# Elementary Principals and Their School Districts in Three Categories of Ruralness 

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#### Abstract

This paper describes a model of relative ruralness for rural states and applies it to North Dakota. From the model, descriptions of the principals and the districts were generated. Comparisons between principals and districts by ruralness are made. Further research is suggested.


In North Dakota - the seventeenth largest state-the 1980 census indicated that approximately 624,000 souls populate its 70,665 square miles. There are 294 operating school districts with 94 of these districts having an enrollment under 100 in grades kindergarten through twelve (or 1-12). Only 11 communities have a population over 5,000.

Very little research exists about schools in such a rural setting. Even less research exists about the administrators who carry out the leadership roles necessary to bring quality educational experiences to students in this context. For many readers, even the largest cities in North Dakota would be considered rural by their standards. The writers felt it would be useful to study the more rural school settings of a rural state in order to make a beginning at informing the profession of educational administration about such matters. To this end, a study was initiated to develop profiles of elementary principals and school districts in rural and geographically isolated areas of North Dakota. Elementary principals and school districts in three rural categories were described and compared.
"Rural" is a relative term - there are differing views of ruralness depending on one's conceptions and experiences. These differing views illustrate the arbitrary nature of the various definitions for "rural."

The two most popular definitions are population based and define rural in terms of what it is not rather than what it is. The Census Bureau defines urban as all places having a population of 2,500 or more and then classifies all the rest as rural. Similarly, the Standard Metropolitan Statistician Areas (SMSA), criteria used by demographers and statisticians, designate everyone and everyplace not meeting the criteria as nonmetropolitan. However, these definitions present some serious problems as geographical location is not taken into account. For example, a small town with a population of 2,000 located 15 miles from a major city would be considered "rural" using Census Bureau calculations; whereas a community of 2,600 people located 100 miles from any metropolitan area would be considered "urban" by the Census Bureau.

## A Two-Factor Model of Ruralness

Seeing the inadequacy of the Census Bureau and SMSA definitions, the writers developed a definition that would include both population and geographical isolation. The definition consists of two sets of criteria: school enrollment and distance from an urban center. Three categories of ruralness encompassed the criteria. The enrollment of school districts, grades kindergarten through twelve (or 1-12), was divided into three categories: category 1 -districts with an enrollment $0-100$; category 2 -districts with an enrollment 101-300; and category 3-districts with an enrollment of 301-600. These categories represented a proxy for a density measure.

The second criterion was distance from an urban center. Eight urban centers were identified in North Dakota including Grand Forks, Devils Lake, Minot, Williston, Fargo, Jamestown, Bismarck, and Dickinson. Category 1 schools were located more than 40 miles from an urban center; category 2 schools were 25 to 40 miles from an urban center; and category 3 schools were 10 to 25 miles from an urban center. Schools within a 10 -mile radius of the urban centers identified were not considered rural since the services, materials, and facilities within the city were easily available to these educators.

The most rural schools were those with the smallest enrollment (labeled category 1) and the greatest distance from an urban center (also labeled category 1). These schools were referred to as $1-1$ schools. These schools had an enrollment of 0-100 students and were more than 40 miles from an urban center. Twenty schools in North Dakota fit both criteria and qualified as $1-1$ schools.

The next group of rural schools were labeled 2-2 schools. These schools had an enrollment of 101-300 students and were 25 to 40 miles from an urban center. In North Dakota, 27 schools were categorized as 2-2 schools.

The least-rural schools identified - the 3-3 schools included 9 school districts. These schools had an enrollment of 301-600 students and were 10 to 25 miles from an urban center.

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## The Principals

The information about the elementary principal which was collected for the development of the profiles included age; sex; number of teachers supervised; salary; contract time in months; how long the principal expected to stay in his/her current position; years of professional experience as a principal; percentage of time spent as an elementary principal; and percentage of time spent in other professional positions (e.g., teacher, high school principal, assistant superintendent, superintendent).

Using the data collected the following composite profile for the elementary principal in a $1-1$ school district was developed. The elementary principal would likely be female ( 14 out of 20 ). The principal would likely be middle-aged. Their ages ranged from 28 to 76 with a mean age of 41.80 years of age. This person would likely hold a bachelor's degree ( 2 two-year standards, 16 bachelors, 2 masters) and would almost certainly be married ( 17 married, 2 single, 1 widowed). This person would likely supervise 3 or 4 teachers. The average was 3.60 and the number of teachers supervised ranged from 1 to 9 . The average monthly income for these principals was $\$ 1,611.17$. On the average, such a person would have had 7.60 years of experience as an elementary principal of which .35 years were full-time and 7.25 years part-time. This principal would have served the present district an average of 6.10 years ( .35 years full-time and 5.75 years part-time). Such persons would have invested $13.60 \%$ of their time, on the average, carrying out their duties as elementary principals; the percentage of time ranged from 0 to 33 . Three of the 1-1 elementary principals were also superintendents, 4 were also secondary principals; however, 19 were also teachers.

An elementary principal in a 2-2 school had the following composite profile. The elementary principal was more likely to be male ( 18 out of 27 ). Such a person would likely be classified as middle-aged since their ages ranged from 25 to 64 with a mean age of 40.63 . This person would be slightly more likely to hold a master's degree ( 12 bachelors, 14 masters) and would quite likely be married ( 20 married, 4 single, 2 widowed, and 1 other). This person would likely supervise 6 or 7 teachers; the average was 6.44 and the number of teachers supervised ranged from 2 to 12. The average monthly income for these principals was $\$ 1,932.07$. On the average, such a person would have had 6.59 years of experience as an elementary principal of which .67 years were full-time and 5.93 years were part-time. This principal would have served the present district an average of 4.89 years, all of which were part-time. Such persons would typically have invested $21.22 \%$ of their time carrying out their duties as elementary principals. The percentage of time spent in 2-2 schools carrying out the duties of an elementary principal ranged from 0 to 80 . One of the elementary principals was also a superintendent, 6 were also secondary principals, while 21 were also teachers.

The composite profile of an elementary principal in a 3-3 school was developed from the data. The elementary principal would likely be male ( 7 out of 9 ). Such a person would likely be described as middle-aged since these principals had an average age of 40.11 years; the ages ranged from 31 to 50 . This principal would be more likely to have a bachelor's degree ( 6 bachelors, 3 masters) and would be married (all 9 were married). This person would likely supervise 12 or 13 teachers; the average was 12.78 and the number of teachers supervised ranged from 9 to 18. The average monthly income of this group was

Table 1
Comparison of Profiles

|  |  | School Category |  |
| :--- | :---: | :---: | :---: |
| Characteristic | Most Rural 1-1 | Mid Rural 2-2 | Least Rural 3-3 |
| Age | 41.8 | 40.6 | 40.1 |
| Sex | Female | Male | Male |
| Education Degree | Bachelor's | Master's | Bachelor's |
| Teachers Supervised | 3.6 | 6.44 | 12.78 |
| Monthly Income | $\$ 1,611.17$ | $\$ 1,982.07$ | $\$ 2,271.79$ |
| Years of Experience | 7.60 | 6.59 | 11.78 |
| Part-time | 7.25 | 5.93 | 9.89 |
| Full-time | 0.35 | 0.67 | 1.89 |
| Years in Present District | 6.10 | 4.89 | 5.78 |
| Part-time | 5.75 | 4.89 | 1.89 |
| Full-time | 0.35 | 0.00 | 60.11 |
| Percent of Time Spent as |  | 21.22 | Teacher |
| Elementary Principal | 13.60 | Teacher | 36.78 |
| Other Professional Positions | Teacher | 70.19 |  |
| Percent of Time Spent in Other Position | 76.90 |  |  |

$\$ 2,271.79$. On the average, such a person would have had 11.78 years of experience in the principalship of which 1.89 years were full-time and 9.89 years were part-time. This principal would have served the present district an average of 7.78 years ( 1.89 years full-time and 5.89 years part-time). Such persons would typically have invested $60.11 \%$ of their time carrying out their duties as elementary principals; the percentage of time ranged from 5 to 100. Five of the elementary principals were also teachers and 1 was also a superintendent. A comparison of the profiles is seen in Table 1.

## The School Districts

To develop the profiles of the school districts, enrollment, assessed valuation, total mills levied, average per pupil cost, and accreditation level of the school were used. An explanation of these terms is important before proceeding with the data. Total enrollment was defined as "the total number of pupils admitted to (or entered on the roll of) a particular school unit" [2, p. 150]. Enrollment was also a criteria for determining the categories of ruralness. The amount of tax money levied on the value of property determined by legal property assessors was defined as the taxable valuation. Mills, as defined by Merriam-Webster Dictionary [1], were "...a money of account equal to one-tenth cent" (p. 444) and were the unit of taxation expressed in mills per dollar. The writers chose to use the general fund levy, high school tuition fund levy, high school transportation fund levy, social security fund levy, library fund levy, communications fund levy, teachers fund for retirement levy, specialized fund levy, kindergarten fund levy, vocational education fund levy, school bus fund levy, school rental fund levy, and unemployment compensation fund levy to calculate the mills levied for the cost of education.

Average cost per pupil was defined as the total expenditures of the district divided by the average daily membership of the school district. School districts in North Dakota are evaluated and rated by selected standards set by the Department of Public Instruction, Bismarck, North Dakota. Accreditation and school levels were instituted in 1952. Level I is the highest accreditation, Level II is the second highest, Level III is the third highest, and nonaccredited is the lowest accreditation
level. These categories defined the accreditation levels.
Using the data collected the composite profile of 1-1 school districts was described as follows. The 1-1 school districts would have an average enrollment of 79.2 students; the enrollment ranged from 53 to 100 . The taxable valuation ranged from $\$ 509,040$ to $\$ 1,340,744$ with a mean taxable valuation of $\$ 964,895.15$. The mills levied in 1-1 schools ranged from 45.00 to 118.90 with a mean of 89.33 mills. The average cost per pupil would be $\$ 2,275.67$ and the school would typically be nonaccredited.

The composite of 2-2 school districts was described as follows. The 2-2 school districts would have an average enrollment of 181.07 students; the enrollment ranged from 101 to 281 . The taxable valuation of the districts ranged from $\$ 666,310$ to $\$ 3,873,968$ with a mean taxable valuation of $\$ 1,873,967.40$. The range of mills levied was from 50.03 to 108.38 with a mean of 77.08 mills. The average cost per pupil would be $\$ 1,909.81$ and the school would typically have Level III accreditation.

The composite profile of 3-3 school districts was described as follows. The 3-3 school districts would have a mean enrollment of 391.3 students; the enrollment ranged from 307 to 506 . The average taxable valuation of the district was $\$ 2,614,439.20$ ranging from $\$ 1,505,886$ to $\$ 4,796,287$. The mills levied ranged from 60.00 to 85.22 with a mean of 72.82 mills. The average cost per pupil was $\$ 1,577.83$ and the school would typically have Level III accreditation. Table 2 summarizes these profiles.

The intention for conducting the study was to secure data which would allow the development and comparison of profiles of elementary principals and school districts in three categories of ruralness. In analyzing the data, the following conclusions were reached about elementary principals in rural North Dakota schools.

1. There was very little difference in age among the elementary principals in the three categories. This suggests that no particular category of ruralness attracts a certain age group to the principalship.
2. Elementary principals in 1-1 schools would be more likely to be female and elementary principals in 2-2 schools and 3-3 schools would be more likely to be male. This suggests that the most rural districts select a female teacher, perhaps because they mainly have female teachers, to be principal; whereas the 2-2 and 3-3 schools select

Table 2
Comparison of Profiles

|  | School Category |  |  |
| :--- | :---: | :---: | :---: |
| Characteristic | Most Rural 1-1 | Mid Rural 2-2 | Least Rural 3-3 |
| Enrollment | 79.2 | 181.07 | $\mathbf{3 9 1 . 3}$ |
| Taxable Valuation | $\$ 934,895.15$ | $\$ 1,873,967.40$ | $\$ 2,614,439.20$ |
| Mills Levied | 89.325 | 77.083 | 72.824 |
| Average Cost/Pupil | $\$ 2,275.67$ | $\$ 1,909.81$ | $\$ 1,577.83$ |
| Accreditation Level | NA | Level III | Level III |

males to be principals, perhaps because they have male teachers from which they can select.
3. Elementary principals in 1-1 and 3-3 schools would be more likely to have only the bachelor's degree while elementary principals in 2-2 schools would be more likely to have the master's degree. This suggests that elementary principals in 2-2 schools may receive greater encouragement for the school board or superintendent to get a master's degree. This may occur as a result of efforts to raise the level of school accreditation.
4. Elementary principals in all categories of ruralness would most likely be married. This suggests that marital status does not vary with the degree of ruralness.
5. The more isolated a school and the smaller the enrollment, the fewer the number of teachers who were supervised by the principal; the less isolated and the larger the enrollment in a school the larger the number of teachers who were supervised. This suggests that principals in the different categories of rural schools have differing levels of responsibility in the supervision of instruction and may carry out their supervisory responsibilities in differing ways.
6. The more rural a school the smaller the monthly salary of the elementary principal; the less rural a school the greater the monthly salary of the elementary principal. This suggests that the less rural districts may be wealthier and thus able to pay larger salaries to attract elementary principals.
7. Elementary principals in 2-2 schools were likely to have the fewest years of administrative experience and the elementary principals in 3-3 schools were likely to have the most years of administrative experience. This suggests that officials in 2-2 schools hire people with less experience, perhaps because they have just recently completed master's degrees; and officials in 3-3 schools hire people with more experience, possibly as a result of their longer tenure in the district.
8. Elementary principals in $\mathbf{2 - 2}$ schools were likely to have the fewest years of experience in the present district and elementary principals in 3-3 schools were likely to have the most experience in the district they were currently serving. This suggests that 2-2 schools had a higher turnover rate of elementary principals and the 3-3 schools had a lower turnover rate. It may also suggest that elementary principals in less rural schools are more satisfied with their jobs or their locations than elementary principals in more rural schools. This, in turn, may have influenced the qualifications of principals in 3-3 schools.
9. The percentage of time spent as an elementary principal is likely to decrease as ruralness increases. Elementary principals in 3-3 schools spent about $41 / 2$ times as much time as do elementary principals in 1-1 schools performing principal duties. This suggests that elementary principals in the least rural schools are relieved of more teaching or other duties and given more principal responsibilities than elementary principals in the more rural schools. The amount of time spent in carrying out prin-
cipal duties may have been, in part, a function of the enrollment.
10. Elementary principals in all rural school categories would most likely be principal-teachers. This suggests that the enrollment and accompanying responsibilities are not great enough in rural schools to warrant a full-time elementary principal in the minds of key decision makers.
11. Elementary principals in 1-1 and 2-2 schools spent about twice as much time teaching as did principals in 3-3 schools. This suggests that the least-rural schools with larger enrollments demand more time and responsibility, and therefore less teaching time, of their principals than the more rural schools with smaller enrollments demand of their elementary principals.

The following conclusions were reached about rural school districts in North Dakota.

1. The most rural schools (1-1) would be more likely to have less taxable valuation than 2-2 schools, and 2-2 schools would be more likely to have less taxable valuation than 3-3 schools. This suggests that 1-1 school districts may have property assessed at a lower value (the quality is less) or there is less property to be taxed (the districts are smaller) than in the 2-2 or 3-3 school districts. It also suggests that 3-3 school districts may have property assessed at a higher value (the quality is greater) or there is more property to be taxed (the districts are larger).
2. More mills would likely be levied by 1-1 school districts for educational costs than 2-2 or 3-3 schools. This suggests that $1-1$ school districts may require a greater financial effort to maintain their schools.
3. Average cost per pupil would likely be the greatest in 1-1 schools and the least in 3-3 schools. This would suggest that small schools have greater average costs per pupil possibly due to small enrollments and expenditure for faculty to support relatively low pupil-teacher ratios. Transportation and energy costs may also be factors.
4. The most rural schools - the $1-1$ schools - would most likely be nonaccredited, and 2-2 and 3-3 schools would most likely be Level III schools, the lowest level of accreditation. This suggests that rural schools cannot provide the services and skilled staff necessary for higher accreditation possibly due to the small number of students that would benefit from the specialized services and the costs involved in obtaining such services in an isolated area.

It is hoped that this study will spawn further studies which will make available more information about rural leaders, their schools, needs, skills, and goals. Such research could lead to the improvement of rural education and thus enrich an underserved and sometimes overlooked portion of the education community in America.

## References

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