Recruiting and Retaining High-Quality Teachers in Rural Areas

David H. Monk

Summary

In examining recruitment and retention of teachers in rural areas, David Monk begins by noting the numerous possible characteristics of rural communities—small size, sparse settlement, distance from population concentrations, and an economic reliance on agricultural industries that are increasingly using seasonal and immigrant workers to minimize labor costs. Many, though not all, rural areas, he says, are seriously impoverished.

Classes in rural schools are relatively small, and teachers tend to report satisfaction with their work environments and relatively few problems with discipline. But teacher turnover is often high, and hiring can be difficult. Monk observes that rural schools have a below-average share of highly trained teachers. Compensation in rural schools tends to be low, perhaps because of a lower fiscal capacity in rural areas, thus complicating efforts to attract and retain teachers.

Several student characteristics, including relatively large shares of students with special needs and with limited English skills and lower shares of students attending college, can also make it difficult to recruit and retain high-quality teachers. Other challenges include meeting the needs of highly mobile children of low-income migrant farm workers.

With respect to public policy, Monk asserts a need to focus on a subcategory of what might be called hard-to-staff rural schools rather than to develop a blanket set of policies for all rural schools. In particular, he recommends a focus on such indicators as low teacher qualifications, teaching in fields far removed from the area of training, difficulty in hiring, high turnover, a lack of diversity among teachers in the school, and the presence of migrant farm workers' children. Successful efforts to stimulate economic growth in these areas would be highly beneficial. He also calls attention to the potential for modern telecommunication and computing technologies to offset some of the drawbacks associated with teaching in rural areas.

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In many discussions of rural schools and school districts, *rural* is simply a catchword denoting everything that is not urban or metropolitan. Such usage overlooks the complexity of rural communities and school districts, as well as the considerable variation within them. In examining recruitment and retention of teachers in rural areas, I begin with the premise that *rural* is an important analytic category. I examine rural communities in detail and then survey the organizational structure of their schools and the demographics and educational needs of their students to see how each affects the ability of rural schools to attract and retain high-quality teachers. I conclude with an assessment of implications for policy.

Attributes of Rural Communities

As the noted rural sociologist Daryl Hobbs has observed, one of the problems with past generalizations about rural America is that rural America defies generalization.[1] But it is possible to describe in some detail the features of a rural community. Some of these features can be considered fundamental to or inherent in a rural community; others are simply associated with such a community.

Among the inherent characteristics are small size, sparse settlement, narrowness of choice (with regard, for example, to shopping, schools, and medical services), distance from population concentrations, and an economic reliance on agricultural industries, sometimes in tandem with tourism. In keeping with Hobbs's assertion, not all of these essential characteristics necessarily apply to each rural community. For example, a community might be small but densely settled. The term *rural*, then, might imply small, but small need not imply rural. Even assuming uncritically that rural implies small can be problematic: sometimes large-enrollment centralized school districts serve geographically large rural settings. Likewise, certain regions, such as the newly coined "micropolitan statistical area," can be simultaneously urban and rural. As defined by the U.S. Census Bureau, each of these relatively sparsely settled regions must have at least one urban cluster with a population of at least 10,000 but less than 50,000.[2]

The economic base of rural communities tends to be place-bound. Enterprises like agriculture engage seasonal workers, and other place-bound industries like meatpacking are increasingly using immigrant workers to minimize labor costs.[3] Indeed, the rural economic base may be shifting to include more industries that are place-bound and that can make use of low-skill workers. Such shifting has far-reaching effects for the schools in general, and for their ability to recruit and retain high-quality teachers in particular.

Other attributes are not inherent in rural communities but nevertheless tend to be closely associated with them. For example, many rural areas are seriously impoverished.[4] Indeed, the incidence of poverty in conventionally defined nonmetropolitan areas is higher (14.6 percent) than it is in metropolitan areas (11.4 percent), although poverty rates are highest (16.6 percent) in metropolitan central cities.[5] Among the 250 poorest counties in the United States, 244 are rural, and out of the more than 8 million children attending public schools in rural areas, 2.5 million live in poverty.[6]

Rural communities are also associated with aging populations and with population and job loss. For example, populations have dropped in rural areas in response to declines in traditional rural industries like wood prod-

ucts, textiles, apparel, and leather, coupled with agribusiness consolidations and the decline of family farms.[7] These trends have created one of the most pressing challenges facing many rural communities—namely, retaining younger populations.[8]

But rural communities are also associated with positive attributes, such as beauty and serenity. And economies in rural areas grew briskly after the 1990–91 recession and grew more rapidly than those in urban areas in the first part of the 1990s.[9] One study attributes the more rapid growth to technological innovations of the information age, new forms of work organization that permit workers to reside away from population centers, and the expansion of jobs that do not require college degrees. The study sees the largest share of jobs in the near-term rural economy as requiring more than a high school degree, but not as much as a college degree.[10]

Finally, rural communities vary widely both within themselves and across regions of the nation. Some rural areas, particularly resorts, for example, feature extremely valuable real estate, whose high property taxes have implications for funding rural schools. Yet poverty can exist in these same resort settings. Highly valued properties are typically held by part-time residents who engage permanent residents in low-wage service jobs like waiting on tables and caretaking. Real estate prices can become so high that permanent residents are forced to live elsewhere and to commute into the resort communities. In states where property owners vote on school budget referenda, it can be hard to secure the support of the absentee landowners for maintaining the schools even if the property wealth base is high.

Rural school districts in the western United States also differ from those in the east, partly because of geography and partly because of history. In years past, many small country schoolhouses dotted the nation's eastern, particularly northeastern, states. As school district consolidation has proceeded over the years, the number of districts has declined substantially, but many small districts continue to exist, particularly in New York and Pennsylvania. Elsewhere, particularly in the south, county-level districts are more common, and consolidation efforts are more typically focused on individual schools.

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A legacy of consolidation can have important internal implications for schooling.[11] Consolidation can join separately organized communities that vary widely in terms of their culture, values, and worldview. Teachers and other school officials in consolidated districts must then find ways to bring together the differing perspectives into a common and coherent schooling endeavor. When consolidations are contentious, teachers and administrators must do what they can to forge a new community identity. As the prevalence of hyphenated school district names in the aftermath of school consolidations suggests, the task is not easy. The presence of multiple community identities within a school district is a common hallmark of a rural school setting.

Table 1. Number of Students, Teachers, and Schools, by School Type and Student Enrollment, Public Schools, 2003–04

School type and enrollment	Students	Teachers	Schools
All public schools	47,315,700	3,250,600	88,113
Rural/small town	8,427,900	617,000	23,802
Student enrollment			
Fewer than 100	320,900	48,700	6,895
100–199	1,182,300	118,800	7,922
200–499	12,543,200	978,900	35,685
500–749	12,290,800	850,300	20,156
750–999	7,229,600	466,300	8,396
1,000 or more	13,748,800	787,700	9,059

Source: National Center for Education Statistics, *School and Staffing Survey, 2003–04* (U.S. Department of Education, 2006).

One final twist is that sometimes rural attributes can be taken on voluntarily. Some schools and school districts, for example, are small out of choice rather than out of necessity. To the degree that added costs are associated with small scales of operation, policymakers have been more sympathetic to providing relief for places that have no choice but to be small. Of course, in practice, the choice-necessity distinction can be a vexing one to draw.

Assessing the Scope of the Rural Sector

Estimates of the number of rural districts and schools in the United States vary according to how they are defined. According to the Common Core of Data collected by the National Center for Education Statistics (NCES), 7,824 school districts were classified as rural in 2002–03—close to half (49 percent) of the school districts in the nation.[12] These rural districts operated 24,350 schools, served more than 7.6 million students, and employed more than 523,000 full-time equivalent (FTE) teachers.[13] And these estimates may be undercounts because many rural areas are embedded within school districts in other categories, including urban districts.

Table 1 reports data collected as part of the NCES's 2003–04 School and Staffing Survey (SASS). The table acknowledges the complexity of the definition question by providing separate breakdowns according to the characteristics of the community served and the size of the school. Clearly, rural schools, which are defined in different ways in the table, represent a significant share of schools in the nation.

Organizational Features of Rural Schools

Several organizational features of rural schools directly affect teacher recruitment and retention. Among the most important are demographic characteristics of the teachers, teachers' workloads, and teachers' salaries.

Characteristics of Teachers in Rural Schools

Table 2 shows how several key teacher attributes—experience, advanced schooling, and race—are distributed among schools of different types and sizes. It suggests, in particular, a discrepancy between rural and small schools in the average level of teacher experience. The share of inexperienced teachers, though relatively low in rural areas, is high in the smallest

Table 2. Share of Teachers with Selected Attributes, by School Type and Student Enrollment, 2003–04

Percent

School type and enrollment	Share with three or fewer years of full-time experience	Share with master's degree or higher	Share white, non-Hispanic
All public schools	17.8	48.1	83.1
Rural/small town	14.6	41.9	90.2
Student enrollment			
Fewer than 100	21.0	37.6	81.3
100–199	17.9	40.7	88.4
200–499	16.6	47.8	86.8
500–749	17.7	46.9	82.3
750–999	18.3	47.4	79.8
1,000 or more	18.9	51.9	80.7

Source: See table 1.

schools, perhaps suggesting the smallest schools face the greatest hiring and retention challenges. These data are consistent with the findings of a study using a sophisticated research methodology that controlled for the influence of other background characteristics.[14] The table shows that both rural schools and the smallest schools have a below-average share of more highly trained teachers, and that rural schools have an above-average share of non-Hispanic white teachers.

The data in table 2 are consistent with Robert Gibbs's findings in 2000 that teachers in rural areas are only about half as likely to have graduated from top-ranked colleges or universities as their peers in urban areas (7 percent for rural teachers and 15 percent for urban teachers).[15] Researchers also consistently find that teachers in rural areas have comparatively low educational attainment, which suggests one reason why rural areas may be less likely to offer college-preparation programs. Elizabeth Greenberg and Ruy Teixeira report, for example, that 93 percent of twelfth graders in urban areas were enrolled in schools that offered calculus, as against 64 percent of rural twelfth graders. They found similar gaps in other content areas.[16] William Carlsen and I also found that rural science teachers were less likely to have graduate degrees and more likely to have majored in education with less course work in science and mathematics than their urban counterparts.[17]

Table 3 provides insights into the hiring practices of small and rural districts. For example, it shows that the share of rural districts requiring full standard state certification for the field to be taught is larger than the share of all public school districts with that requirement. Here again, rural districts and small districts differ, with a somewhat smaller share of the very smallest districts—those with fewer than 250 students—requiring full certification. The share is even lower for the largest districts. The table also shows that rural and small districts are less likely to require passing scores on state tests as well as standardized tests such as the Praxis examinations required by some states for certification (though passing scores on the Praxis examination vary from state to state).

Table 3. Share of Districts Requiring Selected Hiring Criteria, by School Type and District Student Enrollment, 2003–04

Percent

School type and enrollment	Full standard state certification for field taught	Passing score on state test of basic skills	Passing score on Praxis core professional practice	Passing score on Praxis II content area
All public school districts	77.4	64.1	29.1	26.9
Rural/small town	79.2	59.7	26.7	25.2
Student enrollment				
Fewer than 250	73.8	53.2	11.8	9.4
250–999	77.3	64.3	25.3	21.5
1,000–1,999	79.8	68.3	36.3	33.8
2,000–4,999	80.5	69.1	40.2	38.9
5,000–9,999	77.3	68.9	42.3	44.5
10,000 or more	72.1	66.8	38.3	39.4

Source: NCES, *Schools and Staffing Survey, 2003–04,* District Data File (U.S. Department of Education, 2006), table 38.

Table 4 makes clear the difficulty that schools of different types and sizes encounter in filling various teaching positions. Relatively small shares of schools report difficulty hiring general elementary teachers, although the smallest schools have more difficulty than most. In classic shortage areas like special education, mathematics, and the sciences, however, the share tends to be higher in the rural and the smallest schools, again suggesting that these schools face special challenges in recruiting teachers.

Working Conditions for Teachers in Rural Areas

Studies comparing working conditions for teachers in rural and other kinds of school settings have found differences in average class size and in the mix of courses taught, particularly at the secondary level.

Pupil-teacher ratios are relatively low in both elementary and secondary schools that enroll few students. According to the NCES, elementary schools with fewer than 300 students report pupil-teacher ratios of 13.3, compared with 20.3 for schools with more than 1,500 students. Figures for secondary schools are comparable, although they tend to be lower.[18] The lower pupil-teacher ratios in smaller schools affect different aspects of teacher workloads. On the positive side, smaller schools tend to have smaller class sizes, although cost sensitivities can prompt measures like combining grade levels. Smaller class sizes, all else equal, are an attractive feature of working in small or rural schools.

Other advantages can stem from a small school or small classroom environment. Rural teachers, for example, report more satisfaction with their work environments and feel they have greater autonomy and more direct influence over school policy.[19] Evidence also suggests fewer problems with discipline in rural areas.[20]

On the negative side, smaller numbers of students limit the ability of teachers to specialize and may require them to deal with wider ranges of pupil needs. This drawback is perhaps most obvious at the secondary level, where a single high school science teacher

Table 4. Share of Schools with Teaching Vacancies in Selected Subject Areas Having Difficulty Filling These Vacancies, by Type of School and Student Enrollment, 2003–04

Percent

School type and enrollment	Subject area with vacancy						
	General elementary	Special education	English language arts	Social studies	Mathematics	Biology	Physics
All public schools	3.9	29.2	8.1	4.0	28.8	20.9	27.7
Rural/small town	3.9	33.1	11.4	6.3	29.6	20.9	29.7
Student enrollment							
Fewer than 100	6.3	37.5	10.6	7.9	24.6	17.0	23.2
100–199	2.9	29.2	19.6	8.1	34.7	29.6	40.6
200–499	4.3	26.8	12.5	3.8	29.1	17.4	25.4
500–749	3.9	27.5	4.4	2.8	27.0	21.3	27.0
750–999	2.5	31.9	2.2	5.0	25.3	20.9	25.7
1,000 or more	1.9	32.7	7.8	3.2	31.0	21.9	28.9

Source: NCES, *Schools and Staffing Survey, 2003–04,* Public School, BIA School Data Files (U.S. Department of Education, 2006), table 15.

may teach all the science subfields, but even in elementary schools teachers can find themselves dealing with a wider age span than is customary elsewhere because grade levels have been combined.

Smaller student enrollment can also make it hard for schools to offer more specialized courses. In earlier research using data from New York, I found that increasing enrollment up to 100 in a grade level in secondary schools predictably broadened the curriculum. Increasing enrollment beyond 100, however, often resulted in increased sections of existing courses rather than in more varied courses.[21]

The smaller numbers of students in rural schools can also affect school stability from one year to the next. Schools with larger numbers of students tend to enjoy a cushion against change. But when students are few, the school or district can change substantially from one year to the next in ways that affect the work of teachers. Recent federal legislation, most particularly the No Child Left Behind (NCLB) law, raises the stakes for fluctuations from one year to the next, notably in calculating the adequate yearly progress (AYP) accountability yardsticks. Failures to meet AYP standards because of fluctuations stemming from small numbers make small schools vulnerable to sanctions even when teaching performance is exemplary. The small number problem is exacerbated when the performance levels of subpopulations are assessed, making the already small numbers even smaller. The Bush administration has begun to provide increased flexibility to small and rural districts as part of its refinement of NCLB, but making accountability measures sensitive to the realities of small and rural schools and districts remains a challenge.

Salaries of Teachers in Rural Schools

Table 5, which compares average salaries across school and district types and sizes for 2003-04, shows that compensation tends to be low in both rural and small school settings. Salaries for teachers in the smallest schools are

Table 5. Average Base Salary for Regular Full-Time Teachers and Share of Teachers with Supplemental Income, by School Type and Student Enrollment, 2003–04

School type and enrollment	Average base salary (dollars)	Share of teachers (percent)		
		With extracurricular compensation	With compensation from other school sources	With an outside job
All public schools	44,400	40.2	13.6	15.9
Rural/small town	38,000	42.5	14.1	15.7
Student enrollment				
Fewer than 100	38,100	32.5	11.8	19.5
100–199	38,200	38.4	12.3	17.6
200–499	43,200	36.5	11.8	15.3
500–749	44,100	36.7	13.1	13.5
750–999	45,000	42.1	17.0	15.2
1,000 or more	46,700	47.7	14.6	19.0

Source: See table 1.

16.5 percent lower than the national average. The share of teachers in the smallest schools who report having an extra job is higher than the national average (19.5 percent compared with 15.9 percent for the sample as a whole). Teachers in the smallest settings are less likely than those in public schools nationwide to be receiving supplemental compensation for extracurricular work or from other school sources, though no such difference appears to exist for teachers in rural districts.

In a separate study Gibbs found that urban salaries are approximately 21 percent higher than rural salaries for starting teachers and 35 percent higher for teachers with master's degrees and twenty or more years of experience.[22]

Why Are Rural Teachers' Salaries Lower? Researchers have offered various reasons to explain why teacher salaries are lower on average in rural and small school districts than in other areas.

Neoclassical economic theory holds that people's willingness to accept a particular wage is related in part to the attractiveness of the location where the work will be done. In highly attractive places, workers will be willing to accept a lower wage, so perhaps wages are low in rural areas because the attractiveness of the areas to teachers, on average, induces them to accept lower wages. The opposite, however, might be true if teachers, on average, are not receptive to rural living. In such a case, rural school districts would have to offer higher wages to attract a comparable pool of applicants. In such a case, again, the lower prevailing wages in rural areas could suggest that rural school districts make do with less qualified pools of candidates and are more likely to face retention problems.

Closely related to the mix of attractive and unattractive features in the locale is the mix of features of the job itself. On the one hand, the smaller pupil-teacher ratios and the relative absence of disciplinary problems and greater social cohesion (to the extent that it exists) could prompt teacher candidates to accept lower wages, all else equal. On the other hand, the inability to specialize and the need to teach wide ranges of students could

be dispiriting to teachers and mean that higher wages would be necessary to attract and retain comparable candidates.

One aspect of teachers' work in rural areas that has not received much attention is the availability of services for students with special needs. Rural schools are likely to have to struggle to provide these specialized services because of combinations of poverty and higher costs owing to small scales of operation, and shortages of such services will tend to make teaching less attractive.

Differences in the underlying costs of living also explain some of the nominal differences in teacher wages. Housing costs, for example, tend to be higher in urban areas. But people in rural areas may depend more on automobiles than their counterparts in urban settings, a difference that has a bearing on the cost of living.

The lower wages in rural schools may also simply reflect a lower fiscal capacity in rural areas, coupled with only limited efforts by states to offset the effects of poverty through equalizing grant-in-aid programs.

Rural schools arguably face higher costs of operation because of their smaller size and sparsely settled locations. More concretely, small schools may have to hire and pay for more teachers on a per pupil basis because certain courses must be offered, if only to a few students. One way to absorb these extra costs is to pay lower salaries. As noted, schools are sometimes small by necessity; when school officials and voters choose to have small schools, it complicates the policy implications of size-related costs.

Such rural attributes as sparse settlement or geographic isolation can also raise transportation costs and draw resources away from the core instructional program in general, and teacher salaries in particular.

Rural districts in micropolitan areas will be under pressure to offer wages and working conditions comparable to those of nearby urbanized areas.[23] An inability or unwillingness to compete will lead to applicant pools with lower qualifications, all else equal. Districts in more isolated rural areas will feel less pressure to compete with neighboring districts, though isolation itself may adversely affect the available pool of candidates for teaching positions.

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Teacher labor markets, in general, tend to be highly localized. A study by Donald Boyd and several colleagues shows that teachers want to teach in schools near where they grew up and prefer areas like their hometowns. For example, 61 percent of teachers entering public school teaching in New York State from 1999 to 2002 started teaching within fifteen miles of their hometown; 85 percent began teaching within forty miles of their hometown.[24] Several studies stress the hardship the localized teacher market poses for

urban areas, which tend to produce lower shares of college graduates than do suburban areas.[25] And similar challenges exist for rural areas, which also produce relatively low shares of college graduates. Indeed, one study finds that the share of rural youth getting some college education is lower than that of urban youth, so teacher supply problems are even more serious in rural areas.[26] It

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In a study of hiring in Pennsylvania, Robert Strauss found a dysfunctional penchant for hiring candidates with local ties, which he traced in part to the minimal limits in the school code on indirect conflicts of interest in hiring relatives or friends. Strauss faulted the willingness of school authorities to sacrifice academic credentials in favor of ties to the local area and even called into question the nation's commitment to local school board authority for school governance.[27] More recently, a study of hiring in a large Florida school district suggests that school principals factor academic credentials into a broader array of considerations in what appears to be a rational assessment of the prospective teacher's fit with the organizational context of the school.[28] For example, if teachers with better academic credentials leave a rural school after very short periods of employment, it could be rational for the hiring authorities at that school to prefer other candidates whom they believe will stay in place longer. This could then translate into a preference for candidates who grew up in the vicinity of the school, even at the risk of introducing elements of provincialism into school operations.

Retention rates also influence teacher salaries. High turnover and an inclination to hire inexperienced people will lower average salaries. The data in table 2 suggesting that rural areas have lower shares of inexperienced teachers, while the smallest schools have a relatively high share of such teachers, are confirmed in work of Richard Ingersoll that finds teacher retention to be greater in rural than in other schools. He also finds that teachers leave smaller schools at higher rates.[29]

Anecdotal evidence suggests a sharp split in district experiences with respect to teacher retention. On the one hand, some teachers settle into small and rural districts and stay for extraordinarily long periods. Indeed, some teachers who grew up in or near a rural community spend their entire career in the same school—a boon or a horror, depending on your perspective. On the other hand, some teachers in these schools leave shortly after arriving in the classroom. Among the possible reasons for this revolving-door phenomenon are the disadvantages associated with rural living, the low salaries, and a tendency to assign greater weight to the draw-

backs of rural school teaching (that is, seeing the wider range of students and subjects being taught as undesirable and more important than positive features such as smaller class sizes and fewer discipline problems). Teachers remaining in rural settings do so either by choice or because they cannot get work elsewhere. Presumably school authorities in rural areas seek teachers who are highly talented and genuinely interested in teaching in rural schools. It remains unclear how many teachers and prospective teachers fall into this category.

Features of Rural Student Populations

Several characteristics of students in rural schools, especially the share with special needs, the share with limited English skills, the share of highly mobile students, and the share of students who do not go to college, may impair the ability of rural schools to recruit and retain teachers.

One measure of the prevalence of students with specialized needs by school size and type is the share of students with Individualized Educational Programs (IEPs), which are required by federal law to establish eligibility for federally funded special education services. The share of students with IEPs is at best a crude measure of the incidence of needs because not all students with disabilities are recognized as such. Concerns also exist about the "overidentification" of students having special needs and receiving IEPs, perhaps as a regrettable way of removing them from regular instructional settings or of qualifying a district for additional federal and state financial aid, which may or may not reach the intended students. Another consideration, in small and rural settings, is that parents (particularly well-to-do parents) can respond to deficiencies in services by moving to more highly populated areas with better services, thus reducing pressure on the rural districts to provide services.

A further possible difficulty with an IEP indicator is that IEPs themselves vary enormously in how demanding they are regarding the treatments and services identified. An IEP in a small, rural school could look quite different from one for a similar student in a large, urban school, though no relevant evidence seems to exist.

According to the NCES, rural schools look quite similar to the national average with respect to both the share of schools enrolling students with IEPs (on average, about 98 percent) and the share of enrolled students who received an IEP (on average, about 13 percent).[30] A lower share of the smallest schools has any students with IEPs (perhaps reflecting the tendency for parents to leave to find better offerings), but those with IEP students have a higher share of such students.

Other students with unusual needs are also putting pressures on rural schools. Efforts by meatpacking and other place-bound industries to cut costs by hiring recent immigrants are forcing schools to teach more students with limited English language skills. A study by Mark Grey finds enrollments of non-English-speaking students climbing in rural schools with little experience with such students. Grey also calls attention to the consequences for schools of high employee turnover in meatpacking.[31] Other researchers also cite the disruptive effects of high student turnover on schools.[32] Such problems run counter to the image of bucolic and tranquil rural schools and may over time affect the satisfaction that teachers in rural areas report with their working conditions.[33]

Rural districts in agricultural regions work with children of very low-income migrant farm workers, whose frequent comings and goings pose challenges for schools. Paul Green's review of research on migrant workers' living conditions uncovered crushing poverty and some of the harshest housing and labor conditions the United States has ever known. Edward R. Murrow's documentary, *Harvest of Shame*, broadcast on Thanksgiving Day in 1960, called the nation's attention to the plight of farm workers. In 1971 Robert Coles's *Children of Crisis* also provided a detailed look at the conditions of migrant farm workers. A more recent assessment suggests that these conditions have remained disturbingly unchanged.[34]

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Green points out that life expectancy in migratory farm families is quite low, about forty-nine years, and that infant mortality rates are quite high. He reports that stresses on migrant families are enormous and also cites maltreatment, malnutrition, and intermittent school attendance among their children.[35]

Reports that native children as well as teachers refuse to accept migrant children into the school culture do not reflect well on the schools that serve these students. One cannot help but wonder what the increased accountability provisions for schools in No Child Left Behind could inadvertently do to the willingness of schools to accept and provide appropriate education for these children. They could become marginalized and invisible, passed on from one set of largely indifferent institutional caregivers to the next with little sense of collective responsibility.

Instability in the student population of rural areas, however, is not limited to the comings and goings of migrant farm workers. It can also stem from poverty and the tendency of impoverished families to move from community to community to escape creditors and abusive spouses and to try to find work in economies where jobs are not stable.[36] Indeed, parallels exist with inner-city schools, where the comings and goings of students also pose significant educational challenges. As accountability measures are strengthened in response to NCLB and related state efforts, decisions need to be made and clarified about how to account for the progress of such highly mobile students. There is some risk that districts will be increasingly reluctant to incorporate mobile students into their programs out of a fear of being held accountable for what will presumably be low test scores.

One final characteristic of students in rural schools that may complicate teacher hiring and retention involves the likelihood of college attendance. As Gibbs argues, rural families have lower incomes and less wealth than urban families and are therefore less able to afford to send their children to college.[37] Moreover, rural students who do go to college are more likely to attend less expensive and less prestigious public colleges. The parents of children in rural areas are themselves less likely to have a college education, one of the well-established predictors of college attendance in the next generation.[38] As a con-

sequence, college preparation courses are less well established in rural high schools than in others, thereby setting up something of a vicious cycle: college preparation programs are less prevalent in rural areas because demand is less well developed, and demand for such programs is less well developed because the programs do not exist.[39] The educational aspirations of rural youngsters will almost surely be low compared with those in other areas of the nation.

Implications for Policy

Some rural schools succeed admirably at attracting and retaining teachers whose qualifications are comparable to those of teachers at other kinds of schools. But for many rural schools, the quality of life in the community is lacking, working conditions are problematic, student needs are great, support services are limited, and professional support networks are inadequate. Salaries are lower for teachers in rural schools for many interconnected reasons, and certain types of rural schools struggle to appoint qualified teachers or make do with teachers who have fewer qualifications and face higher turnover rates. Moreover, teacher experience is also more limited in the smallest schools—a disturbing finding, given that teacher experience is emerging as one of the most important predictors of teaching effectiveness in the research literature.[40] And there is some reason to fear that inequalities in rural schools are becoming larger, particularly in light of the changing demographics of rural areas and the increases in the prevalence of bilingual students from impoverished backgrounds.

When it comes to public policy, this record suggests the need for a strategy focusing on a subcategory of what might be called hard-to-staff rural schools, rather than a blanket set of policies for all rural schools. In particular, the focus should be directly on such indicators as low teacher qualifications, teaching in fields far removed from the area of training, difficulty in hiring, high turnover, and a lack of diversity among teachers in the school, to name just a few. Efforts to identify hard-to-staff rural schools could parallel a similar effort focused on urban and suburban schools.

Assuming it is possible to identify hard-to-staff rural schools, what steps might be taken? Several interconnected approaches warrant further attention.

General Policy Options

One option would be to offer higher wages and benefits to teachers who are willing to work in hard-to-staff schools. The drawbacks associated with rural school teaching could, in theory, be offset by higher wages or improved benefits, or both, thereby improving the ability of officials in these areas to recruit and retain teachers comparable to their peers in other schools. For example, Mississippi offers an Employer-Assisted Housing Teacher Program that provides interest-free loans to licensed teachers in areas of critical shortage, along with a loan repayment program for student teachers who teach in rural areas of the state.[41]

The drawbacks to this approach are many. First, it could be prohibitively expensive to try to "buy your way around" a deeply problematic feature of rural life or schools. To the degree people dislike being isolated, for example, paying them to put up with isolation could be expensive. Moreover, no one knows how large the offsets would need to be or who should bear the burden of the cost. Perhaps the biggest problem of all is that a willingness to work in a hard-to-staff school for an agreed-upon bonus is no guarantee of effectiveness.

More promising, perhaps, are efforts to remove or modify the underlying conditions that are making the school difficult to staff. For example, policies in other government sectors affect the growth of bilingual populations in certain areas, and changes in these policies could have implications for schools. Presumably, steps can be taken to avoid sudden influxes of impoverished students with little English in certain schools. Or, if such population changes do take place, steps can be taken to better meet the needs of these students.

In the case of immigration policies and migrant farm worker policies, the federal government would seem to be the logical party to bear the cost, given how many states are affected.

With respect to migrant farm workers, some progress has been made toward developing effective programs and building national databases that help affected schools track the progress of students.[42] The goal is to address the root cause of the difficulty and provide the needed relief. In the case of immigration policies and migrant farm worker policies, the federal government would seem to be the logical party to bear the cost, given how many states are affected.

To the degree that problems are rooted in differences in the economic capabilities of different regions, economic policies could help spur prosperity in regions where hard-to-staff schools are located. Developing such policies would appear to be state and federal responsibilities.

Within the schools themselves, steps could be taken to offset some of the currently discouraging conditions. For example, modern telecommunications and computing technologies can reduce schools' need to rely on teachers in the classroom. A landmark NCES study of distance education technologies in the K–12 sector found that 36 percent of all school districts have students enrolled in distance education courses. Moreover, half the districts with students taking such courses reported that their students are in advanced placement or college courses, suggesting that districts are using these emerging technologies to enhance course offerings.[43]

The NCES study also found that rural districts were expanding their use of computing and telecommunication technologies, particularly in areas like advanced placement and college course offerings. Technology has long been seen as a way to overcome some of the drawbacks to rural settings, and districts are embracing these new opportunities at an accelerating pace. Steps that allow professional school personnel on site to tap into content knowledge will help solve a thorny and long-standing problem for schools in rural settings.

School and district reorganization could also help remove the root causes of distress. The reorganization logic on its face is compelling. If the difficulties can be traced to small scales of operation, why not remove the problem by reorganizing schools (and districts) into larger units? Quite a rich history surrounds reorganization, and efforts continue to this day.[44] Most if not all of the easily accomplished reorganizations, however, have already taken place; the remaining small units

fall into the category of hard cases. It also seems a bit incongruous to be advocating reorganization in the face of prevailing thinking about the value of small high schools as a learning environment.[45]

In a number of areas, relatively simple improvements in basic human resource processes could yield improvements. For example, Dana Balter and William Duncombe, finding that districts in New York State make only limited use of the Internet to attract applicants, recommended significantly expanding use of the web.[46] Alaska has created statewide clearinghouses to help teachers find positions in rural areas. Timely posting and personalized follow-ups to inquiries can foster positive feelings about opportunities in rural areas. Parallel efforts to provide better support for those who accept job offers can have similarly positive effects on retention. Effective mentoring can break the tendency of new teachers to quickly leave rural settings.[47] Modern technology is also being used to build more effective professional communities of practice for teachers far from population centers. Carla McClure and Cynthia Reeves describe an array of initiatives, including online professional development, e-mentoring networks, and provision of student services such as speech therapy, psychological testing, and assessment using two-way, interactive telecommunications technology.[48]

When a school or district is small by choice rather than by necessity, and to the degree that its difficulties can be traced to the small size, the cost is logically borne by those electing to remain small, not passed along to others such as the taxpayers of an entire state. This reasonable position has, however, proven hard to put into place, and the failure of the political system to impose costs properly has complicated states' efforts to provide financial relief to schools and districts that face extra costs because of unavoidable small size.

Accountability issues also arise in the context of mobile student populations. Mark Grey notes the potential for windfalls to districts that lose students—and for corresponding burdens on districts that receive students at times when those students are not counted for aid purposes.[49] NCLB has significantly raised the accountability stakes for schools and districts and poses numerous questions about tracking and counting pupils, particularly mobile pupils.

One way to help solve the "problem" of the localized teacher market is a grow-your-own strategy. The idea is to take advantage of aspiring teachers' tendency to prefer to return "home" to teach, by working harder to cultivate interest and skill in teaching in areas with hard-to-staff schools. There are urban as well as rural variants of this strategy, and various writers have discussed the possibilities, although more typically from an urban perspective.[50]

Many states are pursuing grow-your-own strategies with a rural focus.[51] One promising approach involves working with paraprofessional aides already employed in rural schools to develop the requisite teaching skills. States are also finding that partnerships with colleges and universities that place aspiring teachers in rural areas can help break down negative stereotypes about teaching in rural schools.

Finally, a better understanding of the causes of staffing difficulties—in rural, urban, or suburban schools and districts—will allow policymakers to develop more effective and presumably less costly policy interventions. The United States invests phenomenal re-

sources in developing and maintaining teachers, and research to improve the quality of teaching in hard-to-staff schools, regardless of where they may be located, can be expected to pay handsome dividends.

The No Child Left Behind Policy Context

Many analysts have examined the effects of NCLB on small and rural schools.[52] One interesting feature of this legislation is the Rural Education Achievement Program (REAP). The program is modest in size, with some 6,000 schools meeting the eligibility requirements and awards averaging about $20,000.[53]

But compliance issues abound with respect to how the law applies to rural settings. For example, the federal government's definition of a highly qualified teacher, including a requirement for full certification, a bachelor's degree, and demonstrated competence in all subject areas being taught, can create substantial problems for small rural schools, where teachers must teach in many different subject areas. Similarly, measures of student performance, particularly when the focus is on subgroup performance, create special challenges when there are few students in each of the various categories. As noted, small student numbers can cause volatile changes from year to year, and the challenge is to hold rural schools accountable to the spirit of the law even in the face of structural and measurement problems that can be quite troubling.

The U.S. Department of Education has made many modifications of NCLB to address the concerns coming from rural states, and former Secretary Rodney Paige created a special task force to help the department be responsive to its rural constituencies.[54] It is too soon to know whether the adjustments have been appropriate.

The attention NCLB is drawing to the importance of having highly qualified teachers in every classroom could help to move forward a serious policy agenda to improve the ability of rural schools to attract and retain teachers who function effectively.

Notes

1. Daryl Hobbs, "Foreword," in *Rural Education and Training in the New Economy*, edited by Robert M. Gibbs, Paul L. Swaim, and Ruy Teixeira (Iowa State University Press, 1998), p. viii.

2. See www.census.gov/population/www/estimates/aboutmetro.html.

3. Mark A. Grey, "Secondary Labor in the Meatpacking Industry: Demographic Change and Student Mobility in Rural Iowa Schools," *Journal of Research in Rural Education* 13, no. 3 (1997): 153–64.

4. David L. Brown and Thomas A. Hirschl, "Household Poverty in Rural and Metropolitan-Core Areas of the United States," *Rural Sociology* 60, no. 1 (1995): 61; Don E. Albrecht, Carol Mulford Albrecht, and Stan Albrecht, "Poverty in Nonmetropolitan America: Impacts of Industrial, Employment, and Family Structure Variables," *Rural Sociology* 65, no. 1 (2000): 87–103; Leif Jensen, Diane K. McLaughlin, and Tim Slack, "Rural Poverty," in *Challenges for Rural America in the Twenty-First Century*, edited by David L. Brown and Louis E. Swanson (Penn State Press, 2003), pp. 118–31.

5. Jensen, McLaughlin, and Slack, "Rural Poverty" (see note 4), table 9-1, p. 122.

6. Gregory C. Malhoit, "Providing Rural Students with a High-Quality Education: The Rural Perspective on the Concept of Educational Adequacy" (Washington: Rural School and Community Trust, 2005), p. 11; Lorna Jimerson, *The Competitive Disadvantage: Teacher Compensation in Rural America* (Washington: Rural School and Community Trust, 2003).

7. See, for example, Jane L. Collins and Amy Quark, "Globalizing Firms and Small Communities: The Apparel Industry's Changing Connection to Rural Labor Markets," *Rural Sociology* 71 (2006): 281–310; Thomas A. Lyson and Amy Guptill, "Commodity Agriculture, Civic Agriculture and the Future of U.S. Farming," *Rural Sociology* 69, no. 3 (2004): 370–85.

8. Kai A. Schafft and others, "The Community Context for Rural Youth Educational and Residential Aspirations," paper prepared for the annual meeting of the Rural Sociological Society, 2006. See also Georgeanne Artz, "Rural Brain Drain: Is It a Reality?" *Choices* 4 (2003): 11–15; and Bradford Mills and Gautam Hazarika, "The Migration of Young Adults from Non-Metropolitan Counties," *American Journal of Agricultural Economics* 83 (2001): 329–40.

9. Robert M. Gibbs, Paul L. Swaim, and Ruy Teixeira, eds., *Rural Education and Training in the New Economy: The Myth of the Rural Skills Gap* (Iowa State University Press, 1998).

10. Ibid.

11. I shall use the term *consolidate* broadly to include various types of centralization, annexation, and related phenomena. For an overview of this important historical feature of school districts, see David H. Monk and Emil J. Haller, *Organizational Alternatives for Small Rural Schools* (1986) (ERIC Document 281 694).

12. The NCES classified districts as rural if they were in local code 7 (rural, outside a metropolitan statistical area) or local code 8 (rural, inside a metropolitan statistical area). The NCES has revised these codes and has developed a more refined set of categories. For more information, see http://nces.ed.gov/ccd/rural_locales.asp.

13. Carla McClure and Cynthia Reeves, "Rural Teacher Recruitment and Retention: Review of the Research and Practice Literature," Appalachia Educational Laboratory (November 2004).

14. Richard M. Ingersoll, "Teacher Turnover and Teacher Shortages," *American Educational Research Journal* 38, no. 3 (2001): 499–534.

15. Robert M. Gibbs, "The Challenge Ahead for Rural Schools," *Forum for Applied Research and Public Policy* 15, no. 1 (2000): 82–87.

16. Elizabeth J. Greenberg and Ruy Teixeira, "Educational Achievement in Rural Schools," in *Rural Education and Training in the New Economy,* edited by Gibbs, Swaim, and Teixeira (see note 9), table 2.6, page 32.

17. William S. Carlsen and David H. Monk, "Differences between Rural and Nonrural Secondary Science Teachers: Evidence from the Longitudinal Study of American Youth," *Journal of Research in Rural Education* 8, no. 2 (1992): 1-10.

18. National Center for Education Statistics (NCES), *Digest of Education Statistics, 2004,* table 63.

19. Gibbs, "The Challenge Ahead for Rural Schools" (see note 15); Dale Ballou and Michael Podgursky, "Rural Teachers and Schools," in *Rural Education and Training in the New Economy,* edited by Gibbs, Swaim, and Teixeira (see note 9), 3–21.

20. Emil J. Haller, "High School Size and Student Indiscipline: Another Aspect of the School Consolidation Issue?" *Educational Evaluation and Policy Analysis* 14 (1992): 145–56.

21. David H. Monk, "Secondary School Size and Curriculum Comprehensiveness," *Economics of Education Review* 6, no. 2 (1987): 137–50.

22. Gibbs, "The Challenge Ahead for Rural Schools" (see note 15).

23. According to Jimerson, rural districts that lie in between the boundaries of urban and rural areas can face the greatest pressures to compete in recruiting and retaining teachers. Jimerson, *The Competitive Disadvantage* (see note 6).

24. Boyd and others, "The Draw of Home: How Teachers' Preferences for Proximity Disadvantage Urban Schools," Working Paper 9953 (Cambridge: National Bureau of Economic Research, March 2003).

25. Ibid.; Susanna Loeb and Michelle Reininger, "Public Policy and Teacher Labor Markets: What We Know and Why It Matters" (Michigan State University, Education Policy Center, April 2004).

26. Gibbs, "The Challenge Ahead for Rural Schools" (see note 15).

27. Robert Strauss, "Who Gets Hired to Teach? The Case of Pennsylvania," in *Better Teachers, Better Schools,* edited by M. Kanstroom (New York: Fordham Foundation, 1999), pp. 117–19.

28. Douglas N. Harris and colleagues, "When Supply Meets Demand: Principal Preferences and Teacher Hiring" (Florida State University), paper presented at the annual meeting of the American Educational Research Association, San Francisco, 2006.

29. Ingersoll, "Teacher Turnover and Teacher Shortages" (see note 14).

30. NCES, *Schools and Staffing Survey, 2003–04*, Public School, BIA School Data Files, tables 2 and 3.

31. Grey, "Secondary Labor in the Meatpacking Industry" (see note 3).

32. For a compelling example, see Michael Brunn, "The Social Organization of Diversity: The Changing Faces in Rural America," paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, October 2002 (ERIC Document 469 367).

33. Recall the findings of Gibbs, "The Challenge Ahead for Rural Schools" (see note 15); and Ballou and Podgursky, "Rural Teachers and Schools" (see note 19).

34. Robert Coles, *Children of Crisis: vol. 2, Migrants, Sharecroppers, Mountaineers* (Boston: Little, Brown, 1971), and J. Moon, executive producer, *New Harvest, Old Shame* (Los Angeles: Corporation for Public Broadcasting, 1990), as cited in Paul E. Green, "The Undocumented: Educating the Children of Migrant Workers in America," *Bilingual Research Journal* 27, no. 1 (2003): 51–71.

35. Green, "The Undocumented" (see note 34).

36. Kai A. Schafft, "Poverty, Residential Mobility and Student Transience within a Rural New York School District," *Rural Sociology* 71, no. 2 (forthcoming).

37. Gibbs, "The Challenge Ahead for Rural Schools" (see note 15).

38. Ibid.

39. Ibid.

40. Jonah E. Rockoff, "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data," *American Economic Review* 94, no. 2 (2004): 247–52; and Douglas N. Harris and Tim R. Saas, "The Effects of Teacher Training on Teacher Value-Added" (Florida State University), paper presented at the annual meeting of the American Education Finance Association (2006).

41. McClure and Reeves, "Rural Teacher Recruitment and Retention" (see note 13), p. 10.

42. Angela Maria Branz-Spall and Roger Rosenthal, with Al Wright, "Children of the Road: Migrant Students, Our Nation's Most Mobile Population," *Journal of Negro Education* 72, no. 1 (2003): 55-62.

43. NCES, "Distance Education Courses for Public Elementary and Secondary School Students: 2002–2003," available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005010 (September 18, 2006).

44. See Monk and Haller, *Organizational Alternatives for Rural Schools* (note 11), for an overview of New York State's history. For a critical assessment of recent reorganization efforts in West Virginia, see Cynthia Reeves, "A Decade of Consolidation: Where Are the $avings?" (2004), a Challenge West Virginia document available at www.challengewv.org/resources.html.

45. Private foundation support, in particular from the Bill and Melinda Gates Foundation, has spurred interest in and creation of small high schools in recent years. For additional information, see Anne C. Lewis, "Washington Commentary: High Schools and Reform," *Phi Delta Kappan* 85, no. 8 (2004): 563; and Tom Vander Ark, "The Case for Small High Schools," *Educational Leadership* 59, no. 5 (2002): 55–59.

46. Dana Balter and William Duncombe, "Teacher Hiring Practices in New York State School Districts" (Maxwell School, Syracuse University, January 2005), available at www-cpr.maxwell.syr.edu/faculty/duncombe/.

47. Richard Ingersoll and J. Kralik, "The Impact of Mentoring on Teacher Retention" (Denver: Education Commission of the States, 2004).

48. McClure and Reeves, "Rural Teacher Recruitment and Retention (see note 13), p. 12.

49. Grey, "Secondary Labor in the Meatpacking Industry" (see note 3).

50. Boyd and others, "The Draw of Home" (see note 24); Loeb and Reininger, "Public Policy and Teacher Labor Markets" (see note 25).

51. McClure and Reeves, "Rural Teacher Recruitment and Retention" (see note 13), p. 9.

52. Rhonda Barton, "Challenges and Opportunities of NCLB for Small, Rural, and Isolated Schools" (Portland, Ore.: Northwest Regional Lab, 2003) (ERIC Document 482 267); Cynthia Reeves, "Implementing the No Child Left Behind Act: Implications for Rural Schools and Districts" (Northcentral Regional Lab, 2003) (ERIC Document 475 037); and Lorna Jimerson, "The Devil Is in the Details: Rural-Sensitive Best Practices for Accountability under No Child Left Behind," Rural Trust Policy Brief Series on Rural Education (Washington: Rural School and Community Trust, 2004).

53. Reeves, "Implementing the No Child Left Behind Act" (see note 52).

54. For more on the secretary's task force and the virtual town hall meeting that it sponsored, see http://www.ed.gov/about/offices/ods/ruraled/index.html.