

A STUDY ON THE APPLICATION OF THE COOPERATIVE
SCHOOL LAW TO RUSH COUNTY

by

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INTRODUCTION

The elimination of the small one-room rural schools is one of the major educational problems in Kansas. Their inefficiency, the generally lower scholastic achievements of their pupils (1, 2, 3), and the inability of their small enrollment to provide the social and cultural contacts which are necessary for the best development of every child have made them one of the greatest obstacles to educational progress in the state. These inherent weaknesses of the district system of schools have long been a problem for thought and solution by educators, school officials, and writers (1, 10, 11).

The first solution, that of consolidation, which began in Kansas in 1897 (1), did not solve the problem to any appreciable extent. The idea of consolidation was not well taken by the people in rural areas. Their coolness probably was due to the increased cost and to sentimental reasons (1). Transportation may have been a factor in the early part of the century, but as automobiles and good roads increased the number of consolidated districts organized decreased (1).

As the years passed and the number of consolidated schools organized decreased with improved transportation, it became apparent that consolidation would not solve the

rural school problem. Educators began advocating a substitute plan which called for the cooperation of districts instead of consolidation (1). Legal provision for carrying this plan into effect was made by the legislature in 1935 when Senate Bill Number 322 became law (4). This plan differs from the consolidated school plan in the following respects: 1. No new district is formed. The cooperating district retains its officers and it is neither disorganized nor united with another district. 2. The cooperating district cannot be taxed for buildings or maintenance outside its own district. 3. Temporary closing of a school is possible, which gives school districts an opportunity to experiment with the cooperative plan. Should they become dissatisfied with the plan, they may withdraw at the end of the school year and function as before.

In substance the cooperative plan would provide the rural districts with the opportunity of enjoying the advantages of consolidation without actually consolidating.

The cooperation of districts with many of the small grade schools of the state was encouraged by the passage of Senate Bill Number 125 by the legislature in 1937 (4). As grade schools eligible for state aid will receive approximately \$3.00 per month state aid for each additional student, it should not be necessary for districts cooperating

with them to pay tuition¹.

At the present time the financial saving, as well as the educational gain, is so great for many districts that they can well afford to cooperate wherever it is feasible. In view of these facts the author wishes to present a cooperative school plan for Rush County. The plan includes proposals for eight cooperative areas which will be designated as follows:

1. The McCracken Area.
2. The Bison Area.
3. The Otis Area.
4. The La Crosse Area.
5. The Rush Center Area.
6. The Alexander Area.
7. The Tinken Area.
8. The Nekoma Area.

The data used in this study were taken from the records in the offices of the Rush County clerk and superintendent of schools.

¹The grade schools in Rush County have required tuition at the rate of \$2.00 per month.

THE PROBLEM STATED

The purpose of this study is to develop plans for eliminating a number of the small one-room rural schools in Rush County by the cooperation of districts; and to show that a financial saving and an educational gain would be provided by organizing cooperative schools. These results are to be achieved by making more complete use of the facilities (except in one case) now available in the grade schools of the county.

TOPOGRAPHY AND HIGHWAYS OF RUSH COUNTY

The topography of Rush County is favorable for carrying out the cooperative school plan. The location of the county in the dry and level plains region makes travel by car less difficult and muddy roads do not prove the hazard that they are in the eastern counties of the state. Two all-weather state highways run from east to west through the central part of the county. Four all-weather county and state highways traverse the county from north to south. The schools located on the crossroads of these highways are favorably located for cooperative schools. (In this discussion the central school of the cooperating area will be referred to as the cooperative school. The district schools which send their pupils to the cooperative school will be referred to as the cooperating schools.) A study of Fig. 1,

page 10, shows the favorable road systems and location of cities for organizing cooperative school areas in the central and southern parts of the county.

DATA ON THE PUBLIC SCHOOLS OF RUSH COUNTY

The large number of grade schools in the county facilitates the cooperative school plan. These grade schools can accommodate additional students without impairing their efficiency.

Table 1. Significant Facts Relating to the Rush County Schools

Type of School	Number of Schools	Number Pupils Enrolled	Number of Teachers	Average Salary
Rural Schools	37	667	37	\$59.25
Graded Schools	9	736	27	76.60
Consolidated	1	95	4	70.00
Parochial	3	26	3	-- --
High Schools	5	553	30	-- --

A general survey of Rush County reveals the general lack of qualifications among the rural teachers of the county. The poor qualifications of a great majority of these teachers should be a good argument in favor of the cooperative school idea in the county. Data obtained from the records of the county superintendent revealed the following facts relating to the rural school teachers of the county: Fifty-one per cent have less than three hours of college preparation. Forty per cent have less than two

years of experience. Seventy-nine per cent do not have the equivalent of one year of college. Only five and one-half per cent hold life certificates.

Table 2. Certification and Qualification of
Rush County Teachers

	One- Teacher	Two- Teacher	Grade School
Normal Training	7	0	2
Second Grade County	13	1	2
First Grade County	28	2	12
Three-Year State Life	8	2	2
	3	1	13
Average No. College Hours	17	43	59
Average No. Years Experience	5.3	4.3	6.7

The superiority of the training of teachers of the graded schools, which will become the central schools of the cooperative areas, are shown by the following facts: No graded school teacher has less than 12 hours of college work. Only three and one-fifth per cent have less than two years of experience. Six per cent do not have the equivalent of one year of college preparation. Forty-two per cent hold life certificates.

In his investigation for the United States Bureau of Education, J. F. Abel came to the conclusion that, "Too many of them (rural schools) are trying to do the work where larger schools can do it in a better and probably cheaper way (5)." This is the situation in Rush County today.

Table 3. Valuation, Enrollment, and Levy of
Rush County School Districts

District	Enrollment	Valuation	Levy
1 (Consolidated)	95	\$332,923	14.00
1	44	370,204	7.50
2	8	160,368	2.80
3	8	252,805	1.40
4	14	387,283	2.43
6	10	323,490	1.30
7	14	182,373	4.44
9	12	184,383	3.41
13	8	215,795	2.10
14	9	189,086	4.78
15	14	189,863	6.00
16	12	184,638	4.63
17	9	143,000	6.00
18	5	110,927	6.00
19	10	204,625	2.05
20	7	121,061	6.00
21	14	265,010	2.43
22	7	136,864	4.16
23	7	234,907	2.31
24	8	126,777	4.80
26	14	180,307	4.77
28	34	100,927	6.00
27	15	147,217	5.21
29	27	115,285	2.20
30	9	153,979	6.00
33	27	124,681	6.00
34	11	129,769	6.00
35	18	121,999	6.00
36	12	109,764	4.00
38	6	91,092	2.75
39	8	163,204	4.76
40	10	127,469	4.67
41	13	191,687	5.00
42	9	160,075	3.33
43	8	118,138	4.75

Table 3. Continued

44	9	95,067	6.00
45	10	127,200	6.00
46	15	110,572	4.41
48	16	231,141	3.25
*50	2	---	1.36
52	10	139,455	.74
53	30	173,605	4.16
54	6	149,805	4.22
55	11	197,202	3.53
56	18	149,045	6.00
57	9	126,966	2.98
58	12	154,634	1.30
59	16	115,442	4.70
60	7	146,167	6.00
62	12	121,225	5.19
63	30	169,512	2.24
64	15	205,911	2.37
*65	—	---	none
66	11	167,101	4.68
67	10	128,029	6.00
68	6	129,068	6.00
69	15	108,564	6.00
70	8	121,604	6.00
71	9	117,081	6.00
72	12	155,055	4.18
74	9	114,862	5.68
75	9	105,368	6.00
Graded Schools			
8	232	920,978	3.74
11	90	214,995	6.00
12	31	255,712	1.06
20	105	562,712	14.00
31	36	294,016	6.00
47	99	655,308	6.00
51	68	218,936	2.78
61	65	403,669	6.00

*Does not maintain a school.

THE MCCRACKEN AREA

McCracken is a third class city maintaining a grade school and a high school in separate buildings. The grade school is a modern brick structure with four large classrooms and a gymnasium. Four teachers are employed in the McCracken grade school which has an enrollment of 103 students. The school receives an "A" rating from the state department of education. As the school system is organized under the C.V.S. (City-Village Schools) system a superintendent has supervision over the grade school. It is proposed that this school become the cooperative school of this area.

Under the proposed plan districts 43, 50, and 30 would cooperate with district 28, the McCracken district (See Fig. 1). The average distances traveled by students of the cooperating districts would be a fraction over four miles. It would not be necessary for any student to travel over six miles to reach the cooperative school. All students in district 43 reside less than one mile from an all-weather state highway leading into McCracken. Children living in this district must travel over as much dirt road in going to their own schools as they would need to travel to reach a state highway. In district 30 the average distance to a state highway is less than one mile. Nearly all

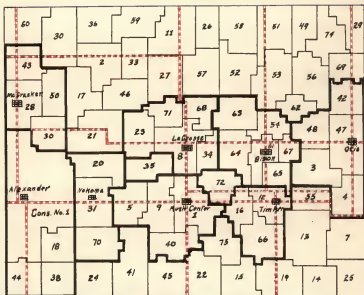


Figure 1. Map of Rush County showing school districts and proposed cooperative school areas. — Boundaries of proposed cooperative school areas. - - - - Canted or oiled highways.

students have less dirt road over which to travel to reach a state highway than they have to reach their own school. Students in district 50 must resort to dirt roads to reach the cooperative school, but these roads are well graded.

Three of the six students in number 43, three of the nine in number 50, and both of the students in number 50 have other members of the family attending high school in McCracken. Therefore, at present, 47 per cent of the students from the cooperating districts who would attend the cooperative school could ride to school with their older brothers or sisters.

The addition of these 17 students would increase the McCracken enrollment to 120 students. This enrollment would not be excessive, as 15 of the 17 students are enrolled in the lower five grades. It is in these grades that McCracken has the smallest classes.

The cooperating districts would need to tax themselves only for transportation and the upkeep of their buildings. McCracken would demand no tuition from the cooperating districts as the state aid received from the attendance of each additional pupil would be greater than the tuition required in the past. It is suggested that the cooperating districts pay transportation at the rate of 15 cents a day for each child attending the cooperative school. This

amount should be sufficient to defray the expenses of transportation. Arrangements can be made by which the car of one family can transport the children of two or three other families and receive the transportation allowance. A high school student may transport children of other families and receive the allowance. There are many other plans that could be worked out by the families of these districts for transporting their children. Districts, if they wished, could pay transportation on the basis provided by law for children in elementary school districts, that is, 15 cents per day per family if they reside three miles from the school, or 25 cents per day per family living five or more miles from the school (4). Investigations of various districts show that payment according to this plan will average about 15 cents per day per individual. This figure will be used in determining transportation costs in this study. Linscheid, in his study, determined that the cost of upkeep and insurance for a rural school should not exceed \$42.00 annually (5). This figure will be used in this study to defray the cost of insurance and upkeep on the rural school buildings.

The elimination of the necessity for the payment of tuition by the cooperating districts would be a great encouragement for cooperation with McCracken. Reference to

Table 4 will show the large financial saving when no tuition is required from the cooperating districts. It will be noted that the two cooperating districts which are maintaining schools would make a total financial saving of \$664.00, an average reduction in their expenses of 56 per cent. An additional gain would be made by families having children in both grade and high school. As the high school pupils from these districts must provide their own transportation, the families having children in both grade and high school would gain in the process of the payment of transportation for their grade school children. The families of 47 per cent of the children in the cooperating districts will gain by this process.

McCreeken would gain approximately \$400.00 additional state aid from the attendance of the 17 students from the cooperating districts. As present facilities are adequate for accommodating these students, the added income would reduce the school levy by six per cent. McCracken would welcome the added income as it must levy the limit allowed by law to maintain a good school.

Although the financial savings would be great, the educational gain from cooperation would be of much greater significance. The students from the rural districts would gain the advantages derived from larger school systems.

Table 4. Proposed Cooperative Budgets and Savings for the McCracken Area

District	Present Budget	State Aid	Present Budget with Aid	Average Distance	Cost of Insurance and Transportation	Proposed Saving in Budget Dollars	Per Cent
28	108	\$0,400	\$1,114	\$5,388			
20	2	100	none	4	\$ 54	\$ 90	none
20	9	802	189	8	243	286	54.9
45	6	850	180	4	182	204	31.6

District 20 is sending its two pupils to McCracken.

The larger cooperative school would excel in the following respects:

1. Better scholastic achievements. Studies and investigations of the achievement of children of consolidated schools give rather conclusive evidence that elementary children actually achieve better results in such schools (1). Scholastic achievement in larger schools is undoubtedly facilitated by longer terms, teachers have a limited number of grades, better equipment, and teachers are more efficient and better trained. The facts show that the McCracken school excels in the first three of these. The following comparison of the teacher qualifications for McCracken and the cooperating schools shows the superiority of teacher training as well.

Table 5. Teacher Qualifications in the McCracken Area

District	Teacher	Certificates	College Hours	Years in Present Position	Years Experience
28	A	Life	92	2	6
28	B	Life	62	1	1
28	C	Life	86	5	13
28	D	Life	86	4	10
Cooperating Schools					
50	E	3-yr. state	185	0	1
43	F	1st Co.	0	0	35

The superior scholastic achievement shown by children in larger schools should in no way be construed as an

indictment against the mental capabilities of rural school children. It is rather an indictment against a system that does not permit full development of their capabilities. Perhaps G. P. Glenn explained the situation best when he wrote, "We find the art of learning very generally well developed among pupils of city schools, while it is displayed in rural schools by only a few--a few mental giants of whom Cicero, in his comments on the genius of nature says: 'Something marvelous may be expected from the youth who has both'. These rare combinations of genius, in the past, have performed the wonderful feat of capturing the art of learning, despite the adverse conditions of the rural school. Unfortunately they do not represent the masses of country school children (?)." Glenn wrote this indictment against the rural schools of the Atlantic states in 1903, but it is applicable to the rural school situation in Kansas today.

2. Better social opportunities. The larger school provides the opportunity for group activities in music, operettas, athletics, and other fields. Dramatization of work is possible, which is a factor in motivating interest, and which is an important part of the present day unit program of study. Contact with a large group widens the vision of the individual; he gains ideas which he could not

gain in a small group (8). His association with many will cause the disappearance of shyness and bashfulness. As he associates with a large number he measures himself against them and forms a more correct estimate of himself and his abilities than is possible were he with a small group (8). Lack of competition may cause him to do work below his possibilities as he may be able to rank among the best of the few with inferior effort. He learns to cooperate, a lesson sadly needed by many rural school children (8).

3. Better organization and supervision. In the larger system testing programs can be carried out by the principal, and the work of students and teachers can be evaluated. It eliminates the problem which forces a school board to employ, for disciplinary reasons, a male who knows nothing about the art of teaching the primary pupils. Teachers can be chosen for the type of extra-curricular activity for which they are best suited.

4. The larger school tends to eliminate the pressure brought on the rural teacher by a few families of the district. It eliminates the danger of the freezing out of a teacher by two or three families because of family feuds, jealousies, or dissatisfaction with grades. Matters are complicated still further where a larger percentage of the students are children of board members. This pressure often

forces the teacher of the rural school to award high grades to hold his position. The student gains an unfair estimate of his ability for which he suffers when he enters high school.

Thus, it has been shown that the cooperative school plan for this area is practical, it provides a financial saving, and it is of great educational benefit to the students involved.

THE BISON AREA

Bison, a city of the third class, affords another excellent location for a cooperative school. The high and grade schools are maintained in separate buildings. The grade school employs four teachers and receives an "A" rating from the state department of education. A new grade school building is under construction which will have four large classrooms and a gymnasium. As the present enrollment is only 65 students, Bison can accommodate approximately 50 additional students when the new building is completed. The increased enrollment would not be excessive for four teachers (1). Hence, the conditions at Bison provide an excellent opportunity for the children in the rural districts of this neighborhood to gain better educational advantages.

Under this proposed plan, districts number 63, 64, 65,

67, and 54 would cooperate with the Bison district, number 61. The addition of the pupils from these districts would increase the Bison enrollment to 116 pupils. The transportation of the pupils from the rural districts would not be difficult since the average distance to the cooperative school would be a fraction over three miles. The road system of the vicinity is also favorable to cooperation which is shown by the following facts: Students living in 26 of the 42 sections, in the area of the cooperating districts would have less than one mile to travel to reach an all-weather highway leading directly to the cooperative school. In the remaining 16 sections, pupils living in 14 sections would need to travel less than two miles to reach an all-weather highway.

The financial saving would be great for all districts concerned. Bison undoubtedly would be satisfied with the state aid gained from the attendance of the additional students, as it will be greater than the tuition required at present. Hence the cooperating districts would need to budget only for transportation, insurance, and upkeep of their buildings. It is proposed that transportation be allowed at the rate of 15 cents per day per individual. Upkeep and insurance will also be the same as in the McCreeken Area. Facts of financial significance relating

to this area are shown in Table 6. The large financial savings should be an incentive for cooperation, as the four rural districts maintaining schools would reduce their budgets by an average of 43 and one-half per cent, a total saving to the four districts of \$1,129.00.

Bison, the central or cooperative school, would receive approximately \$1,160.00 in state aid by the attendance of the additional 47 students. This is calculated on the basis that the average daily attendance would be 90 per cent of the enrollment, which is a low figure. Bison should be anxious to receive this additional income, as it will reduce its school levy by approximately 38 per cent. More supplies and equipment will be needed, but reasonable arrangements could be made with the cooperating districts for their libraries, equipment, and other necessary supplies. Bison could spend \$6.00 per additional student for the additional equipment he would necessitate and reduce its budget by 25 per cent. The added income should make for a better school and indirectly help the people of the Bison district to pay for their new grade school building. The students from the cooperating schools would also gain the educational advantages already mentioned in the McCracken area. The following comparison will show that the rural school students entering the cooperative school would have

Table 6. Proposed Budgets and Savings for the Mason Area

District	Present Budget	State Aid	Budget with Aid	Average Distance	Cost per Transportation	Estimated Savings	Proposed Budget	Savings in Dollars	Savings in Percent
65	\$1,000	\$106	\$896	5	\$240	\$48	\$908	\$313	36.0
66	715	88	603	5	406	42	447	206	31.4
61	3,581	845	3,006	---	---	---	---	---	---
68	none	---	---	5	---	---	---	---	---
67	787	242	545	5	270	42	512	253	43.8
64	700	117	685	5	182	42	204	378	66.0

*District 65 does not maintain a school at present.

better trained teachers than they have in their own schools.

Table 7. Preparation and Experience of the Teachers in the Bison Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Bison	40	2.5	5
Cooperating Schools	24	1.5	3

As the Bison school becomes larger and financially richer the school officials undoubtedly would demand better qualified teachers. The district schools cannot afford the better trained teachers, consequently, there would be little prospect that the rural districts would demand better qualified teachers in the future, except so far as determined by law.

THE OTIS AREA

Otis, a third class city, provides another good location for a cooperative school. Otis maintains a high school and a grade school in separate buildings. The grade school receives an "A" rating from the state department of education. The school has an enrollment of 99 students and employs four teachers. There are eight rooms in the building but, at present, only four are used as classrooms. It is proposed that Otis add one teacher and maintain a five-teacher school.

Under this plan, districts 42, 48, three and four would cooperate with district 47, the Otis district. The average distance traveled by students from the cooperating school would be about four and one-half miles. No student would need to travel to exceed seven miles to reach the cooperative school. Due to the favorable road system, pupils living in 25 of the 38 sections in the cooperating school area would have less than one mile to travel to reach an all-weather road leading to the cooperative school. Pupils living in 39 per cent of the cooperating territory have more dirt road to cover in going to their own school than they would have to reach an all-weather road leading to the cooperative school. Thirty-eight per cent of the pupils of the cooperating schools have brothers or sisters attending the Otis high school with whom they could ride to the cooperating school.

The addition of the 47 students from the four cooperating districts would increase the enrollment of the Otis grade school to 146 students. This enrollment would not be excessive for five teachers (1).

Reference to Table 8 will reveal the significant financial facts relating to this proposed area. It is assumed that Otis will require no tuition in addition to the state aid received from the attendance of the additional students.

Table 8. Financial Facts Relating to the Otis Area

Dis- tribut- ment	Present Budget	State Aid	Budget with Aid	Average Distance	Cost Transpor- tation	Insurance and Upkeep	Propose Budget	Propose Savings Dollars	Savings Per Cent
42	0	\$ 770	\$ 802	4	\$245	\$42	\$896	\$317	35.6
48	18	812	812	4	432	48	474	338	41.6
5	8	900	900	8	216	48	266	633	71.3
47	99	4,200	5,492	"	"	"	"	"	"
4	14	1,136	1,136	8	370	48	450	716	63.0

Transportation, upkeep, and insurance are determined the same as in the McCracken area. The four cooperating districts would make a total saving of \$2,012, an average reduction in their budgets of 57.1 per cent. Since the Otis high school students must provide their own transportation, the families who have children in both grade and high school would make an additional gain from the payment of transportation for their grade school children.

The Otis district would receive \$1,134.00 additional state aid from the attendance of the 47 additional pupils. This income would pay the salary of the additional teacher and leave three or four hundred dollars for reducing the Otis levy or adding additional equipment. As arrangements could be made for using equipment from the cooperating schools, it should not be necessary for Otis to spend a large sum of money on new equipment.

The educational advantages derived from the larger school system would be the most valuable gains made by the people of the rural districts. These advantages have already been mentioned in the McCracken area. The better prepared and more experienced Otis teachers would provide a better trained faculty for the pupils from the rural districts.

Table 9. Preparation and Experience of the Teachers in the Otis Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Otis	28	3	9.8
Cooperating Schools	15	2	4.7

The people living in and near Otis have shown a great deal of interest in building up a good high school system. This rural high school district recently built a new building which is considered among the best school plants in the state. To reap the full benefit of their fine high school system, the people of the rural sections should be interested in the full educational development of their children before they reach the secondary school. The organization of the proposed cooperative area would be an inexpensive, easy, effective way to provide better elementary education for their children.

THE LA CROSSE AREA

La Crosse, the county seat, would provide a good example of an eight-teacher school absorbing the small schools located around it. La Crosse maintains a high school and a grade school in separate buildings. The grade school building is modern in every respect. The classrooms are large and can accommodate more students. The road system is

favorable for pupil transportation as two state highways cross at this point.

With present facilities, it would be practical for districts number 68, 71, 23, and 54 to cooperate with number eight, the La Crosse district. The additional students from the four rural districts would increase the enrollment of the La Crosse school to 260 students. This would not be excessive as the average enrollment would be less than 33 pupils per teacher. Students living in 50 per cent of the area of the cooperating districts would need to travel less than one mile to reach a hard surfaced state highway. Only those living in ten per cent of the area would have over two miles to an all-weather road.

La Crosse probably would not demand any tuition from the incoming students. The state aid it would receive by their additional attendance would be greater than the tuition required in the past. Fifteen cents per day per individual is sufficient transportation allowance for the students of the cooperating districts, since the average distance traveled by these pupils would be less than four miles. Upkeep and insurance on the rural school buildings would be the same as the figure determined in the first plan. Reference to Table 10 will show the significant financial facts relating to this cooperative area. It should be noted

Table 10. Significant Financial Posts Relating to the La Crosse Area

Dis- tribut- ment	Present Budget Aid	State Aid with Aid	Average Distance Traveled	Cost Transpor- tation	Insurance and Upkeep	Proposed Budget	Saving in Dollars	Per Cent
8	\$0,965	\$5,804	\$6,403	---	---	---	---	---
25	7	none	094	5	\$189	\$251	(\$463)	66.7
24	11	840	800	3	297	42	839	41.6
68	6	740	596	4	162	43	204	65.8
71	6	773	613	3	162	43	204	66.7

that three of the cooperating districts would reduce their expenses to nearly one-third of what they are at present. The four cooperating districts would reduce their expenses by an average of 60.2 per cent, a total saving to the four rural districts of \$1,508.00.

The income of the La Crosse grade school district would be increased by \$800.00. State aid gained from the attendance of the additional 30 students would provide this sum. La Crosse could spend \$200.00 of this amount for additional equipment which might be needed and reduce her levy by more than nine per cent.

The pupils from the cooperating schools could step from among the worst to the best educational opportunities in the county. The educational advantages of the larger school system would be similar to those listed in the McCracken area, but with more emphasis, as La Crosse employs one teacher for each grade. As would be expected, the teacher training of the cooperative school is superior to that of the cooperating schools.

Table 11. Preparation and Experience of the Teachers in the La Crosse Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
La Crosse	70	5.5	9.6
Cooperating Schools	14	1	2

With an average enrollment of only seven and one-half pupils, the cooperating schools can in no way secure the social advantages which would be provided by the large enrollment of the La Crosse school. This one fact should be sufficient reason for the rural districts to consider cooperation. However, this study shows that the organization of this area would be practical, a large financial saving would be provided, and a great improvement in the educational opportunities of the rural children would be secured.

THE RUSH CENTER AREA

In the south central part of the county we find another favorable location for a cooperative school. The grade school at Rush Center is housed in a large four-room brick building. Three teachers are employed to instruct 44 students. In addition to the fact that this community has an adequate building, Rush Center is favorably located for a cooperative school. State highways act as arteries for travel and run in every direction from this community. As Rush Center does not maintain a high school, the people in this part of the county send their children to high school in La Crosse. A great majority of the students who live east, west, and south of Rush Center must pass through this community on their way to high school in La Crosse.

It is proposed that this area be organized so that present facilities at the Rush Center school would be adequate. W. E. Sheffer, in his study on cooperative schools (1), determined that 76 students should not impair the efficiency of a three-teacher school. Therefore, it is proposed that districts number nine, five and 40 cooperate with number one, the Rush Center district. The total enrollment of the cooperative school would become 76 students. Thirty-eight per cent of the students in these three cooperating districts have brothers or sisters attending high school in La Crosse. As these high school students must pass through Rush Center on their way to school, the family car could furnish transportation for both the grade and high school students. Accessibility to good roads is not difficult as the pupils living in 54 per cent of the area of the cooperating districts reside less than one mile from a graveled or oiled state highway.

Table 12 reveals that the plan has great financial possibilities. Transportation, insurance, and upkeep are calculated the same as in the McCracken area. It is assumed that Rush Center will demand no tuition from the cooperating districts, as the present rate of tuition is two dollars per month per pupil. State aid would provide nearly three dollars per month per pupil. The cooperating districts

Table 12. Significant Financial Facts Relating to the Bush Center Area

As- tributed	Present Budget	State Aid	State Budget with Aid	Average with Transportation	Govt Transportation	Insurance and Other	Proposed Budget	Per Dollar	Saving in Dollars	Per Cent
9	18	\$ 796	\$125	0	672	3	\$324	642	\$506	45.5
40	10	2,988	240	718	6	570	42	312	401	86.2
1	44	2,900	78	2,908	-	-	-	-	-	-
8	10	1,008	0	1,046	8	270	42	318	754	70.1

would reduce their budgets by an average of approximately 57 per cent, a total saving for the three districts of \$1,441.00. The families who have children in both grade and high school would make an additional gain by the payment of transportation for their grade school children.

The Rueh Center school will realize approximately \$780.00 additional state aid from the attendance of the 32 students from the rural districts, a reduction in their levy of 34 per cent. The additional equipment needed would not be a problem for this cooperative school. Some years ago this district maintained a four-year high school in addition to the grade school in this building. Consequently, there is an abundance of equipment of all kinds that could be used.

The educational gain, as brought out in the McCracken area, will be of greater significance than the financial saving. Reference to table 13 will show that the rural pupils would be instructed by teachers with better training in the cooperative school.

Table 13. Preparation and Experience of the Teachers in the Rush Center Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Rush Center	27	4	6
Cooperating Schools	11	2	3

Since there are four classrooms in the Rush Center grade school building, it might be suggested that in the future one teacher be added to the present faculty of three. District 72, district 75, district 22, and district 45 could then be added to the cooperative area just proposed. District 72 would reduce its budget by five per cent, 75 by 40 per cent, 22 by 72 per cent, and 45 by 50 per cent. Rush Center would receive more than \$900.00 in state aid from the attendance of the 38 students in these districts. The added income would easily provide for the extra teacher.

THE ALEXANDER AREA

A sixth proposed cooperative area would be built around the only consolidated school in the county. This consolidated district maintains its high school and grade school in Alexander. The grade school employs four teachers for an enrollment of 95 students. The building is

modern in every respect and the grade school receives a class "A" rating from the state department of education.

As this grade school could accommodate at least a dozen more students with present facilities, it is proposed that districts number 44, 38, and 18 cooperate with this consolidated school. Number 44 does not maintain a school at the present time. The addition of the 12 pupils from districts 38 and 18 would increase the Alexander enrollment to 107 students. Fifty-eight per cent of the children in these two districts have other members of the family attending the high school in Alexander. The cooperating districts have valuations of only \$91,092.00, \$95,957.00, and \$110,927.00. This makes it difficult and expensive for them to maintain schools for their small enrollments. Cooperation should provide an easy solution for their difficulty. In view of the above two facts, the average distance of seven miles should not be excessive for the cooperating students to travel to attend the cooperative school.

Since the average distance in this plan is greater than in the previous plans, it is proposed that transportation be paid at the rate of 25 cents per day per pupil. Alexander probably would demand no tuition in addition to the state aid received from the attendance of these 12

pupils. The financial savings of each district and other facts relating to this area are shown in Table 14. The two cooperating schools would make an average reduction of 25 per cent in their current expense. Their present budgets are very low primarily because of the low wages paid to their teachers. Their saving by cooperation would become greater when they increase the wages of their teachers, which they surely must do because of the low salaries they are paying.

Alexander, the cooperative school, would gain approximately \$300.00 additional state aid from the attendance of the 12 students. This would be net income, as present facilities are adequate to accommodate this number of students.

The financial saving of the cooperating districts would be of minor consideration when the educational gains from cooperation are considered. The pupils from the rural districts will gain all the educational advantages listed in the first plan. We can measure the training of the teachers and show that the training of the cooperative school teachers would be superior to that of the rural schools. The great superiority of the training of the Alexander teachers can be seen by referring to Table 15.

Table 14. Significant Financial Facts Relating to the Alexander Area

District	Present Budget	State Aid	Budget with Aid	Average Distance	Best Transportation	Insurance and Salary	Proposed Budget	Saving in Dollars	Saving in Percent
Con. 1	93	\$ 60	---	---	---	---	---	---	---
18	6	\$363	171	\$404	6	\$270	\$42	\$312	87
35	6	590	203	590	8	270	42	512	47

*44

*District 44 does not maintain a school at present.

Table 15. Preparation and Experience of the Teachers in the Alexander Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Alexander	72	4	6.5
Cooperating Schools	1	0	1

The greatest benefits gained by the pupils from the two rural districts, however, would be the social advantages achieved from association and contact with more than a hundred students instead of a mere half dozen.

THE TIMKEN AREA

Timken affords a plan whereby a two-teacher school would become the central school of a cooperative school area. At the present time, Timken employs two teachers and has an enrollment of 31 students. A new school plant, with two large classrooms and a gymnasium, is to be constructed at this place. The building was planned in such a way that additional classrooms could be added in the future. Whether they expected the community to grow, or were making allowances for a consolidated or a cooperative school area in the future, could not be determined.

As Timken does not maintain a high school, students from this vicinity attend high school in Bison. Consequently, high school students living in districts 16 and

66 must either pass through or within a mile of Timken on their way to school in Bison. This is an important consideration as 45 per cent of the pupils attending the rural schools in these two districts have brothers or sisters attending the Bison high school. Consequently, nearly half the pupils in districts 16 and 66 could ride with their older brothers or sisters and be dropped off at the Timken grade school.

Therefore, it is proposed that districts number 16 and 66 cooperate with the Timken district, number 12. The enrollment of the Timken school would be increased to 54 students by the addition of the 23 students from these two districts. The road system adds to the practicability of this plan. This can be shown by the fact that pupils living in 69 per cent of the cooperating area would have less than one mile to travel to reach an all-weather highway leading to Timken. Those residing in only nine per cent of the cooperating area live more than two miles from a graveled highway.

With state aid providing the tuition to the Timken district, the two cooperating districts would need to tax themselves only for transportation, insurance, and upkeep. The financial facts relating to this proposed area are shown in Table 16. Transportation, insurance, and upkeep

Table 10. Significant Financial Facts Relating to the Indian Area

No.	Mill-	Percent	Excess	Budget	Average	Lost	Excess	Period	Saving	Per
trist	most	Budget	Aid	with	Distance	Transportation	and	Budget	Dollars	Cent
			Aid	Aid			Excess			
16	18	\$ 700	\$76	\$ 622	5	\$224	\$42	\$666	\$666	41.1
13	51	1,500	09	1,490	"	---	---	---	---	---
66	11	800	27	765	4	297	42	359	422	55.4

are calculated the same as in the McCracken plan. The two cooperating districts would make a total saving of \$678.00, or an average reduction in their expenses of 48.2 per cent. Additional savings would be made by families having children in both grade and high school. Timken would receive about \$560.00 additional state aid from the attendance of the 23 students from the two rural districts. As reasonable arrangements could be made with the cooperating districts for the additional equipment needed, Timken would realize a nice sum for its district. This could be used to lower Timken's levy, which would indirectly help to pay for the new school building.

Educational advantages would naturally be better in a two-teacher school than in a one-teacher school. The increased enrollment of the cooperative school would provide a sufficiently large group for group activities and for the social contact which is necessary for the full development of every child. The other educational advantages listed in the McCracken area would apply also. Reference to Table 17 will show that the rural pupils would be instructed by better trained teachers in the cooperative school.

Table 17. Preparation and Experiences of the Teachers in the Timken Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Timken	47	3	4
Cooperating Schools	16	0	1

The organization of this area would provide the rural school children with the opportunity of enjoying the comforts of a new building as well as the educational advantages derived from a larger school.

THE NEKOMA AREA

Nekoma provides another plan by which a two-teacher school would become the cooperative school. As the present enrollment is only 56 pupils, 15 or 20 additional students could be accommodated without impairing the efficiency of this school.

Districts number 20 and 70 could cooperate to their advantage with the Nekoma district, number 31. The addition of the 15 students from these two districts would increase the enrollment of the Nekoma school to 51 students. High school students living in district 70 can pass through Nekoma on their way to school at Alexander without increasing the distance to travel. Hence, families having children in both grade and high school would gain in the process of

the payment of transportation for their grade school children. The pupils living in district 20 have access to a fairly well sanded road leading directly to Nekoma. With little expense this road could be improved to the point where it could be classed as an all-weather road. As the rural school is located on this road, which runs through the center of the district, pupils living in half the area would reside within a mile of it. Only those living in three quarters of a section would have more than two miles to travel to reach this road. As this district has only seven students these facts should be worthy of consideration.

The financial possibilities of this plan are revealed in Table 18. Transportation, insurance, and upkeep were calculated the same as in the McCreeken plan. A glance at this table reveals that the two cooperating districts would make a total saving of \$868.00, an average reduction in their expenses of 63.4 per cent. Nekoma would gain \$565.00 additional state aid from the attendance of the 15 students from the two rural schools. Reasonable arrangements could be made with the cooperating districts for the additional equipment needed. Hence, the Nekoma district could reduce its levy by nearly 20 per cent.

The increased income should make for a better school educationally, as well as financially. Better trained

teachers could be provided and probably would be demanded as the school became larger. Reference to Table 19 will show that the teachers of the cooperative school would be as well trained as those in the rural schools. The educational advantages in the McCracken plan would apply here also, with

Table 19. Preparation and Experience of the Teachers in the Timken Area

Teachers	Average Number College Hours	Average Years in Present Position	Average Number Years Experience
Hekoma	29	2	4
Cooperating Schools	8	3.5	4.5

the social advantages derived from the larger school being of special significance.

SUMMARY

The cooperation of 27 rural school districts with the grade schools in Rush County would be practical. The location of roads and districts make all-weather roads easily accessible to pupils in these districts. Pupils living in 49 per cent of the territory of the cooperating schools, reside less than one mile from a graveled or oiled highway leading to their cooperative school. In the five plans where data were available, 45 per cent of the pupils in the cooperating districts have brothers or sisters attending

high school with whom they could ride to their cooperating schools.

The organization of the cooperative areas would provide a large financial saving for the districts involved. The cooperating districts would make a total financial saving of \$8,550.00, an average reduction in their expenses of 51 per cent. The net income of the cooperative schools would be increased \$4,200.00, which would provide an average reduction of 19 per cent in their levies, a total financial gain of \$12,750.00 for the cooperating and cooperative districts.

Better educational opportunities for the pupils would be the most significant result of the larger school units. The scholastic achievement of the pupils from the rural schools would be facilitated by longer terms, longer recitation periods, better trained teachers, and teachers having a limited number of classes. The larger cooperative school would secure an enrollment large enough to provide group activities, dramatization of work, and the social contact necessary for the best development of every child.

If the cooperative school areas were organized, 27 one-teacher schools could be closed. This represents 47.4 per cent of the 57 one-teacher schools in the county. As the pupils from the closed schools would gain better educational opportunities, the cooperative plan would provide a great

improvement in the school situation in Rush County.

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BIBLIOGRAPHY

1. Sheffer, W. E.
The cooperative school area in Kansas. State Dept. of Educ. Research Bul. 121 p. 1934.
2. O'Brien, F. P., and Smart, T. J.
Schooling in one-teacher schools. University of Kansas. Bul. 22(18):14. Dec. 1921.
3. Foots, John M.
Comparative study of instruction in one-room and consolidated schools. Jour. Educ. 2:337. 1923.
4. Kansas school laws, compiled by W. T. Markham. rev. ed. Kans. State Dept. of Public Instruction. 1937.
5. Abel, James Frederick.
Recent data on consolidation of schools and transportation of pupils. U.S. Bur. Educ. Bul. 22:21-24. 1922.
6. Linscheid, Peter Rudolph.
Administrative proposals for improving the Harper county schools based upon the cooperative school plan. Unpublished Thesis. Kans. State College of Agr. and Applied Science. 51 p. 1935.

7. Glenn, George Pineskney.
The concentration of schools and transportation of pupils. Ann. Amer. Acad. Pol. and Soc. Sci. 22:254-258. Sept. 1903.
8. Monahan, Arthur Coleman.
Consolidation of rural schools and transportation of pupils at public expense. U.S. Bur. Educ. Bul. 30. 12 p. 1914.
9. Twenty-ninth biennial report of the state superintendent of public instruction. Kans. State Dept. of Public Instruction. 551 p. 1933-34.
10. Twelfth biennial report of the state superintendent of public instruction. Kans. State Dept. of Public Instruction. 179 p. 1899-1900.
11. Sixteenth biennial report of the state superintendent of public instruction. Kans. State Dept. of Public Instruction. 363 p. 1907-1908.