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# THE PROBLEM OF DECLINING ENROLLMENT 

in the Elementary Schools<br>of Minnehaha County

W. F. Kumlien<br>C. Scandrette<br>Raymond Hatch



In 1920 the enrollment for the first four grades in Minnehaha county schools made up one-half of the total enrollment for all grades; by 1940 it had fallen to one-third of the total. During the same period the high school enrollment increased from one-seventh to one-third of the entire school enrollment.

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For some time population experts have advanced the opinion that a decline in elementary enrollments will occur as an inevitable aftermath of the steadily falling birth rate. A study of elementary enrollment trends in Minnehaha county indicates that this prediction has been fulfilled. Since 1930, the year of peak enrollments, a distinct downward trend has been in evidence.

Figure 1 discloses the fact that rural enrollments reached their peak as early as 1907. The total rural enrollment for that year was 3964. The steady decline which set in immediately thereafter had reduced the numbers by 1940 to 1385-a drop of 65\%. The rapid population growth made by the city of Sioux Falls enabled the independent schools to show strong gains long after the rural enrollments had begun to decline. The top enrollment for independent schools was reached in 1930. Between 1930 and 1940 the population of Sioux Falls increased almost 22\%*. This increase was sufficient to account for the $13 \%$ gain made by Minnehaha county as a whole (even though the rest of the county showed a slight loss in numbers); yet elementary enrollments in Sioux Falls declined 8\% during the decade.

In seeking an explanation for this somewhat paradoxical situation, one must look to the recent trends in the Minnehaha county birth rate. In 1920 there were 26.8 births for every 1,000 of the population-in 1940, only 17.3. The decline in birth rate, amounting to over $25 \%$ in the past 20 years, has already given rise to certain rather serious problems within the existing educational structure. These problems cannot be overlooked in the drawing up of any program which aims at community and county planning.
*The 1940 population of Sioux Falls was 40,646 , as compared with 33,362 in 1930.

** Prior to 1901 elementary enrollments were not divided into "rural" and independent categories.

Figure 2. Elementary Binrollment in Minnehaha County Districts 1920, 1930, 1940.


Legend: Top Figure - 1920 Enrollment Lower Figure - 1940 Enrollment Center Figure - 1930 Enrollment $\square$ Consolidated or Independent Schools
Source: Minnehaha County Superintendent of Schools' Records.

During the school year 1939-40, 100 common school districts were operating in Minnehaha county, with one school in each district. Minnehaha is one of a group of early settled counties in the eastern part of the state having this type of small district organization.

The enrollment figures listed in Figure 2 for the years 1920, 1930, and 1940 indicate that school districts throughout the county have experienced declines in elementary enrollment. Seventy-nine percent of the districts reported lower enrollments in 1940 than in 1920; 17\% showed increases during the 20 year period, while $4 \%$ had exactly the same onrollments at the end of the period as at the beginning. The rural schools enrolled an average of 23 pupils per school in 1920, as compared with 14 in 1940.

The figures for independent and consolidated schools are not shown in Figure 2, but examination of enrollment records for such schools indicates the existence of a similar trend. Of the six independent districts which were operating in 1920,*all except Sioux Falls had experienced enrollment declines by 1940. (As we have noted, the elementary enrollment in Sioux Falls dropped between 1930 and 1940, but the figure at the later date was still well ahead of that for 1920). Lyons was the only one of the three consolidatad districts to register an enrollment increase between 1920 and 1940.

[^0]

Legend: Closed 6-10 pupils $11-15$ pupils 16 or more pupils Independent and consolidated districts
Source: Records of Minnehaha County Superintendent of Schools

Figure 3 shows the location of all rural schools of Minnehaha county in 1940, and indicates the size grouping into which each of them falls.

The proportion of schools enrolling 16 or more elementary pupils was relatively high-26\&-but considerably lower than in 1920.* Of the 26 schools so classified in 1940, 13 or exactly one-half enrolled 20 or more pupils. $36 \%$ of the schools were operating with 11 to 15 pupils, while $38 \%$ had enrollments ranging from 6 to 10 pupils. It is interesting to note that no schools were operating with five or fewer pupils. This fact reflects an apparent tendency in Minnehaha county to close schools whose enrollments drop below a minimum figure (apparently six or seven).

Eleven school districts are marked closed for the 1939-40 school term. Two of these districts, No. 16 and No. 102, have never had school buildings. They lie adjacent to Sioux Falls and their pupils have always been transported to Sioux Falls city schools. Two districts in the north central part of the county, No. 12 and No. 127, have been closed since before 1915. The school in District 95 was closed between 1920 and 1930, while the six additional schools to cease operations have done so since 1930. This would indicate that the closing of schools is a comparatively recent development growing out of the decline which has been noted in elementary enrollments.

[^1]Figure 4. Enrollment and Total Costs Per Pupil in Common School Districts of Minnehaha County, 1940


Legend. Encircled figure-melementary enrollment Lower figuremosts per pupil
Source. Records of Minnehaha County, Superintendent of Schools.

A wide variation is seen to exist among districts in regard to the per pupil cost of operating schools. The cost per pupil ranged from $\$ 42$ in District 81 , where 24 pupils were enrolled, to $\$ 151$ in District 68, which had an enrollment of 7 pupils. In general, per pupil costs tend to increase as enrollments decline.

Table I shows the per pupil costs as well as total costs, for operating schools of various sizes in Minnehaha County. The per pupil costs for schools having 16 or more pupils was only $60 \%$ as great as for schools which enrolled 10 or fewer pupils. The per pupil cost for medium-sized schools (11-15) strikes a middle figure which corresponds quite closely to the average for all schools.

It would seem that the operation of schools for 10 or fewer pupils is excessively expensive when computed on a cost per pupil basis.

Table I. Total Cost Per Pupil for Operating Rural Schools of Minnehaha County, 1939-40

| Size of School <br> (in number of pupils) | Number <br> of <br> Schools | Number <br> of <br> Pupils | Total Cost | Average Cost <br> Per Pupil |
| :---: | :---: | :---: | :---: | :---: |
| Total | 100 | 1374 | $\$ 101,418.83$ | $\$ 73.98$ |
| 5 or under | - | - | - | - |
| $6-10$ | 38 | 320 | $32,966.70$ | 103.02 |
| $11--15$ | 36 | 465 | $33,088.49$ | 71.16 |
| 16 or over | 26 | 589 | $35,376.40$ | 60.04 |



That it is possible to effect savings by closing a school when the enrollment reaches too low a figure is graphically shown in the above figure.

In 1934-35 the school in District No. 60 was operating with only seven pupils. The total costs during that year amounted to 帮2019.72, or $\$ 288.53$ per pupil. The following year, because of the prohibitive per pupil cost, the school was closed and the remaining pupils were sent as tuition students to other districts. During 1932-40, with $4^{*}$ pupils from the district attending other schools, the total costs were $\$ 790.95$. This figure was $\$ 1228.77$ lower than that for $1934-35$. It is true that the pupils receiving education numbered three less in the later year, but even when computed on a per pupil basis, the net savings were considerable.**

In general, it seems advisable to close a school when the enrollment drops to five or fewer pupils.

* This figure was taken from the school census, not from school enrollment records.
** On the basis of 4 pupils, the per pupil cost in 1939-40 was $\$ 197.74$.

Figure 6. Areas From Which High Schools Enrolled Their Minnehaha County Tuition Students, 1940.


An inquiry into the matter of where farm children in Minnehaha county attend high school may suggest a possible ultimate solution to the problem of declining elementary enrollments. Since 1921 it has been compulsory for school districts without high schools to pay tuition costs for pupils within their borders who attend high school in neighboring towns. Practically every district in the county contributed tuition students to Minnehaha county high schools in 1939-40. During that year, Washington High School in Sioux Falls enrolled 150 tuition students; Hartford, 78; Garretson, 76; Lyons, 59; Humboldt, 58; Colton, 53; Valley Springs, 44; Dell Rapids, 41; Sherman, 34; Baltic, 26; Brandon, 25; and Crooks, 4.

The decline in elementary enrollments has proceeded to the point where per pupil costs for operating the smaller district schools is becoming prohibitive. If this trend continues (and it appears from all indications that it will), why shouldn't the common school districts solve their problems in the same manner as they have already handled the high school situation?

As previously noted, Districts 16 and 102 have never operated their own schools, but have always paid the tuition and transportation costs involved in sending their elementary pupils to schools in Sioux Falls. Eventually all the common districts may close their schools and send their remaining pupils to the nearest independent districts. This plan would not only make possible considerable savings to the school districts, but would likely provide enriched educational advantages to pupils from rural areas.

An alternative plan which might be more practical in some instances would involve the retaining of certain centrally located common school districts to which neighboring districts having closed schools could send their children as tuition pupils. A combination of these two plans might conceivably provide a solution to the Minnehaha county problem.

Figure 7 - Federal, State and County Highways of Minnehaha County, 1940


The above map indicates that good roads are found in every township of the county. No matter where he may live, practically every farmer has good roads to his nearest trade center, is well as to Sioux Falls. The latter city, it can be noted, serves as a hub toward which roads radiate from all directions.

Good roads and the automobile have caused many functions which were formerly performed by open country institutions to be shifted to the city or villago. The farmer now goes to his trade center to buy groceries, clothing and other necessities; to sell his produce; to attend church; and to participate in social and recreational activities. In addition, he sends his sons and daughters to the village or city high school. It may be only a matter of time before his younger children will be attending elementary school in these same centers.

## Suggestions for Solving the Elementary School Problem

As an immediate, but temporary measure, one of these two aiternatives might be tried.

1. The present rural school district can be kept intact, but the school itself can be closed when the enrolIment drops below five pupils. Childrep who live within the district could then be sent as tuition pupils to the nearest rural school that will agree to take them, the district paying the transpertation when the dietance is greater than four miles.
2. Where the district involved lies close to an independent district it may be more satisfactory to send children as tuition pupils to that school, paying transm. portation as provided by lear.

If the present trend of rapidly declining enrollments continues it may be in the interest of both econamy and efficiency to reorganize the county's entire rural school system. Several alternatives are available for permanent reorganization.

1. Farm children can be transportod to independent distm .ricts as tuition students, the same as is now done with high school tuition students. This plan would undoubtede ly be much less expensive than maintaining a large number of small schools. It would have the further advantage of giving farm childran more educational opportunities than is possible in a one-room country school of four or flive pupils. This plan would result in sevon or aight contral ized school systems, combining town and country on a natural commanity basis.
2. Another alternative would be to reorganize the rural school systom on a county-wide district basis. Under this plan the county school board would have authority to discontinue small schools and establish larger schools at strategic points.
3. A third alternative would be for several school districts to consolidate. If this is done, however, great care should be taken to include a large enough area to insure a sufficient number of students and to provide a large enough unit of support.

# THE PROBLEM OF DECLINING ENROLUIENT 

in the Elementary Schools<br>of Marshall County

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In 1920 there was an average of 33 pupils per rural school teacher

but by 1940 the average enrollment had shrunk to 13 pupils

Each symbol represents 3 pupils

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For some years past population experts have been predicting a widespread reduction in elementary sohool enrollments as a direct result of the marked decline in the birth rate.

One has but to glance at Figure 1 to realize that elementary enrollments in Marshall county are falling rather rapidly. Although the peak enrollment was reached in 1922*, no definite downward trend was in evidence until after 1929. For each year between 1930 and 1940 total enrollments were lower than for the preceding year, with the net decline during the interval amounting to 25.6 percent. It can be noted that rural enrollments have dropped more rapidly than have the independent and consolidated enrollments.

It seems probable that recent population losses through migration may have accounted for a part of the enrollment decline. During the decade 1930-40, the population of Marshall county experienced a loss in numbers of approximately 7 percent**. Of far greater significance to the enrollment question, however, is the recent trend in the Marshall county birth rato-a trend which follows the same general pattern as that for the state and for the nation as a whole. Between 1925 and 1938 the birth rate fell from 22.9 per thousand of the population to 17.4 , a drop of 24 percent. This decline in birth rate seems to offer the only adequate explanation for the decreases noted in elementary enrollments. Since no immediate change in the birth rate trend is likely, and since net gains from immigration promises to be negligible, enrollments will continue to decline. At the present time high school enrollments are just beginning to feel the effects of fewer births, but they will experience greater losses in coming years. The problems which have grown out of declining enrollments are so serious in nature that they cannot be overlooked by any action program which aims at county and community planning.

* The total elementary enrollment in 1922 was 2,178.
** In 1930 Marshall county had a population of 9,540; in 1940, 8,881.

Figure 1. Elementary School Enrollment in Marshall County, 1890-1940.


Source: Biennial Reports of the State Superintendent of Public. Instruction.

Figure 2. Elementary Enrollments in Marshall County Districts, 1920, 1930
 Middle figure - 1930 enrollment. Lower (or last) figure - 1940 enrollment.
Source: Records of Marshall County Superintendent of Schools.

In 1940, 66 elementary schools were operating in 41 common districts in Marshall county. Four additional districts had no schools in operation during that year. There were 6 independent and 2 consolidated districts in towns and villages of the coupty. Marshall county has no uniform pattern of school district organization, but combines the small district type with the township plan.

Figure 2 shows the elementary enrollment by districts for 1920, 1930, and 1940. A general downward trend can be detected, with the declines being especially pronounced after 1930. That the decline has not been limited to common districts is evident when it is seen that all independent and consolidated districts with one exception (Britton Independent) had lower enrollments in 1940 than in 1920.*

[^2]Figure 3. Elementary Enrollment in Marshall County Districts, 1940.


Source: Records of Marshall County Superintendent of Schools.

The location of each of the common schonls in Marshall county is shown in Figure 3. It will be noted that 12 schools had heen closed by 1940. During that year two schools were operating with five or fewer pupils, 20 enrolled 6 to 10 pupils, 26 had 11 to 15 pupils, and 18 had 16 or more pupils.

The average enrollment in the common schools in 1940 was 13.4 pupils. This figure was 59 percent lower than that for 1920 when the common schools enrolled an average of 32.6 pupils. The greatest part of this sizeable decline has occurred since 1930, as the average enrollment during that year was 28.8 pupils. In 1920 over two-thirds of the schools hac 16 or more pupils--in 1940 scarcely more than one-fourth of the schools enrolled as many as 16 pupils.

There appears to be a marked concentration of closed schools in the wostern part of Marshall county, alone with a dispronortionate share of schools onrolling 10 or fewer pupils. Schools havine larger enrollments are found in greatest numbers in the two eastern tiers of townshins. A possible explanation is that emigration has been heaviest from the western part of the county.

Figure 4. Enrollment and Cost Per Pupil in Marshall County Schonls, 1940*


Figure 5. Costs in Dayton School District Number 3 before and after the Closing of the District School.


During the 1938-39 school term, Dayton School District Number 3 enrolled six pupils at a total instructional cost of \$585. The following year the school was closed and the remaining pupils, two in number, were sent to a school outside the district. Dayton district paid the transportation, tuition and board costs for these two pupils during the 1939-40 term. The total expenditures for that year amounted to $\$ 271$. Even on the basis of instructional cost (teacher's salary) alone, and not considering the additional costs of maintaining and operating the school, the net savings to the district totalled $\$ 314$.

In general, it seems advisable to close a school when the enrollment drops to five or fewer pupils.

Figure 6. Areas from Which High Schools Drew Their Marshall County Tuition Students,1940.


The above map, showing the areas from which high schools draw their tuition students, suggests a possible ultimate solution to the problem of declining elementary enrollments. Since 1921 it has been compulsory for school districts without high schools of their own to pay the tuition costs for pupils living within their boundaries who attend high school in nearby towns and villages. Since the costs of maintaining their own high schools are obviously prohibitive, common districts of Marshall county send nearly 250 tuition students to 11 independent and consolidated high schools in and adjacent to Marshall county.

Why should not the common districts solve their elementary problem in the same manner as they have handled the high school situation? It has been noted that enrollments in certain districts have dropped to the point where the per pupil cost of operating schools has become prohibitive. It may be only a matter of time before many more of the districts will find themselves in similar straits, in which case it will likely prove advantageous to the district to close its schools and send its remaining pupils to a nearby village school, paying transportation and tuition costs. District No. l, Newport Township, has been doing this for several years. Since the closing of the district school, the elementary pupils have attended school at Langford.

For the immediate future, however, it appears that each of the township districts of Marshall county is large enough to support at least one centrally located school. In this event only those schools should be closed whose enrollments drop below a specified minimum. Pupils from the areas formerly served by these schools can be sent to the centralized district school (or schools), with transportation paid by the board as provided by law. For the one-school districts, particularly those located at some distance from village centers, schonls can be closed when the enrollments drop below a minimum, with the remaining pupils sent as tuition students to the nearest common school still in operation.

Figure 7. Marshall County Highway System, 1940.


It becomes evident upon inspection of Figure 7 that improved roads are found in every section of Marshall county. The automobile and good roads have made trade centers in the county readily accessible to farmers no matter where they might live. This feature has revolutionized the patterns of neighborhood and community interaction in rural-farm areas.

Many functions formerly performed by open country institutions have been shifted to the village centers. The farmer now goes to the village to buy groceries, clothing, and other necessities; to sell his produce; to attend church; and to participate in social and recreational activities. It has been noted in addition that the farmer now sends his sons and daughters to the village high school. It may be only a matter of time before his younger children will be receiving instruction in elementary schools of these same villages.


[^0]:    * Hartford, Baltic and Sherman were included in the 1920 records as common, rather than independent, school districts. They had not yet adopted the independent district organization. However, in all three schools the 1940 anrollment was lower than that for 1920.

[^1]:    * In 1920, 70.4\% of the common schools had enrollments of 16 or more pupils.

[^2]:    * Schools at Amherst (now Weston Consolidated), Lake City and Newark (the latter two now being independent districts) were still included within common districts in 1920 and their enrollments for that year are listed along with rural open-country schools.

