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## ABSTRACT

The development of effective policies to improve rural schools is impeded by the lack of a consistent definition of "rural" and a paucity of good rural education research. The argument for consolidating small rural schools into larger ones is based on the assumptions that larger school systems can achieve economies of scale that reduce per-pupil costs and that larger systems can offer better and more specialized instructional programs that improve opportunities for students. There is little evidence supporting either assumption. Research examining the relationship between high school size and student learning found that schools can be too big and too small, with the optimum size between 600 and 900 students. Recommendations to policymakers concerning rural schools include: (1) consolidation is not beneficial in most instances, but should be a local decision when considered; (2) multi-dimensional approaches are needed; (3) one-size-fits-all policies are not suited to rural schools since they are diverse and their needs differ from those of urban and suburban schools; (4) rural schools should seek assistance and technical advice; (5) policymakers should involve local stakeholders in the policy-setting process and give local communities the flexibility to carry out policies in ways that best suit their needs; and (6) state policymakers should learn more about rural schools in their state through comprehensive surveys of rural schools and periodic reviews of strategies and issues pertinent to rural schools. (Contains 13 references.) (TD)

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## Rural Schools: Diverse Needs Call for Flexible Policies

by Michael L. Arnold

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# Policy Brief



## Rural Schools: Diverse Needs Call for Flexible Policies

by Michael L. Arnold

At the beginning of the 20th century, rural schools were viewed by many reformers as ineffective, inefficient, and hindered by provincial attitudes and local politics. The array of proposed remedies to these problems included consolidation, better trained teachers, and removing schools from the pressures of local politics by placing them in the hands of professional educators (Tyack, 1974).

Today, many rural schools still face a host of challenges, from poverty, underfinancing, and isolation, to a decreasing pool of experienced teachers, and high turnover among teachers and administrators. Many rural schools have successfully met these challenges and are well prepared for the future. Others have failed to meet these challenges and are poorly positioned for the future. In addition, some rural communities are reticent about reform efforts that are not locally initiated, perhaps because of ill-conceived reform efforts of the past. As a result, there is considerable concern among policymakers and educators about the future success and survival of America's rural schools.

Developing effective policies aimed at improving rural schools is not an easy task. Rural education experts contend that one-size-fits-all remedies have been largely unsuccessful because they have ignored the diversity of rural schools and the effects of scale and isolation. In fact, they argue, such policies have not only been unsuccessful, but actually have caused many of the problems rural schools now face. This policy brief draws on available research, lessons learned from past reform efforts, and McREL's experiences in the field to examine rural school reform and offer guidance for local and state policymakers.

### OBSERVATIONS ABOUT RURAL POLICY

1. Consolidation may not be a solution.
2. Effective solutions are multidimensional.
3. One-size-fits-all policies are inappropriate.
4. Assistance with policy implementation is available from a wide variety of sources.
5. Better understanding of rural issues is needed.

### Understanding rural schools

In the 1995–96 academic year, one in four public schools was located in rural America, accounting for 14.5 percent of total public school enrollment — roughly 6.5 million children (National Center for Education Statistics, 1999). Although rural schools constitute a significant portion of public elementary and secondary education in the United States, relatively little is known about them, in part because rural education issues receive little attention from policymakers and scholars. This lack of knowledge puts rural communities and schools at a disadvantage because policymakers often lack the information they need to develop sound policies to assist rural schools.

One factor that has contributed to the limited understanding of rural schools is the lack of consensus on a definition for the term *rural*. This lack of consensus is due in large part to the difficulty of crafting a definition that reflects the diversity and changing nature of rural areas. Some scholars have maintained that the problem of a commonly used definition of *rural* adversely affects the quality of the

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research on rural student achievement or the valid conclusions that can be drawn. For example, Fan and Chen (1999) argued that many rural education research studies lack clear definitions of the terms *rural*, *suburban*, and *urban* or that definitions vary across studies. Fan and Chen wrote that the resulting variation in study samples is one of the “likely sources of the inconsistent findings” about the differences in achievement between rural students and urban (or suburban) students (p. 33).

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*Consumers of rural education research must carefully determine the validity of empirical findings that guide policymaking.*

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Coladarci (Pelavin Research Institute, 1996), editor of the *Journal of Research in Rural Education*, asserted that the quality of rural education research would be improved if researchers would draw finer distinctions between rural and nonrural contexts. This distinction would allow analysts to identify phenomena that are truly rural as opposed to those that occur in all settings. For example, the level of success of a reading program in a rural school may be enhanced in rural settings because the program includes a parent involvement component, which may be more readily implemented in rural environments — or its success may have nothing to do with the setting.

Also contributing to the lack of knowledge about rural schools is the paucity of rural education research. In comparison to other disciplines, there are fewer researchers conducting rural education research, and much of the research that exists suffers from design flaws that limit its usefulness to policymakers and educators. Moreover, as Khattri, Riley, and Kane (1997) argued, some of the rural education literature is philosophically biased because it is explicitly or implicitly based upon the belief that maintaining rural communities should be a primary goal of education.

Certainly good rural education research does exist. However, as is true of all disciplines, consumers of rural education research must carefully determine the validity of empirical findings. Using poorly designed or conducted research to guide policymaking can have lasting, adverse effects on students and communities. Weak research also can harm rural children by leading practitioners to take actions that are well meaning, but based upon erroneous findings and conclusions.

### **Is consolidation the answer?**

Consolidation is the most divisive issue in rural school reform. Some reformers have argued that small rural schools are inefficient and ineffective and that consolidating them into larger organizations is the best, if not only, remedy. This argument is based upon two assumptions: (1) larger school systems can achieve economies of scale that reduce per-pupil costs, and (2) larger systems can offer better and more specialized instructional programs that improve opportunities for students. There is, however, little evidence supporting either assumption.

Although considerable effort has been taken to investigate economies of scale in schools, much of the research about rural schools has methodological flaws that limit its usefulness to policymakers. In a major review of the literature on economies of size in education, Fox (1981) omitted studies that were conceptually invalid or that used inappropriate units of analysis. He concluded that the relationship between per-pupil expenditures and size (i.e., student enrollment) is U-shaped, with higher costs in very small and very large districts.

Nevertheless, Fox cautioned that policymakers must be careful when applying the economies of scale research because each place has unique characteristics that must be considered when making policy decisions. For example, the economies of scale research presumes that all other costs remain constant with increases in enrollment. However, increasing the enrollment of a school or district through consolidation usually means an increase in the geographic area from which students are drawn. Increasing

geographic size can result in higher costs — for example, higher transportation costs — that might not be considered in decision making.

Chambers (1981) also concluded that the relationship between school size and per-pupil costs is U-shaped and argued that “the smallest of schools” can realize economies of scale by increasing their enrollment. However, Chambers noted, eventually larger enrollments can result in less communication, interaction, and coordination throughout the school, which can lead to lower student achievement and lower performance on other indicators of student success, such as graduation rates (p. 31).

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*The preponderance of evidence does not support continued school and district consolidation.*

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More recently, Odden and Picus (2000), both former presidents of the American Education Finance Association, reviewed the research on the relationship between school/district size and cost, concluding that the preponderance of evidence does not support continued school and district consolidation. They suggested that the lack of empirical support for consolidation should be reassuring to states that adjust for size differences in their school funding formulas.

The second assumption underlying the argument for consolidation is that because larger schools have more students with similar needs, they can offer specialized programs to meet those needs. Smaller schools, on the other hand, cannot offer many options for students at either end of the ability distribution beyond the core instructional programs. Thus, all students, with the exception of those with the most severe handicaps, take the general academic curriculum. Research suggests that fewer curricular options may be more beneficial in practice, especially for students with lower abilities. In a major review of the literature on effective secondary schools, Lee, Bryk, and Smith (1993) concluded that it is not clear whether increased curricular specialization is beneficial in the aggregate, noting some

evidence that larger differences in achievement may result among students of different abilities when there are more specialized programs.

A substantial body of literature on student performance suggests that students learn more in small schools, but few research studies have investigated how small is too small. A study conducted by Lee and Smith (1997) set out to identify the high school size that results in the most effective learning. Building upon their previous work, Lee and Smith used hierarchical linear modeling methods and data from the 1988 National Education Longitudinal Study to examine the relationship between high school size and student learning.

Based upon their results, the authors offered four conclusions. First, high schools should be smaller than they typically are because student achievement is higher in relatively small high schools and learning is more equitable — that is, differences in achievement associated with students’ socioeconomic status are somewhat offset by school size. Second, high schools can be too small, as students who attend high schools with fewer than 600 students exhibit lower achievement levels than do students in moderately sized schools with student enrollments between 600 and 900. Third, the ideal size of a high school (600–900) is the same for all students; ideal size does not vary as a result of students’ social class or ethnic background. Fourth, school size is more important for the most disadvantaged students, as their performance declines substantially when the size of the high school they attend is higher or lower than the ideal.

## **Observations and advice**

Giving advice about rural school reform policies is difficult because of the diversity of rural America and the complexity of the geographic, socioeconomic, and political factors contributing to this diversity. Although these factors typically result in similarities among rural areas within a region, there can also be considerable differences, even within states and counties. Adding to the diversity are the rapid changes occurring in rural

America as employment shifts from agriculture to the service industry. In 1969, farming and service industries accounted for 14.4 percent and 40 percent, respectively, of the jobs in rural areas. By 1992, only 7.6 percent of rural workers were employed in farming, but 50.6 percent were employed in the service industries (Economic Research Service, 1995). In short, the diverse and changing landscape of rural communities precludes cut-and-dried policy solutions for rural communities.

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*Rural schools are different from their urban and suburban counterparts, but rural schools also differ from one another in terms of needs, resources, and capacities.*

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Stephens and Perry (1991) noted that if you asked ten people to define the problem of rural education, you would more than likely get ten different answers. Moreover, each person would interpret much of the same data differently in order to support his or her position. With these caveats in mind, the following observations and advice are offered based on what McREL has learned from the research literature and from its work with rural schools.

### **Consolidation may not be a solution**

Although there are some important exceptions, mass consolidation has run its course in rural communities across most of the country. Furthermore, the preponderance of the empirical evidence suggests that consolidation is not beneficial in most instances. Thus, consolidation should be primarily a local decision. When communities do seek to merge schools (or in the rare instances in which consolidation is mandated by the state), states should provide adequate assistance to engage stakeholders in the decision-making process. In addition, local policymakers should seek outside help to facilitate the process. The facilitator must be someone who is viewed as neutral, so state department personnel or local community members are usually not good choices.

### **Multidimensional approaches are needed**

A single policy solution will not solve the problems faced by rural schools because the problems are multidimensional. Even if a state chooses a consolidation strategy, this approach in itself will not improve the quality of rural schools or ensure equality of educational opportunity (Monk, 1992). Large schools can face the same challenges as small ones. In order to adequately address the challenges facing rural schools, states should develop a coherent plan for crafting a *package* of solutions that addresses as many of the dimensions of the problem as possible. The same is true for local decision makers.

### **One-size-fits-all policies fall short**

Rural schools are different from their urban and suburban counterparts, but rural schools also differ from one another in terms of needs, resources, and capacities. These differences preclude the implementation of one-size-fits-all solutions. Rural education experts have long argued that such “generic” policies are not suited to rural schools since their needs differ from those of urban and suburban schools, and because of the diversity of rural America.

One way to ensure that state policies are better suited for individual rural schools is to meaningfully involve stakeholders in the policy-setting process. States should have a system for facilitating this participation. In addition, local stakeholders should find ways to constructively share their concerns because state policymakers may not fully realize the implications of implementing policies in rural contexts. Further, local communities must be given the flexibility to carry out policies in ways that best suit local needs.

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*Consolidation should be primarily a local decision.*

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### **Seek assistance and technical advice**

Past experience has shown that rural schools often lack the human and fiscal resources to successfully implement policies in a timely

manner. State mandates that districts adopt standards and aligned assessments offer a good example. Rural districts usually do not have a substantial number of central office staff members who can lead and oversee a standards-setting process. In the smallest districts, the superintendent may, in addition to his or her usual duties, serve as the curriculum director, school principal, transportation director, and/or athletic director. Similarly, teachers who are already working at full capacity have little time or energy to undertake the development of standards and assessments. In addition, the district may not have anyone on staff with the necessary expertise.

However, local leaders in need of outside expertise can seek assistance from state and federal sources and from professional education organizations. Articles, reports, newsletters, and a variety of other rich materials are available from the U.S. Department of Education, state departments of education, and regional educational laboratories. Local districts also can seek assistance from other districts working on the same issues in order to maximize financial and human resources.

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*The diverse needs of rural schools and the complex issues involved in rural school reform make effective policymaking difficult.*

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### **Learn more about rural schools**

Finally, state policymakers should seek more knowledge about the strengths and weaknesses of rural schools in their states. One way to do this is to commission a comprehensive survey of rural schools. Although a considerable amount of data has been collected on rural schools, this information usually is not systematically reported or synthesized, resulting in a gap between what we know and what we could know.

Policymakers also need to know what research suggests are the most effective strategies for

addressing the challenges facing their rural schools. If not already available, states should commission regular reports that provide up-to-date reviews on issues pertinent to rural schools. Research reviews and results from surveys about the condition of rural schools should be shared with local policymakers to assist their decision-making processes.

If there is one theme guiding policy formulation for rural education, it is that the diverse needs of rural schools and the complex issues involved in rural school reform make effective policymaking difficult. There is no silver bullet or five-step recipe that will significantly improve educational opportunities for all rural children in the long run. Those who seek quick solutions to the challenges facing rural schools no doubt will quickly become frustrated. Meaningful school improvement requires thoughtful planning and systematic execution, both of which take time. Nevertheless, as the 21st century begins, the rural school challenge is no less important for the children and communities of rural America.

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