

# **GUIDING RURAL SCHOOLS AND DISTRICTS: A RESEARCH AGENDA**

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## INTRODUCTION

According to the U.S. Department of Education, 45.1 million children attended a public school in 2001. Of these, about 7.2 million attended a school in a rural community that had a population of less than 2,500. This means that in 2001 about one of every six kindergarten classes, one out of every six biology classes, and one out of every six American government classes were held in a rural school. Certainly, then, rural students represent a significant population that is affected by decisions made by educators and policymakers at the local, state, and federal levels.

The reauthorization of the Elementary and Secondary Education Act in 2001— better known as No Child Left Behind (NCLB) — set an ambitious goal that all students will be proficient in reading and mathematics by 2014. In order to achieve this goal, it is obvious that we must find ways to enhance the learning of all students, including students who attend rural schools. The challenge at hand is to provide sound guidance and assistance to rural schools in order to improve the education outcomes for all of their students. NCLB emphasizes the importance of using rigorous scientifically based research to guide education decision making. In this respect, rural schools are at a disadvantage because relatively little high-quality research has been conducted about rural education issues (Arnold, 2000).

Recognizing the difficulty rural educators and policymakers would encounter in identifying rigorous research to inform their decision making, McREL undertook an effort to discern the extent of the rural education knowledge base through discussions with experts in the field. Based on these discussions, McREL designed and implemented a review of the rural education literature to take a first look at the condition of rural education research (Arnold, Newman, & Bailey, 2003). While acknowledging that there is general consensus around some issues, the review suggests that there is almost no rural education research that is rigorous enough to guide important decision making with the necessary level of certainty. For all practical purposes, the knowledge base about important rural education issues is nonexistent.

The paucity of rigorous rural education research points to an almost limitless number of possibilities for a rural education research agenda. In order to prioritize, and therefore narrow, the number of issues to be addressed, McREL has identified a research agenda that connects the challenges that schools face in implementing NCLB's provisions with the persistent issues that have plagued rural schools for decades. The rural education research agenda crafted by McREL includes nine priority topics:

1. Opportunity to learn
2. School size and student achievement
3. Teacher quality
4. Administrator quality

5. School and district capacity
6. School finance
7. Local control and alternative organizational structures
8. School choice
9. Community and parent aspirations and expectations

These priority topics were developed with the help of McREL's Rural Advisory Committee (RAC). The RAC is comprised of 12 members representing rural practitioners, policymakers, and researchers, whose role is to provide feedback about the activities conducted under McREL's Rural Initiative. As a first step, the practitioner and policymaker members of the RAC were asked to evaluate the practical utility of 113 research questions that were developed based on McREL's review of rural education research (Arnold et al., 2003). The responses for each item were tallied, and a mean score was calculated.

Selected results from the research review and the survey were then shared with the four-member Research Subcommittee of the RAC at a meeting at McREL. Based on this information, the subcommittee developed a set of research questions around uniquely rural education issues as they relate to NCLB. This group was asked to keep in mind the importance of identifying issues of practical importance to rural educators and policymakers.

The research questions identified by the subcommittee were then reviewed by McREL staff members who had participated in that meeting. Based on these data, these research questions were grouped into nine priority topics that represent uniquely rural obstacles to achieving the goals of NCLB.

## **PRIORITY TOPICS**

### **1. OPPORTUNITY TO LEARN**

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If NCLB holds schools and districts accountable for ensuring that all students reach the proficient performance level for identified standards, students must have the opportunity to learn the knowledge and skills embedded in those standards. Opportunity to learn is the notion that students have access to a viable curriculum and to effective instruction. Of the school-level factors examined in a recent meta-analysis of student achievement, opportunity to learn was found to have the strongest relationship to student achievement (Marzano, 2000). Therefore, one of the most effective strategies for increasing student achievement is to ensure that students have the opportunity to learn content identified in district and state content standards.

Standardized test scores suggest that rural schools have done a good job of teaching the basics. Time after time, rural students have been shown to hold their own against their urban counterparts on standardized tests (Gibbs, 2001; Economic Research Service, 2003). But rural

schools typically offer fewer advanced and college preparatory courses, and lower proportions of rural students take advanced classes such as physics and calculus (Greenberg & Teixeira, 1998). The primary reason for this difference is that rural schools traditionally have not been organized around the goal of ensuring that students are prepared for admission to college (McGranahan & Gehlfi, 1998). Priority should be given to developing and testing strategies that rural districts can use to provide students with opportunities to take courses in advanced topics.

Potential research questions related to how rural districts can provide students with the opportunity to learn advanced topics include the following:

- How cost effective are different methods of providing advanced courses to rural students?
- How does the introduction of advanced courses affect the overall achievement of rural students?
- Does a focus on providing opportunities to learn in advanced subjects improve all curricula and instruction, or does it divert attention elsewhere?

## **2. SCHOOL SIZE AND STUDENT ACHIEVEMENT**

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Although smaller class size has been shown to increase student achievement, a related issue is the relationship between school size and student achievement. This issue is of particular interest to rural educators due to attempts to consolidate schools and districts. If student achievement is positively influenced by smaller school size, there is a good rationale for maintaining small schools.

Lee, Smerdon, Alfeld-Liro, and Brown (2000) distinguish between strands of school size research. One strand examines how smallness affects the organizational systems of schools. The second strand focuses on the economic aspects of smallness, including cost-benefits analyses. Lee et al. note that results from the two strands provide different conclusions: “Although the studies with an organizational focus generally favor small schools, the research with an economic focus tends to suggest benefits from increased size” (p. 148). These contradictory views make decision making difficult for educators and policymakers.

Priority should be given to how schools can better use small enrollments to increase achievement. Small size does not automatically result in increased learning if educators engage in practices that are better suited to schools with larger class sizes.

Potential research questions about school size and student achievement include the following:

- What is the nature of the relationship between school size and student achievement?
- How can rural schools take advantage of small size to improve student achievement?
- What organizational structures of rural schools facilitate improved student achievement?

### **3. TEACHER QUALITY**

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Finding and retaining good teachers is a challenge for all schools, yet rural schools are at a considerable disadvantage in an increasingly competitive market for teachers. Given that NCLB requires that all teachers of core subject areas must be highly qualified by the 2005–2006 school year, there is a heightened concern among rural administrators that they will be unable to fill teaching positions. In commenting on the highly qualified teacher provision of NCLB, Gene Carter (2003), executive director of the Association for Supervision and Curriculum Development, notes that “as teacher quality provisions of NCLB increase the demand for licensed teachers, rural communities will face greater difficulty recruiting and retaining qualified teachers” (p. 1).

Three broad areas related to the quality of rural teachers need to be explored: (1) recruiting highly qualified teachers and inducting them effectively into the rural schools; (2) providing effective teacher professional development that is aligned with research-based strategies and school improvement goals; and (3) retaining teachers in geographically isolated schools. Additional knowledge is needed about the effects of state policies on rural teacher quality, and on how higher education institutions can assist in improving the quality of rural teachers.

Potential research questions related to the quality of rural teachers include the following:

- How can rural schools attract and induct new teachers?
- How can rural schools retain teachers?
- How can rural schools build teachers’ content knowledge and pedagogical skills in ways that have the greatest impact on student achievement?
- How do state policies facilitate or hinder the recruitment, retention, and improvement of rural teachers?

#### 4. ADMINISTRATOR QUALITY

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Similar to the issue of teacher quality is the problem of recruiting and retaining administrators who are adequately prepared to create and sustain high-performing learning systems that ensure that all students meet high standards. This problem begins in university administrator preparation programs that are geared primarily for training urban and suburban school leaders. McREL's review of the rural education literature points to a shortage of information about the professional development of rural administrators (Arnold et al., 2003). Technology has emerged as a potential solution for providing professional development to administrators in geographically isolated schools, but questions remain about the effectiveness of this type of training. There are also questions about whether the knowledge and skills that rural administrators need to be successful differ depending upon the community in which they work.

Rural school districts face a different set of challenges in recruiting administrators than do their urban and suburban counterparts. Rural administrators have to assume more responsibilities in small districts (e.g., instructional leader, athletic director, bus driver) because there are fewer administrators in the district. They also receive less compensation and have greater visibility in their communities. In short, being a rural administrator is a difficult job that fewer and fewer people are willing to take. Distributed leadership is a potential solution for easing the burden on rural school administrators. Distributed leadership occurs when there is shared responsibility and mutual accountability toward a common goal or goals for the good of an organization. Questions remain about how distributed leadership plays out in rural schools versus nonrural schools.

Potential research questions about administrator quality include the following:

- What are the elements of effective professional development for rural administrators?
- How effective is technology in delivering professional development to rural administrators?
- How can rural districts attract and retain administrators?
- Does distributed leadership play out differently in rural schools than in nonrural schools?
- Do rural principals need more instructional knowledge than nonrural principals do?
- Have alternate routes to administrative certification been successful?



## 5. SCHOOL AND DISTRICT CAPACITY

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Rural schools and districts need the internal capacity to successfully reach the goals of NCLB. There are a number of issues related to whether rural schools and districts have adequate resources and the infrastructure to implement programmatic innovation. Professional isolation can lead to weak professional communities, which perpetuate ineffective practices. These types of organizations may lack leaders who know how to build internal capacity, or the systems that facilitate ongoing improvement of practices. Rural schools also face significant resource limitations particularly in terms of economic and human resources. In addition, there are social, cultural, and political forces that can influence the capacity of rural schools to improve. For instance, trust is cited as a key resource for improvement (Bryk & Schneider, 2002), but questions remain about how administrators build trust while creating change at the same time. Therefore, priority should be given to developing and testing strategies that build school and district capacity to improve student achievement.

Potential research questions related to school and district capacity include the following:

- How are rural schools developing the local capacity to respond to the curricular and instructional alignment required by standards-based education?
- How are rural schools developing the local capacity to conduct formative and summative assessments that are part of standards-based system?
- Are there different issues that rural administrators have to consider in school improvement?
- How do traditional notions of schooling, and the roles individuals play in schools, influence the development of rural school capacity?
- How do rural administrators increase their knowledge and ability to build school and district capacity?
- How do rural schools develop and use their human, cultural, social, economic, and political resources to improve?

## 6. SCHOOL FINANCE

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There is considerable debate about the financial implications of NCLB. Regardless of one's view of the issue, of main concern is whether rural schools have adequate financial resources to successfully comply with the Act's requirements. Like all schools, rural schools receive a considerable amount of their funding through state funding formulas. In recent years, states have taken on greater responsibility for funding schools. With tightening state budgets, lawmakers are seeking ways to reduce public education costs. Rural schools become easy targets because of higher per-pupil costs in the smallest schools and districts. As a result, lawmakers

seeking to reduce state budgets turn to school district consolidation. However, as Odden and Picus (2000) note, “In most cases, there is not a strong research base [about the benefits of consolidation] for continuing to encourage school and district consolidation” (p. 231).

In addition, there are issues about how much it costs to bring all students to proficient levels of performance. This issue is particularly salient regarding students who have immigrated to the United States and for whom English is a second language. In a related vein, some rural school advocates maintain that rural schools are more instructionally efficient because the cost of educating a child all the way through graduation is lower in rural districts than in urban districts, which typically have lower graduation rates.

Potential research questions about school finance issues include the following:

- What are the different ways in which states are funding rural schools given higher per-pupil costs in small districts?
- How can rural school districts increase efficiency (i.e., lower costs while increasing student achievement)?
- Are rural schools instructionally more effective and efficient than nonrural schools?
- With the increase in English language learners, how are district and school resources distributed and redistributed?

## **7. LOCAL CONTROL AND ALTERNATIVE ORGANIZATIONAL STRUCTURES**

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Local control of schools is a deeply held value in many rural communities, yet many educators and policymakers think that local control is an outdated notion that hinders rather than facilitates successful school improvement. Advocates of local control counter that schools are community institutions and that local governance is an important part of community culture (Jimerson, 2004). Related to local control are governance issues. Consolidation has long been a contentious issue in rural America as local communities have struggled to maintain control over their schools in the wake of state budget cuts.

In recent years, school districts have experimented with alternative organizational structures that reduce central administration costs while ensuring that policy decisions are made at the local level. These arrangements, sometimes called regional cooperation of governance agreements, may be an effective compromise that meets the goals and objectives of both sides of the consolidation debate. No research is available, however, on the relationship between alternative organizational structures and student achievement.

Potential research questions related to local control and alternative organizational structures include the following:

- How can local community control be used to improve student achievement?
- What are the effects of alternative organizational structures on costs, local control, and student achievement?
- What are the contextual factors that could make alternative organizational structures cost effective?

## **8. SCHOOL CHOICE**

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School choice in rural areas is a subject that has been largely overlooked by researchers (Arnold et al., 2003). This gap in the rural education knowledge base may be due to the perception that geographic isolation precludes choice. There are signs to the contrary. Rural charter schools are providing an option to school consolidation by giving parents and educators the opportunity to keep their local school open. State interdistrict choice laws are giving parents the opportunity to send their children to schools outside of their home district. NCLB provides parents with the opportunity to send their children to another school at district expense if their neighborhood school is found to be in need of improvement.

The lack of educational alternatives in the most isolated communities weakens parental choice. Because even outstanding rural schools cannot meet the needs of all students, it is important to develop and test alternatives that could result in parents having more viable educational choices.

Potential research issues related to school choice in rural schools include the following:

- How can school choice be effectively provided in rural contexts?
- In what ways can school choice options improve the educational outcomes of rural students?
- Can school choice improve the responsiveness of rural schools to community and parent educational expectations for students, and how?
- How effective are alternative choice models at improving student achievement?

## 9. COMMUNITY AND PARENT ASPIRATIONS AND EXPECTATIONS

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Rural community aspirations and expectations can influence the success of school improvement efforts, perhaps even negatively, if communities continue to adhere to the economic development model of bringing in low-skill, low-wage jobs. For many years, the conventional wisdom has been that rural economic development should be based on attracting businesses that offer lower wage/lower skill jobs (Hobbs, 1998). Thus, academically talented rural youth often have been encouraged by their parents and teachers to stay in school, go to college, and move to the city to find higher paying jobs. As a result, there has been a steady migration of the most successful graduates away from rural areas (Jischke, 2000).

A related issue is parent expectations — an important factor in improving student achievement. In fact, as Marzano (2003) notes, “high expectations communicated to students are associated with enhanced achievement” (p. 129). Thus, schools can boost student achievement by encouraging parents and other community members to recognize the potential of higher aspirations and expectations.

Potential research questions related to community and parent aspirations and expectations include the following:

- How can rural schools educate parents and community members about the importance of student achievement?
- Are there effective models for how rural schools can support community development efforts?
- How can schools encourage parents to have high expectations for their children?

### MOVING THE AGENDA AHEAD

McREL has developed this research agenda in order to encourage a strong body of rural education research. McREL is taking a leadership role in three ways in moving ahead the rural education research agenda articulated in this paper. First, McREL will identify two or three specific topics from the priorities listed herein to launch a research program. McREL will select those topics that are most likely to improve student achievement in rural schools and that represent the greatest difficulties for rural schools in achieving the goals of NCLB.

Second, McREL will solicit proposals from education researchers to develop designs for studies focused on these priority rural topics. The competition for awards to develop these designs is intended to initiate a national rural education research agenda that addresses significant rural issues.

Third, following the development of the research designs, McREL intends to secure funding to conduct their studies. Working with these researchers, McREL will help build the national rural education research capacity. McREL also will seek opportunities to encourage rural education research in other ways, including organizing small rural education research symposia and working with national rural education leaders including the National Rural Education Association and Organizations Concerned about Rural Education.

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