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A Study of Secondary Education in Muhlenberg County

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A STUDY OF SECONDARY EDUCATION IN MUHLENBERG COUNTY

BY

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INTRODUCTION

In beginning a detailed analysis of the problem of this study, it is best to set out the conditions in the Muhlenberg County schools as regards elimination by comparing them with other counties that have reorganized their schools, and with other high schools that are successful.

One of the anomalous features of the American system of education, organized though it may be for the democratic purpose of providing opportunities for all, is the absence of variety and elasticity. The elementary school retains its pupils up to the age of fourteen; without a flexible system of promotion each boy and girl is expected to pass through one grade in a year. Good, bad, or indifferent, few manage to reach the high school before the age of fourteen. For many pupils this system must mean mental retardation, since the progress is based on the speed of the average. By our postponing the age for beginning secondary education, the American boys and girls at the age of eighteen or nineteen are at least two, if not more, years behind the European boys and girls in intellectual attainment.[1]

The demand for efficiency made upon all public and private institutions during the last decade is beginning to have a decided effect upon the public school. More and more is the efficiency of high school education being questioned when looked at from a business standpoint by the trained educator. He concludes thus: if the majority of the pupils who graduate from the

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[1] W. L. Uhl, Principles of Secondary Education (New York, Silver Burdett and Company, 1925), p. 441.

elementary school regard a secondary education of enough importance to enter the high school, is the high school, then, to be considered an efficient institution when over one-third of all those who enter drop out by the end of the first year, with the result that fewer than one-third of the freshman class remain to graduate?[1]

In the majority of the Southern states the number of graduates falls as low as ten or eleven per cent of those who enter. But the fact that approximately eighty-six per cent do not complete the course indicates that most of those who thought it worth while to enter the high school do not find it possible or perhaps worth while, for various reasons, to complete the course.

When the searchlight of inquiry is turned on this high-school situation, the problem of elimination is recognized as one of the great number of outstanding problems. The modern trained educators, together with the practical business men, are demanding that the modern high school be so reorganized as to meet the needs of modern times; and that community needs, to a large degree, color the activities of the high school. They realize that the American high school was organized and was developed before our present complex industrial and social civilization had evolved. They know that during its early development the curriculum of the high school, its methods, ideals, and values were worked out and its aims and purposes were in most part determined with reference to social conditions and educational conceptions which no longer obtain. The function of the high school came to be the offering of certain fixed courses of study and the preparing of

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[1] Joseph Roemer, Function of Secondary Education (Nashville, Peabody College, 1920).

pupils to pass certain examinations demanded for admission to college, to which the high school was tributary. Certain traditional offerings in required subject matter were made, but the utilitarian value of the offerings in terms of social service was in no way emphasized. This condition, although it is gradually changing, is yet the predominating element in much of the high school's administration.

Since the burden of preparing the future citizen to meet the new social, industrial, and political conditions is being thrown more and more on the schools, the demand is growing more urgent that the spirit and the organization of the high school be changed to meet these conditions. As a result of these new demands, there has developed in many centers a modern high school, which has a diversified curriculum with free electives and which is dominated by the democratic spirit of giving the greatest service to the greatest number.

The high schools of the past and many of the present train students for college entrance, which is still a function of the high school; yet it is only one. The modern high school mentioned above, with its diversified curriculum, large range of electives, and inclusive social activities, prepares more pupils for college than the rigidly prescribed system of the past used to prepare. The modern high school also recognizes that its prime function is to prepare the vastly larger group to enter business and industrial life upon the completion of the high-school course. The ideal of the modern high school is that individual needs, interests, and aptitudes of the pupils be studied with the view of their becoming the basis of the entire school organization. Then a diversified curriculum is planned with practical and utilitarian ends in view, along with the so-called cultural ones.

Setting of study:--Muhlenberg County was established in 1789. It is

situated in the southwestern, middle portion of the state and is bounded by McLean, Ohio, Butler, Logan, Todd, Christian, and Hopkins Counties. The surface of the county is generally rolling, part of it broken; the northern portion is good farming land, and all the county is fine grass land and well timbered. The principal products are tobacco, corn, hay, and wood. But the great wealth of the county is coal and iron. Oil and gas in commercial quantities have been recovered. The area is 332,080 acres.[2]

There are two main towns: Greenville, the county seat; and Central City, the larger, with a population of 4,500. Both towns have fine school buildings.

The latest estimates of the Census Bureau[3] place the number of inhabitants of the county at 37,784, an increase of 4,431 since 1920. Less than one-half of one per cent of the population is foreign born.

A number of railroads traverse the county. Bus service connects the towns with other important surrounding towns and cities.

Green River, with its wide and fertile bottom lands, forms many miles of the county's northeastern boundary.

Highways:--The highways for which funds have been provided fairly vein the entire county. The program calls for 27½ miles of Federal and state-aid roads and 116 miles of county roads. The east and west central highway enters the county at the McLean County line, includes Central City and Greenville on its route, and crosses the Hopkins County line for connection with the Dixie B Highway in the latter county. The road traverses the county for a distance of twenty-nine miles, nine miles being coated with a

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2 Kentucky Directory and Blue Book, 1923, p. 62.

3 Richard M. Collins, History of Kentucky, Vol. II (1874) (Revised Edition).

rock asphalt surface and the remainder with a gravel surface. Surveys have been completed for roads connecting Central City with Rockport, on the Ohio County line; Greenville with the Todd County line by two routes; and Drakesboro with the Logan County line. Citizens have authorized the issue of bonds in the total sum of $500,000 for the purpose of improving the county's road system.

Educational:--Some of the pioneers of Muhlenberg were men and women of education and refinement, some were not, others occupied an intermediate position. The schoolhouses throughout the county were open only a few months each year. A short time after Greenville was founded, the pioneers built a one-story, two-roomed brick schoolhouse. This house was used many years, both as a schoolhouse and as a place of worship. It was usually known as the Greenville Academy but is sometimes referred to as the Greenville Seminary.

None of the schools in Muhlenberg County went beyond primary work until about 1850, when post-primary classes were first taught by Professor William Lewis Green, who is regarded as the first teacher of higher education in the county. During the course of the second half of the last century five colleges were organized.

There are 12 high schools for whites in Muhlenberg County and 3 high schools for colored, giving employment to 42 white teachers, and 14 colored teachers, respectively. The 73 elementary schools for white children employ 106 teachers, and the 12 elementary schools for colored children employ 15 teachers. County school reports give 8,220 as the average number of pupils in attendance at these schools during the 1926 period. Both the Central City and the Greenville high schools are Class A, the latter being also an accredited member of the Southern Association of Colleges and Secondary Schools. No colleges or private schools are located in

Muhlenberg County.

Nature of the problem.--Muhlenberg County has expended thousands of dollars to build and equip school buildings and thousands more for teachers to teach in them. The writer believes that it would be well to make a study of the conditions as they exist at the present time and see if what is being taught and how it is being taught in these buildings is the thing desired from the standpoint of worth and usefulness.

The county unit system is being used in other counties and states. Why will it not work successfully in this particular county?

Eminent educators of America say that the junior high school is a success in many respects. A study along this line of thought should indicate certain trends and possibilities for Muhlenberg County. Reorganization, in this study, is to be treated relative to its function as an educational activity. By reorganization is meant the process of systematizing education or making it anew.

STATEMENT OF PROBLEM

1. To discover a sound, practicable, and economic plan for distributing and administering schools for the upper six grades.
2. To determine whether it would be efficient and sound for all of the schools of Muhlenberg County to be under the county unit system.
3. To study the existing conditions relative to the number of small, weak high schools existing in Muhlenberg County.
4. To show that the efficiency of the system of county schools might be increased if they were reorganized under the 6-6 plan of organization.

Scope of study:--This study deals principally with the county high schools. One city school of Muhlenberg County and the high schools of Fayette County are used for comparison in some respects. The colored schools are not taken into consideration, nor are the grades of the white schools used. Other studies should be made in this field.

Purpose of study:--This study is attempted with the thought that some

of the many weak points of the small, struggling high schools may be brought to light and that some plans of reorganization may be suggested that will be profitable for all concerned. The writer has been the principal of a Muhlenberg high school and realizes some of the difficulties under which the schools are laboring and the utter impossibility of meeting the ever-increasing standards of the state department and society unless some changes are brought about. It is believed that studies of a similar nature for other counties in the state will be made and thereby bring about a state-wide program of reorganization and superconsolidation for small high schools.

Sources of data:--The data were secured from the following sources:

1. From the office of the county superintendent.
2. From the Biennial Report of the State Superintendent.
3. From questionnaires sent to county superintendents.
4. From year books and other county and state records in the library.

Limitations:--The writer has been handicapped in this study by not being able to obtain all the data for the same year, but he has been able to secure it over a period of time sufficiently close that general trends may be shown.

Need of study:--To justify such a study as this one need but consider the number of students that the high school loses at the beginning and every year thereafter throughout the course. Again, if one will only compare the offerings of large consolidated high schools with the offerings of these small schools, it is evident that some reorganization needs to take place in order that some equalization of opportunities for every boy and girl of high-school age in the smaller communities should be provided.

Method of treatment:--The method of treatment is comparative and statistical. The county high schools of Muhlenberg County are taken as a basis for study and compared with the largest city school in Muhlenberg

County. Also the county high schools are compared in some respects with the Fayette County high schools, this being done because Fayette County, with the exception of the city of Lexington, is using the county unit system.

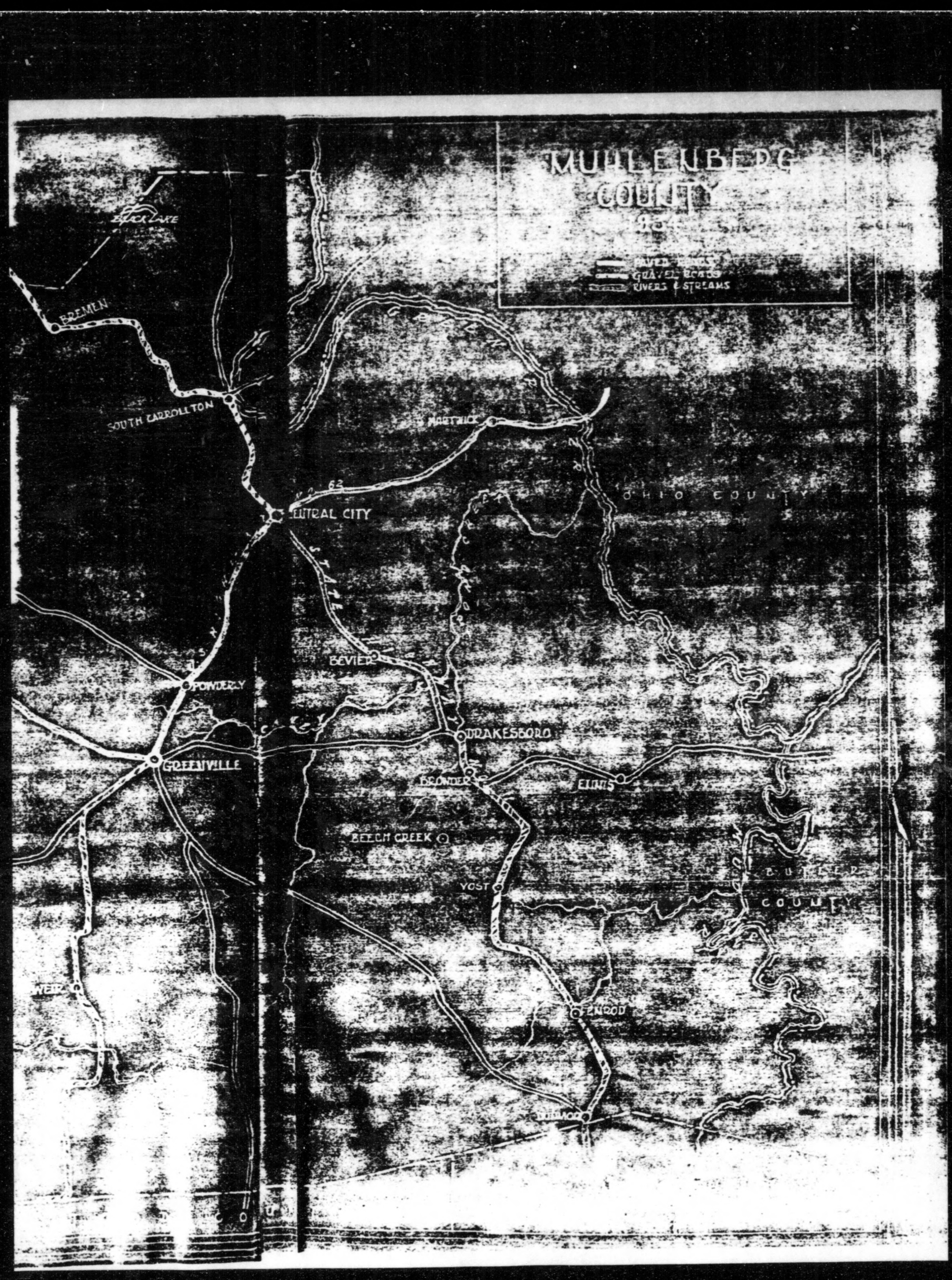
A map showing the location of the county high schools, the condition of the roads, and the distance between these schools is included at this point in order to show the possibility of a superconsolidation program.

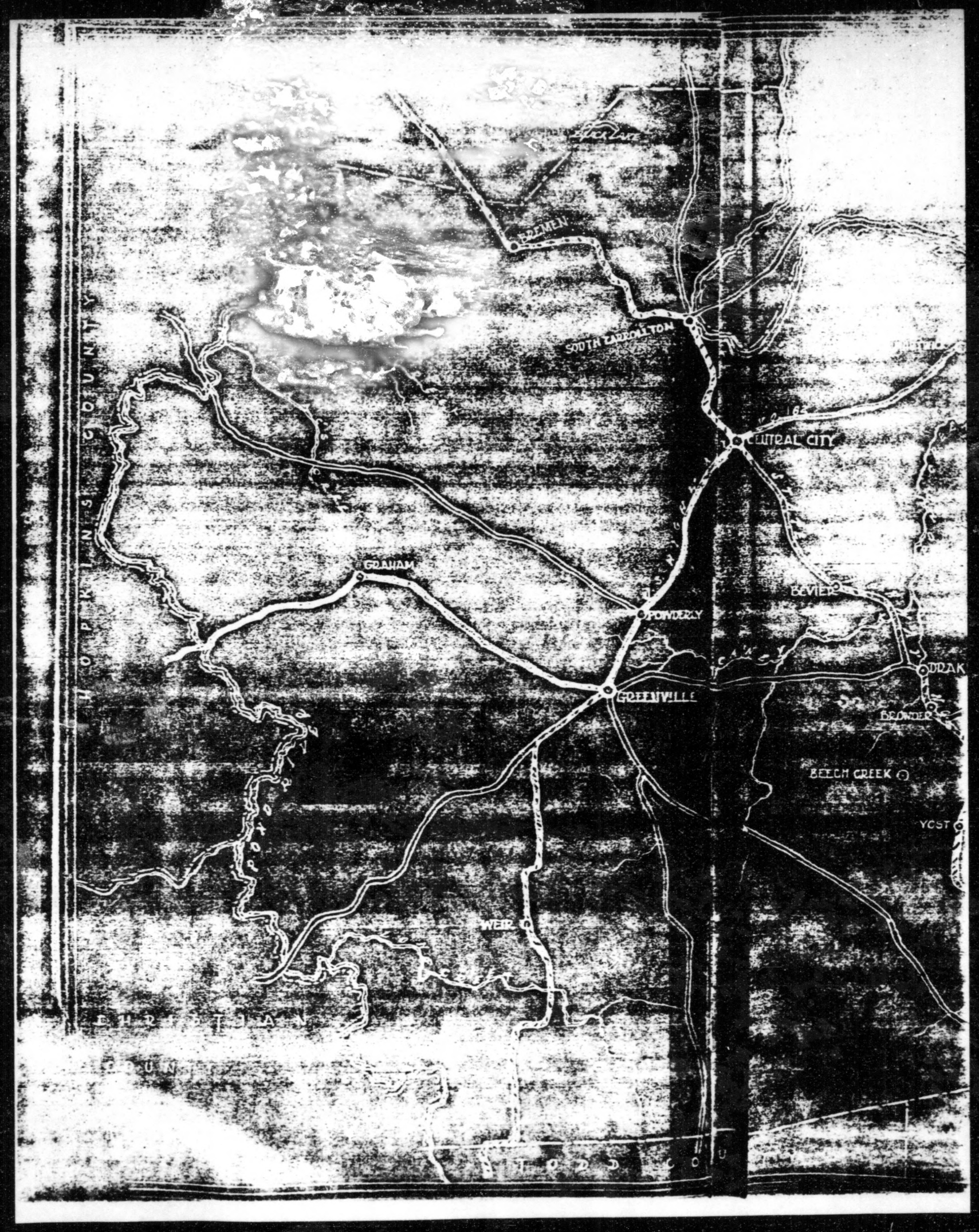
TABLE I

TEACHING STAFF AND ORGANIZATION OF HIGH SCHOOLS IN MUHLENBERG COUNTY--1928-29.#

	1	2	3	4	5	6	7	8	9	10
Years in course	4	4	3	4	4	4	2	2	4	4
Academic relations	A	B	-	B	A	B	-	-	S.A.	S.A.
Total number of teachers	5	3	2	3	6	5	2	2	11	12
Men	2	2	1	2	3	2	1	2	3	1
Women	3	1	1	1	3	3	1	0	8	11
Full-time	5	3	1	2	6	5	1	2	10	11
Part-time	0	0	1	1	0	0	1	0	1	1
4 or more yrs. of college	5	2	1	2	5	3	0	0	10	10
2 to 4 yrs. of college	0	1	1	1	1	2	2	2	1	2
Less than 2 yrs. of college	0	0	0	0	0	0	0	0	0	0
Number of days taught	172	174	175	180	175	175	177	175	177	178
Length of recitation period	40	40	40	40	40	40	40	40	50	45
Number of periods in day	8	8	9	9	8	8	10	8	6	6
Maximum number of recitations per pupil per day	4	5	5	5	5	5	6	5	5	4
Maximum number of recitations per teacher per day	6	6	7	6	6	6	8	6	5	6
Average number of recitations per pupil per day	6	4	4	4	4	4	5	4	4	4
Average number of recitations per teacher per day	5	6	6	6	6	6	5	6	5	5
Average pupil per week per teacher	27	510	208	465	750	600	75	420	550	625
Minimum time required for graduation	3½	3½	3	3½	3½	3½	2	2	3½	4

Taken from Biennial Report of State Superintendent, 1929.


MUHLENBERG COUNTY
GRAVEL ROADS
RIVERS & STREAMS
BLACK LAKE
BREMEN
SOUTH CARROLLTON
MORTON
63
OHIO COUNTY
CENTRAL CITY
STATE
BEVIER
POWDERLY
DRAKESBORO
GREENVILLE
BROWDER
ELLIS
BEECH CREEK
YOST
BUTLER
COUNTY
ENGLOD


HOPKINS COUNTY
FREMEN
SOUTH CARROLLTON
CENTRAL CITY
GRAHAM
PONDERAY
BEVIER
DRAK
GREENVILLE
BROWDER
BEECH CREEK
YOST
WEBS

From Table I we see that some of the county schools have as many as ten periods per day, while the maximum of the two larger schools, No. 9 and No. 10, is six periods per day. The maximum number of recitation periods per teacher per day in the county schools is eight, while in the others it is six. One county high school allows a maximum of six recitations per pupil per day. Ordinarily it is four. The table shows this for the larger schools. The average pupil period per week per teacher has a range from 27 to 750. The other two schools show a range from 550 to 625. The length of the recitation period is shorter in all of the county schools of Muhlenberg. Looking at the teaching staff, one finds ten teachers in Muhlenberg without four years of college. For the other schools there are three without degrees, but two of these are part-time teachers. Of the eight county schools, two are class A, three are class B, and three are not accredited. No. 9 and No. 10 are both S. A. schools.

TABLE II

LIBRARY, PLAYGROUNDS, LABORATORY EQUIPMENT, ETC., OF MUHLENBERG COUNTY SCHOOLS, 1928-29.#

Value June 1929	1	2	3	4	5	6	7	8	9	10
Value of bldgs, and grounds used for high schools	120,000	5000	4000	2,000	50000	30000	400	2500	105,000	90,712
Lab. equip. added this year	0	0	0	225	1290	150	0	0	575	150
Lab. equip. at close of year	225	275	0	225	1520	650	0	0	1650	600
Maps, charts, globes added this year	0	0	5	0	0	0	0	0	0	0
Maps, charts, globes at close of year	60	0	5	0	0	0	0	0	140	500
Musical instruments added this year	0	100	0	0	0	0	0	0	993	0
Musical instruments at close of year	250	100	0	150	300	175	0	0	1292	0
Playground and gym, equip. added this year	0	90	0	85	500	20	0	0	0	0
Playground and gym, equip. at close	5000	90	0	85	500	50	0	0	0	650
General equipment	925	600	250	400	3000	5000	97	650	4000	2500
Volumes in library added	490	78	44	75	200	150	55	150	300	0
Volumes in library at close	925	520	60	225	700	550	55	150	1150	600
Principal's salary	3000	1575	1350	2000	1890	1644	1260	1209	1800	1800
Total paid full-time teachers including principal	7116	3825	2393	4430	9180	6296	1260	2338	13455	16065
Average of full-time teachers including principal	1543	1275	1196	1215	1530	1259	1260	1169	1345	1422
Total paid part-time teachers	0	0	0	0	0	0	0	0	900	1125
Total paid principal and teachers	7116	3825	2393	4430	9180	6296	1260	2338	14355	7190
Total expense other than teachers' salaries	370	3215	130	800	3458	1090	134	155	12235	3080
Total cost of school	7486	7040	2523	5230	12638	7386	1394	2493	26590	10270
Per capita based on average daily attendance	71	89	70	163	89	66	75	103	105	80

Taken from Biennial Report of State Superintendent, 1928-29.

From Table II let us take No. 4 as a sample of the small high school and compare it with No. 9 and No. 10 as to the opportunities offered to its high-school students so far as physical equipment counts. We find that No. 4 has a laboratory valued at $225 against $1650 and $600, respectively. General equipment is valued at $400, against $4000 and $2500 for the other two schools. The library contains 225 volumes, against 1150 and 600 volumes, respectively, for the other schools. The per capita cost based on average daily attendance for No. 4 is $162, while for No. 9 it is $105 and for No. 10 $80. This means that the smaller school in this case is costing twice as much per child, yet the opportunities are far less than the consolidated and larger schools. According to this table the smaller the school the more the cost per child to operate it.

TABLE III

SCHOOL FUNDS RECEIVED AND SOURCE. 1929.#

Funds received and source	Muhlenberg Co.	Fayette Co.	Central City, Ky.
State fund	85,208	41,522	12,259
Local tax	66,000	196,523	43,709
Bonds, etc.	- - -	10,000	6,500
Other receipts	35,285	8,803	1,180
Total receipts	186,492	256,849	63,649

Taken from Biennial Report of State Superintendent, 1929.

TABLE IV

SCHOOL EXPENDITURES 1929.#

EXPENDITURES	Muhlenberg Co.	Fayette Co.	Central City, Ky.
General control I a. salaries	2400	3000	3600
General control I b. overhead	2447	7394	640
Instruction salaries	129,980	120053	31,637
Instruction, other expenses	1,913	10,687	814
Operation	4,785	12,848	3,916
Maintenance	3,335	7,281	3,453
Auxiliary	8,926	21,160	69
Fixed charge	16,884	8,756	257
Capital outlay	18,550	44,656	6,696
Debt service bonds	- - -	10,000	9,359
Debt service interest	- - -	250	2,380
Total expenditures	189,222	251,069	62,825
Balance 7-1-28	4,168	17,346	6,352

Taken from Biennial Report of State Superintendent, 1929.

Tables III and IV show that from the state fund Muhlenberg County received $85,208, Fayette $41,522; from local taxation Muhlenberg received $66,000, Fayette $196,523; with a total of $186,492 for Muhlenberg and $256,849 for Fayette. According to Tables VII and IX the former has 450 high-school students to educate, whereas the latter had 956 in the last four years. For instruction salaries Muhlenberg spends $129,980; Fayette spends $120,053, nearly $10,000 less for this item, yet educates a larger number of children per year. The figures are not given so that the value of buildings and grounds may be compared.

TABLE V.

EDUCATIONAL ASSETS, 1928.#

Assets June 1928	Muhlenberg Co.	Fayette Co	Central City, Ky.
Balance 6-30-29	1,438	23,107	7,176
Value of buildings	111,000	441,589	180,000
Value of equipment	10,922	64,124	5,300
Total liabilities	4,809	- -	44,800

Taken from Biennial Report of State Superintendent, 1928.

This table compares the amounts invested for physical equipment in the three school systems. The value of buildings in Fayette County is four times that of Muhlenberg, and equipment is valued at six times as much. This indicates, so far as physical equipment is concerned, that the opportunities for getting a well-rounded high-school education are much less in Muhlenberg County than in Fayette County or Central City.

TABLE VI

COST OF INSTRUCTION PER CENSUS PUPIL IN TWENTY-ONE COUNTY SCHOOL DISTRICTS HAVING A TAX RATE OF $.75, SCHOOL YEAR 1929-30.#

Name of District		Cost of instruction per census pupil		
No.		Local	State	Total
1	Grant	20.76	8.15	28.91
2	Ballard	20.68	8.15	28.83
3	McCracken	15.47	8.15	23.62
4	Caldwell	11.34	8.15	19.49
5	Carroll	11.22	8.15	19.37
6	Graves	10.70	8.15	18.85
7	Livingston	10.48	8.15	18.63
8	Boyd	10.05	8.15	18.20
9	Calloway	9.27	8.15	17.42
10	Breckinridge	8.88	8.15	17.03
11	Letcher	8.14	8.15	16.29
12	Meade	7.96	8.15	16.11
13	Muhlenberg	6.01	8.15	14.16
14	Carter	5.74	8.15	13.89
15	Knott	4.96	8.15	13.11
16	Magoffin	4.05	8.15	12.20
17	Rockcastle	4.01	8.15	12.16
18	Clinton	3.28	8.15	11.43
19	Knox	1.85	8.15	10.00
20	Elliott	1.80	8.15	9.95
21	Jackson	1.29	8.15	9.44

Taken from Biennial Report of State Superintendent, 1929-30.

This table lists in order the names of twenty-one county school districts that levied a tax rate of $.75. It does not include the names of any graded or city school districts. Opposite the name of each district is given its cost of instruction per census pupil. Column No. 1 gives the amount paid from funds accruing from local taxation. No. 2 gives that accruing from state taxation. No. 3 gives the total. From this table we find that of the twenty-one counties levying a tax rate of $.75, Muhlenberg spends less than half as much as the highest ranking counties for instruction per census pupil. The cost of instruction per census pupil is $14.16, that being derived from a state fund of $8.15 and a local tax amounting to $6.01. Grant, the highest county in the list, has a cost of instruction per census pupil of $28.91, with a local tax of $20.76, which is $14.75 higher than Muhlenberg. Jackson county is the lowest, with a state tax of $8.15 and a local tax of $1.29. The range in local tax is from $1.29 to $20.76. Muhlenberg county is about midway in this group.

TABLE VII

ORGANIZATION OF NINE MUHLENBERG COUNTY SCHOOLS.#

Schools 1932	1	2	3	4	5	6	7	9
No. of H. S. teachers	4	5	2	2	7	5	2	10
No. of pupils enrolled in elementary grades	145	309	70	15	467	289	124	-
No. of pupils enrolled in high school	65	97	34	54	98	85	16	-
ninth	17	31	6	19	41	33	8	92
tenth	14	24	17	9	28	15	9	61
eleventh	17	21	5	15	12	22	-	47
twelfth	17	21	6	11	17	15	-	46
Per cent of total enrollment in H. S.	45	31	48	-	20	29	13	-

Taken from office of County Superintendent.

TABLE VIII

SALARY OF MUHLENBERG COUNTY HIGH SCHOOL TEACHERS.#

Schools 1933	1	2	3	4	5	6	7	9
	1680	1228	981	1680	900	1680	981	-
	688	675	643	733	859	855	724	-
Salary	724	362		724	706			
of	769	778			702	706		
teachers		684			720	688		
					643			
					652			

Taken from office of County Superintendent.

From tables VII and VIII we see that No. 5 has 7 high school teachers with only 98 pupils enrolled. Based on average daily attendance, this means that there is an average of 12 or 13 pupils to the teacher. Educators tell us that teachers in certain subjects can handle three times this many without any trouble resulting from overloading. No. 1 has 15 students per teacher based on A. D. A.# This school shows nearly the same number of students in each year of high school. No. 3 has 15 students per teacher. No. 7 has 17 high-school students with two teachers. Based on A. D. A., this would be about 7 or 8 per teacher, or one-fourth of what a teacher should have. Of the 141 in the entire school 12 per cent are in high school, showing a loss of 88 per cent somewhere along the line. No. 6 shows a teacher load of 15. No. 4 has 54 students with 2 teachers. No. 2 has 19 pupils per teacher. When we look at the total for all the schools, we see that there is only 17 per cent of the entire enrollment in high school. There are 450 students, enrolled with 27 teachers, or an average of 16 pupils per teacher. Based on A. D. A., this would mean about 14 pupils per teacher. The total cost of all teachers is $23,172.75, or $51.49 per pupil enrolled. This includes only teachers' salaries. In most subjects these teachers should be handling not fewer than 30 children each. This would mean a saving of 12 teachers, or about $12,000 on teachers' salaries alone. There is a total enrollment of 155 freshmen, 116 sophomores, 92 juniors, and 87 seniors. Approximately 68 per cent of the students have dropped out of school in the four years, or a loss of 32 per cent. The average high-school salary in Muhlenberg is $858. In Fayette it is $1097 per year.

It is estimated that on the basis of thirty pupils per teacher a saving of twelve high-school teachers could be made. There are approximately 450 students in the high schools. If these pupils could be transported to a

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Average daily attendance.

central point in the county, fifteen teachers might easily handle them. After studying the road map following page 8 and the location of the schools, the writer believes that there should not be over two high schools located in the county. This would leave Graham as it is. The ideal situation, though, would be to put one school building on the Russellville and Owensboro road half way between Bremen and Dunmor. If this were done, the maximum distance of transportation would be about fifteen miles, with the exception of Weir. The two independent schools, Bevier-Cleaton and South Carrollton, should be included in this set-up. It is believed that these two schools will eventually go to the county, anyway. The rooms in the buildings vacated by these changes could easily be used for the grades. There are a number of poorly equipped one-room rural schools near these high-school buildings. A consolidation program should be incorporated that would transport these children to the old high-school buildings and thereby eliminate many of the rural teachers who are carrying from one-third to one-half of a maximum load based on average daily attendance.

The saving in teachers' salaries would take care of the added expense of transportation in nearly every case. According to Dawson's Study,[1] the cost of transportation is $22.50 per pupil annually. On the basis of 450 high-school pupils transported, the annual cost would be approximately $10,000.

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[1] Howard A. Dawson, op. cit., p. 330.

TABLE IX

FAYETTE COUNTY HIGH SCHOOL ORGANIZATION#

3 Fayette County H. S.	1	2	3
No. of H. S. teachers	15	7	14
Salary of H. S. teachers	15,667	7,631	16,204
No. of pupils enrolled in grades	318	213	481
No. of pupils enrolled in H. S.	473	133	350
No. in 7th grade	111	21	79
No. in 8th grade	84	29	98
No. in 9th grade	93	20	61
No. in 10th grade	87	24	44
No. in 11th grade	54	26	34
No. in 12th grade	44	13	34
Average daily H. S. attendance	460	128	342

#Taken from office of County Superintendent.

The following questionnaire was sent to Superintendent D. Y. Duke, of the Fayette County schools, after that county was selected as a basis for comparison with the Muhlenberg County schools. The questions and answers are as follows:

1. Q. Are all of the high schools in your county under the county unit system?

   A. Yes, with the exception of the city of Lexington.

2. Q. Under what plan are they organized?

   A. 6--6

3. Q. Is this plan successful in your estimation?

   A. Yes

4. Q. Do your high schools offer only the old classical program of studies?

   A. Partly classical and partly vocational.

The Fayette County schools have an average of 26 pupils per teacher in the high schools. There are 36 teachers handling 956 pupils in three high schools. Figuring the per-pupil cost on the basis of Muhlenberg at $51.49 would mean a total cost of $49,224 for teachers' salaries, whereas it is only $39,503, a saving of approximately $10,000 on this one item alone. The per-pupil cost for teachers in Fayette is $41 against $51 in Muhlenberg County. Fayette County enrolled 10 per cent of the 1932 census, ages 6-17 inclusive, in high school, while Muhlenberg County enrolled only 6 per cent.[1]

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[1] Taken from Biennial Report of Superintendent of Public Instruction, 1933.

TABLE X

DISTRIBUTION OF STUDENTS IN MUHLENBERG COUNTY 1928-29#

Schools	1	2	4	5	6	9	10
No. in ninth grade	19	20	10	30	31	92	73
No. in tenth grade	18	12	20	21	18	61	48
No. in eleventh grade	6	7	5	13	11	47	25
No. in twelfth grade	27	4	2	17	11	46	34
Total	113	86	37	139	125	411	264
No. in last year's graduating class	13	5	4	13	8	40	21
No. in last year's class in college	2	5	4	7	4	17	15

Taken from Biennial Report of State Superintendent.

From this table may be seen the number of students in each year of high school, the number in the preceding year's graduating class, and the number of students in the preceding year's class in college. The data are given for Muhlenberg County, Fayette County, and the Central City system. This table is used for the purpose of estimating the percentage of students attending college each year and comparing that with the other systems. We find a total of 43 in the graduating classes of Muhlenberg County, with 22 of that number attending college. This is 51 per cent of the class.

Looking at schools 9 and 10, we find 61 in the graduating class, with 32 of that number attending college. This is 52 per cent of the class.

TABLE XI

1932 DAILY SCHEDULE FOR THE JUNIOR HIGH SCHOOL#

	Teacher I	Teacher II
8:30 to 9:15	Algebra I	Geometry
9:15 to 10:00	Algebra II	Study Hall
10:00 to 10:15	Recess	
10:15 to 11:00	English I	Latin II
11:00 to 11:45	Study Hall	Latin I
11:45 to 12:30	Noon	
12:30 to 1:15	Occupations	Ind. Geog.
1:15 to 2:00	English III	Gen. Science
2:00 to 2:45	Extra-curricular activities	
2:45 to 3:30	English II	Problem of Dem.

Taken from office of County Superintendent.

This daily schedule of classes points out the limited offering of a small school. The principal subjects offered are English, foreign language, mathematics, and general science. The students have practically no choice in what they shall take. There are no industrial, commercial, or agricultural subjects in this program. The opportunities for students to choose vocational subjects are reduced to a minimum.

TABLE XII

PROGRAM OF STUDIES FOR SIX MUHLENBERG COUNTY HIGH SCHOOLS, 1932-33.

Subjects	1	2	3	4	5	6
English I	X	X	X	X	X	X
English II	X	X	X	X	X	X
English III	X	X	X		X	X
English IV		X			X	
Algebra I	X	X	X	X	X	X
Geometry	X		X	X	X	X
History	X	X	X	X	X	X
Home Economics	X				X	X
Manual Training					X	X
French					X	
General Science						
Physics		X			X	
Occupations	X		X			
Latin	X		X			
Industrial Geography	X	X	X			
Agriculture	X	X		X		X
Biology		X		X		X
Typing		X				

From this table it is noticeable that only two schools offer manual training, three offer home economics, one offers typing, and four offer agriculture. The majority of the subjects in the program of studies are of a formal, set nature. For example, English, formal mathematics, and history have the major part of the emphasis.

CHAPTER III

EVALUATION AND INTERPRETATION OF DATA

This study was begun with the idea that a reorganization and superconsolidation program for Muhlenberg might be wise. The writer realized many of the difficulties under which these small high schools were laboring, and he, being a high-school teacher in that county, wished to give some help and inspiration that would put the school organization on a sounder basis; in the business world one would say to put it on a paying basis. If the schools are ever to be a success in this respect, they must certainly be looked at from this angle, or they are doomed to failure even before they start.

Does Muhlenberg County, as a unit of administration in secondary education, possess certain characteristics which render it a desirable unit through which to administer the high schools of the county? If this question could be answered for this county as it has been for others, the writer believes that one of the first steps toward a better and more efficient school system would be made.

In selecting the different items for comparing the efficiency of the small high schools of Muhlenberg with Fayette County, there was no intention to claim that these are the best indices to the educational status of the schools. This will at least show certain trends and possibilities of reorganization. In this comparison there was no hope that it would give the complete story of the county problem. In nearly every case the larger the school, the better it measured up to the best educational practices and standards. It is not claimed that in every case the cost was less, but it is believed that the cost in proportion to value received and efficiency obtained is less for the larger schools organized under the county unit system. From Table I it is evident that there is no set number of class

periods per day. Students in some schools are allowed to take six classes per day. Some teachers have as many as eight classes per day. The state department recommends six and in most cases five. It recommends four classes for students. The length of the recitation period is shorter in all of the county schools than in the schools they were compared with. Ten teachers were teaching in the high schools with less than four years of college training. Of the eight schools there were three unaccredited.

From Table II it was seen that many of the small high schools had scarcely any equipment. The per capita costs for these small schools in general was much higher than for the Fayette County schools. The larger schools are more efficient for the amount of money expended.

In Table IV the figures show that for instruction salaries Muhlenberg County is spending approximately $10,000 per year more money, yet it is educating a smaller number of children than Fayette. If the children could be brought together into one or two groups, much of this cost could be eliminated by increasing the teaching load.

From the total receipts in Table III it is evident that Muhlenberg County gets $70,357 less money than Fayette County, but the latter has more pupils to educate. Muhlenberg County should be giving its students equal opportunities so far as the equipment and materials that money can buy are concerned.

Table V shows us that the buildings of Fayette County cost four times as much as those in Muhlenberg County, yet the funds received each year by these counties does not justify this advantage in buildings. Nor does it justify the equipment for the latter being one-sixth as large as that of the former. Muhlenberg County has been spending too much for instruction salaries in proportion to the number of children educated. This is due largely to the small groups located in different sections of the county.

Table VI shows that of the $14.16, the cost of instruction per census pupil, the state tax amounts to $2.14 more than the local tax. The cost of instruction per census pupil of Muhlenberg County is $14.75 less than that of Grant County and $4.72 more than that of Jackson, the lowest of the group.

Table VII is evidence enough that the teachers of the county high schools are teaching about one-half of the maximum number of students based on average daily attendance. Teachers' salaries are costing $51.49 per pupil enrolled. The cost would be more for the A. D. A. Approximately twelve teachers could be saved by a consolidation project, provided that the transportation and a broader curriculum did not offset this saving. Fayette County accommodates more pupils, pays higher teachers' salaries, and spends less for instruction salaries than Muhlenberg County.

In Table VIII the total amount expended for high-school teachers' salaries is $23,165 annually. By dividing by 450, the number of students enrolled, we get $51.47 as the annual cost of instruction per pupil. The average salary is $857 per year. This is entirely too low for a high-school teacher. School No. 4, with two teachers, pays its principal $1680 per year; while No. 5, with seven teachers, pays its principal $900. This seems to be out of proportion. The principal should be paid according to his training, experience, and the number of teachers under his direction.

From Table IX it is estimated that the Fayette County teachers have about 26 pupils per teacher in comparison with about 13 for Muhlenberg. The per-pupil cost in the former is $41.00, against $51.00 in the latter for teachers' salaries. In answering the questionnaire, Superintendent D. Y. Dunn, of Fayette County, says that the county unit system is a success, the 6--6 plan is better than the 8--4 plan, and vocational subjects are being incorporated in the high school.

Table X compares the number of graduates and the number attending college in three school systems. There were not any noticeable differences in these relative percentages.

Tables XI and XII give a sample daily schedule and a list of the subjects offered by the high schools. Students have very little choice in what they shall take. Practically no vocational subjects are offered in the program. There is too much attention given to the classical subjects.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

An intensive study of eight small high schools of Muhlenberg County, according to standard score cards, the physical plants, and educational equipment, revealed that they were inadequate with one or two possible exceptions. The administration, supervision, teaching staff, and curriculum, when measured in the light of best practice as set forth by school authorities, were found to be deficient. The preparation and training of teachers for the most part is the only exception. The per-pupil costs in some instances were lower than those in the larger schools, but they were maintained by sacrificing standards.

It is evident that the high schools are organized on the wrong basis. The basal occupations of a community should be the determining element in the organization of its high-school course of study. The high schools are preparing their pupils for one calling, while in fact the pupils are entering others. For example, the chief emphasis is falling on the classical and traditional courses, which prepare primarily for college entrance and pave the way for professional careers, although only about five per cent of the students will ever enter the professions.

The very fact that the few who do graduate value their high-school education in terms of college entrance explains why the great groups that drop out of high school to enter the industrial, commercial, or agricultural fields place so little value on high-school education.

The training given in the high school is considered primarily as a means to an end, or preparation for college entrance, with little thought of its being an end in itself, such as training for immediate vocations. This forces students who plan non-college careers to seek special schools for training which they should receive from the high school. Heavy elimination

is but proof of the fact that these high schools are playing a very small part in the lives of their pupils. If the program of studies for Muhlenberg high schools could be enlarged and enriched to the point that a student could choose the subjects leading up to his life's vocation, there would be no question of the increased benefit.

The lack of co-ordination between training given and occupations followed by the students, together with the lack of intelligence displayed in the evaluation of the various subjects, evidence the great need of vocational guidance in these schools.

If Muhlenberg County, as a unit of administration in secondary schools, can sufficiently equalize educational opportunities by controlling conditions of maintenance, distribution of schools, administrative organizations, physical equipment, student population, teaching force, and programs of study, then progressive education will endorse it.

It is believed by the writer that some communities in Muhlenberg County have established high schools which they can illy afford to support and have pauperized the elementary schools to carry on the project. Antiquated, unhygienic buildings, poorly prepared and poorly paid teachers, and overcrowding are the price paid by the many to provide a high-school education for the few.

Recommendations

1. There should not be over two high schools located in the county. One is suggested. This does not include Central City or Greenville. If one is operated, it should be located on the highway half way between Bremen and Dunmor. If there is another, it should be at Graham.

2. Teachers should be paid according to qualification, training, and experience. Men with the highest qualities of leadership should be placed at the head of these schools.

3. The students should be transported to these central schools, leaving the vacated rooms in the old buildings to be used for a consolidation of the near-by one-room schools.

4. The emphasis in the program of studies should be shifted from the classical and traditional to the scientific and vocational point of view.

5. More emphasis should be placed upon the newer modern languages and practical arithmetic.

6. The content of the social science group should be changed so that there would be more work done in civics and American history and less in ancient and medieval history. Instead of freshmen and sophomore classes starting on ancient and medieval history, they should be given more civics, American history, and history of modern Europe.

7. The practical arts and commercial work should be greatly increased. Music and drawing should be included. This reorganization and redirection of the program of studies along the lines suggested above should vitalize these high schools more and bring them into closer touch with the life and vocational activities of the people they serve. This would mean, necessarily, a shifting of the point of view and, consequently, a changing of the emphasis from the classical and traditional to the scientific and vocational.

8. These schools should be organized on the 6-6 plan of organization.

9. The schools could be easily organized under the county unit system.

10. The laboratory equipment, library, and other physical material should be enriched to meet the need of the student body.

11. No teacher should be allowed to teach in a field that he has not majored in, and in no subject in which he has fewer than twelve semester hours.

CHAPTER V

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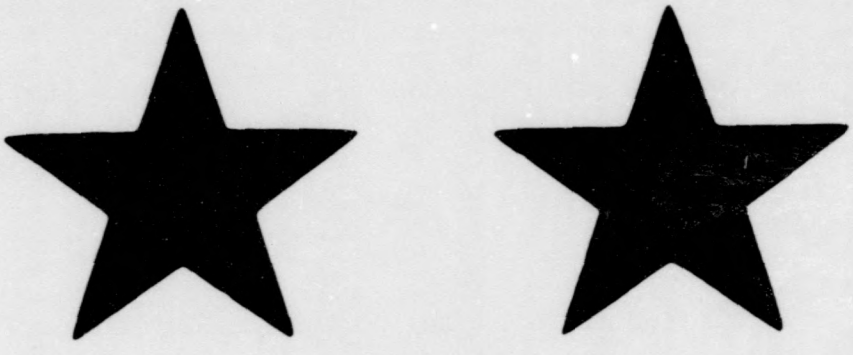
1947

CORRECTION



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