

## Research Brief

### Poverty and Rural Schools

**Question: What are the special needs of schools serving the rural poor?  
What programs work to promote learning among rural poor populations?**

**Summary of Findings:**

In a Nutshell

Impoverished populations and schools in rural areas face special challenges that are different from other settings. Among these are the distances from social services, the sparse availability of assistance programs, and the shortage of resources to support educational programs and student learning. Rural schools, do, however, have assets that can be leveraged to promote student learning, including relatively smaller size, the centrality of the school in local community affairs, and the deep commitments of instructional and leadership staff.

While instructional interventions that work with any low-performing students are generally transferrable to the rural setting, the most promising programs focus on curricular changes. Curricula that strengthen the “value of place” and “place-based pedagogy” are successful in linking students to schools and important learning outcomes.

**Special Conditions of Rural Education and Poverty**

Angela Kirby captures some of the unique conditions of rural poverty and its effect on schools in her [essay](#) about working in rural Michigan. Putting some of the research into context, she writes:

- Human services may be limited and agency and support services are sparse compared to their suburban or urban counterparts. Tapping into limited existing resources may require hours of transportation. As a result, some families have difficulty meeting the child’s most basic needs.
- Rural students may not only live several miles from their country school but also at a greater distance from larger population hubs. Access to technology, social services and outside resources which support the educational process are often limited and complicate schooling. The importance of the school and teacher become greater because rural at-risk students living in poverty often lack local resources to access.
- Some rural poor students and families display ambivalent attitudes toward traditional school cultures. Part of this stems from conflicting values of work and what constitutes “productivity,” and part is due to a message that runs through much of schooling: “If you want the good life you must look elsewhere to the cities and suburbs for higher wages, better jobs, nicer homes, and abundant living with *lots more stuff.*” [Education] has fed

into this by schooling children with information outside of the community, forcing children to find educational relevance *anywhere else but here.*”

Many of Kirby’s observations are borne out in a very comprehensive study of rural schools by the National Center for Educational Statistics (U.S. Department of Education). A September 7, 2007 posting on the [Rural Matters](#) blog by Robin Lambert highlights key features of this important NCES report. Lambert writes,

- High poverty rural schools spend less, per pupil, on average, than low poverty rural schools and less than high poverty urban schools, even after adjustments are made "to reflect geographic cost differences." By contrast high poverty city schools, on average, spend more per pupil than other city schools. This funding circumstance of poor rural districts is important to note because the *averaged* expenditures of rural districts -- the ones that got most attention in the report -- are higher than other districts.
- Remote rural schools have much higher poverty rates than other rural schools and higher than many urban schools. Forty-five percent (45%) of students in remote rural schools attend a schools where 50% or more of the students are eligible for free or reduced-price lunch; only large and midsize cities have larger percentages of students in schools where more than half of students qualify.
- For African American and American Indian/Native Alaskan students in remote rural schools, the percentages are even higher. Eighty-seven percent (87%) of African American and 79% of American Indian/Native Alaskan students attend a moderate to high poverty remote rural school, compared to 78% and 62%, respectively, in cities. In fact, more than three-quarters of African American students and nearly half of American Indian/Native Alaskan students attend remote rural schools where more than 75% of students qualify for free or reduced-price lunches.
- Students in remote rural schools earn, on average, lower scores on the NAEP than students in almost all other locales, except cities.

These statistics make it clear that there are needs in these remote rural schools that are getting very little national response, or even attention.

But the NCES report also makes clear that there are important strengths in these schools as well:

- The averaged freshman graduation rate for students in remote rural schools is equivalent to the suburban rate and higher than all other locales.
- Despite high rates of poverty, students in remote rural schools scored higher than students in cities on most of the tests in the National Assessment of Educational Progress (NAEP). Rural students scored relatively well on the NAEP science tests, generally outpacing towns and cities and equaling suburbs, with remote rural students scoring at levels similar to other rural students in the 8th and 12th grades.
- Remote rural schools are smaller, on average, than all other schools. This structure offers more possibilities for individual attention and for student and parent participation.

Within the averaged rural data, there is some interesting and important information. For example:

- Rural teachers report fewer discipline problems of all kinds and express more satisfaction with teaching conditions than teachers in other locales.
- Rural schools, on average, have lower student to teacher ratios and lower ratios of students to instructional computers with internet access than other locales.
- Rural teachers earn less than teachers in other locales, a circumstance that has been well-documented in a number of sources, including "The Competitive Disadvantage: Teacher Pay in Rural America."
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One of the more troubling aspects of the report is what it shows about college participation and access for rural students. Here again, the data is averaged across all rural schools, so students in remote rural schools are likely to face even greater challenges:

- College enrollment is lower in rural areas than in all other locales for both 18-24 year olds and for 25-29 year olds. Rural adults are also less likely than adults in other locales to take work-related courses or university credential programs.
- The percentage of adults with a bachelor's degree is lower in rural areas than nationally.
- Rural parents are less likely than parents in all other locales to indicate that they expect their children to attain a bachelor's degree or higher.
- Rural high schools are less likely to offer students access to college-level/college credit classes. Rural schools offer dual enrollment courses (courses that carry both high school and college credit and are usually offered in conjunction with community colleges) at about the same rate as cities, but at lower rates than towns and suburbs. Further, rural schools are less likely than schools in all other locales to offer Advanced Placement (AP) classes, which provide students who take the course and pass an exam the opportunity to earn college credit for the course. What's also worth noting is that cities and suburbs are more likely to offer AP classes than dual enrollment classes, compounding the gap for rural students.

### ***Instructional Interventions***

While this report provides an agenda for improving school organization and access to programs, it does not focus specifically on instruction. However, most researchers conclude that the interventions that work for struggling students anywhere work equally well in rural settings.

Among these are:

- Enhanced skill instruction in high need areas – particularly mathematics, reading and writing. Because of their smaller size, some rural schools have been able to schedule intensely personalized tutorial services, often with community volunteers, to improve basic skills.
- Mentoring programs are especially important for rural students who may not have family resources that allow them to consider, or even imagine, post-secondary education. Educators can fill this role, since many of them have rural roots and can show students that it's not necessary to abandon their entire culture in order to improve their opportunities.
- Access to educational resources, such as technology or out-of-school learning experiences, is often limited for impoverished rural students. For many students, schools may provide the only supplementary resources available to poor students, so after-school programs (with transportation) and other learning experiences become especially important.

### *The Centrality of Curriculum*

An excellent article from the [Annenberg Challenge](#), produced by the Annenberg Institute for School Reform at Brown University, reports on interdisciplinary research from education, sociology, psychology, anthropology and economics. The Institute researchers call for “a pedagogy of place” in rural schools:

One way to strengthen students' ties with their rural homes is to root the school curriculum solidly in the community -- which is another pillar of the overall Annenberg Challenge vision of good teaching and learning. What Rural Challenge leaders call the "pedagogy of place" connects the intellectual ' work of students with hometown issues, nurturing their academic skills in a rich cultural and environmental context that incorporates the arts, language, history, economy, natural resources, and citizenship. The approach pays off handsomely in increased student engagement as well as community revitalization, rural schools have learned.

Projects from Annenberg Challenge rural schools provide concrete examples for how a “pedagogy of place” can be used to strengthen student achievement, enhance the community, and underscore the importance of education and educational institutions in rural communities:

- Students in Howard, South Dakota read Osha Gray Davidson's book *Broken Heartlands* on the farm crisis in Iowa, using it to analyze what was happening in their town. After a series of community-wide discussions, they delivered their questions and policy recommendations to their U.S. Senator and ultimately to the President.
- In Parrish, Alabama, students discovered high concentrations of lead in the school water supply, then found similar levels in municipal water. As a result of their two-year investigation, the town installed a new water system.
- Community experts are mentoring students in five rural Colorado charter schools, created by communities to keep kids from three-hour bus rides to regional schools. Students are collecting and catalog historical artifacts, creating guided nature trails, tutoring community members in computer use, and building a town library.
- Fourth-grade students at Wallins Creek Elementary School in Harlan County, Kentucky, researched the area's rare old growth Blanton Forest, including writing plays set in the forest, collecting money to expand its protected parts, and taking the whole school to their own Forest museum.
- In the Alaskan village of Kasigluk, the entire K-12 curriculum of the Akula Elitnaurviak school revolves around concepts that the Yup'ik Eskimo elders considered important. In a Dance and Cultural Festival that drew a crowd from surrounding villages, 80 students and elders performed traditional Yup'ik dances in native dress. The school and community are preparing a multimedia CD presentation of their efforts to teach "in culture," not "about culture."
- At a remote crossroads of two communities 15 miles from the Mexican border in South Texas, the schools responded to a dearth of medical services by training students and local residents for entry-level jobs in health occupations.

- In the Northern California mountains, students from Mariposa County partner with researchers at Yosemite National Park to collect data on plant growth and species distribution. Thirteen schools scattered over 1,400 square miles are cooperating to build and equip a mobile classroom laboratory for shared project work; retired scientists from the community help out in class.
- Elementary students in rural Alabama gathered the wisdom of community elders into a recorded CD of songs and recitations, which is distributed through the Smithsonian Folkways label and won Grammy nominations in both folk music and spoken word categories.
- In Rutland, South Dakota, a fire wiped out most business 40 years ago. Based on their survey of local needs, students are constructing a convenience store they will own and operate themselves.
- In the Appalachian Copper Basin that links Tennessee, North Carolina, and Georgia, Ducktown Elementary School developed a 160-acre environmental education center for use by the tri-state community. Partnering with 13 area agencies, students built birdhouses, cleared trails, and helped preserve the cranberry flood plain.
- Students in Cedar Bluff, Alabama run a thriving computer assembly and software development business that takes orders from the public, serves a network of rural schools, and won a grant to connect the entire county's school system.
- Sixteen elders work with Ojibwe students at Lac Courte Oreilles Ojibwe School in Wisconsin, listening to readers, correcting papers, asking and answering questions, and teaching about respect, outdoor skills, traditional foods, and Ojibwe language.
- Students and other residents in Big Springs, Nebraska uncovered and are planning to renovate a large and abundant spring that once supplied water to travelers in this very arid section of the West.

### ***Rural School Assets***

There is much that the rest of the education system can learn from rural schools as well. Scholars from the Annenberg Institute for School Reform at Brown University point out the assets in rural schools that can be leveraged to foster school improvements. Some of these assets, the authors conclude, are worth replicating in urban and suburban schools as well.

Among these assets are the schools' small size, which allows educators to focus on individual students. In addition, because of school size and its central role in the community, students do not suffer from the anonymity that tends to plague larger urban and suburban schools and allows students to fall through the cracks in the system.

While school consolidation has weakened some of these benefits by increasing school size, keeping schools small has profound benefits, country schools have found, for example. Small schools perform better than large schools on most measures-including school grades, test scores, honor roll membership, subject-area achievement, and assessment of higher order thinking skills-

and equal to them on the rest, says a recent [digest](#) by Kathleen Cotton of over 100 research studies, published by the Northwest Regional Educational Laboratory in Portland, Oregon. Along every measure of student attitudes-attendance and graduation rates, extracurricular participation, attachment to school, disciplinary incidents, and more-students in small schools also do better. This holds true for both elementary and secondary students of all ability levels and in all kinds of settings (though many of the studies of the effectiveness of small schools derive from rural schools).

### *Resources*

#### ***Status of Education in Rural America***

From the National Center for Educational Statistics, U. S. Department of Education, this is a comprehensive, detailed profile of rural schools and how they compare with urban and suburban counterparts in key areas of demographics, achievement, teaching staff and other school features. <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007040>

#### ***Strengthening At-Risk Students' Affiliation with the School***, by Christie Edge

A research brief from the Principals' Partnership, a program of the Union Pacific Foundation, examines how schools can change basic practices to strengthen bonds with potential drop-outs. <http://www.principalspartnership.com/affiliation.pdf>

#### ***Compared to What? Rural Poverty and NCLB***, by Renee Moore

This essay examines some of the special issues in meeting NCLB standards in impoverished, rural schools.

<http://teacherleaders.typepad.com/teachmoore/2007/09/rural-poverty-a.html>

#### ***Rural Poverty and the Importance of Place Value***, by Angela Kirby

A very readable essay from Michigan State University and the Michigan Writers' Project that summarizes both research and personal experiences to help understand the challenges of working in rural schools with poor students.

[http://www.nwp.org/cs/public/download/nwp\\_file/10545/akirby\\_ruralpoverty.pdf?x-r=pcfile\\_d](http://www.nwp.org/cs/public/download/nwp_file/10545/akirby_ruralpoverty.pdf?x-r=pcfile_d)

#### **The Rural School and Community Trust**

A North Carolina based organization devoted to improving conditions in rural schools and communities for all populations.

<http://www.ruraledu.org/index.php>

#### ***What Rural Schools Can Teach Urban Schools***, the Annenberg Institute, Brown University

An excellent article on how to leverage the assets of rural schools and communities to improve educational opportunities for all students.

<http://www.annenberginstitute.org/challenge/pubs/cj/v1n2/pg1.html>

#### **Rural Roots Newsletter**

Excellent publications from the Rural School and Community Trust on programs and practices for successful rural education.

<http://www.educationpartnerships.org/>

- (1) <http://www.elainaloveland.com/pdfs/Place-Based%20Learning%20-%20Rural%20Roots.pdf>
- (2) <http://www.elainaloveland.com/pdfs/RRYouthinMontana.pdf>
- (3) <http://www.elainaloveland.com/pdfs/RRYouthArticle.pdf>
- (4) <http://www.elainaloveland.com/pdfs/RRYouthinOhio.pdf>
- (5) <http://www.elainaloveland.com/pdfs/Place-Based%20Learning%20-%20Rural%20Roots.pdf>

### ***Foxfire***

The granddaddy of all “pedagogy of place” programs, now well past its 40<sup>th</sup> year in operation. Includes resources, student publications and teacher materials and training.

<http://www.foxfire.org/>

### ***Recent Trends in Urban Poverty: A Digest for Educators***, ERIC Research Summary

Although somewhat older than other resources, this is a good summary of early work on poverty in rural schools.

<http://www.ericdigests.org/pre-9221/recent.htm>

### ***Challenges and Rewards of Rural School Leadership***

An excellent article in the Rural Roots Newsletter on leadership in rural schools.

[http://www.elainaloveland.com/pdfs/rr\\_v3no61.pdf](http://www.elainaloveland.com/pdfs/rr_v3no61.pdf)

### ***An Annotated Bibliography of Resources on Rural Poverty***, by Ann Healy-Raymond and Kathy Rowland

Excellent description of research and developmental material on rural poverty.

[http://www.nwp.org/cs/public/download/nwp\\_file/9066/RSN\\_Bibliography.pdf?x-r=pcfile\\_d](http://www.nwp.org/cs/public/download/nwp_file/9066/RSN_Bibliography.pdf?x-r=pcfile_d)

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