general" law shown in the first tertile of Table VI, by 42the total number of counties under the "general" law. The 67 % was obtained by dividing the sum of 10 and 18 in

Table VI, or the number in the first and second tertiles under the "general" law, by 42 the total number of "general"-law counties. The same procedure was followed in calculating the percentages for the Barnes and community laws. The counties operating under the community law have 39 % of their number in the upper tertile, while 48 % of their number is in the first and second tertiles combined. The Barnes counties have 40 % of their counties in the first tertile and 78 % in the first two tertiles. The data in Table VI indicate that the Barnes law was the most effective in attracting students to high school in 1930; that the "general" high-school law ranked next in effectiveness in appealing to students ; while the community law was the least effective.

In 1915, Table V shows that the Barnes law ranked first, the "general" law second and the county law third.

This indicates that the community law is operating more effectively in attracting high-school students than the county law which it replaced in 1923.

A COMPARISON OF THE GROUPS OF COUNTIES

The counties operating under each law have been grouped and ranked according to the percentage of the total enrollment in high school.

Table VII shows the per cent that each county law had enrolled of its total population of school age for 1915. It

is reproduced* to show the ranking in 1915 and to compare with the ranking of the three laws in Table VIII for 1930.

TABLE VII.-Grouping of counties under the three laws and showing total enrollment and percentages of the school census for each law in 1915.

Law	School census	High School enrollment	Percentage of census in H. S.	Rank
Barnes	208,353	19,159	9.19	1
County	114,773	9,211	8.01	3
General	179,885	14,461	8.03	2
Totals	502,791	42,831	8.51	

Read table thus: In 1915, the total census for counties under the Barnes law was 208,353; the total enrollment of high schools under the Barnes law counties was 19,159; the per cent of the census enrolled in high school in Barnes coumties for 1915 was 9.19 %.

Table VIII shows the per cent that each county law had enrolled of its total population of school age and the ranking of the three laws for 1930. It compares not only the high-school enrollment but also the percentages each law had enrolled of its total school census for 1930.

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* W. H. Carothers, op. cit., p. 23.

TABLE VIII.-Grouping of the counties under the three laws and and showing total enrollment and percentage of t the school census for each law in 1930.

Law	School census	High School enrollment	Percentage of census in H. S	Rank
Barnes	268,475	46,606	17.35	2
Community	92,819	16,161	17.41	1
General	193,786	31,966	16.49	3
Totals	555,080	94,733	17.06	

Read table thus: In 1930, the total school sensus for the counties under the Barnes law was 268,475; the total high-school enrollment of Barnes counties was 46,606; the per cent of the census enrolled in high school in Barnes counties for 1930 was 17.35 %. Barnes law ranked second.

It is interesting to note the changes that have occurred in the ranking of the three counties laws for 1915 and 1930. The ranking shows that the counties operating under the Barnes law during the last fifteen years have dropped from first to second rank. Yet, their enrollment has more than doubled. The counties operating under the community law have raised their rank from third to first place. Their enrollment has almost doubled. The counties operating under the "general" law, which ranked second in 1915, now rank second with the enrollment slightly more than doubled. A very potent fact is that in 1915 only 8.51 %, of the population between the ages of five and twenty-one, were attending high school, while 17.06 % of those of school age were attending in 1930.

CHAPTER IV

TEST NUMBER II

The second test applied to high schools is for persistence of attendance. It is applied with the idea in view that the high school must not only attract students and secure their enrollment but it must also offer such courses and facilities which will hold the interest of students and retain them until the completion of their high-school education. What per cent of the students enrolled in the high schools of the various counties remained to complete the third and fourth years in 1915? Table IX shows the percentage of students which remained in high school for their third and fourth years in 1915.

Table IX is introduced * in order to make a comparison between the persistence in attendance in 1915 and the persistence in 1930.

TABLE IX.-Ranking of counties according to persistence of attendance in 1915.

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Trego	1	53.0	Sheridan	6	40.2
Scott	2	47.0	Hamilton	7	40.0
Ellis	3	45.9	Sherman	8	39.2
Greeley	4	44.0	Jewell	9	38.8
Wallace	5	40.8	Leavenworth	10	38.6

* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 19.

TABLE IX.-Continued-

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Edwards	11	38.2	Saline	51	32.5
Finney	12	38.1	Seward	52	32.3
Wichita	13	37.9	Jackson	53	32.3
Atchison	14	37.8	Dickinson	54	32.1
Kearny	15	37.6	Sedgwick	55	31.9
Nemaha	16	37.6	Greenwood	56	31.8
Barber	17	37.4	Ford	57	31.7
Rush	18	37.2	Osage	58	31.6
Norton	19	37.0	Thomas	59	31.4
Smith	20	36.2	Coffey	60	31.4
Woodson	21	36.0	Decatur	61	31.2
Cowley	22	35.9	Sumner	62	31.1
Logan	23	35.9	Kingman	63	31.1
Marshall	24	35.8	Mitchell	64	31.0
Wabaunsee	25	35.8	Marion	65	30.9
Cloud	26	35.6	Ellsworth	66	30.9
Doniphan	27	35.4	Miami	67	30.8
Douglas	28	35.2	Jefferson	68	30.8
Chase	29	35.1	Brown	69	30.6
Barton	30	35.0	Rooks	70	30.5
Johnson	31	35.0	Washington	71	30.5
Lyon	32	35.0	Rawlins	72	30.3
Clay	33	34.5	Bourbon	73	30.1
Harvey	34	34.4	Allen	74	29.6
Shawnee	35	34.4	Grant	75	29.4
Lincoln	36	34.4	Crawford	76	29.2
Stafford	37	34.4	Meade	77	29.1
Montgomery	38	34.1	Phillips	78	28.8
Osborne	39	34.1	Russell	79	28.6
Elk	40	34.0	Linn	80	28.4
Rice	41	34.0	Ottawa	81	28.3
Comanche	42	33.9	Wilson	82	27.1
Geary	43	33.9	Ness	83	26.9
McPherson	44	33.9	Cherokee	84	26.5
Harper	45	33.6	Wyandotte	85	26.5
Pottawatomie	46	33.1	Labette	86	26.5
Pawnee	47	33.0	Chautauqua	87	26.4
Neosho	48	32.7	Republic	88	26.4
Franklin	49	32.6	Anderson	89	25.9
Gray	50	32.5	Reno	90	24.0

TABLE IX.-Continued-

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Stevens	91	23.8	Haskell	101	18.1
Clark	92	23.6	Gove	102	17.5
Morris	93	23.5	Hodgeman	103	12.5
Kiowa	94	23.3	Morton	104	--.-
Pratt	95	23.2	Stanton	105	--.-
Cheyenne	96	22.9			
Riley	97	22.8			
Lane	98	22.2			
Butler	99	20.7			
Graham	100	20.6			

Read table thus: Column I designates the names of the counties; Column II, the rank of the counties in persistence; Column III, per cent of students enrolled in the third and fourth years of high school in 1915; Fifty three per cent of the students in high school in Trego county were enrolled in the third and fourth years in 1915.

What per cent of the students enrolled in high school, in 1930, remained to complete the third and fourth years? Table X shows the percentage of persistence in each county for the year 1930. The results in Table X will be compared with those found in Table IX for 1915.

TABLE X.-Ranking of counties according to persistense of attendance for the year 1930.

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Hodgeman	1	50.29	Rice	6	46.79
Trego	2	48.50	Kiowa	7	46.69
Bourbon	3	48.12	Clark	8	46.18
Lyon	4	47.66	Lincoln	9	46.03
Riley	5	47.01	Ness	10	45.84

TABLE X.-Continued-

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Chase	11	45.74	Cloud	51	42.21
Kearny	12	45.52	Jackson	52	42.02
Douglas	13	45.50	Leavenworth	53	41.98
Dickinson	14	45.48	Stanton	54	41.94
Comanche	15	45.41	Ellsworth	55	41.90
Wabaunsee	16	45.29	Neosho	56	41.85
Rush	17	45.14	Atchison	57	41.81
Linn	18	45.01	Greenwood	58	41.80
Labette	19	44.95	Stevens	59	41.78
Elk	20	44.65	Marion	60	41.75
Clay	21	44.55	Graham	61	41.50
Chautauqua	22	44.54	Sumner	62	41.42
McPherson	23	44.40	Morton	63	41.41
Morris	24	44.30	Gove	64	41.38
Republic	25	44.04	Harvey	65	41.29
Miami	26	43.76	Mitchell	66	41.23
Lane	27	43.72	Franklin	67	41.19
Saline	28	43.69	Phillips	68	41.18
Wichita	29	43.68	Allen	69	41.10
Osage	30	43.50	Kingman	70	41.06
Brown	31	43.49	Pawnee	71	41.05
Woodson	32	43.44	Stafford	72	40.96
Coffey	33	43.43	Gray	73	40.76
Smith	34	43.33	Johnson	74	40.74
Sheridan	35	43.32	Doniphan	75	40.73
Crawford	36	43.25	Geary	76	40.72
Cowley	37	43.24	Anderson	77	40.66
Shawnee	38	43.09	Grant	78	40.60
Russell	39	43.08	Jewell	79	40.58
Marshall	40	42.94	Butler	80	40.57
Logan	41	42.92	Hamilton	81	40.51
Barton	42	42.73	Cheyenne	83	40.00
Nemaha	43	42.62	Jefferson	83	40.00
Osborne	44	42.59	Wallace	83	40.00
Ottawa	45	42.54	Edwards	85	39.79
Sherman	46	42.40	Pottawatomie	86	39.68
Finney	47	42.33	Scott	87	39.67
Harper	48	42.29	Cherokee	88	39.61
Seward	49	42.28	Ellis	89	39.41
Norton	50	42.27	Thomas	90	39.39

TABLE X.-Continued-

County	Rank	Per cent 3-4 yrs.	County	Rank	Per cent 3-4 yrs.
Rooks	91	39.32	Ford	101	37.39
Decatur	92	39.22	Montgomery	102	36.12
Reno	93	38.85	Haskell	103	31.58
Greeley	94	38.71	Sedgwick	104	29.98
Barber	95	38.70	Wyandotte	105	22.46
Rawlins	96	38.69			
Pratt	97	38.61			
Wilson	98	38.56			
Washington	99	38.27			
Meade	100	38.13			

Read table thus: Column I, names of counties in order of rank on persistence of attendance in 1930; Column II, rank of counties on persistence in 1930; Column III, 50.29 % of the total number of high-school students in Hodgeman county were in the third and fourth years of high school in 1930.

GROUPING OF COUNTIES INTO TERTILES

The counties were grouped into tertiles according to each law to determine which of the three laws was operating most effectively to retain students until they had completed the third and fourth years of high school. The county law having the most counties in the first tertile, or the first and second tertile combined, should rank the highest in regard to persistence.

Table XI shows number of counties in each tertile for the three laws for 1915. Table XI is reproduced * to show a comparison with Table XII for 1930.

* ibid., p. 22.

TABLE XI.-Grouping of counties under the three laws into tertiles when ranked according to persistence for 1915.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	17	14	8	39
County	10	5	12	27
General	8	16	15	39
Totals	35	35	35	105

Read table thus: 17 Barnes counties ranked among the highest 35 in persistence in 1915; 14 Barnes counties ranked among those of the second tertile; 8 Barnes counties ranked among those of the third tertile.

Table XII shows the number of counties in each tertile for the three laws in 1930.A comparison was made between the results shown in the tertiles for 1915 and those for 1930.

TABLE XII.-Grouping of counties under the three laws into tertiles when ranked according to persistence for 1930.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	11	14	15	40
Community	9	5	9	23
General	15	16	11	42
Totals	35	35	35	105

Read table thus: 11 Barnes counties ranked in the first tertile; 14 Barnes counties ranked in the second tertile; 15 Barnes counties ranked in the third tertile in 1930.

In 1930, the first tertile showed a gain of seven counties for the "general" law. The Barnes law showed a loss of six counties in the first tertile. There was practically no difference, in the first tertile, between the number of counties under the county law and those under the community law. The number in the second tertile being the same as the number in the first tertile indicates no difference in persistence, in the middle group for 1915 and 1930. The results indicate that the "general"-law counties have made considerable improvement as to persistence of attendance. It is not likely there is an appreciable difference due to the laws.

Table XIII shows a comparison of the three laws on the distributon of attendance for each high-school year in 1915.*

TABLE XIII.-Total enrollment of county laws by years including per cents of persistence for 1915.

Law	1st year	2nd year	3rd year	4th year	Total	Per cent 3-4 yrs.
Barnes	7767	5039	3329	2763	18898	32.24
County	3965	2341	1564	1200	9070	30.04
General	5623	3764	2423	1953	13703	31.93
Totals in third and fourth years				13232	41676	31.03

Read table thus: First year enrollment under the Barnes law 7767; second year, 5039; third year, 3329; fourth year, 2763. Thiry two and twenty four hundredth per cent of the total high-school enrollment was in the third and fourth years in 1915.

* ibid., p. 25.

Table XIV shows a comparison of the three county laws on distribution of attendance for each high-school year in 1930. The totals have been added to secure the total number attending high school under each law. The sum of the third and fourth years has been divided by the total, under each law, to obtain the per cent of persistence for each law. A comparison was then made between the per cents for 1915 and those for 1930.

TABLE XIV.-Total enrollment of county laws by years including per cents of persistence for 1930.

Law	1st year	2nd year	3rd year	4th year	Total	Per cent 3-4 yrs.
Barnes	17050	12226	9358	7972	46606	37.18
Community	5004	4324	3709	3124	16161	42.26
General	9677	8830	7180	6279	31966	42.13
Totals in third and fourth years				37622	94733	39.71

Read table thus: First year enrollment in counties under Barnes law in 1930, 17050; second year, 12226; third year, 9358; fourth year, 7972. The per cent of total high-school enrollment in the third and fourth years was 37.18 % in 1930.

SUMMARY OF TEST II

Table X shows that the variation in persistence of attendance for 1930 ranged from 50.29 % in Hodgeman county to 22.46 % in Wyandotte county. It is interesting to note that on this test Hodgeman ranked first in 1930 but 103 in 1915. Trego county ranked first in 1915 and second in 1930.

There was not an appreciable difference in persistence in the trend of fifteen years. Especially, there was little difference among the counties of the highest rank. However, there was considerable difference in the trend among the lower rank. The lowest in 1930 was 22.46 % while the lowest in 1915 was 12.5 % with two counties entirely without persistence..

According to Table XI, the percentages show that the Barnes counties ranked first in 1915 in persistence of attendance. The "general" law ranked second and the county law ranked third.

Table XII, for 1930, shows that the community law ranked first in persistence of attendance, with 42.26 %. The "general" law ranked slightly lower than the community law for 1930 with 42.13 %. The Barnes law ranked the lowest with 37.18 %.

The increase in persistence of the community high-school law over the former county law is partly due to the fact that students once enrolled in the community high school tended to complete their work rather than take the last year or two at local high schools. Distance may have been a factor in causing students to discontinue at the county high school sooner than at the community high school. A comparison of the two laws is interesting.

A comparison of Table XIII and Table XIV shows that the percentage of persistence in 1915 was 31.03 %, while in 1930 the percentage of persistence was 39.71 %. There was no great difference found in persistence in counties operating under the various laws in 1915 or in 1930. However, there was a

greater tendency for high-school students to complete the third and fourth years in 1930 than there was in 1915.

CHAPTER V

TEST NUMBER III

Test number three is a study of the preparation and qualifications of high-school teachers. Each year above the eighth grade in preparation has been taken as a unit of comparison. Graduates of colleges or universities are allowed eight points; three-year state certificates are allowed seven points; two-year state certificates and graduates of a normal school are allowed six points; and all teachers holding special certificates and those who have done an indefinite amount of work above the eighth grade are allowed two points.

What is the average number of years of preparation above the eighth grade for teachers of each county? Table XV shows the ranking of counties according to the number of years of preparation for teachers for 1915. It is reproduced * to compare results with Table XVI for 1930.

The proper number of points was allowed and calculated for each teacher of each county. The numbers representing the points were added to determine the years of preparation for each county. In Chase county, 136 points represent the number of years of preparation.

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* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 26.

TABLE XV.-Ranking of counties according to the average number of years of preparation of teachers for 1915.

County	Rank	Years of preparation	Number of teachers	Average
Chase	1	136	17	8.00
Geary	2	88	11	8.00
Lane	3	24	3	8.00
Trego	4	32	4	8.00
Stanton	5	16	2	8.00
Grant	6	8	1	8.00
Comanche	7	70	9	7.77
Coffey	8	130	17	7.64
Clay	9	122	16	7.62
Hodgeman	10	38	5	7.60
Logan	11	68	9	7.55
Harvey	12	226	30	7.53
Ford	13	112	15	7.46
Pratt	14	112	15	7.46
Leavenworth	15	276	37	7.45
Sedgwick	16	574	77	7.45
Finney	17	82	11	7.45
Clark	18	74	10	7.40
Dickinson	19	300	41	7.31
Riley	20	96	13	7.30
Norton	21	80	11	7.27
Phillips	22	116	16	7.25
Greenwood	23	114	20	7.20
Sherman	24	36	5	7.20
Douglas	25	230	32	7.18
Harper	26	186	26	7.15
McPherson	27	186	26	7.15
Hamilton	28	50	7	7.14
Cowley	29	264	37	7.13
Lyon	30	228	32	7.12
Jackson	31	128	18	7.11
Linn	32	120	17	7.05
Ellsworth	33	84	12	7.00
Kearny	34	28	4	7.00
Scott	35	28	4	7.00

TABLE XV.-Continued-

County	Rank	Years of preparation	Number of teachers	Average
Greeley	36	14	2	7.00
Allen	37	216	31	6.96
Stafford	38	174	25	6.96
Brown	39	208	30	6.93
Osage	40	194	28	6.92
Shawnee	41	346	50	6.88
Ness	42	62	9	6.82
Ottawa	43	116	17	6.81
Wyandotte	44	552	81	6.78
Pawnee	45	190	28	6.78
Rice	46	210	31	6.77
Marion	47	204	31	6.77
Chautauqua	48	88	13	6.76
Jefferson	49	496	29	6.75
Thomas	50	54	8	6.75
Barber	51	114	17	6.70
Anderson	52	140	21	6.66
Wallace	53	20	3	6.66
Wichita	54	20	3	6.66
Montgomery	55	292	44	6.63
Butler	56	272	41	6.63
Saline	57	212	32	6.62
Decatur	58	86	13	6.61
Ellis	59	66	10	6.60
Johnson	60	138	21	6.57
Edwards	61	82	14	6.57
Jewell	62	164	25	6.57
Crawford	63	249	38	6.55
Wilson	64	190	29	6.55
Nemaha	65	170	26	6.53
Bourbon	66	176	27	6.51
Republic	67	104	16	6.50
Rawlins	68	52	8	6.50
Reno	69	292	45	6.48
Atchison	70	194	30	6.48
Barton	71	148	23	6.43
Osborne	72	128	20	6.40
Kingman	73	128	20	6.40
Washington	74	140	22	6.36
Kiowa	75	38	6	6.30

TABLE XV.-Continued-

County	Rank	Years of preparation	Number of teachers	Average
Cheyenne	76	38	6	6.30
Rooks	77	94	15	6.26
Neosho	78	144	23	6.26
Cloud	79	100	16	6.25
Mitchell	80	112	18	6.22
Pottawatomie	81	114	23	6.21
Lincoln	82	68	11	6.18
Woodson	83	92	15	6.13
Sumner	84	372	61	6.09
Morris	85	78	13	6.00
Russell	86	72	12	6.00
Seward	87	36	6	6.00
Graham	88	24	4	6.00
Haskell	89	18	3	6.00
Stevens	90	12	2	6.00
Labette	91	200	34	5.88
Cherokee	92	188	29	5.79
Franklin	93	188	29	5.79
Wabaunsee	94	126	22	5.72
Marshall	95	148	26	5.69
Gray	96	28	5	5.60
Sheridan	97	22	4	5.50
Miami	98	118	22	5.35
Doniphan	99	118	22	5.35
Elk	100	74	15	4.93
Smith	101	68	14	4.85
Meade	102	56	12	4.66
Gove	103	32	7	4.57
Rush	104	36	8	4.50
Morton	105	6	2	3.00

Read table thus: Column I designates the counties; Column II, the rank of the counties; Column III, the total years of preparation for each county; Column IV, the number of teachers in each county; Column V, the average years of preparation for each teacher in the county.

Table XVI shows the ranking of the counties according to the average number of years of preparation for teachers for 1930. The averages were obtained by dividing the number of years of preparation in each county by the total number of teachers for that particular county. The same method of procedure was used to calculate the number of years of preparation for 1930 as was used to determine the years of preparation for 1915.

TABLE XVI.-Ranking of counties according to the average number of years of preparation of teachers for 1930.

County	Rank	Years of preparation	Number of teachers	Average
Greeley	1	40	5	8.00
Ellis	2	271	34	7.97
Seward	3	236	30	7.87
Geary	4	280	36	7.77
Douglas	5	668	86	7.76
Haskell	6	85	11	7.72
Trego	7	108	14	7.71
Sedgwick	8	2665	347	7.68
Rush	9	207	27	7.66
Wichita	9	46	6	7.66
Neosho	11	543	71	7.65
Hodgeman	12	99	13	7.62
Graham	13	152	20	7.60
Harvey	14	516	68	7.59
Leavenworth	15	591	78	7.58
Riley	16	568	75	7.57
Decatur	17	227	30	7.56
Mitchell	18	408	54	7.55
McPherson	19	542	72	7.53
Russell	20	345	46	7.50
Stanton	20	45	6	7.50
Cowley	22	967	129	7.49
Coffey	23	307	41	7.48
Lyon	24	733	98	7.47
Wallace	25	112	15	7.46

TABLE XVI.-Continued-

County	Rank	Years of preparation	Number of teachers	Average
Sherman	26	194	26	7.46
Saline	27	753	101	7.45
Rooks	28	283	38	7.44
Lincoln	29	253	34	7.44
Ness	30	305	41	7.43
Atchison	31	409	55	7.43
Shawnee	32	1657	223	7.42
Brown	33	557	75	7.42
Ford	34	579	78	7.42
Logan	35	193	26	7.42
Crawford	36	1157	156	7.41
Cloud	37	459	62	7.40
Woodson	38	222	30	7.40
Jefferson	39	466	63	7.39
Thomas	40	266	36	7.38
Pratt	41	421	57	7.38
Butler	41	1034	140	7.38
Wyandotte	43	1978	268	7.38
Reno	44	1136	154	7.37
Johnson	45	516	70	7.37
Gray	46	221	30	7.36
Pottawatomie	47	449	61	7.36
Scott	48	103	14	7.35
Rice	49	522	71	7.35
Bourbon	50	463	63	7.34
Chase	51	279	38	7.34
Marshall	52	536	73	7.34
Sumner	52	771	105	7.34
Norton	54	301	41	7.33
Kingman	55	366	50	7.32
Allen	56	519	71	7.30
Montgomery	57	1257	172	7.30
Franklin	59	584	80	7.30
Harper	59	365	50	7.30
Rawlins	59	146	20	7.30
Kiowa	61	197	27	7.29
Wilson	62	569	78	7.29
Clay	63	291	40	7.27
Pawnee	64	276	38	7.26
Phillips	65	305	42	7.26

TABLE XVI.-Continued-

County	Rank	Years of preparati n	Number of teachers	Average
Anderson	65	305	42	7.26
Jewell	67	450	62	7.25
Ellsworth	68	283	39	7.25
Kearny	69	87	12	7.25
Morton	69	116	16	7.25
Barton	71	514	71	7.23
Doniphan	72	369	51	7.23
Gove	73	159	22	7.22
Greenwood	74	548	76	7.21
Osage	75	424	59	7.18
Finney	76	273	38	7.18
Wabaunsee	77	287	40	7.17
Cherokee	78	674	94	7.17
Ottawa	79	301	72	7.16
Labette	80	809	113	7.15
Linn	81	293	41	7.14
Jackson	82	442	62	7.12
Elk	83	206	29	7.10
Lane	84	78	11	7.09
Smith	84	312	44	7.09
Nemaha	86	382	54	7.07
Chautauqua	87	318	45	7.06
Meade	88	169	24	7.04
Republic	89	380	54	7.03
Cheyenne	91	133	19	7.00
Miami	91	336	48	7.00
Sheridan	91	105	15	7.00
Dickinson	93	636	91	6.98
Morris	94	319	46	6.93
Marion	95	539	78	6.91
Osborne	96	310	45	6.88
Comanche	97	172	25	6.88
Washington	98	384	56	6.85
Stafford	99	233	35	6.65
Barber	100	370	56	6.60

TABLE XVI.-Continued-

County	Rank	Years of preparation	Number of teachers	Average
Clark	101	179	27	6.62
Hamilton	102	105	16	6.56
Edwards	103	341	52	6.55
Stevens	104	78	12	6.50
Grant	105	43	7	6.14

Read table thus: Column I designates the counties; Column II, the rank of the counties; Column III, the total years of preparation for each county; Column IV, the number of teachers in each county; Column V, the average years of preparation for each teacher in the county for 1930.

SUMMARY OF TEST III

When the counties are grouped according to the three high-school laws operating, the foregoing tables show that the county high schools supported 440 teachers with an average of 6.65 years of preparation above the eighth grade for 1915, while the community high schools of 1930 supported 1012 teachers with an average of 7.37 years of preparation above the eighth grade. The counties under the Barnes law supported 996 teachers with an average preparation of 6.12 years in 1915, while the counties under the same law for 1930, supported 2872 teachers with an average preparation of 7.27 years. The counties operating under the "general" law in 1915 supported 720 teachers whose average years of preparation was 6.55. In 1930, the counties to which the "general" law applied, supported 2224 teachers whose average preparation was 7.25 years.

Using the averages as a basis for comparing the preparation of teachers of the three groups, those teaching in the community high schools have the greatest amount of preparation. The teachers in the counties under the Barnes law ranked second and those under the "general" law ranked third in 1930. In 1915, the county high schools ranked first; the "general" high schools second; and the Barnes high schools third. It is probable that the differences are not great enough to be of primary significance. The change from 1915 to 1930 is likely more significant than the differences in type according to the laws in any one year.

It has been a tendency among the community high schools as well as county high schools to demand high standards of scholarship of their teachers. During recent years, teachers with better qualifications have sought positions in Barnes high schools, which accounts for teachers of those counties raising their average ranking more rapidly than those of the "general" law counties. A comparison of the medians shows that the teachers of 1930 were better prepared than those of 1915. In 1915, the median was 6.66 for average preparation, while in 1930, it was 7.34.

GROUPING OF LAWS INTO TERTILES

In Table XVII, the counties are grouped into tertiles, consisting of 35 counties each, according to the three county laws. Table XVII shows the number of counties in each tertile for the three county laws in 1915. It has been reproduced * to

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* ibid., p. 29.

show how the preparation of teachers in 1915 compares with that of 1930.

TABLE XVII.-Showing counties grouped into tertiles according to the average preparation of teachers in 1915.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	14	13	12	39
County	11	9	7	27
General	10	13	16	39
Totals	35	35	35	105

Read table thus: 14 counties under the Barnes law are in the first tertile; 13 counties under the Barnes law are in the second tertile; 12 counties under the Barnes law are in the third tertile.

Table XVIII shows the number of counties in each tertile for the three county laws in 1930. The tertiles in Table XVIII show which law is operating most effectively as to preparation of teachers. It is also used to compare results of teachers' preparation for 1915 with those of 1930.

TABLE XVIII.-Showing counties grouped into tertiles according to the average preparation of teachers in 1930.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	16	12	12	40
Community	9	8	6	23
General	10	15	17	42
Totals	35	35	35	105

Read table thus: 16 counties under the Barnes law are in the first tertile; 12 counties under the Barnes law are in the second tertile; 12 counties under the Barnes law are in the third tertile.

Table XVIII shows that the Barnes law had 16 of its 40 counties, or 40 % of its total number of counties, in the first tertile in 1930; that the community law had 9 of its 23 counties, or 39 % of its total number of counties, in the first tertile; and that the "general" law had 23 % of its number in the first tertile.

Table XVII shows that the "general" law ranked third in 1915, while the Barnes law ranked slightly above the community law for first place. The Barnes law and the community law counties have each shown a gain while the "general" law counties have remained about the same during the last fifteen years. We would conclude from this that schools operating under the Barnes and community laws have teachers with greater amount of preparation than high schools under the "general" law.

CHAPTER VI

TEST NUMBER IV

Test number IV applies to the salaries of teachers in the counties according to their rank. The average salary has been determined for each county. The average salary paid to the teachers in each high school was determined, first, by adding all the salaries in the high school and dividing by the number of teachers. The average salaries of all high schools in the county were then added and divided by the number of high schools in the county.

How do the counties under the three county laws compare in the salaries paid to teachers? Table XIX shows the average salaries paid to teachers in each county for 1915. It is reproduced * to show a comparison between the average salaries for 1915 and 1930.

TABLE XIX.-Showing counties ranked according to the average salaries paid to teachers in 1915.

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Wyandotte	1	117.75	Wallace	6	97.50
Pratt	2	105.60	Ellsworth	7	93.20
Sedgwick	3	102.05	Gray	8	93.20
Shawnee	4	101.33	Doniphan	9	92.50
Reno	5	98.34	Pottawatomie	10	92.27

* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 31.

TABLE XIX.-Continued-

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Barber	11	92.00	Finney	51	84.73
Ford	12	92.00	Crawford	52	84.71
Ellis	13	92.00	Sumner	53	84.66
Kearny	14	92.00	Labette	54	84.57
Marion	15	91.94	Nemaha	55	84.16
Marshall	16	91.30	Cherokee	56	84.11
Comanche	17	90.40	Clay	57	83.98
Lyon	18	90.23	Neosho	58	83.59
Chase	19	90.06	Kingman	59	83.47
Leavenworth	20	89.99	Barton	60	83.37
Ness	21	89.82	Wichita	61	83.34
Thomas	22	89.38	Pawnee	62	83.33
Graham	23	89.00	Dickinson	63	83.14
Elk	24	88.93	Johnson	64	83.08
Franklin	25	88.88	Jackson	65	82.84
Coffey	26	88.62	Rooks	66	82.66
Russell	27	88.56	Norton	67	82.43
Meade	28	88.55	Decatur	68	82.37
Jefferson	29	88.55	Chautauqua	69	82.25
Wabaunsee	30	88.34	Anderson	70	82.12
Clark	31	87.90	Stanton	71	81.94
Geary	32	87.86	Brown	72	81.89
Butler	33	87.85	Seward	73	81.39
Atchison	34	87.85	Cheyenne	74	81.25
Rush	35	87.50	Miami	75	80.63
Washington	36	87.43	Linn	76	80.12
Cowley	37	87.09	Phillips	77	80.11
Montgomery	38	86.43	Greeley	78	80.00
Edwards	39	86.10	Sheridan	79	80.00
Harvey	40	86.09	Stevens	80	80.00
Bourbon	41	85.96	Harper	81	79.41
Mitchell	42	85.95	Rawlins	82	79.38
Smith	43	85.78	Sherman	83	79.00
Lincoln	44	85.45	Rice	84	78.51
Logan	45	85.44	McPherson	85	78.18
Osborne	46	85.35	Hodgeman	86	78.00
Wilson	47	85.27	Allen	87	77.13
Ottawa	48	85.00	Hamilton	88	77.08
Trego	49	84.99	Greenwood	89	77.00
Douglas	50	84.95	Riley	90	76.85

TABLE XIX.-Continued-

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Morris	91	76.15	Morton	101	70.00
Osage	92	75.08	Woodson	102	69.27
Kiowa	93	74.92	Stafford	103	68.96
Cloud	94	73.83	Grant	104	65.00
Scott	95	73.75	Haskell	105	60.00
Republic	96	73.46			
Gove	97	72.81			
Lane	98	71.67			
Saline	99	71.31			
Jewell	100	70.96			

Read table thus: Column I designates the counties; Column II, the rank according to average salaries; Column III, the average salary paid to teachers in each county in 1915.

Table XX shows the average salaries paid to teachers in the various counties for 1930. A comparison of Table XIX and Table XX shows the differences in average salaries paid to teachers by counties in 1915 and in 1930.

TABLE XX.-Showing counties ranked according to the average salaries paid to teachers in 1930.

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Stevens	1	187.00	Miami	11	176.60
Ness	2	186.50	Shawnee	12	175.01
Trego	3	186.00	Rawlins	13	174.24
Barton	4	185.11	Reno	14	173.53
Geary	5	183.68	Leavenworth	15	172.11
Smith	6	182.79	Pawnee	16	171.67
Douglas	7	182.71	Wabaunsee	17	171.09
Cloud	8	179.46	Sedgwick	18	171.07
Johnson	9	177.32	Republic	19	170.48
Labette	10	177.12	Chase	20	170.44

TABLE XX.-Continued-

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Cowley	21	170.11	Harper	56	161.58
Saline	22	169.81	Comanche	57	161.33
Clark	23	169.67	Osage	58	161.13
Seward	24	169.36	Sumner	59	161.04
Butler	25	169.27	Kingman	60	160.73
Meade	26	168.98	Wyandotte	61	160.69
Franklin	27	168.85	Thomas	62	160.18
Sherman	28	168.51	Finney	63	159.96
Kiowa	29	168.50	Mitchell	64	159.86
Montgomery	30	168.34	Hamilton	65	159.67
Brown	31	168.33	Morris	66	159.44
Ottawa	32	168.05	Graham	67	159.12
Rice	33	167.10	Crawford	68	158.93
Dickinson	34	167.05	Coffey	69	158.71
Jackson	35	166.92	Barber	70	158.25
Edwards	36	166.44	Jefferson	71	158.22
Ellsworth	37	166.33	Jewell	72	157.36
Pratt	38	165.85	Stanton	73	157.36
McPherson	39	165.75	Clay	74	157.25
Lyon	40	165.67	Norton	75	156.89
Rush	41	165.60	Lane	76	156.77
Osborne	42	165.50	Anderson	77	156.75
Ford	43	165.14	Gove	78	156.40
Allen	44	165.03	Russell	79	156.39
Atchison	45	164.45	Linn	80	156.17
Nemaha	46	164.26	Marshall	81	155.56
Riley	47	164.12	Cherokee	82	155.52
Harvey	48	164.01	Chautauqua	83	154.85
Haskell	49	164.00	Lincoln	84	154.80
Gray	50	163.40	Washington	85	154.70
Greenwood	51	162.77	Doniphan	86	154.49
Sheridan	52	162.50	Stafford	87	154.17
Ellis	53	162.49	Elk	88	153.16
Cheyenne	54	162.00	Decatur	89	151.55
Wilson	55	161.59	Pottawatomie	90	150.27

TABLE XX.-Continued-

County	Rank	Ave. Salary of teachers	County	Rank	Ave. Salary of teachers
Bourbon	91	150.03	Scott	101	145.00
Kearny	92	150.00	Wichita	102	144.00
Phillips	93	149.25	Morton	103	143.50
Greeley	94	148.75	Marion	104	143.33
Woodson	95	148.38	Wallace	105	139.42
Grant	96	148.00			
Hodgeman	97	147.50			
Neosho	98	147.20			
Rooks	99	145.43			
Logan	100	145.20			

Read table thus: Column I designates the counties; Column II, the rank according to average salaries; Column III, the average salary paid to teachers in each county in 1930.

SUMMARY OF TEST IV

The most remarkable difference in the trend of fifteen years, among the tests of efficiency applied to the high schools of Kansas, has been found in teachers' salaries. The lowest salary in 1930 was $21.67 higher than the highest average salary in 1915. The highest average salary paid by any county in 1930 was $187.00 in Stevens county as compared with $117.75 in Wyandotte county in 1915. Average salaries of all counties in 1930 ranged from $139.42 to $187.00 per month. The average salaries of all counties in 1915 ranged from $60. to $117.75 per month. The median salary in 1930 was $162.49 in Ellis county. The median salary in 1915 was found in Sumner county which was $84.65 per teacher per month.

GROUPING OF COUNTIES INTO TERTILES

Counties were grouped into tertiles, of 35 counties each, in order to compare the three county laws as to the average salaries paid to teachers in the various counties.

Table XXI shows the counties grouped into tertiles according to the three county laws. The law having the most of its counties in the first tertile, or in the first and second tertiles combined, should be considered the one with the highest rank.

TABLE XXI.-Grouping of counties under the three laws into tertiles when ranked according to average salaries paid in 1930.

Law	First tertile	Second tertile	Third tertile	Total
Barnes	13	16	11	40
Community	7	5	11	23
General	15	14	13	42
Totals	35	35	35	105

Read table thus: 13 counties under the Barnes law were in the first tertile in 1930; 16 counties under the Barnes law were in the second tertile; 11 counties under the Barnes law were in the third tertile.

In 1915, counties under the Barnes law paid better salaries to their teachers than counties under either of the other two laws. The first 58 counties in Table XIX for 1915, have 53 % of their counties under the Barnes law; 18 % under the county high-school law; and 29 % under the "general" law.

In 1930, the "general" law counties, which ranked first, paid slightly higher salaries to their teachers than the Barnes counties. Of the first 58 counties ranked in 1930, 41.3 % were under the "general" law; 39.7 % were under the Barnes law; and 19 % were under the community high-school law. This shows a slightly higher schedule in teachers' salaried for the counties under the "general" law.

In Table XXI for 1930, 35.7 % of the counties under the "general" law were in the first tertile; 32.5 % of the Barnes counties were in the first tertile; and 30.4 % of the community high schools were in the first tertile. This evidence shows that the "general" law counties ranked first in 1930.

CHAPTER VII

TEST NUMBER V

This test applies to the salaries of the superintendents and principals of the high schools of Kansas. It was thought wise to consider the executive salaries separate from those of the teachers. This study of salaries is considered very important because the way in which a school functions depends largely upon the administrator. The old adage "as a teacher so the school" still applies very well to the administrator and the high school of the present.

Salaries are in a large measure a determining factor for a successful school. The better teachers and administrators generally receive the higher salaries. It is a well established fact that the ratio between good and poor supervision is decidedly in harmony with the salary.

Table XXII consists of the counties ranked according to the average yearly salary paid to superintendents and principals for 1915 *. The average salary of the superintendents and principals of the various high schools of the county were added and this result was divided by the total number of superintendents and principals in that particular county. The average salary for superintendents and principals for each county was secured in this manner.

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* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 35.

TABLE XXII.-Showing counties ranked according to the average salaries paid to superintendents and principals in 1915.

County	Rank	Average salary	County	Rank	Average salary
Wyandotte	1	1864	Wilson	36	1109
Geary	2	1575	Labette	37	1109
Douglas	3	1540	Wabaunsee	38	1101
Ellis	4	1479	Dickinson	39	1090
Leavenworth	5	1433	Clark	40	1083
Finney	6	1425	Greenwood	41	1080
Montgomery	7	1413	Osage	42	1069
Atchison	8	1381	McPherson	43	1066
Cowley	9	1381	Woodson	44	1064
Harvey	10	1381	Cloud	45	1061
Bourbon	11	1341	Jefferson	46	1052
Miami	12	1325	Butler	47	1048
Ford	13	1311	Stafford	48	1034
Crawford	14	1310	Doniphan	49	1033
Sedgwick	15	1304	Brown	50	1033
Seward	16	1300	Kearny	51	1028
Barton	17	1279	Pawnee	52	1024
Mitchell	18	1256	Ellsworth	53	1014
Chase	19	1256	Jewell	54	1006
Osborne	20	1234	Linn	55	1002
Franklin	21	1228	Greeley	56	1000
Shawnee	22	1195	Comanche	57	997
Reno	23	1194	Rice	58	996
Riley	24	1192	Harper	59	995
Saline	25	1177	Coffey	60	994
Edwards	26	1175	Cherokee	61	993
Neosho	27	1174	Barber	62	992
Marshall	28	1158	Norton	63	991
Meade	29	1157	Johnson	64	982
Anderson	30	1127	Marion	65	980
Hodgeman	31	1125	Ottawa	66	977
Wallace	32	1125	Sherman	67	970
Trego	33	1120	Sumner	68	965
Allen	34	1115	Sheridan	69	960
Lyon	35	1109	Pratt	70	955

TABLE XXII.-Continued-

County	Rank	Average salary	County	Rank	Average salary
Morris	71	954	Rawlins	91	898
Kiowa	72	950	Rush	92	869
Clay	73	949	Chautauqua	93	867
Pottawatomie	74	949	Ness	94	864
Logan	75	949	Phillips	95	863
Lincoln	76	948	Smith	96	847
Washington	77	945	Lane	97	840
Elk	78	944	Graham	98	817
Russell	79	942	Gove	99	810
Republic	80	934	Morton	100	800
Cheyenne	81	933	Decatur	101	798
Rooks	82	930	Thomas	102	796
Nemaha	83	927	Stanton	103	765
Hamilton	84	923	Haskell	104	730
Kingman	85	901	Gray	105	679
Stevens	86	900			
Jackson	87	900			
Grant	88	900			
Scott	89	900			
Wichita	90	900			

Read table thus: Column I designates the counties; Column II, the rank according to average salaries per year; Column III, the average salary paid to superintendents and principals in each county in 1915.

What was the average salary paid by each county to superintendents and principals in Kansas in 1930? Table XXIII shows the counties ranked according to the average yearly salaries paid by the various counties to superintendents and principals in 1930. To obtain the average salaries paid by the counties, the average salaries of superintendents and principals of the various high schools in each county were added and the sum divided by the number of superintendents and principals in that particular county. The counties were then ranked in order of the highest average salary paid in 1930.

TABLE XXIII.-Showing counties ranked according to the average salaries paid to superintendents and principals in 1930.

County	Rank	Average salary	County	Rank	Average salary
Wyandotte	1	3105.71	Franklin	36	2351.15
Douglas	2	3066.67	Cloud	37	2338.89
Seward	3	2951.67	Clark	38	2333.33
Cowley	4	2946.82	Haskell	39	2325.00
Montgomery	5	2933.50	Sherman	40	2323.00
Shawnee	6	2914.00	Ellsworth	41	2321.67
Geary	7	2833.33	Butler	42	2317.00
Sedgwick	8	2724.44	Stafford	43	2312.14
Brown	9	2717.55	Dickinson	44	2310.00
Cheyenne	11	2700.00	Jackson	45	2308.40
Grant	11	2700.00	Lane	46	2300.00
Leavenworth	11	2700.00	Clay	46	2300.00
Reno	13	2695.00	Harper	48	2295.00
Saline	14	2657.80	Greenwood	49	2292.86
Johnson	15	2656.67	Norton	50	2286.67
Labette	16	2632.27	Kiowa	51	2286.00
Ford	17	2596.43	Jefferson	52	2274.44
Barton	18	2586.88	Gray	53	2258.33
Comanche	19	2586.67	Meade	54	2254.17
Rawlins	20	2560.00	Lincoln	55	2244.29
Pawnee	21	2518.33	Osborne	56	2242.78
Thomas	22	2507.14	Nemaha	57	2237.08
Stevens	23	2500.00	Morris	58	2223.33
Lyon	24	2490.00	Wilson	59	2222.70
Harvey	25	2467.22	Logan	60	2215.80
Atchison	26	2440.00	Sheridan	61	2200.00
Pratt	27	2432.22	McPherson	62	2189.71
Riley	28	2423.00	Chase	63	2181.43
Crawford	29	2388.82	Woodson	64	2180.00
Trego	30	2375.00	Mitchell	65	2175.20
Bourbon	31	2370.71	Elk	66	2175.00
Sumner	32	2367.50	Graham	67	2168.33
Hodgeman	33	2362.50	Miami	67	2168.33
Barber	34	2355.91	Cherokee	69	2154.67
Edwards	35	2355.63	Osage	70	2127.29

TABLE XXIII.-Continued-

County	Rank	Average salary	County	Rank	Average salary
Kearny	71	2125.00	Chautauqua	91	2010.00
Rice	72	2122.86	Russell	91	2010.00
Washington	73	2117.50	Doniphan	93	2007.50
Marshall	74	2112.19	Phillips	94	1984.50
Finney	75	2109.17	Ellis	95	1981.25
Decatur	76	2105.71	Wallace	96	1975.00
Wichita	77	2100.00	Neosho	97	1969.58
Wabaunsee	78	2098.33	Smith	98	1938.11
Marion	79	2091.47	Jewell	99	1916.07
Gove	80	2075.00	Coffey	100	1910.00
Ness	81	2071.25	Scott	101	1868.33
Kingman	82	2053.50	Hamilton	102	1864.75
Rush	83	2048.75	Republic	103	1827.05
Pottawatomie	84	2045.86	Greeley	104	1800.00
Stanton	85	2045.00	Morton	105	1643.40
Linn	86	2042.50			
Rooks	87	2039.00			
Ottawa	88	2035.00			
Anderson	88	2035.00			
Allen	90	2021.53			

Read table thus: Column I designates the counties; Column II, the rank according to average salaries per year; Column III, the average salary paid to superintendents and principals in each county in 1930.

Table XXIII shows that the salaries of superintendents and principals for 1930 were considerably above those shown in Table XXII for 1915. The median average salary of $2258.33 in 1930 represents more than twice the median average salary of $1014.00 for 1915 for all the counties.

When the counties are grouped according to their respective laws, the counties operating under the community law rank first with a median salary of $2310.00. The counties

operating under the Barnes law rank second with a median salary of $2258.33. Gray county paid not only the median salary for the Barnes high schools in 1930, but also the median salary for all counties. Counties under the "general" law ranked third in 1930 with a median salary of $2223.00.

In 1915, the medians of the three groups of counties were as follows: Counties under the Barnes law ranked first with a median of $1101.00; counties under the "general" law ranked second with a median of $995.00; while the counties operating under the county law ranked third with a median of $964.00.

GROUPING OF COUNTIES INTO TERTILES

Table XXIV shows the counties grouped into tertiles consisting of 35 counties each according to the three county laws. It is reproduced * to show the number of counties in each tertile for the three county laws in 1915 and to show how the salaries paid to superintendents and principals compared with the salaries in 1930 when ranked into tertiles.

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* ibid., p. 38.

TABLE XXIV.-Grouping of counties under the three laws into tertiles when ranked according to the average salaries paid superintendents and principals in 1915.

Law	First tertile	Second tertile	Third tertile	Total	Rank
Barnes	18	14	7	39	1
County	7	8	12	27	3
General	10	13	16	39	2
Totals	35	35	35	105	

Read table thus: In 1915, 18 counties under the Barnes law were in the first tertile; 14 counties under the Barnes law were in the second tertile; 7 counties under the Barnes law were in the third tertile; the Barnes law ranked first in 1915.

Table XXV has been compiled to determine which law had the highest per cent of its counties in the first tertile, or the first and second tertiles combined. The rank of the county laws has been shown in the last column. The rank of the county laws for 1915 was shown in Table XXIV. A comparison may be made very easily between the ranking of the county laws in 1915 and 1930.

TABLE XXV.-Grouping of counties under the three laws into tertiles when ranked according to average salaries paid superintendents and principals in 1930.

Law	First tertile	Second tertile	Third tertile	Total	Rank
Barnes	15	11	14	40	2
Community	9	8	6	23	1
General	11	16	15	42	3
Totals	35	35	35	105	

Read table thus: In 1930, 15 counties under the Barnes law were in the first tertile; 11 counties under the Barnes law were in the second tertile; 14 counties under the Barnes law were in the third tertile; the community law ranked first in 1930.

In 1915, the Barnes law ranked first with 18 of its counties in the first tertile; the "general" law ranked second with 10 of its counties in the first tertile; while the county law ranked third.

In 1930, the community law ranked first with 9 of its counties in the first tertile and 17 of them in the first two tertiles combined. Table XXV shows a slight decrease in the number of counties in the first and second tertiles for both the Barnes and the community laws since 1915. It also shows a slight increase in both the first and second tertiles for the "general" law since 1915. In 1930, the community-law group ranked first in regard to salaries paid to superintendents and principals.

CHAPTER VIII

TEST NUMBER VI

The sixth test to be applied to the high schools of Kansas is one in regard to library facilities. The importance of the library, as an asset of accurate and complete information, is well recognized. The library test is an important one. In an effort to control expenses, the mistake is often made of neglecting the library. Students need an opportunity to read intelligently and widely.

In applying this test, the total number of volumes in the high-school libraries of each county was divided by the total number of students in that county. This result gave the number of volumes per pupil in each county. The counties were ranked upon the basis of the number of volumes per pupil.

Table XXVI shows the ranking of the counties according to the number of volumes per pupil in 1915. It is reproduced * in order to compare the library facilities of high schools of Kansas in 1915 with those of 1930.

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* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 40.

TABLE XXVI.-Showing the number of volumes per pupil in counties in 1915.

County	Rank	Volumes per pupil	County	Rank	Volumes per pupil
Stevens	1	24.28	Geary	36	6.50
Kearny	2	21.88	Gray	37	6.50
Grant	3	17.06	Wilson	38	6.20
Doniphan	4	13.44	Wallace	39	6.02
Mitchell	5	11.66	Labette	40	5.99
Logan	6	11.54	Comanche	41	5.95
Allen	7	11.12	Nemaha	42	5.91
Jefferson	8	10.92	Brown	43	5.81
Hamilton	9	10.10	Ottawa	44	5.78
Trego	10	10.00	Barber	45	5.57
Greeley	11	8.72	Leavenworth	46	5.54
Wyandotte	12	8.71	Lincoln	47	5.54
Riley	13	8.59	Wabaunsee	48	5.37
Scott	14	8.10	Ellsworth	49	5.27
Sheridan	15	8.08	Wichita	50	5.13
Edwards	16	8.05	McPherson	51	5.09
Anderson	17	7.88	Stafford	52	4.94
Atchison	18	7.79	Pawnee	53	4.85
Clark	19	7.46	Lyon	54	4.66
Dickinson	20	7.23	Rice	55	4.59
Neosho	21	7.14	Ford	56	4.56
Linn	22	7.13	Meade	57	4.40
Ellis	23	7.09	Cloud	58	4.22
Jewell	24	7.08	Osborne	59	4.20
Chase	25	7.07	Washington	60	4.18
Chautauqua	26	6.99	Barton	61	4.14
Osage	27	6.92	Pratt	62	4.04
Woodson	28	6.88	Kingman	63	4.01
Elk	29	6.82	Marion	64	3.97
Montgomery	30	6.74	Cheyenne	65	3.88
Pottawatomie	31	6.72	Greenwood	66	3.88
Norton	32	6.67	Cowley	67	3.87
Sumner	33	6.63	Cherokee	68	3.72
Marshall	34	6.54	Saline	69	3.70
Gove	35	6.53	Smith	70	3.60

County	Rank	Volumes per pupil	County	Rank	Volumes per pupil
Rawlins	71	3.48	Bourbon	91	2.26
Reno	72	3.47	Phillips	92	2.03
Ness	73	3.42	Morris	93	1.96
Crawford	74	3.40	Hodgeman	94	1.91
Jackson	75	3.28	Sherman	95	1.88
Clay	76	3.20	Butler	96	1.88
Johnson	77	3.04	Finney	97	1.87
Graham	78	2.98	Kiowa	98	1.78
Harvey	79	2.94	Decatur	99	1.33
Rush	80	2.93	Russell	100	.84
Rooks	81	2.91	Miami	101	.72
Sedgwick	82	2.80	Shawnee	102	.--
Douglas	83	2.77	Haskell	103	.--
Lane	84	2.67	Morton	104	.--
Republic	85	2.55	Stanton	105	.--
Harper	86	2.55			
Seward	87	2.50			
Thomas	88	2.49			
Franklin	89	2.37			
Coffey	90	2.28			

Read table thus: Column I, names of the counties; Column II, rank of counties on library facilities in 1915; Column III, average number of volumes per pupil in each county in 1915. Stevens county ranked first with 24.28 volumes per pupil in 1915.

What was the number of volumes per pupil in each county in 1930? Were there more volumes per pupil in each county in 1930 than in 1915? Table XXVII shows the number of volumes per pupil in each county in 1930. The same procedure was used to determine the average number of volumes per pupil in 1930 as was used in 1915. The total number of volumes in the high-school library in each county was divided by the number of high-school pupils in each county. A comparison of Table XXVI and Table XXVII shows more volumes per pupil in 1930 than 1915.

TABLE XXVII.-Showing the number of volumes per pupil in counties in 1930.

County	Rank	Volumes per pupil	County	Rank	Volumes per pupil
Douglas	1	24.88	Dickinson	36	11.65
Rush	2	19.46	Jackson	37	11.64
Labette	3	19.39	Logan	38	11.31
Gray	4	18.41	Stevens	39	11.17
Ellis	5	18.23	Ford	40	11.03
Chase	6	18.11	Allen	41	10.92
Chautauqua	7	17.84	Ellsworth	42	10.90
Wichita	8	17.24	McPherson	43	10.86
Edwards	9	17.16	Finney	44	10.84
Kearny	10	16.00	Rice	45	10.82
Barber	11	15.86	Wallace	46	10.59
Lane	12	15.28	Reno	47	10.42
Sheridan	13	14.97	Lyon	48	10.41
Hamilton	14	14.41	Stafford	49	10.34
Kiowa	15	14.40	Pratt	50	10.23
Elk	16	14.34	Cowley	51	10.17
Wilson	17	14.14	Smith	52	10.03
Thomas	18	14.04	Jewell	53	10.02
Clark	19	14.03	Marshall	54	10.02
Decatur	20	13.75	Barton	55	9.85
Nemaha	21	13.72	Cloud	56	9.81
Republic	22	13.69	Cheyenne	57	9.78
Woodson	23	13.58	Marion	58	9.70
Osage	24	13.44	Wabaunsee	59	9.68
Brown	25	13.41	Kingman	60	9.57
Lincoln	26	13.18	Ness	61	9.53
Butler	27	12.98	Washington	62	9.49
Doniphan	28	12.64	Franklin	63	9.36
Mitchell	29	12.57	Sumner	64	9.32
Trego	30	12.29	Jefferson	65	8.94
Greenwood	31	12.21	Anderson	66	8.88
Gove	32	12.17	Montgomery	67	8.70
Ottawa	33	12.14	Johnson	68	8.42
Pottawatomie	34	12.10	Leavenworth	69	8.39
Atchison	35	12.05	Hodgeman	70	8.38

TABLE XXVII.-Continued-

County	Rank	Volumes per pupil	County	Rank	Volumes per pupil
Graham	71	8.33	Rooks	91	6.71
Neosho	72	8.31	Miami	92	6.68
Rawlins	73	8.20	Osborne	93	6.32
Norton	74	8.15	Coffey	94	6.07
Pawnee	75	8.14	Harper	95	6.04
Greeley	76	8.06	Harvey	96	5.85
Stanton	76	8.06	Meade	97	5.81
Crawford	78	8.05	Seward	98	5.59
Comanche	79	7.76	Sedgwick	99	5.39
Morton	80	7.52	Geary	100	5.35
Bourbon	81	7.50	Haskell	101	5.26
Cherokee	82	7.45	Clay	102	5.12
Phillips	83	7.35	Grant	103	4.51
Scott	84	7.34	Shawnee	104	4.17
Wyandotte	85	7.30	Sherman	105	3.68
Russell	86	7.17			
Riley	87	7.12			
Saline	88	7.01			
Linn	89	6.89			
Morris	90	6.72			

Read table thus: Column I, names of the counties; Column II, rank of the counties on library facilities in 1930; Column III, average number of volumes per pupil in each county in 1930. Douglas county ranked first with 24.88 volumes per pupil in 1930.

SUMMARY OF TEST VI

Table XXVII shows that the high schools have not progressed in library facilities as rapidly as they have along other lines to which the efficiency tests have been applied. The county having the highest average in volumes per pupil ranked only .6 of a volume higher than the highest average fifteen years ago. The median of 10.02 volumes per pupil exceeded the corresponding median for 1915 by 5.17 volumes per

pupil. Many books in the high-school libraries are old and out of date. High-school libraries are not adequate to meet the need for the present reading age.

GROUPING OF COUNTIES INTO TERTILES

Counties were ranked into tertiles, of 35 counties each, in order to ascertain which county law ranked highest in library facilities in 1915. Per cents were calculated for each tertile. Table XXVIII has been reproduced * to make a comparison of the tertiles on library facilities of 1915 with those of 1930.

TABLE XXVII.-Grouping of counties into tertiles when ranked according to library facilities in 1915.

Law	First tertile	Per cent	Second tertile	Per cent	Third tertile	Per cent
Barnes	11	31.0 %	19	54.0 %	9	25.0 %
County	11	31.0 %	4	11.0 %	12	34.0 %
General	13	37.0 %	12	34.0 %	14	40.0 %

Read table thus: In 1915, 11 counties or 31 % of the total counties under the Barnes law were in the first tertile; 19 counties or 54 % were in the second tertile; 9 counties or 25 % were in the third tertile.

Table XXIX shows the counties grouped into tertiles when ranked according to library facilities in 1930. Per cents for each tertile of the three county laws are also shown.

* ibid., p. 43.

TABLE XXIX.-Grouping of counties into tertiles when ranked according to library facilities in 1930.

Law	First tertile	Per cent	Second tertile	Per cent	Third tertile	Per cent
Barnes	11	25.7 %	16	40.0 %	13	32.5 %
Community	9	39.1 %	5	21.8 %	9	39.1 %
General	15	35.7 %	14	33.3 %	13	31.0 %

Read table thus: In 1930, 11 counties or 27.5 % of the total counties under the Barnes law were in the first tertile; 16 counties or 40 % were in the second tertile; 13 counties or 32.5 % were in the third tertile.

Table XXIX for 1930 shows that 39.1 % of the counties under the community law were in the first tertile; 35.7 % of those under the "general" law were in the first tertile; and 27.5 % under the Barnes law were in the first tertile. According to Table XXIX the community law ranked first as to library facilities; the "general" law ranked second; and the Barnes law ranked third in 1930.

In 1915, Table XXVIII shows that the "general" law ranked first as to library facilities; the Barnes law ranked second; and the county law ranked third.

In order to make the test for library facilities more rigid, the total number of volumes for each law has been calculated for 1915 and 1930. The per cents that the number of volumes under each law represent of the total number of volumes for all counties were also calculated. Table XXX shows the number and per cent of the total number of volumes in all the counties for 1915.

TABLE XXX.-Showing the number of volumes for each law and its per cent of the total volumes in all counties for 1915.

Law	Volumes	Per cent of total volumes
Barnes	88,125	42 % of the total number volumes
County	51,294	24 % of the total number volumes
General	69,850	33 % of the total number volumes

Read table thus: Column I, the name of the county law; Column II, total number of volumes for the Barnes law was 88,125 in 1915; Column III, counties under the Barnes law had 42 % of the total number volumes in 1915.

Table XXXI, shows that the number of volumes had greatly increased for 1930. Table XXXI also shows the number and per cent of the total number of volumes in all the counties for 1930. Table XXX was reproduced * to make a comparison between the total number of volumes for each law for 1915 and 1930.

* ibid., p. 43.

TABLE XXXI.-Showing the number of volumes for each law and its per cent of the total volumes in all counties for 1930.

Law	Volumes	Per cent of total volumes
Barnes	403,909	44 % of the total number volumes
Community	174,319	19 % of the total number volumes
General	343,643	37 % of the total number volumes

Read table thus: Column I, the name of the county law; Column II, total number of volumes for the Barnes law was 403,909 in 1930; Column III, counties under the Barnes law had 44 % of the total number volumes in 1930.

Table XXXI shows a comparison of the fifteen-year trend with that of Table XXX. Counties under the Barnes law had 44 % of the total number of volumes in 1930 as compared with 42 % in 1915. The counties under the community law had 19 % of the total number of volumes in 1930 as compared with 24 % in counties under the county high-school law in 1915. In 1930 counties under the "general" law had 37 % of the total number of volumes for that year as compared with 33 % of the total volumes for 1915. The tables for 1915 and 1930 indicate that the county laws have held their relative positions. According to Table XXX, the Barnes law ranked first, the "general" law second, and the county law third in 1915. Table XXXI, shows that the county laws held their same relative positions.

CHAPTER IX

TEST NUMBER VII

As demands of society has increased, new subjects have been added to the high-school curriculum. Some high schools, because of better facilities and financial support, offer not only a greater quantity but also a greater variety of courses. New subjects are being added to the curriculum continually and it is being enriched in various ways.

In 1915, the power of accrediting and administering high schools was transferred from the state university to the state board of education. Before that time high schools required 11½ units to satisfy the entrance requirements recommended by the university. Requirements have steadily increased since that time. In order to make a comparable study, 11½ units have been taken as a minimum number of subjects which a high school should offer. High schools have been compared according to those operating under the three county laws upon the number of subjects offered above 11½ units.

The seventh test applied to the high schools of Kansas is one on the breadth of curriculum or the range of opportunity in the selection of subject matter. To apply this test the total number of subjects offered by each high school was ascertained. The totals for each high school were added to secure the total number of subjects offered in a county.

From the total number of units in a county was subtracted an amount equal to the number of high schools multiplied by 11½. This determined the number of excess units offered by each county. The high-school population of the county was divided by the number of excess units in that county. This determined the number of excess units offered per pupil in each county. Since the number of high schools in the county increases the opportunity for high-school education, this result was divided by the number of high schools in the county. The quotient was called the "ratio of opportunity". The smaller this quotient is the higher the county ranks.

Table XXXII has been reproduced * to show the "ratio of opportunity" in 1915 and also to compare it with the "ratio of opportunity" of 1930.

TABLE XXXII.-Showing the breadth of curriculum or the "ratio of opportunity"for 1915.

County	Rank	Ratio of opportunity	County	Rank	Ratio of opportunity
Butler	1	7.4	Harvey	11	16.2
Osborne	2	11.4	Nemaha	12	16.22
Osage	3	11.6	Dickinson	13	16.41
Jefferson	4	12.5	Franklin	14	16.9
Doniphan	5	13.2	Barton	15	16.94
Allen	6	13.9	Sumner	16	17.0
Marshall	7	14.5	Wabaunsee	17	17.1
Stafford	8	14.9	Rice	18	17.18
Marion	9	15.2	Clark	19	17.3
Wilson	10	15.3	Logan	20	17.4

* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 47.

TABLE XXXII.-Continued-

County	Rank	Ratio of opportunity	County	Rank	Ratio of opportunity
Labette	21	18.0	Ellsworth	56	38.9
McPherson	22	18.1	Norton	57	39.3
Greenwood	23	19.2	Meade	58	40.1
Jewell	24	19.5	Phillips	59	42.9
Anderson	25	19.59	Ford	60	43.4
Ness	26	20.1	Republic	61	43.48
Wallace	27	20.3	Pratt	62	45.8
Brown	28	20.4	Bourbon	63	50.2
Barber	29	20.8	Pawnee	64	54.3
Sedgwick	30	20.9	Kearny	65	56.8
Greeley	31	22.4	Wyandotte	66	57.7
Harper	32	22.6	Riley	67	58.9
Linn	33	22.7	Elk	68	59.0
Mitchell	34	23.9	Shawnee	69	60.9
Woodson	35	25.3	Cherokee	70	61.1
Edwards	36	25.4	Cloud	71	65.9
Reno	37	25.8	Rush	72	66.9
Cowley	38	26.8	Hamilton	73	67.2
Atchison	39	27.5	Finney	74	67.6
Rooks	40	28.1	Washington	75	77.2
Montgomery	41	28.3	Jackson	76	79.8
Comanche	42	29.1	Decatur	77	83.9
Crawford	43	30.2	Douglas	78	87.9
Kingman	44	30.5	Thomas	79	90.2
Leavenworth	45	30.7	Chautauqua	80	93.7
Ottawa	46	30.75	Chase	81	94.2
Russell	47	30.8	Rawlins	82	94.3
Pottawatomie	48	31.3	Grant	83	97.6
Miami	49	31.35	Morris	84	100.3
Coffey	50	32.3	Seward	85	100.5
Johnson	51	33.2	Gray	86	100.7
Lyon	52	35.1	Sherman	87	100.9
Saline	53	35.8	Smith	88	117.1
Lincoln	54	37.3	Ellis	89	118.7
Neosho	55	38.6	Clay	90	127.5

TABLE XXXII.-Continued-

County	Rank	Ratio of opportunity	County	Rank	Ratio of opportunity
Geary	91	131.0	Haskell	101	---.-
Gove	92	145.2	Morton	102	---.-
Scott	93	146.2	Stanton	103	---.-
Kiowa	94	158.9	Trego	104	---.-
Hodgeman	95	187.0	Wichita	105	---.-
Sheridan	96	212.5			
Cheyenne	97	236.5			
Graham	98	285.0			
Stevens	99	339.0			
Lane	100	---.-			

Read table thus: Column I designates the names of the counties; Column II, the rank of the counties on breadth of curriculum in 1915; Column III, "ratio of opportunity" in 1915. The"ratio of opportunity" for Butler county was 7.4, which ranked first in 1915.

Table XXXIII shows the counties ranked on breadth of curriculum or "ratio of opportunity" for 1930. The same procedure was used to determine the "ratio of opportunity" for each county for Table XXXIII for 1930 as was used for Table XXXII for 1915.

TABLE XXXIII.-Showing the breadth of curriculum or the "ratio of opportunity" for 1930.

County	Rank	Ratio of opportunity	County	Rank	Ratio of opportunity
Pottawatomie	1	.9	Coffey	36	3.18
Jewell	2	1.0	Leavenworth	37	3.19
Jefferson	3	1.2	McPherson	38	3.2
Greenwood	4	1.3	Franklin	39	3.24
Osage	5	1.32	Ness	40	3.26
Butler	6	1.47	Smith	41	3.27
Sumner	7	1.48	Gray	42	3.4
Jackson	8	1.5	Wallace	43	3.43
Morris	9	1.6	Cloud	44	3.46
Marion	10	1.7	Stafford	45	3.5
Nemaha	11	1.9	Pawnee	46	3.6
Ellsworth	12	2.0	Rush	47	3.7
Mitchell	13	2.0	Riley	48	3.8
Doniphan	14	2.04	Scott	49	3.9
Elk	15	2.06	Harper	50	4.0
Reno	16	2.07	Ford	51	4.04
Edwards	17	2.1	Kiowa	52	4.1
Marshall	18	2.11	Dickinson	53	4.2
Rice	19	2.12	Harvey	54	4.21
Linn	20	2.18	Lincoln	55	4.24
Ottawa	21	2.2	Woodson	56	4.3
Logan	22	2.3	Rawlins	57	4.5
Crawford	23	2.33	Barber	58	4.57
Osborne	24	2.4	Lyon	59	4.7
Phillips	25	2.47	Meade	60	4.8
Johnson	26	2.49	Clark	61	4.81
Republic	27	2.5	Cheyenne	62	4.83
Cherokee	28	2.54	Norton	63	4.9
Labette	29	2.6	Graham	64	5.0
Brown	30	2.66	Neosho	65	5.2
Saline	31	2.8	Shawnee	66	5.5
Barton	32	2.85	Russell	67	5.6
Kingman	33	2.9	Atchison	68	5.68
Anderson	34	3.0	Cowley	69	5.8
Chatauqua	35	3.1	Pratt	70	5.89

TABLE XXXIII.-Continued-

County	Rank	Ratio of opportunity	County	Rank	Ratio of opportunity
Montgomery	71	6.4	Sedgwick	91	12.0
Washington	72	6.7	Wabaunsee	92	12.1
Sherman	73	6.8	Gove	93	12.8
Decatur	74	7.0	Seward	94	13.1
Bourbon	75	7.03	Sheridan	95	13.3
Rooks	76	7.1	Greeley	96	13.7
Wilson	77	7.5	Kearny	97	14.5
Trego	78	7.6	Lane	98	15.2
Haskell	79	8.3	Stanton	99	15.5
Miami	80	8.6	Wichita	100	15.8
Comanche	81	8.66	Ellis	101	26.5
Allen	82	9.0	Wyandotte	102	34.9
Grant	83	9.1	Chase	103	39.1
Hodgeman	84	9.6	Morton	104	56.7
Hamilton	85	10.0	Thomas	105	102.2
Finney	86	10.07			
Clay	87	10.8			
Douglas	88	11.6			
Geary	89	11.8			
Stevens	90	11.83			

Read table thus: Column I designates the names of the counties; Column II, the rank of the counties on breadth of curriculum in 1930; Column III, "ratio of opportunity" in 1930. Pottawatomie county ranked first in 1930 with a "ratio of opportunity" of .9.

SUMMARY OF TEST VII

It will be noted in comparing Table XXXII for 1915 and Table XXXIII for 1930 that the "ratio of opportunity" was much greater in 1930. Many subjects have been added to the high-school curriculum since 1915. There were also many more high schools in 1930. The opportunity for a high-school education was much greater in 1930 as boys and girls of high-school age had easy access to high schools. In 1930, the "ratio of oppor-

tunity ranged from .9 in Pottawatomie to 102.2 in Thomas county. The corresponding range for 1915 was 7.4 in Butler county to over 339.0 in Wichita county.

Table XXXIV shows the counties grouped into tertiles of 35 counties each according to the county laws for 1915. It has been reproduced * to show a comparison between 1915 and 1930 on breadth of curriculum when counties are arranged into tertiles.

TABLE XXXIV.-Showing counties grouped into tertiles when ranked according to breadth of curriculum in 1915.

Law	First tertile	Per cent	Second tertile	Per cent	Third tertile	Per cent
Barnes	19	49 %	16	41 %	4	10 %
County	4	14 %	7	26 %	16	60 %
General	12	30 %	12	30 %	15	40 %

Read table thus: Column I designates the county law; Column II, 19 counties under the Barnes law were in the first tertile in 1915; Column III, 49 % of the total number of Barnes counties were in the first tertile; Column IV, 16 counties under the Barnes law were in the second tertile; Column V, 41 % of the Barnes counties were in the second tertile in 1915.

Table XXXV shows the counties ranked into tertiles according to the three laws on the breadth of curriculum for 1930. The per cents which the tertiles represent of the entire number of counties under that particular law have also been calculated.

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* ibid., p. 49.

TABLE XXXV.-Showing counties grouped into tertiles when ranked according to breadth of curriculum in 1930.

Law	First tertile	Per cent	Second tertile	Per cent	Third tertile	Per cent
Barnes	11	27 %	17	43 %	12	30 %
Community	4	17 %	8	34 %	11	49 %
General	20	48 %	10	23 %	12	29 %

Read table thus: Column I designates the county law; Column II, 11 counties under the Barnes law were in the first tertile in 1930; Column III, 27 % of the total number of Barnes counties were in the first tertile; Column IV, 17 counties under the Barnes law were in the second tertile; Column V, 43 % of the Barnes counties were in the second tertile in 1930.

In 1915, the Barnes law ranked first in the test on breadth of curriculum with 90 % of its counties in the first and second tertiles combined. The "general" law ranked second in the same test with 60 % of its total counties in the first and second tertiles combined. The county law ranked third having 46 % of its counties in the first and second tertiles combined.

In 1930, the "general" law ranked first in the test on breadth of curriculum or the "ratio of opportunity" with 71 % of its total number of counties in the first and second tertiles combined; the Barnes law ranked second with 70 % of its counties in the first and second tertiles combined; while the community law ranked third with 52 % of its counties in the first and second tertiles combined.

CHAPTER X

COMBINING RANKS FOR SCORES

Table XXXVI and Table XXXVII show the results of all seven tests of efficiency. The scores of the seven tests of efficiency are placed in columns in their respective order. The scores for each county are combined for a final score. Since the counties were ranked in order of their positions, allowing the highest ranking county the first place in each of the seven tests, the lowest score indicates the highest rank.

For convenience in referring to the tables in this chapter, the seven tests of efficiency have been related.

First. Percentage of the school population, in the counties, which is attending high school.

Second. Persistence of attendance or the percentage of high-school attendance which reached the third and fourth years of high school.

Third. The qualification of high-school teachers based upon their years of preparation.

Fourth. The average salary paid to the high-school teachers.

Fifth. The average salary paid to the high-school principals and superintendents.

Sixth. The library facilities or the "ratio of opportunity."

Seventh. The breadth of curriculum in selection of subjects.

Table XXXVI shows the scores obtained from all seven tests of efficiency with the sum of the ranks in 1915. It has been reproduced * to show the trend of the combined scores in the seven tests of efficiency from 1915 to 1930.

TABLE XXXVI.-Showing the scores of all seven tests and the combined score and rank for 1915.

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Allen	33	74	37	87	34	7	6	278	26
Anderson	78	87	52	70	30	28	25	370	57
Atchison	54	14	70	34	8	3	39	222	8
Barber	15	17	51	11	62	64	29	249	21
Barton	48	30	71	60	17	37	15	278	27
Bourbon	52	73	66	41	11	65	63	371	59
Brown	66	69	39	72	50	59	28	383	63
Butler	2	99	56	33	47	61	1	299	36
Chase	73	29	1	19	19	9	81	231	12
Chautauqua	85	87	48	69	93	52	80	514	92
Cherokee	91	84	92	56	61	30	70	484	87
Cheyenne	101	96	76	74	81	94	97	619	101
Clark	6	92	18	31	40	41	19	247	20
Clay	75	33	9	57	73	75	90	412	70
Cloud	92	26	79	94	45	67	71	474	83
Coffey	67	60	8	26	60	91	50	362	52
Comanche	39	42	7	17	57	69	42	273	24
Cowley	7	22	29	37	9	14	38	156	1
Crawford	99	76	63	52	14	44	43	391	67
Decatur	9	61	58	68	101	100	77	477	86
Dickinson	25	54	19	63	39	21	13	234	15
Doniphan	68	27	99	9	49	16	5	273	23
Douglas	1	28	25	50	33	11	78	226	10
Edwards	28	11	61	39	26	17	36	218	6
Elk	23	40	100	24	78	35	68	368	55

* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 51.

TABLE XXXVI.-Continued-

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Ellis	105	3	59	13	4	36	89	309	39
Ellsworth	81	66	33	7	53	78	56	374	61
Finney	10	12	17	51	6	43	74	213	5
Ford	37	57	13	12	13	40	60	232	13
Franklin	40	49	93	25	21	87	14	329	44
Geary	62	43	2	32	2	4	91	236	16
Gove	96	102	103	97	99	90	92	679	103
Graham	98	100	88	23	98	89	98	594	99
Grant	97	75	6	104	88	62	83	515	93
Gray	56	50	96	8	105	73	86	476	85
Greeley	55	4	36	78	56	72	31	332	46
Greenwood	45	56	23	89	41	68	23	345	48
Hamilton	59	77	28	88	84	58	73	467	81
Harper	22	45	26	81	59	83	32	348	49
Harvey	8	34	12	40	10	42	11	157	2
Haskell	102	101	89	105	104	103	101	705	104
Hodgeman	83	103	10	86	31	97	95	505	91
Jackson	57	53	31	65	87	81	76	450	97
Jefferson	16	67	49	29	46	12	4	223	9
Jewell	20	9	62	100	54	26	24	295	35
Johnson	41	31	60	64	64	76	51	387	65
Kearny	79	15	34	14	51	27	65	285	31
Kingman	38	63	73	59	85	79	44	441	77
Kiowa	100	94	75	93	72	102	94	630	102
Labette	64	86	91	54	37	15	21	368	56
Lane	4	98	3	98	97	96	100	496	88
Leavenworth	72	10	15	20	5	6	45	173	4
Lincoln	58	36	82	44	76	74	54	424	73
Linn	69	80	32	76	55	48	33	393	68
Logan	3	23	11	45	75	50	20	227	11
Lyon	32	32	30	18	35	34	52	233	14
Marion	36	65	47	15	65	71	9	308	37
Marshall	17	24	95	16	28	32	7	219	7
McPherson	49	44	27	85	43	49	22	319	41
Meade	65	77	102	28	29	77	58	436	75
Miami	77	67	98	75	12	70	49	448	78
Mitchell	34	64	80	42	18	1	34	273	25
Montgomery	60	38	55	38	7	2	41	241	17
Morris	94	93	85	91	71	99	84	617	100
Morton	103	104	105	101	100	104	102	719	105

TABLE XXXVI.-Continued-

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Nemaha	31	16	65	55	83	51	12	313	40
Neosho	88	48	78	58	27	10	55	364	53
Ness	12	83	42	21	94	95	26	373	60
Norton	53	19	21	67	63	29	57	309	38
Osage	18	58	40	92	42	25	3	278	28
Osborne	13	39	78	46	20	53	2	245	19
Ottawa	44	81	43	48	66	57	46	385	64
Pawnee	51	47	45	62	52	55	64	376	62
Phillips	47	78	22	77	95	93	59	471	82
Pottawatomie	50	46	81	10	74	56	48	365	54
Pratt	29	95	14	2	70	63	62	335	47
Rawlins	84	72	68	82	91	85	82	564	96
Reno	26	90	69	5	23	13	37	263	22
Republic	82	88	67	96	80	84	61	558	95
Rice	11	41	46	84	58	66	18	324	42
Riley	70	97	20	90	24	20	67	488	66
Rooks	43	70	77	66	82	86	40	464	80
Rush	90	18	104	35	92	8	72	419	72
Russell	80	79	86	27	79	31	47	429	74
Saline	42	51	57	99	25	47	53	354	50
Scott	24	2	35	95	89	19	93	357	51
Sedgwick	21	55	16	3	15	22	30	162	3
Seward	30	52	87	73	16	54	35	397	69
Shawnee	27	35	41	4	22	92	69	299	33
Sheridan	93	16	97	79	69	46	96	496	89
Sherman	74	18	24	83	67	98	87	441	76
Smith	87	20	101	43	96	88	88	523	94
Stafford	19	37	38	103	48	38	88	291	34
Stanton	95	105	5	71	103	105	103	587	98
Stevens	104	91	90	80	86	24	99	574	92
Sumner	14	62	87	53	68	33	16	330	45
Thomas	5	59	50	22	102	101	79	418	71
Trego	76	1	4	49	33	18	104	285	30
Wabaunsee	35	25	94	30	38	45	17	284	29
Wallace	61	5	53	6	32	60	27	244	18

TABLE XXXVI.-Continued-

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Washington	89	71	74	36	77	82	75	504	90
Wichita	71	13	54	61	90	80	105	474	84
Wilson	46	82	64	47	36	39	10	324	43
Woodson	63	21	83	102	44	23	35	371	58
Wyandotte	86	85	44	1	1	5	66	288	32

Read table thus: Column I, names of counties alphabetically; Column II, ranks of counties according to per cent of school population attending high school; Column III, ranks of counties according to persistence of attendance in high school; Column IV, ranks according to the number of years of teachers' preparation; Column V, ranks according to average salary paid high-school teachers; Column VI, ranks according to the average yearly salary of principals and superintendents; Column VII, ranks according to library facilities; Column VIII, ranks according to breadth of curriculum; Column IX, total score or sum of the seven ranks; Column X, final ranking of counties for 1915.

Table XXXVII shows the results of all seven tests of efficiency for 1930. The scores of the seven tests of efficiency are placed in columns in their respective order. The sum of the ranks has been found for the final score of each county. The final ranking is in the last column. Since the counties were ranked in order of their positions, allowing the highest ranking county the first place in each of the seven tests, the lowest score indicates the highest rank.

TABLE XXXVII.-Showing the scores of all seven tests and the combined score and rank for 1930.

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Allen	52	69	56	44	90	41	82	434	80
Anderson	66	77	65	77	88	66	34	473	94
Atchison	32	57	31	45	26	35	68	294	26
Barber	3	95	100	70	34	11	58	371	52
Barton	88	42	71	4	18	25	32	280	16
Bourbon	89	3	50	91	31	81	75	420	76
Brown	62	31	33	31	9	25	30	221	3
Butler	17	80	41	25	42	27	6	238	7
Chase	8	11	52	20	63	6	103	263	12
Chautauqua	65	22	87	83	91	7	35	390	58
Cherokee	79	88	78	82	69	82	28	506	98
Cheyenne	94	83	91	54	11	57	62	452	88
Clark	2	8	101	23	38	19	61	252	9
Clay	10	21	63	74	46	102	87	403	69
Cloud	57	51	37	8	37	56	44	290	23
Coffey	37	33	23	69	100	94	36	392	61
Comanche	1	15	97	57	19	79	81	349	44
Cowley	28	37	22	21	4	51	69	232	5
Crawford	29	36	36	68	29	78	23	299	30
Decatur	14	92	17	89	76	20	74	382	55
Dickinson	9	14	93	34	44	36	53	283	19
Doniphan	69	75	72	86	93	28	14	437	82
Douglas	31	13	5	7	2	1	88	147	1
Edwards	7	85	103	36	35	9	17	292	24
Elk	55	20	83	88	66	16	15	343	40
Ellis	105	89	2	53	95	5	105	450	87
Ellsworth	46	55	68	37	41	42	11	300	31
Finney	71	47	76	63	75	44	86	462	90
Ford	47	101	34	43	17	40	51	333	37
Franklin	24	67	59	27	36	63	39	315	33
Geary	82	76	4	5	7	100	89	363	47
Gove	74	64	73	78	80	32	93	494	96
Graham	101	61	13	67	67	71	64	444	84
Grant	87	78	105	96	11	103	83	563	104
Gray	56	73	46	50	53	4	42	324	35

TABLE XXXVII.-Continued-

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Greeley	97	94	1	94	104	76	96	562	103
Greenwood	49	58	74	51	49	31	4	316	34
Hamilton	22	81	102	65	102	14	85	471	93
Harper	34	48	59	56	48	95	50	390	59
Harvey	67	65	14	48	25	96	54	369	50
Haskell	92	103	6	49	39	101	79	469	92
Hodgeman	93	1	12	97	33	70	84	390	60
Jackson	36	52	82	35	45	37	8	295	27
Jefferson	12	83	39	71	52	65	3	325	36
Jewell	26	79	67	72	99	53	2	398	66
Johnson	45	74	45	9	15	68	26	285	17
Kearny	80	12	69	92	71	10	97	431	79
Kingman	33	70	55	60	82	60	33	393	62
Kiowa	68	7	61	24	51	15	52	283	18
Labette	19	19	80	10	16	3	29	176	2
Lane	86	27	84	76	46	12	98	429	78
Leavenworth	90	53	15	15	11	69	37	290	22
Lincoln	30	9	29	84	55	26	55	288	21
Linn	15	18	81	80	86	89	20	389	57
Logan	76	41	34	100	60	38	22	371	51
Lyon	60	4	24	40	24	48	59	259	11
Marion	99	60	95	104	79	58	10	505	97
Marshall	48	40	52	81	74	54	18	367	49
McPherson	40	23	19	39	62	43	38	264	13
Meade	43	100	88	26	54	97	60	468	91
Miami	81	26	91	11	67	92	80	448	85
Mitchell	41	66	18	64	65	29	12	295	28
Montgomery	63	102	57	30	5	67	71	395	64
Morris	23	24	94	66	58	90	9	364	48
Morton	20	63	69	103	105	80	104	544	100
Nemaha	96	43	86	46	57	21	11	360	46
Neosho	42	56	11	98	97	72	65	441	83
Ness	70	10	30	2	81	61	40	294	25
Norton	39	50	54	75	50	74	63	405	71
Osage	13	30	75	58	70	24	5	275	15
Osborne	21	44	96	42	56	93	24	376	53
Ottawa	51	45	79	32	88	33	21	349	43
Pawnee	44	71	64	16	21	75	46	337	39
Phillips	64	68	65	93	94	83	25	492	95
Pottawatomie	54	86	47	90	84	34	1	396	65

TABLE XXXVII.-Continued-

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Pratt	35	97	41	38	27	50	70	358	45
Rawlins	95	96	59	13	20	73	57	413	74
Reno	25	93	44	14	13	47	16	252	8
Republic	50	25	89	19	103	22	27	335	38
Rice	5	6	49	33	72	45	19	229	4
Riley	6	5	16	47	28	87	48	237	6
Rooks	77	91	28	99	87	91	76	549	101
Rush	98	17	9	41	83	2	47	297	29
Russell	53	39	20	79	91	86	67	435	81
Saline	58	28	27	22	14	88	31	268	14
Scott	84	87	48	101	101	84	49	554	102
Sedgwick	75	104	8	18	8	99	91	403	70
Seward	38	49	3	24	3	98	94	309	32
Shawnee	85	38	32	12	6	104	66	343	41
Sheridan	103	35	91	52	61	13	95	450	86
Sherman	27	46	26	28	40	105	73	345	42
Smith	78	34	84	6	98	52	41	393	63
Stafford	4	72	99	87	43	49	45	399	68
Stanton	104	54	20	73	85	76	99	511	99
Stevens	91	59	104	1	23	39	90	407	72
Sumner	11	62	52	59	32	64	7	287	20
Thomas	73	90	40	62	22	18	105	410	73
Trego	102	2	7	3	30	30	78	252	10
Wabaunsee	59	16	77	17	78	59	92	398	67
Wallace	61	83	25	105	96	46	43	459	89
Washington	83	99	98	85	73	62	72	572	105
Wichita	100	29	9	102	77	8	100	425	77
Wilson	18	98	62	55	59	17	77	386	56
Woodson	72	32	38	95	64	23	56	380	54
Wyandotte	16	105	43	61	1	85	102	413	75

Read table thus: Column I, names of counties alphabetically; Column II, ranks of counties according to per cent of school population attending high school; Column III, ranks of counties according to persistence of attendance in high school; Column IV, ranks according to the number of years of teachers' preparation; Column V, ranks according to average salary paid high-school teachers; Column VI, ranks according to the average yearly salary of principals and superintendents; Column VII, ranks according to library facilities; Column VIII, ranks according to breadth of curriculum; Column IX, total score or sum of the seven ranks; Column X, final ranking of counties for 1930.

The table above has been used to determine the final score for each county. The final score for each county was obtained by finding the sum of the seven ranks of the seven tests of efficiency for each county. The counties were then ranked in the last column according to the lowest score. The county having the lowest score, which was Douglas county, ranked first. The ranks for all the counties were placed in the last column following the final score.

CHAPTER XI

FINAL RANKING OF COUNTIES WITH LAWS

In Table XXXVIII the counties of Kansas have been ranked according to their superiority as shown from the total scores in Table XXXVII. This table for 1915 has been reproduced * to compare the final scores and ranks of 1915 with the final scores and ranks of 1930. The ranking was based upon the seven efficiency tests applied to the high schools of Kansas. Each county was ranked according to the sum of the scores of each of the seven tests. The lowest score indicates the highest rank. The same is true of the final scores. The lowest score in the final scores designates the highest rank. The law that applies to its respective county is indicated in the second column. In case of ties the rank was determined by school subjects and breadth of curriculum.

TABLE XXXVIII.-Final rank and laws applicable to each county in 1915.

County	Law	Score	Rank
Cowley	Barnes	156	1
Harvey	Barnes	157	2
Sedgwick	Barnes	162	3
Leavenworth	Barnes	173	4
Finney	Barnes	213	5
Edwards	Barnes	218	6
Marshall	Barnes	219	7
Atchison	County	222	8
Jefferson	Barnes	223	9
Douglas	General	226	10

*The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 55.

TABLE XXXVIII.-Continued-

County	Law	Score	Rank
Logan	Barnes	227	11
Chase	County	231	12
Ford	Barnes	232	13
Lyon	Barnes	233	14
Dickinson	County	234	15
Geary	General	236	16
Montgomery	County	241	17
Wallace	Barnes	244	18
Osborne	Barnes	245	19
Clark	Barnes	245	20
Barber	Barnes	249	21
Reno	County	263	22
Doniphan	Barnes	273	23
Comanche	Barnes	273	24
Mitchell	General	273	25
Allen	Barnes	278	26
Barton	Barnes	278	27
Osage	General	278	28
Wabaunsee	Barnes	284	29
Trego	County	285	30
Kearny	Barnes	285	31
Wyandotte	Barnes	288	32
Shawnee	Barnes	290	33
Stafford	Barnes	291	34
Jewell	General	295	35
Butler	Butler	299	36
Marion	General	308	37
Norton	County	309	38
Ellis	General	309	39
Nemaha	General	313	40
McPherson	General	319	41
Rice	Barnes	324	42
Wilson	Barnes	324	43
Franklin	General	329	44
Sumner	County	330	45
Greeley	County	332	46
Pratt	Barnes	335	47
Greenwood	General	345	48
Harper	General	348	49
Saline	Barnes	354	50

TABLE XXXVIII.-Continued-

County	Law	Score	Rank
Scott	County	357	51
Coffey	Barnes	362	52
Neosho	General	364	53
Pottawatomie	General	365	54
Elk	General	368	55
Labette	County	368	56
Anderson	General	370	57
Woodson	Barnes	371	58
Bourbon	General	371	59
Ness	Barnes	373	60
Ellsworth	General	374	61
Pawnee	General	376	62
Brown	General	383	63
Ottawa	General	385	64
Johnson	General	387	65
Riley	General	388	66
Crawford	County	391	67
Linn	General	393	68
Seward	Barnes	397	69
Clay	County	412	70
Thomas	County	418	71
Rush	General	419	72
Lincoln	Barnes	424	73
Russell	Barnes	429	74
Meade	Barnes	436	75
Sherman	County	441	76
Kingman	Barnes	441	77
Miami	General	448	78
Jackson	General	450	79
Rooks	General	464	80
Hamilton	Barnes	467	81
Phillips	General	471	82
Cloud	General	474	83
Wichita	County	474	84
Gray	Barnes	474	85
Decatur	County	474	86
Cherokee	County	484	87
Lane	County	496	88
Sheridan	County	496	89
Washington	General	504	90

TABLE XXXVIII.-Continued-

County	Law	Score	Rank
Hodgeman	County	505	91
Chautauqua	General	514	92
Grant	County	515	93
Smith	General	523	94
Republic	General	558	95
Rawlins	County	564	96
Stevens	General	580	97
Stanton	County	587	98
Graham	General	594	99
Morris	General	617	100
Cheyenne	County	619	101
Kiowa	County	630	102
Gove	General	679	103
Haskell	County	705	104
Morton	General	719	105

Read table thus: Column I, designates the name of the counties; Column II, the county law applicable to the county; Column III, the final score for each county; Column IV, the final rank for each county for 1915.

Table XXXIX shows the counties ranked according to the final scores obtained by adding the ranks of the seven tests of efficiency. It also shows the law applicable to each county in 1930. The lowest score indicates the highest ranking county. In case of ties the rank was determined by school subjects and breadth of curriculum.

TABLE XXXIX.-Showing counties ranked according to the final scores and the law applicable to each county in 1930.

County	Law	Score	Rank
Douglas	General	183	1
Trego	Community	187	2
Rush	General	208	3
Brown	General	219	4
Labette	Community	223	5
Ness	Barnes	245	6
McPherson	General	259	7
Lincoln	Barnes	268	8
Lyon	Barnes	270	9
Jackson	General	271	10
Butler	Barnes	279	11
Rice	Barnes	279	12
Cowley	Barnes	284	13
Cloud	General	286	14
Chase	Community	286	15
Riley	General	288	16
Leavenworth	Barnes	291	17
Mitchell	General	292	18
Elk	General	302	19
Reno	Community	302	20
Republic	General	302	21
Clark	Barnes	302	22
Hodgeman	Community	302	23
Saline	Barnes	305	24
Osage	General	307	25
Barton	Barnes	307	26
Ellsworth	General	314	27
Dickinson	Community	316	28
Sumner	General	317	29
Kiowa	General	318	30
Ottawa	General	320	31
Johnson	General	320	32
Smith	General	321	33
Greenwood	General	323	34
Stevens	General	324	35

TABLE XXXIX.-Continued-

County	Law	Score	Rank
Jefferson	Barnes	326	36
Nemaha	General	326	37
Atchison	Community	327	38
Rawlins	Community	337	39
Crawford	Community	339	40
Wabaunsee	Barnes	341	41
Gray	Barnes	345	42
Marshall	Barnes	348	43
Woodson	Barnes	348	44
Wichita	Community	351	45
Franklin	General	352	46
Edwards	Barnes	353	47
Seward	Barnes	353	48
Graham	General	354	49
Shawnee	Barnes	359	50
Ford	Barnes	364	51
Pawnee	General	366	52
Chautauqua	General	372	53
Comanche	Barnes	375	54
Linn	General	375	55
Morris	General	377	56
Geary	General	378	57
Osborne	Barnes	380	58
Cheyenne	Community	382	59
Lane	Community	382	60
Kingman	Barnes	383	61
Logan	Barnes	384	62
Norton	Community	384	63
Harvey	Barnes	386	64
Jewell	General	387	65
Harper	General	389	66
Kearny	Barnes	394	67
Pratt	Barnes	397	68
Sherman	Community	399	69
Decatur	Community	400	70
Clay	Community	400	71
Pottawatomie	General	405	72
Stafford	Barnes	415	73
Doniphan	Barnes	416	74
Bourbon	General	417	75

County	Law	Score	Rank
Barber	Barnes	419	76
Anderson	General	423	77
Wilson	Barnes	423	78
Coffey	Barnes	425	79
Montgomery	General	426	80
Russell	Barnes	428	81
Sedgwick	Barnes	428	82
Meade	Barnes	429	83
Thomas	Community	439	84
Ellis	General	444	85
Sheridan	Community	452	86
Miami	General	455	87
Marion	General	456	88
Haskell	General	456	89
Phillips	General	458	90
Allen	Barnes	458	91
Neosho	Barnes	463	92
Gove	General	464	93
Greeley	Community	468	94
Finney	Barnes	483	95
Wallace	Community	491	96
Wyandotte	Barnes	493	97
Hamilton	Barnes	498	98
Rooks	Barnes	500	99
Stanton	Community	505	100
Cherokee	Community	514	101
Washington	General	523	102
Grant	General	548	103
Scott	Community	574	104
Morton	General	614	105

Read table thus:Column I, designates the name of the counties; Column II, the county law applicable to the county; Column III, the final score for each county; Column IV, the final rank of each county for 1930.

It will be noted in comparing the scores of 1930 with those of 1915 that there was a greater range in 1915. The scores for 1930 ranged from 183 to 614 while those ranged from 156 to 719. It shows that there was a greater difference

between the highest and lowest score in counties in 1915 than in 1930. In 1930, scores tended to be grouped closer to a central tendency. The difference between the highest and lowest score in 1915 was 563 points while the difference between the highest and lowest score for 1930 was only 431 points.

The median score in 1915 was 364 in Neosho county. The median score in 1930 was 372 in Chautauqua county. This information indicates a great improvement in the high schools of Kansas since 1915.

CHAPTER XII

DISTRIBUTION OF COUNTIES INTO TERTILES AND HALVES

The counties were ranked in Chapter XI according to the sum of the ranks obtained from the seven efficiency tests. Since the final scores have been obtained, it will be interesting to know which law had the highest per cent of its counties in the first tertile or in the first and second tertiles combined. It will also be interesting to know which law had the greatest per cent of its counties in the upper half of all the counties.

In Chapter XII, the counties have been grouped into tertiles and also into halves according to the three county laws. The per cent following the number of counties, in each tertile and each half, indicates the per cent that the number is of the total number of counties operating under that particular law. Table XL, shows the counties grouped into tertiles when ranked according to the total number of scores obtained from the seven efficiency tests for 1915. It has been reproduced * to make a comparison with Table XLI.

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* The table above is reproduced in content from W. H. Carothers, A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, University of Kansas, 1916, p. 58.

TABLE XL.-Showing counties grouped into tertiles when ranked according to the total scores from the seven efficiency tests for 1915.

Tertiles	Barnes Law	Per cent	County Law	Per cent	General Law	Per cent
1	24	61.5 %	6	22.2 %	5	12.8 %
2	9	23.1 %	7	25.9 %	19	48.7 %
3	6	15.4 %	14	51.9 %	15	39.5 %
	39	100 %	27	100 %	39	100 %

Read table thus: Column I designates the tertile; Column II, 24 counties under the Barnes law were in the first tertile; Column III, 61.5 % of the counties under the Barnes law were in the first tertile; Column IV, 6 counties under the county law were in the first tertile; Column V, 22.2 % under the county law were in the first tertile; Column VI, 5 counties under the"general" law were in the first tertile; Column VII, 12.8 % under the "general" law were in the first tertile in 1915.

Table XLI shows the counties grouped into tertiles when ranked according to the total number of scores obtained from the seven efficiency tests for 1930. The per cent following the number of counties in each tertile indicates the per cent that the number is of the total number of counties operating under that particular law. The number of counties in the three tertiles and their per cents were compared with those in Table XL for 1915.

TABLE XLI.-Showing counties grouped into tertiles when ranked according to the total scores from the seven efficiency tests for 1930.

Tertiles	Barnes law	Per cent	Community law	Per cent	General law	Per cent
1	10	25.0 %	6	26.1 %	19	45.2 %
2	16	40.0 %	9	39.1 %	10	23.8 %
3	14	35.0 %	8	34.8 %	13	31.0 %
	40	100 %	23	100 %	42	100 %

Read table thus: Column I designates the tertile; Column II, 10 counties under the Barnes law were in the first tertile; Column III, 25 % of the counties under the Barnes law were in the first tertile; Column IV, 6 counties under the community law were in the first tertile; Column V, 26.1 % under the community law were in the first tertile; Column VI, 19 counties under the "general" law were in the first tertile; Column VII, 45.2 % under the "general" law were in the first tertile in 1930.

It is interesting to know which law had the greatest per cent of its counties in the upper half of the 105 counties for both 1915 and 1930. In order to determine that fact, the counties were divided into the upper and lower halves according to the three county laws. Table XLII shows the counties grouped into halves when ranked according to the total scores obtained from the seven efficiency tests for 1915. Table XLII has been reproduced * to compare the numbers and per cents in the upper and lower halves for 1915 with those of 1930.

* ibid., p. 58.

TABLE XLII.-Showing counties grouped into halves when ranked according to the total scores from the seven efficiency tests for 1915.

Halves	Barnes law	Per cent	County law	Per cent	General law	Per cent
1	30	76.9 %	10	37.0 %	13	33.3 %
2	9	23.1 %	17	63.0 %	26	66.6 %
	39	100 %	27	100 %	39	100 %

Read table thus: Column I designates the half; Column II, 30 counties under the Barnes law were in the first half; Column III, 76.9 % under the Barnes law were in the first half; Column IV, 10 counties under the county law were in the first half; Column V, 37 % under the county law were in the first half; Column VI, 13 counties under the "general" law were in the first half; Column VII, 33.3 % under the "general" law were in the first half in 1915.

Table XLIII shows the counties in the upper and lower halves when ranked according to the total number of scores obtained from the seven efficiency tests for 1930. There were 53 counties included in the upper half and 52 counties in the lower half. The per cent following the number of counties in each half indicates the per cent that the number is of the total number of counties operating under that particular law. The number of counties in the two halves and their per cents were compared with those in Table XLII for 1915.

TABLE XLIII.-Showing counties grouped into halves when ranked according to the total scores from the seven efficiency tests for 1930.

Halves	Barnes law	Per cent	Community law	Per cent	General law	Per cent
1	19	47.5 %	10	43.5 %	24	57.1 %
2	21	52.5 %	13	56.5 %	18	42.9 %
	40	100 %	23	100 %	42	100 %

Read table thus: Column I designates the half; Column II, 19 counties under the Barnes law were in the first half; Column III, 47.5 % under the Barnes law were in the first half; Column IV, 10 counties under the community law were in the first half; Column V, 43.5 % under the community law were in the first half; Column VI, 24 counties under the "general" law were in the first half; Column VII, 57.1 % under the "general" law were in the first half in 1930.

SUMMARY

In 1915, the Barnes law had the greatest per cent of its counties in the first tertile. The Barnes law had 61.5 % of its counties in the first tertile in 1915 and 84 % in the first and second tertiles combined. The "general" law ranked second with 60.5 % of its counties in the first and second tertiles combined.

In 1930, the "general" law had the greatest per cent of its counties in the first tertile. The "general" law had 69 % of its counties in the first and second tertiles and 45 % of its counties in the first tertile. The community law and the

Barnes law ranked about the same with the community law having a slightly higher per cent in the first tertile.

When the counties were divided into the upper and lower halves for 1915, the Barnes law ranked first with 76.9 % of its counties in the upper half. The county law ranked second in 1915 with 37 % of its counties in the upper half. The "general" law had 33.3 % of its counties in the upper half in 1915.

In 1930, the "general" law ranked first with 57.1 % of its counties in the upper half. The Barnes law showed superiority over the community law when counties were divided into the upper and lower halves. The Barnes law ranked second with 47.5 % of its counties in the upper half. The community law ranked third in 1930 with 43.5 % of its total number of counties in the upper half.

CHAPTER XIII

SUMMARY AND CONCLUSIONS

This investigation has as a main objective the study of the present status of the three types of high-school laws operating in Kansas in 1930. The purpose is to analyze the present status of the three laws and to make a comparison with the findings of a previous study [1] made upon the three types of high-school laws operating in Kansas in 1915. In order to make the study comparable with the study of 1915, the same procedure and the same seven tests of efficiency have been applied to the high schools of Kansas in 1930.

The information gathered for this study came from the "High School Principals' Reports", "Report of the First and Second Class Cities" and the "County Superintendents' Reports" to the State Superintendent which were filled out and filed at the State Superintendent's office at Topeka, Kansas. These data were from the reports of the current year, 1929-1930.

The scope of study includes all the public high schools of Kansas. The seven tests of efficiency have been applied to every high school in the 105 counties of Kansas. In 1930, there were 40 counties operating under the Barnes law, 23 counties operating under the community law and 42 counties operating under the "general" law. For convenience the three groups have been called Barnes, community and "general" and include all the 105 counties in Kansas.

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[1] W. H. Carothers: A Comparative Study of the Three Types of High Schools in Kansas by Counties, Unpublished Master's Thesis, Kansas University, Lawrence, Kansas, 1916, pp. 67.

The cities of the first and second class were the first to establish public supported high schools in Kansas. The "general" law of 1876 provided officially for the organization, establishment and maintenance of the first high schools. Soon thereafter, the cities of the third class established high schools in connection with the district schools.

The county high-school law of 1886 was the second high-school law in Kansas. It was supported by a county tax. The county law was repealed in 1923 and the community law created in its place. In 1905, the Barnes law was passed. The Barnes law provided secondary education for local communities and cities of the third class.

In 1915, the power of accrediting and administering high schools was transferred from the University to the State Board of Education. The rural high school law of 1915, which provided for the organization of rural high schools in any of the counties, had a very desirable effect upon the liberalization of high-school education in Kansas. The rural high-school law was revised in 1925 to keep the valuation of each district above $2,000,000.

SUMMATION OF TESTS

It was shown in the first test that the Barnes law ranked first, in 1930, having the greatest per cent of its school population in high school; the "general" law ranked second; and the community law ranked third.

The order of the three county laws was the same in 1915. The Barnes law ranked first; the "general" law ranked second; and the county law ranked third.

There was 17.06 % of the total population of school age in high school in 1930, while there was only 8.51 % of the total school population in high school in 1915.

In persistence of attendance or tendency for high-school students to reach the third and fourth years, the Barnes law ranked first in 1915; the "general" law ranked second; and the county law ranked third.

In 1930, Table XII shows that the community law ranked first in persistence of attendance; the "general" law second; and the Barnes law ranked third.

A comparison of Table XIII and Table XIV shows that the percentage of persistence in 1915 was 31.03 % while in 1930 the percentage of persistence was 39.71 %.

In preparation of teachers in 1915, the county high-school law ranked first; the "general" law ranked second; and the Barnes law ranked third.

In preparation of teachers in 1930, the community high-school law ranked first; the Barnes law second; and the "general" law ranked third.

A comparison of the medians shows that teachers in 1915 had a median preparation of 6.66 above the eigth grade , while in 1930 the median was 7.34 years above the eigth grade.

The most remarkable trend of the fifteen years was found in salaries. The highest average salary paid to teachers in 1915 was $117.75 in Wyandotte county as compared with $187 in Stevens county in 1930. Average teachers' salaries by counties ranged from $60 to 117.75 per month in 1915, while in 1930 the range was from $139.42 to $187. The median teachers' salary by counties in 1915 was 484.65, while in 1930 it was $162.49.

In 1930, the "general" law ranked first in average teachers' salaries by counties; the Barnes law ranked second; and the community law ranked third.

The median salary for superintendents and principals was $2258.33 for all counties in 1930 which represented more than twice the mediam salary of $1104 for 1915.

In 1930, the community law ranked first with a median salary of $2310.00; the Barnes law ranked second with a median salary of $2258.33; while the "general" law ranked third with $2223.

In 1915, the Barnes law ranked first with a median salary of 1101; the"general" law ranked second with a median salary of $995; while the county law ranked third with $964.

Table XXVIII shows that the "general" law ranked first in library facilities in 1915; the Barnes law ranked second; and the county law ranked third.

Table XXIX shows that the community law ranked first in 1930 in library facilities; the "general" law ranked second; and the Barnes law ranked third.

The median of 10.02 volumes per pupil for Jewell county in 1930 exceeded the median of 4.85 in 1915 for Pawnee county by 5.17 volumes per pupil.

The opportunity for high-school education was much greater in 1930 than in 1915. In 1930, the range of "ratio of opportunity" was from .9 to 102.2 while in 1915 it was from 7.4 to over 339.

In 1915, the Barnes law ranked first on the breadth of curriculum; the "general" law ranked second; while the county law ranked third.

In 1930, the "general" law ranked first on breadth of curriculum; the Barnes law ranked second; while the community law ranked third.

When ranked upon the scores obtained from the sum of the scores of all the seven efficiency tests, the Barnes law ranked first with 76.9 % of its counties in the upper 50 % of all counties in 1915; the county law ranked second with 37 % of its counties in the upper 50 %; while the "general" law had 33.3 % in the upper half.

The "general" law ranked first in 1930 with 57.1 % of its counties in the upper 50 %; the Barnes law ranked second with 47.5 % of its counties in the upper 50 %; and the community law ranked third with 43.5 % of its counties in the upper half.

It was found in the previous study [2] that the Barnes law was the most conducive of the three county laws to secondary education in Kansas in 1915. In only one test of the seven tests applied did the Barnes law not show superiority. That test was for the preparation of teachers.

In 1930, the community law ranked first in four of the seven tests but third in the three remaining tests. The Barnes law ranked first in one test and second in four of the tests. The "general" law ranked first in two tests, second in three tests and third in two tests.

To determine a final ranking of the three county laws, the ranks of each law may be added and divided by seven, the number of tests of efficiency. The law having the lowest quotient should have the highest rank.

In 1930, the community law was operating the most effectively according to the seven tests of efficiency; the "general" law second; and the Barnes law third.

CONCLUSIONS

The data collected and presented in this study reveal the following facts:

1. That the high schools of Kansas operating under the three laws were serving their constituency more effectively in every way tested in 1930 than they were in 1915. This is evidenced by the following:

   a. The percentage ratio of enrollment to census was from 24.75 % to 8.47 % in 1930, Table IV, p. 21-

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[2] ibid.

25, while in 1915 the ratio ranged from 13.22 % to 2.41 % as shown in Table III, p. 17-20.

b. Kansas high schools had enrolled 17.06 % of the population of school age in 1930, while only 8.51 % of the school population was enrolled in 1915 as shown in Table VIII, p. 29 and Table VII, p. 28 respectively.

c. Table XIII, p. 36 and Table XIV, p. 37 shows that the percentage of persistence in 1930 was 31.03 % while in 1930 it was 39.71 %.

d. In 1915 the median preparation for teachers was 6.66 years above the eighth grade, Table XV, p. 42 while in 1930 it was 7.34 years above the eighth grade, Table XVI, p. 45.

e. The median salary for teachers in 1930 was $163.49 as showni in Table,XX, p. 54 while in 1915 it was $86.66, Table XIX, p. 52.

f. The median salary for superintendents and principals in 1930 represents more than twice the median salary in 1915 of $1014 as shown in Table XXIII, p.61 and Table XXII, p. 59 respectively.

g. The median volumes per pupil was 4.85 Table XXVI, p. 67 while in 1930 it was 10.02 volumes per pupil as shown in Table XXVII, p. 69.

h. The ratio of opportunity ranged from .9 to 162.2 in curriculum in 1930, Table XXXIII, p. 79-80 while Table XXXII,p.76, 7.4 to339 which indi-

cates the higher rank, in 1930.

2. That the teachers had received a greater amount of preparation and training for their supervision and teaching in 1930 than in 1915. This was evidenced from the following:

a. The years of preparation above the eighth grade ranged from 3 to 8 years in 1915, Table XV, p. 41-43, while in 1930 it ranged from 6.14 to 8 years, Table XVI p. 44-47.

b. The median** average preparation above the eighth grade for all counties in 1930 was 7.34 years, Table XVI, p. 45, while in 1915 it was 6.66 years as shown in Table XV p. 42.

c. The average years of preparation in 1915 for each county law was Barnes 6.12, county 6.65, "general" law 6.65; while in 1930 the average for each county law was Barnes 7.27, community 7.37, and the "general" law was 7.25 as shown in Table XV, p. 41-43 and Table XVI, p. 44-47.

3. That the law under which the county operated its high schools was not a determining factor in 1930 to the extent that it was in 1915. This was shown from the following facts:

a. The Barnes law ranked first in six of the seven tests in 1915, Table III, p. 17-20, Table IX, p. 30-32, Table XV, p. 41-43, Table XIX, p. 51-53, Table XXII, p. 59-60, Table XXVI, p. 67-68, Table XXXII, p. 76-77.

b. The Barnes law ranked first in one of the seven tests in 1930, in percentage of population in

** Median of the averages for all counties.

attendance, Table VI, p. 26; second in four tests, preparation of teachers, Table XVI, p. 44-47; salaries of teachers, Table XXI, p. 56; salaries of superintendents and principals, Table XXV, p. 65; curriculum, Table XXXV, p. 82; and third in two tests, persistence of attendance, Table XXII, p. 35 and library, Table XXIX, p. 72.

c. The community law ranked first in four tests of the seven tests in 1930, persistence of attendance, Table XXII, p. 35, preparation of teachers, Table XVI, p. 44-47, principals and superintendents' salaries, Table XXV p. 65, library facilities, Table XXIX, p. 72, and third in three tests, per cent of attendance, Table VI, p. 26, teachers' salaries, Table XXI, p.56, and curriculum, Table XXXV p. 82.

d. The "general" law ranked first in two tests, teachers' salaries, Table XXI, p.56, curriculum, Table XXXV, p. 82; second in three tests, per cent of attendance, Table XII, p. 35, library, Table XXIX, p. 72; and third in two tests, preparation of teachers, Table XVI, p. 44-47, salaries of principals and superintendents, Table XXV, p. 65.

4. The range of opportunity was greater and more uniform in 1930 than in 1915.

a. Teachers' preparation in 1915 ranged from 3 to 8 years above the eighth grade, Table XV, p. 41-43, while in 1930, teachers' preparation ranged from

6.14 to 8 years, Table XVI, p. 47.

b. In curriculum in 1930 the range in breadth of curriculum was from .9 to 102.2, Table XXXIII, p. 79-80, while in 1915, it ranged from 7.4 to over 339, as shown in Table XXXII, p. 76-78.

c. Library facilities in 1930 were greater than in 1915 as shown inn Table XXVII, p. 69-70 and in Table XXVI, p. 67-68. The volumes per pupil in 1930 ranged from 3.68 to 11.65, while in 1915 it ranged from none to 11.65 volumes per pupil.

d. Table XXXIX, p. 96-98, shows that the total scores from the seven tests ranged from 183 to 614 with a median of 372, in 1930, while in 1915, Table XXXVIII, p. 92-95, shows the scores ranged from 156-719 with a median of 364. The median was not only higher in 1930 but the range was not nearly as wide.

5. Problems have become larger and more complicated in 1930 than in 1915.

a. In 1915, Table VII, p. 28, shows 8.51 % of the school population in high school while in 1930, Table VIII, p. 29, shows 17.06 % of the school population in high school.

b. That more pupils remained to complete the third and fourth years of high school in 1930 than in 1915 is shown by comparing Table X, p. 32-34 and Table IX, p. 30-32, since the range was 22.46 % to 46.79 % in 1930 and only 12 % to 40 % in 1915.

c. There was a greater number of books for libraries for 1930 than for 1915. Table XXVI, p. 67 shows the median average number of volumes per pupil in 1930 was 10.2 while in 1915, the average number of volumes per pupil was 4.85 as shown in Table XXVII, p. 69.

d. Curriculum was braader and included more subjects in 1930 than in 1915. Table XXIII, p. 79, shows a smaller median ratio of 4.2, indicating a higher rank than the corresponding median of 35.8 in Table XXXII, p. 77 for 1915.

6. That salaries were higher for teachers and administrators in 1930 than in 1915 is shown by the following facts:

a. The median salary for all teachers of all counties in 1930 was $162.49, Table XX, p. 54, while in 1915 the median salary was $86.66, Table XIX, p. 52.

b. The median salary for superintendents and principals in 1930 for all counties was $2258.33 per year as shown in Table XXII, p. 61, while in 1915 the median salary was $1014, Table XXII, p. 59.

c. Salaries ranged from $97.59 to $60.00 per month for teachers in 1915, Table XIX, p. 51-53, while in 1930 salaries for teachers ranged from $176.60 to $139.42, Table XX, p. 53-55.

d. Salaries for superintendents and principals ranged from $1109 to $679 per year in 1915, Table XXII, p. 59-60, while in 1930 the sala-

ries ranged from $3105.71 to $1643.40, Table XXXII, p. 61-62.

7. Library facilities are not greatly affected by the county law under which the high school operates. This fact is shown by the following:

a. In 1915, the Barnes counties had 42 % of the total number of volumes of all high schools; the county law 24 %; and the "general" law had 33 % as shown in Table XXX, p. 73.

b. In 1930, the Barnes counties had 44 % of the total number of volumes of all the high schools; the community law counties had 19 %; and the "general" law 37 %.

c. A comparison of the first tertiles, Table XXVIII, p. 71 shows that the Barnes law had 31 % in the first tertile; the county law 31 %; and the "general" law 37 %. A comparison of the second tertiles of the same table shaws that Barnes counties had 54 % in the first tertile when ranked as to library facilities; the county law 11 %; and the "general" law 34 %. The per cents, for the three laws are about the same in the first tertile, and do not vary greatly in the second tertile.

d. A comparison of the three tertiles for 1930 does not show a wide variation . Table XXIX, p. 72, shows, in the first tertile for the three laws, Barnes, 27.5 %; community law, 39 %; "general" law 33 % .

A comparison of the second tertiles, for the three laws, Table XXIX, p. 72, shows that the Barnes law when ranked as to library facilities had 40 % of its counties in the second tertile; the community law had 21.8 %; and the "general" law had 33.3 % of its counties in the second tertile.

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