



Current Challenges and Opportunities in Preparing Rural High School Students for Success in College and Careers

What Federal Policymakers Need to Know

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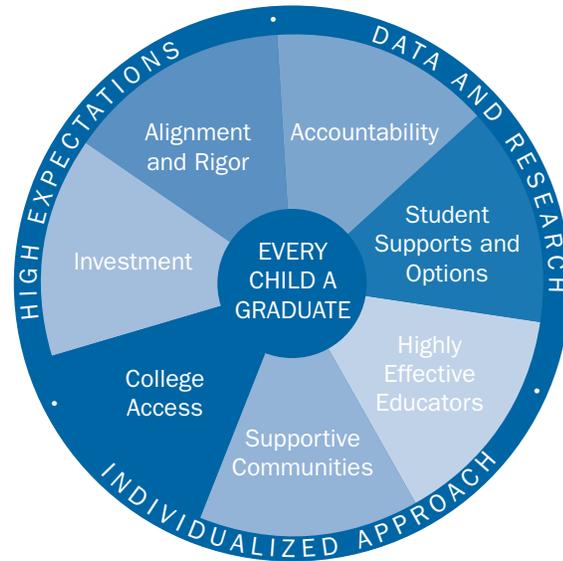
About the Alliance for Excellent Education

The mission of the Alliance for Excellent Education is to promote high school transformation to make it possible for every child to graduate prepared for postsecondary learning and success in life.

The Alliance for Excellent Education is a national policy and advocacy organization, based in Washington, DC, working to improve national and federal policy so that all students can achieve at high academic levels and graduate high school ready for success in college, work, and citizenship in the twenty-first century.

The Alliance has developed a “Framework for Action to Improve Secondary Schools” that informs a set of federal policy recommendations based on the growing consensus of researchers, practitioners, and advocates about the challenges and solutions for improving secondary student learning.

The framework, shown graphically here, encompasses seven policy areas that represent key leverage points in ensuring a comprehensive, systematic approach to improving secondary education. The framework also captures three guiding principles that apply to all of the policy areas. Although the appropriate federal role varies from one issue area to another, they are all critically important to reducing dropouts and increasing college and career readiness.



For additional information on strategies for improving the nation’s secondary schools, visit the Alliance’s website at www.all4ed.org.

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FOREWORD: Why Rural Schools Are Important

Much of the recent debate over high school reform at the federal level has not involved rural schools; big cities tend to dominate the discussion. “Out of sight, out of mind” may be one explanation. Another may be a set of erroneous assumptions about education in rural America. But when one out of every four students fails to graduate from our rural high schools, it’s not just a “local” issue; it’s a national crisis. Every student in America deserves the chance to graduate from high school ready to succeed in college, careers, and life. This paper challenges many of the myths about our rural communities that have led to a lack of attention to the needs of their schools and to ineffective national policies.

Why should education reformers pay attention to rural high schools? And why now?

First, principles of basic equity demand it. The concept of No Child Left Behind was to identify where shortcomings existed in different populations of students and target them for assistance. Rural schools and rural students are no exception. We have an obligation to help them.

Second, beyond the moral imperative for equity is the growing complexity of our economy. With almost 90 percent of the fastest-growing high-wage jobs now requiring postsecondary education,¹ our nation needs every child to be prepared to participate in the global economy. No longer can we write off large numbers of children, whether by race or by region, and still meet the steadily growing skill demands of the twenty-first century. Whether a rural-educated child remains in her community or begins a career in Silicon Valley, our nation desperately needs her operating at the maximum of her ability.

Third, another critical element in current reform efforts is the ability to evaluate and replicate. The nature of rural schools and close-knit communities can be more conducive to implementing change rapidly and performing the necessary evaluations. In communities where residents gather in the volunteer fire hall, the church, the local retail outlet, or the high school, discussions are frequent and consensus can often be quickly achieved—another example of how establishing and evaluating successful practices in rural schools can lead to quick replication in more populous areas.

Finally, beyond calling attention to the condition of America’s rural high schools, there is one other overarching priority behind the writing of this paper: the almost unprecedented opportunity that exists right now. The severe budget crises in many state and local governments coupled with the current national urgency for massive education reform dictates a need for major policy actions in the very near future. Given the dire fiscal situation in most states, the reality is that the next two to three years will provide a rare moment when the federal government will be the driving force. The traditional educational functions of administration and instruction will remain with local school districts and states, but the federal government will have the responsibility to provide the commitment and strategic resources for true innovation.

There is a limited window of opportunity at the federal level to achieve critical policy changes that will truly lead to every child graduating from high school ready for college and ready for a career. Addressing the challenges and conditions for rural schools described in this paper must be part of the solutions.

Bob Wise

A handwritten signature in black ink, consisting of a stylized 'B' followed by 'Wise'.

President, Alliance for Excellent Education
Former Governor of West Virginia

Executive Summary

High schools are a cornerstone of America's rural communities. When they are strong, rural secondary schools provide twenty-first-century students with the high-level knowledge, skills, and technology they need to succeed in college, careers, and life. In too many rural communities, however, high schools are in trouble. In fact, more than one fifth of the nation's two thousand poorest-performing high schools are located in rural areas.² Despite progress in overall rural educational attainment, rural high school dropout rates are still too high and college enrollment rates too low. Currently, one in four rural students fails to graduate from high school, and the rate is even lower for minority youth.³ In addition, only 17 percent of rural adults age twenty-five and older have a college degree—half the percentage of urban adults.⁴ With more than 3.4 million American students currently attending rural high schools,⁵ these troubling outcomes are more than a “local” problem. They are a national crisis.

When one out of every four students fails to graduate from our nation's rural high schools, it's not just a “local” issue; it's a national crisis. —Bob Wise, President, Alliance for Excellent Education

Globalization and the technological revolution have had a profound impact on rural communities. While a high school diploma was once sufficient to secure a stable job with benefits, nearly two thirds of new jobs created in the fastest-growing sectors of the economy will require some postsecondary education.⁶ In addition, higher-level skills are needed to meet the growing diversity of the rural workplace as local markets expand beyond natural-resource-dependent industries to adapt to a knowledge-based economy. In a rapidly changing workforce, the quality of local high schools has a direct impact on the future economic success of both rural communities and the nation.

Rural schools simultaneously face advantages and disadvantages in meeting the goals of today's global economy. Among the challenges are shrinking local tax bases, federal and state education funding inequities, challenges in recruiting and retaining highly effective teachers and leaders, limited access to Advanced Placement and International Baccalaureate courses, and the out-migration of young people and professionals. As rural enrollment becomes more diverse, local high schools also find it harder to meet the changing needs of young people, including the special set of challenges facing low-income and minority students, English language learners, and others at significant risk for dropping out of high school. What's more, small enrollments, geographic isolation, and limited purchasing power (i.e., economies of scale) present challenges unknown to most urban school districts in advancing school improvement initiatives.

At the same time, however, the inherent assets of rural schools and communities provide a strong foundation for progress. These advantages include increasing access to innovative technology, distance-learning and place-based learning opportunities, and high levels of volunteer support from parents and other concerned stakeholders. Along with appropriate and adequate backing from state and national leaders, rural high schools have tremendous potential to ensure that all of their students graduate ready to succeed in college and careers.

Given the local and national implications of the rural high school crisis, this report is intended to give federal policymakers a detailed understanding of the challenges facing rural high schools as well as

the inherent assets that rural schools bring to the national education reform debate. In particular, the report underscores the need for federal solutions that effectively address the following issues:

- *Ensuring fair and adequate federal investments:* From expanding advanced course offerings to recruiting and retaining teachers, effective high schools require sufficient financial and human capital. In addition to state and local funding limitations, many smaller rural school districts are at a distinct disadvantage when it comes to federal Title I funding, the largest federal funding source available to help local school districts expand opportunities for low-income students. Districts are only required to make Title I funding available to high schools with a student poverty rate of 75 percent or higher. This bars most rural high schools from ever receiving federal funding. The rural districts that do qualify for Title I funds generally receive less per-pupil funding than larger districts. Current weighted formulas, which allow districts to choose either the number or the percentage of poor students to determine their Title I allotment, favor large rural districts with a large number of poor students, and disadvantage smaller schools. While there are additional directed federal funding sources for rural schools, they do not adequately address federal funding shortfalls.
- *Providing high standards and demanding courses:* Many rural high schools are already setting high expectations for every student and ensuring that all standards, assessments, and accountability systems reflect the high-level skills and knowledge all students need. To help meet these standards, an increasing number of rural high schools are employing cutting-edge technologies and other distance-learning opportunities to expand the availability and choice of rigorous courses, including Advanced Placement, International Baccalaureate, and dual-credit classes. In addition, rural high schools, often configured as a K–12 school, are pioneers in the expansion of local place-based learning—rigorous, hands-on learning opportunities that provide real-world relevance to improve academic performance. Despite these innovations, however, too many rural high schools still lack the funding, personnel, and technological infrastructure to provide students with rigorous high-level coursework—a vital prerequisite for college and career success.
- *Improving rural high school accountability:* A significant number of rural schools still struggle with deeply rooted issues that make it difficult to meet more stringent state and federal test-based accountability standards, especially for students who face multiple academic and social barriers. These students include minority youth, English language learners, transient children (such as children of migrant workers), and students with special needs. Any accountability system must pay close attention to these groups in particular. At the same time, there are also concerns among rural high school leaders that current accountability systems have led to the teaching of lower-level skills and the narrowing of curriculum options. Rural educators find themselves especially frustrated with what they view as the overemphasis on a single, low-level test, which undermines their unique assets—strong school connectedness, and the ability to engage in more creative, place-based, and interdisciplinary curricula—both of which can help to improve student achievement and successfully prepare students for college and work.
- *Expanding student supports and options:* Strong rural high schools ensure that all students have access to rigorous and option-based courses of study and connect young people with a broader range of social supports to address problems inside and outside of the classroom.

In tight-knit rural communities, strong teacher-student relationships and small teacher-student ratios are common, allowing for more personalization for students, individualized instruction, and increased career satisfaction for teachers. Due to funding limitations and geographic isolation, however, rural communities often contend with more limited social service networks to meet the needs of students at risk, including those dealing with substance abuse, teen pregnancy, gang involvement, and other serious problems that impact their personal well-being, academic success, and career preparation.

- *Recruiting and retaining highly effective teachers:* Successful rural high schools are able to ensure an adequate number of high-quality teachers to boost academic success. Unfortunately, too many rural communities struggle to find and keep effective teachers. Even though rural teachers generally report a higher level of job satisfaction than their urban and suburban counterparts, rural communities have a higher number of less-qualified teachers and often lose their most experienced employees to higher-paying districts in nearby suburban and urban areas. Despite these ongoing challenges, however, an increasing number of rural communities are addressing these difficulties head-on with advanced technologies and distance learning that allow teachers to expand their professional development opportunities, as well as “grow-your-own” programs that encourage talented young people to stay and teach in their home communities.
- *Building strong models of community support:* Rural communities play a vital role in the success—or failure—of their local high schools. High-performing high schools depend on local community-based services, businesses, and other nonacademic partners to stretch limited resources and support a common vision for change. Rural high schools often have the benefit of small, tight-knit communities to help guide school improvement efforts and participate regularly in school activities. Unprecedented and widespread reliance on technology is also allowing rural high schools to engage local stakeholders in educational goals and outcomes more broadly than ever. Unfortunately, however, some rural counties may still lack the tax base, stable local economy, and sufficient social and community capital to invest adequately in local high schools. In areas that have lost a large number of young people and highly educated professionals to higher-paying jobs in nearby cities, retaining broad-based community support is also an ongoing challenge.
- *Setting high expectations for college and career success:* Some rural communities, especially those that struggle with persistent poverty, lack the resources to ensure that their students, including gifted students, are ready for college. Far too many rural high schools lack the requisite parental and community support to foster high expectations for college and careers. In addition, unstable economies and a dwindling local workforce make it more difficult to provide some rural students with the diverse, hands-on work experience they need to supplement their academic training. With the right community and parent support, however, some rural high schools are succeeding. Students continue with postsecondary education after acquiring promising work opportunities that connect them to helpful college and career resources. Additional progress is desperately needed, however, to expand similar opportunities to high school students in the impoverished and isolated communities of rural America.

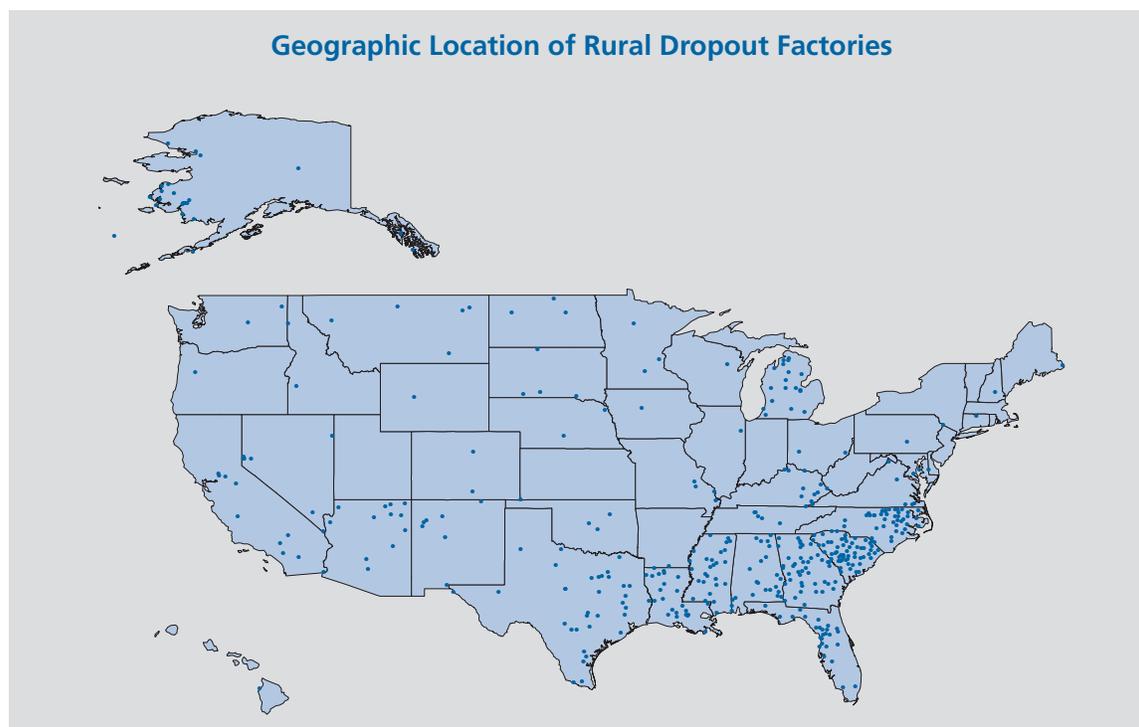
In addition to focusing federal attention on these important issues, the Alliance for Excellent Education is committed to ensuring that rural communities have a continued, strong voice in the national debate on how to achieve high school excellence. Building the nation's capacity to prepare rural secondary school students for success in college and careers will improve America's competitiveness, strengthen rural economies, and ensure that every child is a graduate with a reasonable chance for a viable future.

The Challenge: Improve Rural High Schools, Expand Student Opportunities

High schools are a cornerstone of America's rural communities, serving both as learning institutions and centers of civic engagement. When they are strong, rural secondary schools provide young people with the personalized attention and high-level skills they need to succeed in college, careers, and life. They prepare students to participate in the global economy and to enhance local industry. Most important, excellent rural high schools ensure that *all* students, regardless of income or background, graduate with an equal opportunity to find competitive, well-paying jobs and to contribute to their families, communities, and the nation.

Just as in urban and suburban communities, however, there are far too many rural high schools in crisis. Across the United States, only one third of students who enter ninth grade each year can expect to graduate four years later with the knowledge they need for postsecondary education and the workforce.⁷ In fact, almost two thousand of the country's high schools are doing such a poor job of educating their students that some researchers refer to them as "dropout factories."⁸ More than 20 percent of these dropout factories are located in rural communities.⁹ Although rural Americans have now attained historically high levels of education,¹⁰ there is still a long way to go to ensure that every child is a graduate. Today, one in four rural students fails to graduate from high school, and the failure rate is even higher for students of color.¹¹ In addition, only 17 percent of rural adults age twenty-five and over have completed college—half the college completion rate of urban adults.¹²

More than one fifth of the nation's dropout factories are located in rural areas.



Source: U.S. Census Bureau, 2007; Johns Hopkins University, 2009; National Center for Education Statistics, 2007.

Impact of Globalization

Globalization and the technology revolution have had an ongoing and profound impact on rural communities, providing both opportunities and challenges for economic growth. Despite the national recession and debilitating state budget crises, many rural areas are thriving. In North Dakota, for example, telemarketing firms are scrambling to fill new positions in this high-growth industry. A bank in the Northwest that once supported rural lumber communities is now offering green building loans to promote sustainable community development. A West Virginia lawyer is relying on broadband access to set up a statewide law practice more than two hours from his nearest client.¹³ At the same time, however, countless manufacturing plants—once the backbone of many rural communities—are closing or going offshore. Talented local workers are leaving rural areas for higher-paying jobs in nearby suburban and urban communities, a labor pattern known as “out-migration” or “brain drain.”

While a high school diploma was once the ticket to a stable job with benefits, nearly two thirds of the jobs currently being created in the fastest-growing sectors of the U.S. economy—including office, health care, and teaching positions—now require some postsecondary education.¹⁴ And although there has been a “28 percent increase in the number of jobs that traditionally required a college degree, the largest share of the increase in jobs with postsecondary education requirements—about 72 percent—comes from higher skills needed in jobs that previously” required only a high school degree or less.¹⁵ Even for those jobs that do not require a college education, workers still need new technology and other high-level skills to meet the growing demands and diversity of the rural workplace, especially as local markets continue to expand beyond their traditional agricultural and manufacturing bases.¹⁶

While a high school diploma was once the ticket to a stable job with benefits, nearly two thirds of the jobs currently being created in the fastest-growing sectors of the U.S. economy now require some postsecondary education.

Secondary Education and Economic Success

Just like their urban and suburban peers, rural high school students require unprecedented levels of academic, analytical, and technological skills to compete in the global economy and meet changing business needs.¹⁷ Instead of looking to rural communities as a traditional source of low-skill, low-wage workers, national and international employers are now seeking out rural communities with high concentrations of well-educated, skilled workers and strong municipal and technological infrastructures.¹⁸ From agriculture and ranching to lumber and mining, the demand for specific vocational skills in natural-resource-based jobs is being replaced by the need for general cognitive skills and mathematical and verbal reasoning.¹⁹ And while the success of rural regions was once largely dependent on the quality of the transportation system linking it to the rest of the world, today’s rural communities are finding that, in a knowledge-based economy, a strong education system is even more valuable than a four-lane highway.

In rural America today, the quality and performance of local high schools have a direct impact on their communities’ ability to attract new industries and achieve economic growth. For a business executive deciding where to locate a new facility, the local high school is both an indicator of

future workforce quality and a selling point for relocating workers. Good high schools also play an important role in expanding and diversifying already-existing local industries by providing their students with the skills to participate in urban and suburban expansion, capitalizing on natural settings for tourism and retirement, and building other non-natural-resource-based businesses.²⁰ For all these reasons, a community's ability to build the public will and institutional capacity to create a successful high school is a "make-or-break" proposition—a key determinant in the economic future of rural America and the nation.

With seven out of eight rural counties now dominated by nonagricultural jobs, ensuring that rural high schools provide students with twenty-first-century workplace skills is more crucial than ever.

Rural School Enrollment on the Rise

While rural communities tend to serve smaller numbers of students than their urban and suburban counterparts,²¹ the overall number of children in rural schools is significant. Nationally, one in five children—almost 10 million children—attends a rural school.²² Of these, approximately 3.4 million attend a rural high school.²³ And despite population loss and brain drain in some rural communities, overall rural school enrollment is on the rise. Although total public school enrollment has increased by only 1 percent over the past several years, enrollment in rural schools in communities with a population of 2,500 or less has jumped by 15 percent, a national increase of more than 1.3 million students.²⁴

As rural enrollment grows, however, so do the challenges of local high schools in meeting the academic needs of their students and more demanding state and federal accountability standards. While the increasing number of students may nominally boost federal funding opportunities in some local districts, growing population diversity also brings additional costs for bilingual teachers, new curricula, and other expensive services. Because low education outcomes are highly correlated with persistent poverty, academic and social service gaps are particularly intense for the high number of chronically underdeveloped counties in central Appalachia,²⁵ the Deep South, the Southwest's Rio Grande border area, American Indian communities in the northern plains, and parts of Alaska. In fact, one fourth of the rural counties with the lowest high school completion rates include two thirds of all the nation's persistent poverty counties.²⁶

The link between high poverty and low education has a particularly devastating impact on the most vulnerable high school students, who, in addition to economic disadvantages, may also experience racism and other serious barriers in their local communities. In particular, minority students, English language learners, highly mobile students (including homeless children and children of migrant families), and students with special education needs are often at a higher risk for dropping out of high school without the skills they need to succeed.

Although people living in rural areas constitute a minority of the U.S. population, the number of rural Americans exceeds the total population of all but twenty-two of the world's two hundred countries.²⁷

Persistent Poverty in Rural Counties

Despite progress, rural high schools' efforts to meet more stringent state and federal accountability measures are often thwarted by a chronic lack of adequate financial resources and personnel. Particularly difficult for small, rural high schools is meeting the complex academic and social needs of all their students without the requisite number of highly trained teachers and the funds to expand advanced coursework and provide state-of-the-art equipment. These challenges are compounded for the large number of rural high schools located in counties that experience persistent, intergenerational poverty. Unfortunately, there is a close correlation between poverty and poor educational outcomes. In fact, one fourth of all nonmetro counties with the lowest high school completion rates encompass two thirds of all persistent poverty counties.²⁸ In addition to poor graduation rates, low education levels are also associated with low-wage economies, less stable labor forces, and insufficient community capital to invest in better schools.²⁹ This cycle of economic distress is reinforced by the high rates of child poverty in many rural areas. Although rural child poverty rates have recently declined, they remain significantly higher (21 percent) than poverty rates for urban children (18 percent).³⁰ Rural child poverty is most severe in central Appalachia, the Deep South, the Rio Grande border area, and American Indian communities in the northern plains. Moreover, in rural areas, minority children are overrepresented in the count of poor children relative to their share of the population.³¹

Population Growth in Rural America

Is rural America growing or shrinking? The answer is both. Overall, rural populations grew by over 10 percent between 1990 and 2000 and have continued to increase over the past decade.³² Thanks to high immigration and birthrates, the rural West, in particular, has grown by 20 percent, twice the national average. In addition, the South, parts of the Rocky Mountain West, southern Appalachia, and the upper Great Lakes region have also experienced a population boom, attracting high numbers of retirees looking for moderate climates and scenic amenities. This exodus reflects a growing number of African Americans migrating from urban areas back to small towns.³³ Rural America is also experiencing the growth of a younger population, many of them immigrants with school-age children.³⁴ Since 1980, for example, the rural Hispanic population has doubled, and it is now the most rapidly growing demographic group in small towns.³⁵ There have also been increases in non-Hispanic foreign-born populations in rural areas, numbers that have been reinforced by a younger immigrant population and high fertility rates.³⁶ In total, immigrants accounted for almost 30 percent of rural population growth between 2000 and 2005.³⁷ In addition to the rural immigrant wave, an increasing number of urban and suburban dwellers are moving to rural communities that are now increasingly considered "urban commuter zones."³⁸

At the same time, the decline of small-town America is still very real in many areas of the country. One in four rural counties lost population between 1990 and 2000 due to employment losses and out-migration of young adults in the labor force.³⁹ The areas hardest hit by employment and population losses are the Great Plains, the Corn Belt, and low-income areas such as the Appalachian coalfields and the lower Mississippi Valley.⁴⁰ In areas of both rural growth and rural decline, however, the population paradox has and will continue to have serious academic and funding implications for America's rural high schools. With seven out of eight rural counties now dominated by nonagricultural jobs, ensuring that rural high schools provide students with twenty-first-century workplace skills is more crucial than ever.⁴¹

What Does “Rural” Really Mean?

From small, affluent New England towns to poor, remote communities in the Mid-South Delta, all rural communities are not created equal.⁴² Significant differences in geography, fiscal capacity, and local infrastructure make it difficult for federal leaders to develop uniform national policies that effectively address the unique, and sometimes conflicting, educational needs of individual rural high schools. In addition to regional differences, challenges in education policy development and implementation are exacerbated by the lack of one consistent federal statutory definition of what constitutes a “rural” area.⁴³

Understanding what rural means is important to help federal policymakers identify the resource needs of rural communities and monitor and evaluate their use.⁴⁴ In addition to ensuring that federal policy interventions are responsive to different rural contexts, inconsistent definitions of rural may present challenges for education researchers seeking to compare outcomes between regions and aggregate data to achieve an accurate national overview of rural high school performance.⁴⁵ For these reasons, it is essential that federal policymakers understand the differing definitions of rural and their legal implications to ensure that education policy reform efforts do not unfairly disadvantage rural high schools in their states and districts.⁴⁶

Rural Schools and Communities: Facts-at-a-Glance

Number and Size of Rural Schools

- *One in five students attends rural schools:* More than half of all school districts and one third of all public schools are in rural areas. Fully 20 percent of the nation’s public school students are enrolled in rural schools.⁴⁷
- *Rural enrollment on the rise:* Overall, public school enrollment has increased by 1 percent (approximately 602,000 students) while enrollment in rural schools (communities with populations under 2,500) has increased by 15 percent (approximately 1.3 million students).⁴⁸
- *Prevalence of small schools:* A larger percentage of public school students in rural areas (10 percent) attend very small schools (schools with fewer than two hundred students) compared with towns (4 percent), cities (2 percent), and suburbs (1 percent).⁴⁹
- *Private school enrollment:* Only 6 percent of rural students were enrolled in private schools, less than the overall national rate of 11 percent.⁵⁰
- *Rural charter schools:* In 2006–07 only 2 percent of rural high schools were charter schools, compared to 13 percent of urban, 5 percent of suburban, and 3 percent of schools in towns.⁵¹ In 2006–07 just 1 percent of rural high school students attended charter schools.⁵²
- *Homeschooling in rural areas:* In 2003, 2.9 percent of rural students (compared to 2.2 percent nationwide) were homeschooled and 28 percent of the homeschooled population lived in rural areas.⁵³

Poverty in Rural Schools and Communities

- *High rural poverty rates:* Although rural child poverty rates have recently declined, they remain significantly higher (21 percent) than poverty rates for urban children (18 percent).⁵⁴ Minority children are overrepresented in the count of poor children relative to their share of the population.⁵⁵
- *Students in moderate-to-high-poverty schools:* The percentage of public school students in remote rural areas attending a moderate-to-high-poverty school (45 percent) was higher than the percentages in all other locales except large and midsize cities.⁵⁶
- *Highest-need rural education regions:* The highest-need education regions are generally located in the Southwest, the Southeast, the Mid-South Delta, and Appalachia, due to a combination of poverty, fiscal challenges, and low levels of adult education and student achievement.⁵⁷

Continued on page 12

Diversity in Rural Schools

- *States with the largest populations of minority students:* Minority students make up 25 percent or more of the student population in eleven states (Alabama, Delaware, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Texas, and Virginia). These states serve 80 percent of all rural minority students in the nation.⁵⁸
- *Impact of poverty on minority populations:* Larger percentages of black and American Indian/Alaska Native public school students in remote rural areas attended moderate-to-high-poverty schools (87 percent and 79 percent, respectively) than in large cities (78 percent and 62 percent, respectively).⁵⁹
- *States with no ethnic majority:* In five states (Alaska, Arizona, California, Hawaii, and New Mexico), there is no racial or ethnic majority group in rural schools.⁶⁰

High School Graduation Rates

- *Overall rural graduation rates:* The graduation rate for public high school students is higher in rural areas (73 percent) than in cities (59 percent) or towns (70 percent) but slightly lower than in suburban areas (74 percent).⁶¹
- *Graduation disparities for rural minorities:* Compared to the overall high school graduation rate for rural high school students (73 percent) and the overall graduation rate for white rural high school students (75 percent),
 - 51 percent of rural American Indian/Alaska Native students graduate from high school;
 - 68 percent of Asian and Pacific Islanders graduate from high school;
 - 61 percent of Hispanic students graduate from high school; and
 - 54 percent of black students graduate from high school.⁶²

Rural College Enrollment and Graduation Rates

- *College enrollment rates:* College enrollment rates for eighteen- to twenty-four-year-olds and twenty-five- to twenty-nine-year-olds are generally lower in rural areas than in all other locales.⁶³
- *College completion rates:* Only 17 percent of rural adults age twenty-five and older had completed college in 2000—half the percentage of urban adults.⁶⁴
- *Rewards of a college degree:* Rural college graduates currently make more than twice as much as rural high school dropouts and have significantly lower unemployment rates.⁶⁵ However, rural areas have a smaller percentage of adults with a four-year college degree than either cities or suburbs.⁶⁶

Aspirations and Out-migration

- *Education expectations:* Based on a recent study, nonmetro youth have lower expectations for future schooling than suburban and urban youth. Nearly one half (47 percent) of nonmetro youth reported “little chance they would be enrolled in regular school in five years.”⁶⁷
- *Out-migration of young people:* Only one in five youth who were living in nonmetro areas in 2000 were still living in a nonmetro area in 2005. The rest migrated to either a suburban area (50 percent) or a central-city metro area (29 percent).⁶⁸

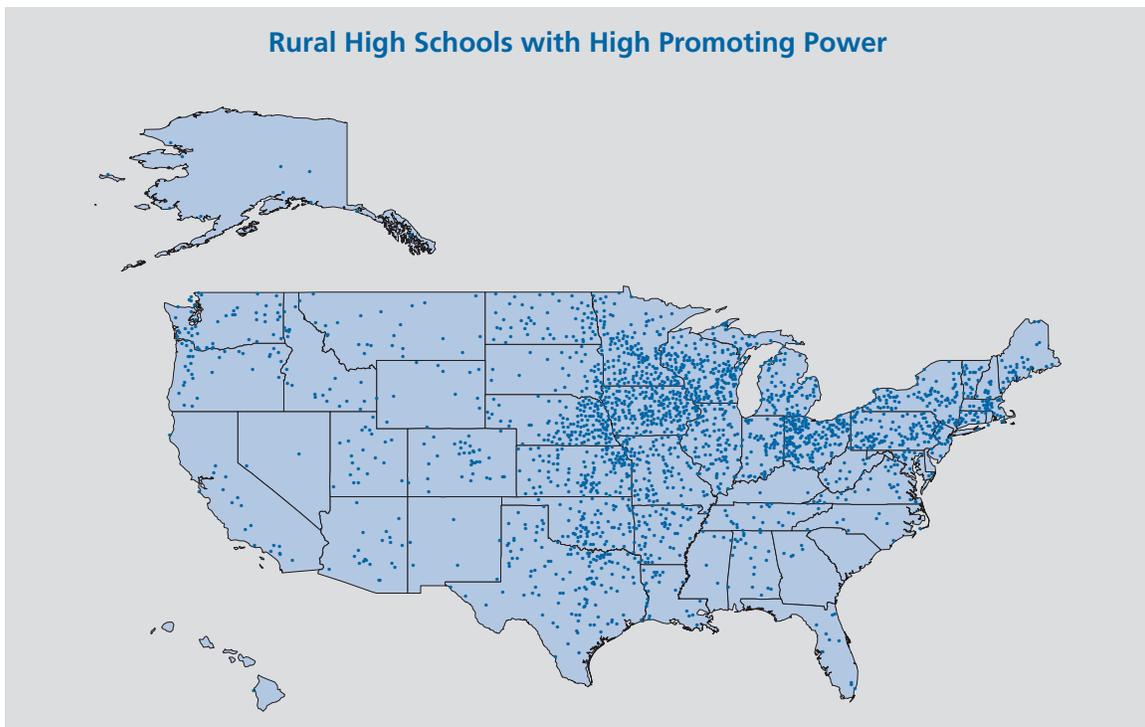
Rural Employment Rates

- *Median earnings:* Regardless of educational attainment, persons in rural areas generally have higher median earnings than those in cities but lower median earnings than those in suburban areas, when adjusted to reflect local cost differences.⁶⁹
- *Rural unemployment rates among young people:* In 2004, a larger percentage of teenagers in rural areas compared to suburban areas were neither enrolled in school nor employed (6 percent vs. 4 percent).⁷⁰
- *Adult unemployment rates:* The unemployment rate for adults ages twenty-five to thirty-four was lower in rural areas (7 percent) than in cities (8 percent) and towns (8 percent). The unemployment rate for adults ages thirty-five to sixty-four was lower in rural areas (4.5 percent) than in all other locales (5–6 percent).^{71 72}

The Goal: Overcome Challenges, Build on Assets

To ensure that every student graduates high school ready for college and careers, rural high schools must consider both the assets and the limitations that they bring to bear on current reform efforts. As they have for centuries, rural communities provide a solid, community-focused foundation for change.

- High levels of parental involvement, supportive community partnerships, strong teacher-student relationships, and personalized academic support can help to engage a broad range of essential stakeholders in the success of local education reforms.
- Increases in overall rural student enrollment in many rural communities accelerated by the growing racial and ethnic diversity of rural populations offer new opportunities to explore innovative and inclusive ways to meet individual student needs.
- Cutting-edge technologies, innovative distance-learning techniques, and pioneering efforts in place-based education are opening doors to more rigorous curricula, real-world work experiences, and heightened expectations of college and career success.



Source: U.S. Census Bureau, 2007; Johns Hopkins University, 2009; National Center for Education Statistics, 2007.

At the same time, however, many rural communities face serious barriers in implementing local reforms and meeting federal and state accountability standards.

- Many rural high schools—especially those in smaller, geographically remote, and poor counties—do not have the same levels of financial, community, and transportation resources available in most urban and suburban populations.

- Shrinking tax bases and shifting local economies, low salaries, and brain drain among young people and educated professionals make it challenging for some rural communities to attract and retain high-quality teachers and administrators.⁷³
- A chronic lack of funding in smaller and more isolated communities for Advanced Placement courses (especially in math, science, and foreign languages) and dual-credit courses, and fewer local employment resources to support student work-based learning opportunities, contribute to lower high school graduation and college enrollment rates and diminished career opportunities.⁷⁴

These hardships for rural communities have a disproportionate impact on the poorest rural communities, often the same areas that serve the highest percentage of English language learners and students with special needs who require more costly, specialized services to overcome additional academic challenges.⁷⁵

Ensuring Fair and Adequate Federal Investments

With more than half of the nation's school districts located in rural areas,⁷⁶ underperforming rural high schools impact every state in the nation by limiting higher education and employment options, undermining local economies, and reducing state and national economic competitiveness. Despite some promising reform strategies, however, federal education policies and research efforts tend to favor urban and suburban high schools with the largest student populations, paying too little attention to the unique needs and circumstances of rural communities.

Unfortunately, there are funding as well as policy disparities, especially when it comes to federal Title I dollars, the nation's largest source of educational funding for low-income school districts. Based on current formulas, for example, the 40 percent of rural schools⁷⁷ that qualify for Title I funds generally receive less Title I funding per pupil than larger districts (see text box below).⁷⁸ In addition to federal funding inequities, smaller and poorer rural communities are often unable to generate sufficient property tax revenues to make up for current budget shortfalls, chronic deficits that have been compounded by the national recession and state budget crises.⁷⁹ And because \$10 billion of supplemental educational funds authorized in the stimulus package is being distributed through existing Title I formulas, poorer and smaller districts will continue to suffer disproportionately despite the federal intention to provide relief.⁸⁰

Title I and Rural High Schools

All of the elements of effective rural high school reform—from offering advanced curricula and new technology options to providing strong professional development opportunities—require sufficient financial and human capital to help ensure their effective application. In general, smaller and poorer rural communities are already financially disadvantaged because they have a lower local tax base that makes it difficult to generate sufficient property tax revenues to make up for current budget shortfalls—chronic deficits that have been intensified by the national recession and current state budget crises.⁸¹

Continued on page 15

In addition to state and local funding problems, many rural high schools encounter major ongoing challenges in obtaining adequate and equitable federal funding to meet their education goals.⁸² Many rural schools are particularly disadvantaged when it comes to federal Title I funding, the largest source of federal financial assistance to schools to help expand education opportunities for low-income children. Rural community challenges with Title I funding are twofold. The first difficulty is shared by all public high schools: federal law only requires districts to provide Title I funding to their local high schools if they have student poverty rates of 75 percent or higher. As a result, only 16 percent of overall Title I funds awarded in the 2006–07 school year were used to serve students in grades 9–12.⁸³ Based on current restrictions, very few rural high schools meet this threshold. Overall, only 18 percent of Title I funds go to fund rural schools—the same percentage as rural schools’ share of low-income students.⁸⁴ In 2006–07, only 40 percent of rural high schools were eligible for Title I funds (compared to 54 percent of urban, 28 percent of suburban, and 37 percent of town high schools).⁸⁵

For the few rural high schools that meet this funding threshold, there is another problem: smaller high schools generally receive less Title I funding per pupil than larger districts, usually located in urban and suburban locales.⁸⁶ Since the 2002 reauthorization of the Elementary and Secondary Education Act, known as No Child Left Behind, additional Title I funding has been distributed mainly through two Title I formulas, the Targeted Formula and the Education Finance Incentive Grant. These formulas use a “weighting” system designed to ensure that higher-poverty districts get disproportionately more money than lower-poverty districts. To distribute funds under this formula, a certain “weight” is applied for each poor student in the district. As the number or percentage of poor students in a district gets larger, so does the weight that is applied to each poor student.

The problem from a rural school perspective is that the current formula allows districts to choose whether they will use a weighted system based on the number of poor students in the district or a weighted system based on the percentage of poor students in the district. The effect of the weighting system is that large districts that choose the numbered system benefit disproportionately because they have more children who can receive higher weights than they would under the percentage system. A smaller rural school district with the same percentage of poor students as a larger school district will end up with a far lower per-pupil allotment under Title I.⁸⁷ In Pennsylvania, for example, the largest twenty-one (of 433) districts with half of all Title I students received 70 percent of the weighted grant funds and 60 percent of all Title I funds. The remaining 433 smaller districts with the other half of Title I students received only 30 percent of the weighted grants and 40 percent of all Title I funds. Overall, the larger Pennsylvania districts received \$2,135 per Title I student, on average, while the smaller districts received only \$1,404 per Title I student, on average.⁸⁸

There are other directed federal funding sources for rural schools, such as Impact Aid, which benefits districts on Indian reservations or military bases, and the U.S. Department of Agriculture’s Secure Rural Schools Program, which targets districts located on federal forest lands. While these programs are intended to compensate districts for lost tax revenue due to federal land ownership, they are not regarded as a supplementary source to make up for overall federal funding shortfalls. The Small Rural School Achievement Program and the Rural and Low-Income School Program also fund rural schools and are intended, in part, to compensate for rural districts’ inability to take advantage of federal competitive grant programs because of limited personnel to oversee complex application processes. However, total funding for this program is only \$174 million, compared to the \$14 billion in Title I funding allocated to school districts in fiscal year 2009.⁸⁹

Providing High Standards and Demanding Courses

Successful rural high schools set high expectations for every student and ensure that all standards, assessments, and accountability systems reflect high-level skills and knowledge. Even in smaller and poorer rural communities, this means access to rigorous classes and the opportunity to take Advanced Placement and International Baccalaureate courses, earn college credits, or obtain industry certification credentials. Previous lessons learned from the National Science Foundation’s rural systemic initiatives tell us the challenge is great.⁹⁰ While some issues or problems confronting rural high schools may be argued as similar to high schools in urban America, finding successful solutions, particularly for small, rural high schools, requires an understanding of important and differing contexts in rural America.

Limited Access to Diverse and Rigorous Coursework

Due to the shortage of appropriately trained teachers, financial constraints, and geographic isolation, many rural high schools offer limited access to rigorous classes in basic academic subjects (e.g., math, science, and foreign languages), career and technical education programs, community college dual-credit options, and Advanced Placement coursework. These limitations have a direct impact on a high school’s ability to prepare students for success in college and higher-paying careers. The percentage of public high school students attending schools offering Advanced Placement and International Baccalaureate courses or programs, for example, is significantly lower in rural areas (69 percent and 1 percent, respectively) than in cities (93 percent and 8 percent) and suburbs (96 percent and 7 percent).⁹¹ While online courses and other distance opportunities are successfully expanding advanced learning opportunities for some rural students (see text boxes on pages 17 and 18), other rural high schools report ongoing struggles with insufficient technological infrastructure (e.g., limited broadband access), too few teachers to oversee the use of the technology, or insufficient funds to justify assigning one teacher to such a small number of students.⁹²

Rural high schools have, however, fared better in offering dual-credit courses (classes that allow students to earn simultaneous high school and college credit). In fact, the percentage of public high school students in rural areas attending schools offering dual-credit courses (76 percent) was not measurably different than in cities and suburbs.⁹³

A shortage of appropriately trained teachers, financial constraints, and geographic isolation in rural schools results in limited access to rigorous classes in basic subject matters and Advanced Placement courses, particularly in math, science, and foreign languages—academic deficits that have a direct impact on a high school’s ability to prepare students for success in college and careers.

The Power of Technology

While the nation’s “digital divide” continues to disadvantage many rural communities, an increasing number of rural high schools are effectively and creatively capitalizing on new technologies to expand distance- and professional-learning opportunities for students and teachers, monitor student performance, expand communication with community stakeholders, help students develop key workforce skills, and improve access to advanced coursework.⁹⁴ As of 2005, nearly all public

schools—both nationally and in rural areas—had Internet access.⁹⁵ Nationwide, there was an average of one instructional computer with Internet access for every 3.8 public school students. In rural areas, the ratio was one instructional computer with Internet access for every three public school students, which was lower than the corresponding ratios in suburban areas and cities.⁹⁶ Almost one fifth of public schools in rural areas currently provide teachers with handheld computers, and 12 percent lend laptop computers to students.⁹⁷ More than 21 percent of small-town and rural schools currently offer distance-learning courses through television, satellite, the Internet, or e-mail.⁹⁸

Increased technology access in the schools has been reinforced by a growth in technology access at home. In 2007, 52 percent of all rural households had in-home Internet access, compared to 64 percent of urban households.⁹⁹ In addition, a number of federal programs and private initiatives—from the federally funded Star Schools program¹⁰⁰ to the Technology Grants for Rural Schools program¹⁰¹—are helping to make engaging software and online resources an integral part of the high school curriculum.¹⁰² Maine, for example, a largely rural state, is one of the leaders in encouraging the use of technology in education. In partnership with Apple Computer in 2002, Maine took advantage of a state budget surplus to outfit every student and teacher in seventh and eighth grade with a laptop computer. In the spring of 2009, it extended the program to all high school students in addition to replacing the aging laptops in middle schools. The goal of the program aligns with the most pressing needs of its rural schools by building student skills to participate in a twenty-first-century workplace and providing increased access to information sources and virtual classes that would not otherwise be offered in their local schools.¹⁰³

As of 2005, nearly all public schools—both nationally and in rural areas— had Internet access. However, without the necessary staff and infrastructure at school, in addition to access at home, technology can do little to improve academic outcomes.

Videoconferencing Technology Expands Academic Horizons

The Wilson County Schools in north-central Tennessee are expanding advanced learning opportunities for their rural high school students using cutting-edge videoconferencing technologies. Using a video camera, a document camera, and an interactive whiteboard, a local high school teacher is now teaching the county's first distance-learning class in Discrete Math, a course that includes live lectures and computerized self-paced lessons. As a result of this new technology, the teacher can simultaneously offer the class to students in her home high school and students at a more remote high school twelve miles away. The students who are viewing her class remotely can log on to a computer and use a headset and microphone to participate in the live lectures. At the same time, the teacher can get a larger view of her "remote" students by projecting her video feed onto an interactive whiteboard. As a result of this project, Wilson County Schools have not only been able to expand advanced course options, but they are also improving their students' technology skills, a combination designed to improve academic outcomes and successfully prepare students for college-level math courses.¹⁰⁴

Using Technology to Improve Student Achievement in Rural High Schools

The Southern Regional Education Board's (SREB) Educational Technology Cooperative is a national effort that focuses on ways to help state leaders create and expand effective uses of technology in schools and colleges. The Cooperative also works with states to provide information and leadership to assist them in sharing their experience and resources as they address the policy, instructional, and management issues connected with virtual schools currently located in all sixteen SREB states.¹⁰⁵ Based on its learning in more than 3,300 school districts and nearly eight hundred colleges and universities in the SREB states, the multistate Cooperative reports that rural schools describe five major factors as critical to technological success:¹⁰⁶

- **effective leadership:** providing local leaders with the essential knowledge and skills to establish a supportive climate for the effective use of technology in schools;
- **adequate and sustainable funding:** obtaining adequate state and federal funding to support technology programs on an equitable, sustainable basis;
- **development of a technology plan:** developing and evaluating a strategy that focuses directly on technology and its link to student outcomes and improved student achievement;
- **focused, high-quality professional development:** providing staff access to online training and support programs that effectively integrate technology into classroom learning; and
- **competent and available technical support:** ensuring sufficient and qualified staff to support and expand available technologies and keep systems running smoothly on a day-to-day basis.¹⁰⁷

What Is Next for E-Rate?

In the Telecommunications Act of 1996, federal policymakers recognized the essential benefit telecommunications provide to schools and libraries. As a result, the federal government established the Universal Service Program for Schools and Libraries, also known as "E-Rate." The E-Rate program provides reduced-cost telecommunications services to schools and libraries and is funded by the Universal Service Fund, maintained through compulsory fees paid by telecommunication providers. As a result of the E-Rate program, 99 percent of public schools had access to the Internet in 2002, and as of 2005 86 percent of rural schools were still participating in the program. Now that the E-Rate has succeeded in connecting so many rural schools to the information highway, the question for federal leaders is whether and how it should be modified to further improve technological access and infrastructure in rural communities.¹⁰⁸

Emphasis on Place-Based Learning

Despite challenges in providing Advanced Placement, International Baccalaureate, and other high-level learning opportunities, many rural high schools are successfully pioneering rigorous place-based learning options. Place-based education is a term used to describe hands-on learning opportunities that are rooted in local history, culture, art, and environment.¹⁰⁹ These classes can take a variety of forms—from an advanced biology course in partnership with a local fishery to a history project that focuses on a community's involvement in the Underground Railroad. While place-based learning has gained national popularity, rural high schools in small communities have found it particularly effective in providing real-world relevance to improve academic performance and increase teachers'

overall job satisfaction by providing more room for creative teaching.¹¹⁰ In diverse rural areas, place-based education also helps to reinforce the positive impact of different cultures on the local community, such as programs that focus on native languages, oral traditions, and music.¹¹¹

Placed-Based Learning: Youth-Led Poverty Reduction Efforts in Louisiana

In Louisiana, local high school students and the Volunteer Income Tax Assistance (VITA) program are teaming up to educate the community about Earned Income Tax Credits and other tax deductions in a place-based learning effort designed to help local low-income citizens save money on their taxes. Working with local high schools and teachers, students are trained in how to prepare tax returns, provide basic taxpayer information, and answer taxpayers' frequently asked questions. Students are trained to participate in local outreach activities, such as posting flyers, placing public service announcements, and building community partnerships to "get the word out" to local community members. In addition to earning course credit and applying their academic learning in math, composition, and other subjects, students participating in this program have a unique opportunity to support their community and learn valuable workplace skills.¹¹²

Improving Rural High School Accountability

In strong high schools, administrators use effective accountability systems to measure student and system performance, foster good instructional practice, and find new ways to improve outcomes for all students. However, a significant number of rural schools are struggling with deeply rooted issues that make it difficult to meet more stringent state and federal accountability standards, especially when it comes to achieving strong educational outcomes for high school students facing multiple barriers, such as minority and low-income youth, English language learners, and others.

Increases in Rural Educational Attainment

Rural high schools are making progress in meeting national accountability measures. As of 2003–04, for example, 82 percent of schools in rural areas and small towns met federal Adequate Yearly Progress (AYP) requirements, a national measurement designed to determine how every public school district in the country is performing academically on standardized tests.¹¹³ In comparison, only 65 percent of schools in central cities and 78 percent of schools in urban fringe areas and large towns met AYP requirements.¹¹⁴

Additionally, when controlling for socioeconomic status, rural students perform as well, on average, as urban and suburban students on standardized tests—with scores slightly above those of central-city students and slightly below those of their suburban counterparts.¹¹⁵ Overall rural educational attainment levels are also higher than ever. As of 2000, the share of nonmetro adults without a high school diploma or GED fell to a historic low of 23 percent. In the same year, approximately one in six rural adults graduated from college, more than double the college graduation rate for rural adults in 1970.¹¹⁶ While gains have been made in high school and college completion rates, progress is still too slow, especially for rural poor and minority high school students, but these positive trends are indicators that meeting the challenge of improving rural high schools and expanding student opportunities is an achievable goal.

Minority and Other Students At Risk

While rural high schools are making progress in meeting the overall education needs of their students, many are still struggling to meet accountability measures for students who face multiple academic and social barriers. These students include minority youth, English language learners, transient children, such as children of migrant workers, and students with special needs:

- *Significant disparities for students of color:* Despite progress, there are still critical disparities in graduation rates for rural students of color. Compared to the overall high school graduation rate for rural high school students of 73 percent, only 51 percent of rural American Indian/Alaska Native students graduate, and just 54 percent of black and 61 percent of Hispanic students earn a diploma.¹¹⁷

Graduation Rates, 2005–06 by Geography					
	All Districts	Urban	Suburban	Town	Rural
All Students	69.2	58.7	73.5	70.1	73.1
American Indian/Alaska Native	50.0	44.2	53.7	50.1	51.3
Asian/Pacific Islander	78.9	76.4	81.5	59.5	68.3
Hispanic	55.0	49.7	60.4	57.7	61.4
Black	51.2	46.4	56.1	52.4	54.1
White	76.1	71.0	78.3	74.2	75.1
All Male Students	64.9	53.9	69.6	65.8	68.1
American Indian/Alaska Native Male	45.2	38.8	49.7	44.8	46.9
Asian/Pacific Islander Male	75.4	72.3	78.8	52.6	62.4
Hispanic Male	49.9	44.6	55.1	53.3	58.4
Black Male	44.0	39.4	49.3	44.3	45.9
White Male	73.0	67.4	75.6	70.9	71.5
All Female Students	72.2	63.4	76.4	72.2	74.6
American Indian/Alaska Native Female	51.2	47.6	55.2	50.7	50.8
Asian/Pacific Islander Female	80.8	79.7	82.3	56.6	65.4
Hispanic Female	59.2	54.3	64.7	60.3	62.4
Black Female	57.5	54.0	61.2	57.4	59.4
White Female	78.4	74.2	80.5	76.3	77.0

Note: Graduation rates are calculated using the Cumulative Promotion Index and data from the U.S. Department of Education’s Common Core of Data (CCD).

SOURCE: EPE Research Center, Special Analysis of Rural Graduation Rates Commissioned by the Alliance for Excellent Education, 2009.

- *Insufficient supports for English language learners:* As rural America grows increasingly diverse, many rural high schools and their communities have inadequate fiscal and human capacity to meet the differing needs of English language learners.¹¹⁸ Nationally, the number of rural ELL students more than doubled between 1989 and 2005—more than seven times the growth rate of the general student population.¹¹⁹ In fact, nearly one half of all ELL students live in rural communities.¹²⁰ On average, rural high schools serving proportionally larger ELL student populations face more barriers to educational achievement than schools with fewer ELL students.¹²¹ Because ELL students tend to move to districts with high poverty rates, it is even harder for poor rural districts to offer appropriate services.¹²²
- *Student transiency:* Nationally, transient students, including homeless children, children in foster care, and children of migrant workers, tend to underachieve academically.¹²³ In fact, high school students who change schools are at least twice as likely to drop out as their nonmobile counterparts.¹²⁴ High school students in rural areas also have a heightened risk of changing schools due to fewer employment opportunities, the single-industry nature of rural communities, lower salaries, and higher poverty rates.¹²⁵ Low-income children are most vulnerable because poverty increases the risk of mobility which in turn increases the risk of academic failure. In addition, transience proves a special challenge for rural schools with smaller budgets and limited capacity to deal with unexpected enrollment changes. In fact, poor rural districts were twice as likely to report “significant challenges” due to newly enrolled students.¹²⁶
- *Students with special needs:* With few resources and limited access to specially trained teachers, rural high schools also experience difficulties in providing adequate services to students with special education needs. While there is little variation in the percentage of urban, suburban, and rural students with Individualized Education Programs,¹²⁷ rural high schools have difficulties connecting students to special education professionals in faraway suburbs and cities. Rural high schools also report widespread challenges in recruiting and retaining qualified special education personnel, delays in identifying and assessing special education needs, and problems linking parents in remote communities to appropriate resources and supports.¹²⁸ In addition, rural districts serve a greater percentage of students with disabilities in regular-classroom placements, making it more challenging for teachers to meet the needs of many different groups of students all in one classroom.¹²⁹

Special Challenges for American Indian and Alaska Native Students in Rural High Schools

Like their rural peers, AI/AN high school students face limitations in the funding and resources provided to their schools, limited access to high-quality teachers, and a lack of exposure to rigorous curricula, especially courses that include native languages, traditions, and history.¹³⁰ As a result, there is a significant achievement gap for AI/AN high school students. While roughly 70 percent of American high school students graduate on time, only 50 percent of AI/AN students graduate high school with a regular diploma¹³¹ and only 14 percent of AI/AN students graduate high school ready for college.¹³² American Indian and Alaska Native high school students who graduated in 2000 were less likely to have completed a core academic track than their peers from other racial/ethnic groups.¹³³ Native Hawaiian students experience pronounced absenteeism and are the least likely of the major ethnic groups to graduate from high school within four years.¹³⁴ In addition, AI/AN youth who drop out of high school are more likely than their graduating peers to experience poverty, poor health, and incarceration in their adult lives.¹³⁵

In order to address high dropout rates and their underlying causes, the National Indian Education Association (NIEA), a membership-based organization committed to increasing educational opportunities and resources for American Indian, Alaska Native, and Native Hawaiian students while protecting cultural and linguistic traditions, has created the Native High School Policy Initiative. In partnership with the Campaign for High School Equity, a national organization that expands education quality and opportunity for communities of color, the initiative is designed to ensure that all AI/AN youth graduate high school ready for college and work.¹³⁶ As part of this effort, the initiative promotes more accurate and consistent standards for calculating AI/AN graduation rates and measuring compliance with other accountability standards, expanded access to rigorous and culturally appropriate curricula, and innovative ways to increase meaningful collaboration with tribes, native communities, and families in high school reform efforts.

In addition, the NIEA supports programs like the Early College High School Initiative that give AI/AN high school students an opportunity to attend smaller schools that incorporate rigorous curriculum with native culture and language while earning up to two years of college credits along with their high school diplomas. Early outcomes for these programs indicate a graduation rate of 85 percent for AI/AN students who entered early college programs—compared to only 59 percent of AI/AN students attending other high schools.¹³⁷

Rural Concerns About Test-Based Accountability

While the goals of strong accountability systems are shared by rural high schools across the country, many rural advocates and researchers have raised major concerns about the de facto impact of test-based accountability systems on rural schools. Nationally, many have argued that such systems have led to the teaching of lower-level skills and the narrowing of curriculum options, but rural high school leaders find themselves especially frustrated. Their concern is that the overemphasis on a single, low-level test undermines their unique assets—strong school connectedness and the ability to engage in more creative, place-based, and interdisciplinary curricula—which can help to improve student achievement and successfully prepare students for college and work.

A 2004 General Accounting Office report on rural challenges in meeting the goals of the federal No Child Left Behind Act outlined some of these concerns:

- Rural schools had more difficulty than nonrural schools in meeting the needs of economically disadvantaged students because they sometimes lack key community resources, such as libraries, to help students overcome their educational challenges.
- “District staff often had to assume multiple roles which reduced the amount of time they could spend on collecting and disseminating information on promising implementation strategies, as well as designing and implementing them to raise student performance.”
- Information about key education reforms through professional development, advanced learning technologies, and supplemental services is less readily available to rural high schools.¹³⁸ The most extreme remedies, such as full school closure and restaffing, are close to impossible given the shortage of highly trained and qualified personnel available to fill open positions.

Information about key education reforms and supplemental services is less readily available to rural high schools. The most extreme remedies, such as full school closure and restaffing, are close to impossible given the shortage of highly trained and qualified personnel available to fill open positions.

The reliability of test data as applied to small, rural schools is also a concern. Because rural schools have fewer students, small shifts in the composition of the student body, such as a sudden increase in the number of migrant students, can dramatically and unfairly affect a school’s overall accountability score from year to year. The result is that changes in accountability ratings do not necessarily reflect the underlying quality of the school, but, rather, changes in student population that are beyond the school district’s control.

Opportunities to Encourage Innovation

Rural areas seeking to improve upon current accountability systems present an opportunity for the federal government to encourage innovation and promote new technologies. For example, implementing high-quality, performance-based assessments that measure students’ problem-solving skills in real-world contexts is particularly promising in rural schools with smaller class sizes and place-based learning in some high schools. Efforts to integrate innovative technologies into accountability assessments, processes, and service delivery would mesh easily with rural schools’ drive to expand and improve their own access to technology. The use of individual student identifiers to monitor student progress over time would not only improve data reliability for rural schools but would enhance these schools’ existing efforts to provide more personalized learning environments.

Expanding Student Supports and Options

Strong high schools ensure that all students have access to a rigorous, option-based course of studies as well as the supports and ongoing interventions necessary to ensure success. Every high school should be small enough to allow teachers and staff members to get to know all students as individuals and step in, as needed, to provide extra help and connect young people with a broader range of social support to help with problems in and out of the classroom. Despite strong teacher-student relationships, however, rural schools sometimes lack the networks of social services that may be available in larger urban and suburban communities.¹³⁹

Strong Teacher-Student Relationships

Supportive personal relationships are critical in promoting and maintaining student engagement, preventing students from dropping out, and encouraging young people to pursue promising college and career opportunities. Because of stable one-on-one relationships that are often reinforced outside of the classroom, rural schools can foster closer ties among teachers, parents, and students, which contributes to a supportive academic environment.¹⁴⁰ Rural high schools also benefit from a lower student-to-teacher ratio than their urban or suburban counterparts, resulting in greater personalization, including individualized attention to students' academic and behavioral needs. (There are fifteen students per teacher in rural areas, compared to seventeen students per teacher in urban and suburban districts.)¹⁴¹

Social Service Gaps

Many rural high schools do not have the necessary funding or infrastructure to adequately meet the needs of young people who are struggling with problems outside the classroom. This includes the growing number of rural students dealing with substance abuse, teen pregnancy, gang involvement, and other social problems. Due to limited networks of local social service agencies and fewer affordable transportation options, high school teachers and administrators often find it hard to connect students in need with appropriate counseling services or healthy alternate social activities.¹⁴² Many rural school leaders also report ongoing difficulties in finding psychologists, substance abuse treatment providers, and other specialized professionals in their communities. School-based social services are also more limited in rural high schools. This means fewer onsite facilities, such as health clinics and child care, and fewer school counselors, social workers, and school psychologists to help students navigate difficult social and emotional issues.¹⁴³

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Meth Prevention Brings Community Action Model to Montana High Schools

Despite common barriers, there are a number of rural high schools and communities that have worked together to create successful models of community action to intervene with troubled students and change behavior before problems become a crisis.¹⁴⁴ The Montana Meth Project, for example, is working closely with high schools, teens, and concerned citizens in rural communities across the state to warn young people about the dangers of methamphetamine use. The nationally recognized prevention program uses a dramatic public awareness campaign and community outreach efforts to reduce meth use. While the program is statewide, it depends on local high schools and communities to reach the teen population of individual counties by placing ads in high school newspapers, training high school student organizers, sponsoring art contests, and organizing the state's first March Against Meth, which included 2,300 teen participants from high schools across the state. Two years after launching the project, meth use in Montana had already declined by 72 percent, meth-related crime had decreased by 63 percent, and the state had reduced its meth-related costs by \$100 million.¹⁴⁵

Rural High Schools: Substance Abuse, Teen Pregnancy, and Gang Involvement

Alcohol abuse has long been a problem in rural areas, and illicit drugs have infiltrated towns of every size. Today, adults and young teens in rural areas are just as likely to abuse substances as those in larger metropolitan areas. While the problems may be similar, smaller communities have limited resources to address the consequences of substance abuse. Factors contributing to substance abuse in rural America include poverty, unemployment, underemployment, and the isolation of rural areas. Substances abused include, but are not limited to, alcohol, drugs, prescription medications, over-the-counter drugs, and cigarettes.¹⁴⁶

According to the 2007 National Survey on Drug Use and Health, substance abuse dependence for persons twelve years or older varied by region.

- In 2007, underage current alcohol use rates in small metropolitan areas were 29.2 percent, large metropolitan areas 26.9 percent, and nonmetropolitan areas 28.8 percent. The rate in completely rural nonmetropolitan areas was 24.6 percent.
- The 2007 rates of binge alcohol use among youths aged twelve to seventeen were 11.6 percent in nonmetropolitan areas, 9.4 percent in small metropolitan areas, and 9.3 percent in large metropolitan areas. In completely rural counties of nonmetropolitan areas, 12.2 percent of youths reported binge drinking in 2006.
- The rate of current illicit drug use among the population aged twelve or older in completely rural counties in 2007 of 4.1 percent was lower than that observed in 2006 (7.8 percent).¹⁴⁷

Like their urban and suburban counterparts, rural high schools also contend with a number of other troubling outside factors.

Drug and Alcohol Abuse

- Compared to their urban peers, eighth graders in rural America are 104 percent more likely to use amphetamines, including methamphetamine.¹⁴⁸
- Rural eighth graders are 83 percent more likely than their counterparts in urban centers to use crack cocaine, 50 percent more likely to use cocaine, 34 percent more likely to smoke marijuana, 29 percent more likely to drink alcohol, and 70 percent more likely to get drunk.¹⁴⁹

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- Among rural tenth and twelfth graders, drug usage rates exceed those in large urban areas for every drug except Ecstasy and marijuana.¹⁵⁰

Teen Pregnancy

- Young women in rural areas have a higher teen birthrate than their urban counterparts—a rate of thirty-eight per one thousand rural teenagers between the ages of fifteen and seventeen, compared to twenty-nine per thousand among urban teens of the same age group.¹⁵¹
- Early childbearing is particularly problematic in rural areas because many rural communities have fewer child care centers and a smaller network of social service supports to help parenting teens stay in school.¹⁵²

Gang Involvement

- Roughly 14 percent of rural communities report youth gang activity.¹⁵³
- According to a study of rural school counselors, more than one third of the counselors indicated a growing gang presence in their communities.¹⁵⁴

Recruiting and Retaining Highly Effective Teachers

Successful rural high schools must ensure an adequate number of high-quality teachers to boost academic success. Unfortunately, too many rural communities struggle to find and keep effective teachers, despite higher rates of teacher job satisfaction. An increasing number of rural communities are addressing these difficulties head-on with “grow-your-own” programs, advanced technologies and distance-learning opportunities that allow teachers to expand their professional development opportunities.

High Job Satisfaction Among Rural Teachers

On the plus side for professional recruitment, most teachers report that rural communities are good places to live and work. In addition to supportive, tight-knit communities, a more relaxed pace, and access to natural beauty, rural teachers generally report a high level of job satisfaction, greater autonomy, and more direct influence over school policy.¹⁵⁵ In addition, most rural teachers feel safer in their schools than their urban and suburban counterparts. And smaller percentages of rural public school teachers report frequent serious student behavioral problems (i.e., occurring at least once a week) compared to public school teachers nationally.¹⁵⁶ Finally, rural school districts, in collaboration with community colleges, universities, and other partners, are relying on an increasing number of grow-your-own programs designed to provide education and support for prospective teachers to stay and teach in their own communities.

In addition to supportive, tight-knit communities, a more relaxed pace, and access to natural beauty, rural teachers generally report a high level of job satisfaction, greater autonomy, and more direct influence over school policy.

Difficulties Recruiting/Retaining Qualified Teachers

At the same time, however, rural communities constantly struggle to recruit teachers, especially in small, geographically isolated communities that cannot match the higher salaries of their urban and suburban neighbors. In almost every state, rural teachers make less than urban teachers. In thirty-nine

out of fifty states, rural teachers have lower beginning salaries than their urban counterparts.¹⁵⁷ In forty-four out of fifty states, they have lower average salaries.¹⁵⁸ These salary discrepancies can be even more pronounced in individual states. In Pennsylvania, for example, rural teachers made an average of \$44,287 per year in 2000 while urban teachers (mainly in the Philadelphia and Pittsburgh regions) made an average of \$50,290 per year.¹⁵⁹ In Illinois, the highest-paid teachers in nonrural areas make approximately \$34,000 more than the highest-paid rural teacher.¹⁶⁰

In addition to lower salaries, many rural teachers also report challenges in balancing diverse student needs, limited support services, and less access to ongoing professional development opportunities. And while rural communities have a slightly higher percentage of experienced teachers (14.5 years for rural teachers versus 13.6 years for urban teachers),¹⁶¹ researchers consistently find that teachers in rural areas have comparatively lower educational attainment and are about half as likely to have graduated from top-ranked colleges and universities as their urban peers.¹⁶² Rural areas also have a slightly lower percentage of National Board Certified teachers (26 percent of rural versus 28 percent in urban and 36 percent in suburban schools).¹⁶³ In addition, rural high schools find it particularly difficult to attract teachers of color to their communities. Racial and ethnic minorities account for a significantly smaller percentage of public school teachers in rural schools (8 percent) than in schools in all other locales (12 to 29 percent).¹⁶⁴

Numerous promising practices can be found that help increase teacher recruitment and retention in rural schools.¹⁶⁵ Educational service agencies (ESAs) and institutions of higher education can be vital partners, particularly in regional efforts to support professional development and teaching practices of teachers.¹⁶⁶ An ESA might network with rural schools to provide support on a regional or individual school basis to new teachers (e.g., induction/mentoring programs), represent multiple schools in their member districts at recruitment fairs held by colleges of education, operate job banks, conduct job fairs, or screen resumes of teacher candidates.

An ESA might also use a regional cooperative purchasing arrangement to give teachers in small, rural high schools cost-effective access to outside consultants and quality professional development opportunities. Partnerships among the school district, an ESA, and one or more higher education institution can provide teachers with access to advanced degrees and other professional development opportunities. Distance-learning technology and online courses can be used extensively to reduce the need for teachers to travel long distances for an opportunity specific to their subject areas (e.g. math, science). Access to a mentor and valuable instructional resources may be only available via technology if, for example, you are the only math or science teacher in the small, rural high school.

Supportive recruitment activities associated with college teacher education programs could include encouraging students in teacher education classes to visit rural districts, posting job openings, noting the positive aspects of teaching in a rural school, and inviting educators from rural areas as guest speakers in teacher education classes. A college of education might also advise students to prepare for teaching in multiple subject areas, sponsor recruiting fairs, and place student teachers in rural schools. Community colleges and universities can also be vital partners in a rural district's grow-your-own program.

“Grow-Your-Own” Teacher Programs: Promising Options for Rural High Schools

A significant number of rural communities are finding success with grow-your-own programs to train and retain highly effective local teachers. These programs identify and recruit promising local high school and college students who want to stay and teach in their own communities. Typically, local community colleges and state four-year teacher and education degree-granting colleges partner with rural districts to provide instruction both on the college campus and onsite at local schools. In return, local communities help to absorb the costs of tuition and other program fees and provide other incentives that allow returning teachers to live in lower-paying communities. Some programs also provide the training to allow local instructional aides or other paraprofessionals to study to become fully licensed teachers.¹⁶⁷ Initial studies have shown that grow-your-own teacher programs result in much lower teacher turnover rates. In North Carolina, for example, where one third of the state’s lowest-performing schools participate in the state program, local districts have retained 89 percent of those teachers that have become fully licensed and certified.¹⁶⁸ An increasing number of states and universities have adopted this model, and some rural communities are using similar strategies to recruit and retain local school leaders in addition to classroom teachers.¹⁶⁹

Building Strong Models of Community Support

Rural communities play a vital role in the success—or failure—of their local high schools. Effective school and district leaders recognize the importance of collaborating with the community.¹⁷⁰ High-performing high schools depend on local community-based services, businesses, and other nonacademic partners to stretch limited resources and support a common vision for change. Many rural high schools have the benefit of small, tight-knit communities to help guide school reform efforts, participate regularly in school activities, and attend community activities in school buildings. The expanded use of technology is also enabling rural high schools to engage local stakeholders in educational goals and outcomes by using the Internet to advertise volunteer opportunities, monitoring and sharing key outcome measures, and informing community members of overall educational goals for students and the plans for achieving them.

Unfortunately, some rural counties lack the tax base, stable local economy, and social and community capital to invest in local high schools. In areas that have a high percentage of elderly in the population, and/or those that have lost a high number of their most educated citizens to higher-paying jobs in nearby suburban or rural areas—often referred to as “out-migration” or “brain drain”—garnering broad-based community support for improved educational outcomes is an ongoing challenge.

High Levels of Parental Involvement

Research shows that when parents get involved in education, students perform better in school.¹⁷¹ Parental involvement can include volunteer and financial support as well as work exposure and job opportunities for students. Rural high schools report a high level of parental involvement as well as frequent communication between parents and teachers.¹⁷² Rural parents also tend to be more involved in their children’s school activities. Greater percentages of students in rural areas (74 percent), for example, had parents who had attended at least one school event (compared to 65 percent of students in cities). Even more significantly, 42 percent of rural students had parents who served on a school

committee (compared to 38 percent of students in cities).¹⁷³ Exceptional challenges exist in parental-family involvement, however, in high schools that serve high concentrations of impoverished students and/or growing populations of English language learners, special needs students, or other students from educationally disadvantaged circumstances. Without a concerted effort, reaching out to parents in rural schools can be overlooked in important school improvement initiatives.¹⁷⁴

Rural high schools report a high level of parental involvement as well as frequent communication between parents and teachers.

Strong Local Community Partnerships

In small rural communities, high schools often play a much greater role in the community than their counterparts in urban and suburban areas.¹⁷⁵ In many areas, the rural community revolves around the church, the volunteer fire department, and the high school. Rural high schools play multiple roles, serving as social, cultural, and civic centers that provide rural residents “with a sense of identity, cohesiveness, and community connectedness.”¹⁷⁶ In addition, local high schools are sometimes used as a place where community residents can access basic health and other social services.¹⁷⁷ In many communities, primary and secondary schools are also vital economic hubs, especially in towns where the public school system ranks among the local economy’s top employers.¹⁷⁸ Because of the central role schools play across all areas of community life, they are often viewed as the place in rural communities around which residents will come to support their youth.¹⁷⁹ These strong relationships provide high schools in rural areas with a unique opportunity to engage the broader community in improved educational outcomes.

Setting High Expectations for College and Career Success

Successful high schools create strong cultures of college and career in their schools and communities. With community and parent support, such schools encourage students to continue with postsecondary education and promising careers and connect them to helpful college and career resources. Some rural communities, especially those that struggle with persistent poverty, unstable economies, a dwindling workforce, or a history of jobs requiring low levels of education, may not be fostering the same high expectations for college and career. College enrollment rates of eighteen- to twenty-nine-year-olds are still lower in rural areas than in all other locales.¹⁸⁰ College completion rates are similar: only 17 percent of rural adults age twenty-five and older had completed college in 2000, half the percentage of urban adults.¹⁸¹

College Culture

Education beyond high school is more essential than ever, particularly as many rural communities transition the local economy for competing in a highly technological, information-oriented world. Fewer rural communities are as dependent on once prominent natural resource-based or manufacturing-oriented economies. Unfortunately, too many communities lack the hallmarks of a “college culture” and desire for postsecondary education that are more readily available in more affluent areas with larger student populations, such as active college recruitment visits by college admissions staff, funding for an adequate number of college counselors, access to information about financial aid and scholarships, and opportunities for students to visit faraway college campuses. Due

to the out-migration of local professionals who find higher-paying jobs in suburban and urban areas, some rural high school students may also find it more difficult to connect with community mentors who can discuss careers and related postsecondary/college education options.¹⁸²

Lower parental education and college expectation levels also play a significant role. The percentage of rural students whose parents' highest level of education was a high school diploma is higher than in cities and suburbs. In addition, the percentage of rural parents who expected their children's highest level of education to be less than a bachelor's degree was higher (42 percent) than their urban (30 percent) and suburban (25 percent) peers.¹⁸³ Unfortunately, some rural students also have lower expectations for their academic future. Based on a recent study, nonmetro youth have lower expectations for future schooling than suburban and urban youth. Nearly one half (47 percent) of nonmetro youth reported "little chance they would be enrolled in regular school in five years."¹⁸⁴

Creating a College Culture in Rural High Schools

In rural northeastern Washington State, the Panorama Rural Education Partnership (PREP) is working to create a college-going culture in rural high schools. A consortium of nine rural districts in counties where the majority of students are poor and have more education than their parents, PREP pools the resources of participating high schools to offer Advanced Placement courses and encourage students to take them and provide increased college counseling and funding. In the Mary Walker School District, one of the participating rural districts, more than half of high school students enroll in an AP class prior to graduation. Even more significantly, approximately 70 percent of students now attend a postsecondary institution, and the number of students entering four-year colleges has increased more than threefold. In addition to advanced coursework and college counseling efforts, PREP has also created Navigation 101, a program that helps students and their families create a "high school and beyond" plan that helps them stay on track in school and graduate with the skills they need to succeed.¹⁸⁵

Career Exposure

Students also need hands-on opportunities, such as internships and other programs, to help them develop the necessary skills to transition from school to career. This may be a particular challenge for rural high schools where few employers exist in the local community.¹⁸⁶ While the close-knit nature of smaller communities may actually increase work-based opportunities in some local economies, national data suggest that, overall, rural employers are less likely to invest in such employment opportunities due to lack of resources to provide training and recruiting.¹⁸⁷ In addition to the concerns of local business owners and professionals, rural communities have fewer intermediaries, such as temporary firms and community-based organizations, to connect young people to hands-on career experiences.¹⁸⁸ Rural firms are also less likely to participate in school-to-work programs because they tend to be smaller with fewer resources and recruitment is more difficult.¹⁸⁹ Without adequate work experience and strong partnerships between local high schools and community businesses, even rural high school students with solid academic preparation are at a distinct disadvantage compared to their urban and suburban peers, who have better access to career training opportunities.

A study by the National Center for Education Statistics¹⁹⁰ found rural schools were less likely than nonrural schools to offer programs targeted to all technical, service, and mechanical occupations, and

most of the life sciences and business/marketing professions. Rural schools were more likely to offer agri-science programs, and building trade programs, such as welding, carpenter, and plumber. An average of 25 percent of career and technical education programs offered by nonrural schools were for projected fast-growing occupations, compared to 17 percent for rural schools. The researchers note that career offerings might be more limited in rural areas compared to urban and suburban areas, in part because rural high schools tend to be smaller than high schools in other areas, and have a different labor market. Rural schools are more likely to offer welding and agri-science programs.

Partnerships to Help Rural High School Students Gain Workplace Skills

To help students explore available career options and develop the skills to pursue them, some rural high schools are partnering with local businesses to establish innovative school-to-work programs. These programs match local students with hands-on employment opportunities designed to create a connection between school-based learning and those skills students need to succeed in the twenty-first-century workplace. In Clay County, West Virginia, for example, high school students are assigned to spend part of the school day at participating local businesses based on their professional interests—from doctor’s offices to Head Start programs and local construction firms. The Clay County School-to-Work Partnership, funded in part by the Appalachian Regional Commission, operates on the principle that education succeeds when students have the ability to apply what they have learned in “real-life, real-work” situations. Job assignments are the culmination of an orientation process that begins in elementary school, when students begin to explore different career options, and continues in the sixth to eighth grades with field trips, job shadowing, and computer simulations of certain jobs. The school-to-work program plays a particularly vital role in diversifying possible employment options in Clay County, one of the poorest counties in West Virginia, where the school system itself is the region’s largest employer. In addition to employment opportunities, the Clay County School-to-Work Partnership has teamed up with West Virginia State College’s Community and Technical College to offer college-level classes at the local high school, providing students with a chance to earn dual credits and increasing college expectations in a community with a low college-going rate.¹⁹¹

Next Steps: Crafting Policy Solutions to Improve Rural High Schools

The Alliance for Excellent Education has developed this report to provide federal policymakers with a comprehensive understanding of the key challenges facing rural high schools as they prepare their students for college and careers. The next step is to continue working with federal leaders and other national partners to craft policy solutions that consider and address the unique circumstances of rural high schools and communities. This requires both a careful analysis of how current policies are impacting rural high schools and a willingness to explore innovative new options that address existing policy gaps on both the national and local levels.

Federal policymakers play a vital role in developing effective national strategies that meet the needs of twenty-first-century rural high schools and fully address the implications of America's dropout crisis on rural communities. As Congress prepares to reauthorize the Elementary and Secondary Education Act, it is imperative that federal leaders understand the full impact—and unintended consequences—of current education reform efforts on America's rural communities. While education will always be administered at the local and state levels, the federal government must continue to provide appropriate funding and guidance to ensure that all of the nation's students have the skills to compete in the global marketplace.

By summarizing key data, policy issues, and insights from the nation's top rural education researchers and federal policy advocates, the Alliance hopes this report will motivate policymakers to capitalize on upcoming reauthorization opportunities and use new legislative and policy avenues to address the diverse and unique needs of rural high schools and their communities. To that end, the Alliance considers this report the first step in an ongoing conversation with federal policymakers and other partners on the optimal way to identify and implement federal policy solutions that effectively address the following key questions:

- *How can federal policy help rural high schools ensure that all students achieve college and career readiness?*
- *What specific strategies are required to meet the needs of rural high school students at particular risk for poor educational outcomes (i.e., low-income and minority students, English language learners, mobile students, students with special education needs, and so on)?*
- *How do the federal policy needs of rural high schools differ from those in urban and suburban areas?*
- *What lessons can federal policymakers learn from exemplary rural high schools (e.g., advantages of strong teacher-student ratios and personalization, place-based learning opportunities) that can be applied to reform efforts in urban and suburban high schools?*
- *What specific lessons can federal policymakers learn from exemplary rural high schools, and how can these lessons be applied at the federal level?*
- *What federal policies and funding practices are necessary to support the preparation of rural high school and district leaders who can collaborate effectively with the community in offering all students excellent teaching and learning opportunities?*

- *How can federal policies encourage the analysis of national databases with information relevant to high schools and communities in rural America and disseminate results, especially for access by educational practitioners and stakeholders in isolated rural areas?*
- *How can federal policies and funding practices encourage use of existing research and lessons learned on teaching and learning in rural high schools to inform practice in educational leadership and instruction?*
- *What federal policies and funding practices are necessary to support the preparation, recruitment, and retention of effective high school teachers and principals, particularly in high-poverty rural areas?*
- *What federal policies and funding practices enable rural schools to increase community viability and prosperity while also preparing all students for success in college, careers, and life?*
- *How can federal policies encourage maximum collaboration among federal agencies in supporting solutions to the challenges of public high schools in rural America?*
- *How can federal policies and funding practices encourage parent-family involvement in rural high schools with high concentrations of students in poverty who need to excel academically, graduate from high school, and pursue postsecondary education?*
- *What are the research gaps that must still be addressed to inform effective federal policies for rural high schools?*
- *How can rural high schools better access cutting-edge technologies and build the sufficient technological infrastructure to expand distance-learning opportunities and improve academic outcomes?*
- *How can federal policymakers help to identify and promote effective district-to-district and district-community partnership strategies to help rural high schools create economies of scale to expand necessary resources and personnel?*
- *What federal policies and funding practices are necessary to increase competitiveness of small rural school districts and their communities in securing federal grants for planning and implementing essential educational programs and services in rural high schools?*
- *What are the most promising evidence-based practices for improving outcomes in rural high schools, and how can federal policymakers help local districts take those practices to scale?*

The Alliance strongly believes that, in crafting effective policies that respond to these key policy questions for rural high schools, federal policymakers and other national stakeholders can provide individual students with the knowledge, skills, and opportunities they need to ensure that every child is a graduate. In addition to improving individual education outcomes, strong rural high schools will also improve America's competitiveness, strengthen rural economies, and reinforce the vital role that secondary schools play as centers of civic engagement and support.

Endnotes

1. U.S. Department of Labor, "America's Dynamic Workforce, 2008" (Washington, DC: U.S. Department of Labor, 2008), <http://www.dol.gov/asp/archive/reports/Workforce2008/ADW2008.pdf> (accessed September 1, 2009).
2. T. Tucci, *Prioritizing the Nation's Dropout Factories* (Washington, DC: Alliance for Excellent Education, 2009).
3. C. Swanson, *Special Analysis of Rural Graduation Rates Commissioned by the Alliance for Excellent Education* (Washington, DC: Editorial Projects in Education Research Center, August 2009).
4. L. Whitener and D. McGranahan, *Rural America: Opportunities and Challenges* (Washington, DC: United States Department of Agriculture, Economic Research Service, AmberWaves, February 2003).
5. J. Meece and T. Farmer, *Rural High School Aspirations Study*, poster on preliminary findings presented at the Society for Research on Adolescence, Chicago, IL, March 6–9, 2008.
6. A. Carnevale, *A College Degree Is the Key: Higher Education and the Changing Workforce* (San Jose: National Center for Public Policy and Higher Education, 1999).
7. Alliance for Excellent Education, *From No Child Left Behind to Every Child a Graduate* (Washington, DC: Author, 2008).
8. Ibid.
9. Tucci, *Prioritizing the Nation's Dropout Factories*.
10. R. Gibbs, *Rural Education at a Glance*, Rural Development Research Report Number 98 (Washington, DC: United States Department of Agriculture Economic Research Service, 2003).
11. Swanson, *Special Analysis of Rural Graduation Rates*.
12. Whitener and McGranahan, *Rural America*.
13. For other promising examples of strategies for achieving economic success in rural communities, see the Rural Policy Research Institute's Center for Rural Entrepreneurship. In partnership with the nation's four Regional Rural Development Centers, the Center for Rural Entrepreneurship connects economic development practitioners and policymakers across rural America to implement entrepreneurship as a core rural economic development strategy (www.energizingentrepreneurs.org).
14. Carnevale, *A College Degree Is the Key*.
15. Ibid. See also A. Carnevale and D. Desrochers, *Standards for What? The Economic Roots of K–16 Reform* (Princeton: Educational Testing Service: 2003).
16. Ibid.
17. See Alliance for Excellent Education, *From No Child Left Behind to Every Child a Graduate*.
18. Whitener and McGranahan, *Rural America*.
19. See Carnevale, *A College Degree Is the Key*.
20. See Whitener and McGranahan, *Rural America*.
21. S. Provasnik et al., *Status of Education in Rural America* (Washington, DC: U.S. Department of Education, National Center on Education Statistics, July 2007). Please note that all the data provided in this brief from the 2007 *Status of Education in Rural America* is from 2003–04.
22. J. Johnson and M. Strange, *Why Rural Matters 2007: The Realities of Rural Education Growth* (Washington, DC: Rural School and Community Trust, 2007).
23. Meece and Farmer, *Rural High School Aspirations Study*.
24. Johnson and Strange, *Why Rural Matters 2007*.
25. In Appalachia, for example, approximately half of the region's 23 million people live in rural areas. Although the poverty rate in this area was cut in half over the past three decades, it is still high, especially in central rural Appalachia, where the poverty rate is nearly 27 percent (as compared to the national average of 13.1 percent). While the region's overall educational level has improved, educational deficits remain closely linked to high-poverty regions, and average high school completion rates are only 68 percent. Appalachian Regional Commission, Economic Overview, www.arc.gov/index.do?nodeId=26 (accessed August 1, 2009).
26. Gibbs, *Rural Education at a Glance*.
27. D. Brown and L. Swanson, eds., *Challenges for Rural America in the 21st Century* (University Park, PA: Pennsylvania State University Press, 2003).
28. Gibbs, *Rural Education at a Glance*.

29. Ibid.
30. C. Rogers, *Rural Children at a Glance*, Economic Information Bulletin Number 1 (Washington, DC: United States Department of Agriculture Economic Research Service, 2005).
31. S. Savage, *Children in Central Cities and Rural Communities Face High Rates of Poverty* (Durham, NH: University of New Hampshire Carsey Institute, 2008). See also W. O'Hare, *The Forgotten Fifth: Child Poverty in Rural America* (Durham, NH: University of New Hampshire Carsey Institute, 2009).
32. Whitener and McGranahan, *Rural America*.
33. Ibid. See also United States Department of Agriculture, Economic Research Service, *Briefing Rooms: Rural Population and Migration* (Washington, DC: Author, November 2008), <http://www.ers.usda.gov/briefing/population> (accessed September 1, 2009).
34. United States Department of Agriculture, Economic Research Service, *Briefing Rooms*.
35. Ibid.
36. C. Jones, W. Kandel, and T. Parker, *Population Dynamics Are Changing the Profile of Rural Areas* (Washington, DC: United States Department of Agriculture, Economic Research Service, AmberWaves, April 2007).
37. Ibid.
38. Whitener and McGranahan, *Rural America*.
39. United States Department of Agriculture, Economic Research Service, *Briefing Rooms*.
40. Whitener and McGranahan, *Rural America*.
41. Ibid.
42. High school completion rates, for example, range from an average of 65 percent in the lowest quartile of rural schools in Appalachia, the South, and the Southwest to 87 percent for the top quartile of rural schools in the Northeast, the Great Lakes and Great Plains regions, the central and northern Rockies, and the Pacific Northwest. See, e.g., Gibbs, *Rural Education at a Glance*.
43. There are six definitions of what constitutes a "rural area" in federal law alone. These include U.S. Census Bureau Classifications, Metropolitan status codes, urban-rural continuum codes, Metro- and Urban-centric locale codes, and core-based statistical areas. See M. Arnold et al., *How the Government Defines Rural Has Implications for Policies and Practices* (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Education Laboratory Southwest, June 2007).
44. Ibid.
45. T. Farmer, *Issues in Rural Education Research*, presentation at the National Rural Education Association Research Symposium, Oklahoma City, OK, November 10, 2007.
46. Arnold et al., *How the Government Defines Rural*.
47. Provasnik et al., *Status of Education in Rural America*.
48. Johnson and Strange, *Why Rural Matters 2007*.
49. Provasnik et al., *Status of Education in Rural America*.
50. Ibid.
51. Alliance for Excellent Education, *Original Calculation Using Typical Universe of High Schools Based on U.S. Department of Education, National Center on Education Statistics 2006–2007 Common Core of Data* (Washington, DC: Author, August 2009).
52. Ibid.
53. D. Princiotta and S. Bielick, *Homeschooling in the United States: 2003* (NCES 2006-042) (Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, 2006).
54. Rogers, *Rural Children at a Glance*.
55. Savage, *Children in Central Cities and Rural Communities*.
56. Provasnik et al., *Status of Education in Rural America*.
57. Johnson and Strange, *Why Rural Matters 2007*.
58. Ibid.
59. Provasnik et al., *Status of Education in Rural America*.

60. Johnson and Strange, *Why Rural Matters 2007*.
61. Editorial Projects in Education, *Diplomas Count 2009: Broader Horizons: The Challenge of College Readiness for All Students* (Bethesda, MD: Editorial Projects in Education, June 2009).
62. Swanson, *Special Analysis of Rural Graduation Rates*.
63. Provasnik et al., *Status of Education in Rural America*.
64. Whitener and McGranahan, *Rural America*.
65. Gibbs, *Rural Education at a Glance*.
66. Provasnik et al., *Status of Education in Rural America*.
67. A. Snyder, D. McLaughlin, and A. Coleman-Jensen, *The New, Longer Road to Adulthood: Schooling, Work, and Idleness Among Rural Youth* (Durham, NH: University of New Hampshire Carsey Institute, 2009).
68. Ibid.
69. Provasnik et al., *Status of Education in Rural America*.
70. Ibid.
71. Ibid.
72. It should be noted, however, that despite lower overall percentages of unemployment, some rural areas may also have lower overall numbers of workers, especially in those areas where portions of the local workforce have “out-migrated” to higher-paying jobs in nearby suburban and urban areas.
73. D. Monk, *Recruiting and Retaining High-Quality Teachers in Rural Areas* (Princeton: Future of Children, 2007).
74. Alliance for Excellent Education, *From No Child Left Behind to Every Child a Graduate*.
75. See Johnson and Strange, *Why Rural Matters 2007*.
76. Provasnik et al., *Status of Education in Rural America*. Please note that all the data provided in this brief from the 2007 *Status of Education in Rural America* is from 2003–04.
77. Alliance for Excellent Education, *Original Calculation Using Typical Universe of High Schools*.
78. Rural School and Community Trust, *Title I Weighted Grants Skewed Toward Largest Districts: Per Pupil Funding Varies Sharply by District Size* (Washington, DC: Author, April 16, 2007).
79. Rural School and Community Trust, *Rural Policy Matters: A Newsletter of Rural School and Community Action* 11, no. 6 (June 2009).
80. Rural School and Community Trust, *Poorer Smaller Districts Lose Out in Stimulus* (Washington, DC: Author, April 1, 2009), <http://www.ruraledu.org/articles.php?id=2112> (accessed August 15, 2009).
81. Rural School and Community Trust, *Rural Policy Matters*.
82. Rural School and Community Trust, *Title I Weighted Grants Skewed Toward Largest Districts*.
83. U.S. Department of Education, *Improving Basic Programs Operated by Local Agencies (Title I, Part A), Program Purpose* (Washington, DC: Student Achievement and School Accountability Programs), <http://www.ed.gov/programs/titleiparta/index.html> (accessed August 24, 2009).
84. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, *State and Local Implementation of the No Child Left Behind Act, Volume VI—Targeting and Uses of Federal Education Funds*, Washington, DC, 2009. Note: This data comes from a sample of schools that is nationally representative except that high-poverty schools were oversampled.
85. Alliance for Excellent Education, *Original Calculation Using Typical Universe of High Schools*.
86. Rural School and Community Trust, *Title I Weighted Grants Skewed Toward Largest Districts*.
87. To find out how much each rural school district would gain or lose if the current federal Title I funding formulas were eliminated, see the Rural School and Community Trust’s chart based on research by the Congressional Research Service at www.ruraledu.org/articles.php?id=1953
88. M. Strange, J. Johnson, and A. Finical, *Many Children Left Behind: How Title I Weighted Grant Formulas Favor the Few at the Expense of the Many in Pennsylvania* (Washington, DC: Rural School and Community Trust, 2009).
89. This number does not include the \$10 billion allocated to Title I through the American Recovery and Reinvestment Act of 2009.
90. Harmon, H. L., & K.S. Smith (June, 2007). *A legacy of leadership and lessons learned: Results from the rural systemic initiatives for improving mathematics and science education*. (Charleston, WV: Edvantia, Inc., June 2007).

91. Provasnik et al., *Status of Education in Rural America*.
92. K. Marcel, *On-line Advanced Placement Courses: Experiences of Low-Income and Rural High School Students* (Boulder: Western Interstate Commission for Higher Education, 2003).
93. Provasnik et al., *Status of Education in Rural America*.
94. Southern Regional Education Board, *Technology Use in Rural High Schools Improves Opportunities for Student Achievement* (Atlanta: Author, March 2005).
95. Provasnik et al., *Status of Education in Rural America*.
96. Ibid.
97. Ibid.
98. Rural School and Community Trust, *Rural Policy Matters*.
99. United States Department of Agriculture Economic Research Service, Economic Information, *Rural Broadband at a Glance: 2009 Edition*, Bulletin Number 47, February 2009, <http://www.ers.usda.gov/Publications/EIB47/EIB47.pdf> (accessed August 25, 2009).
100. See <http://www.ed.gov/programs/starschools/index.html> (accessed August 25, 2009).
101. See <http://www.fred.org/tech.html> (accessed August 25, 2009).
102. In 2005, the Department of Education developed a long-range technology plan that outlines seven action steps that states, districts, and schools can take to use technology effectively to improve student achievement. A copy of the report and its implications for rural secondary schools is available at www.nationaledtechplan.org
103. Maine Department of Education, *Maine Learning Technology Initiative*, <http://maine.gov/mlti/about/index.shtml> (accessed August 20, 2009); Maine Department of Education, *Maine Extends Laptops to High School Students*, press release, March 11, 2009, <http://www.maine.gov/tools/whatsnew/index.php?topic=DOENews&id=69205&v=article> (accessed August 20, 2009).
104. W. Wong, "Going the Distance: Three Schools Share How They Use Unique Distance Learning Approaches to Bridge the Education Gap," *EdTech: Focus on K-12* (January-February 2009).
105. Southern Regional Education Board states include Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.
106. Southern Regional Education Board, *Technology Use in Rural High Schools*.
107. Additional resources from the Educational Technology Cooperative are available at <http://www.sreb.org/programs/EdTech/EdTechindex.asp>
108. Federal Communications Commission, *The FCC's Universal Service Program for Schools and Libraries*, http://www.fcc.gov/cgb/consumerfacts/usp_Schools.html (accessed August 19, 2009); Federal Communications Commission, *The FCC's Universal Service Support Mechanisms*, <http://www.fcc.gov/cgb/consumerfacts/universalservice.html> (accessed August 19, 2009); Government Accountability Office, *Telecommunications: Information on Participation in the E-Rate Program*, GAO-09-254SP, March 2009, an e-supplement to GAO-09-253, <http://www.gao.gov/special.pubs/gao-09-254sp/> (accessed August 19, 2009).
109. Rural School and Community Trust, *Engaged Institutions: Impacting the Lives of Vulnerable Youth Through Place-Based Learning* (Washington, DC: Author, June 2003).
110. Ibid.
111. To promote place-based learning in rural communities, the Rural School and Community Trust offers the online Place-Based Learning Portfolio to help states document and measure progress of local initiatives (<http://portfolio.ruraledu.org>). In addition, the Center for Place-Based Learning and Community Engagement provides information on research, program design, resource development, and other technical assistance (www.promiseofplace.org).
112. Example detailed in Rural School and Community Trust, *Engaging Students and Revitalizing Communities Through Place-Based Learning*, a Rural School Innovation Network Webinar, April 29, 2008.
113. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, *State and Local Implementation of the No Child Left Behind Act*. Note: This data comes from a sample of schools that is nationally representative except that high-poverty schools were oversampled.
114. Ibid.
115. Gibbs, *Rural Education at a Glance*.
116. Ibid.
117. Swanson, *Special Analysis of Rural Graduation Rates*.

118. Johnson and Strange, *Why Rural Matters 2007*.
119. Ibid.
120. Ibid.
121. Ibid.
122. Ibid.
123. S. Paik and R. Phillips, *Student Mobility in Rural Communities: What Are the Implications for Student Achievement?* (Naperville, IL: North Central Regional Educational Laboratory, 2002).
124. Ibid.
125. Ibid.
126. K. A. Schafft, "The Incidence and Impacts of Student Transiency in Upstate New York's Rural School Districts," *Journal of Research in Rural Education* 20, no. 15 (2005), <http://jrre.psu.edu/articles/20-15.pdf> (accessed August 15, 2009).
127. Provasnik et al., *Status of Education in Rural America*.
128. U.S. Department of Education, *Factors Associated with the Provision of Special Education to Students with Disabilities in Rural Districts* (Washington, DC: Author, 1995), archived at <http://www.ed.gov/pubs/OSEP95AnlRpt/ch7c.html> (accessed August 15, 2009).
129. Ibid.
130. National Indian Education Association, "Preparing Students for College and the Workforce," *NIEANews* (spring 2008).
131. Editorial Projects in Education, "Diplomas Count 2009: Broader Horizon—The Challenge of College Readiness for All Students," *Education Week* 28, no. 34 (June 2009).
132. Ibid.
133. C. Freeman and M. A. Fox, *Status and Trends in the Education of American Indians and Alaska Natives* (NCES 2005-108) (Washington, DC: August 2005). See also National Indian Education Association, *High School Equity for Native Students: Preparing Native Students to Enter College and the Workforce* (Washington, DC: February 9, 2009).
134. Ibid.
135. Ibid.
136. National Indian Education Association, "High School Policy Initiative: Looking Back and Moving Forward," *NIEANews* (spring 2009).
137. Ibid.
138. U.S. Government Accountability Office, *No Child Left Behind: Additional Assistance and Research on Effective Strategies Would Help Small Rural Districts*, GAO-04-909 (Washington, DC: Author, September 2004).
139. L. Beaulieu and G. Israel, "It's More Than Just Schools: How Families and Communities Promote Student Achievement," *The Role of Education Promoting the Economic and Social Vitality of Rural America* (Gainesville, FL: Southern Rural Development Center at the University of Florida, 2005).
140. Gibbs, *Rural Education at a Glance*.
141. Provasnik et al., *Status of Education in Rural America*.
142. Interview with Dr. Barbara Ludlow, professor, West Virginia University College of Human Resources and Education, May 12, 2009.
143. U. Rouk, "When Rural Traditions Really Count," *Southwest Educational Development Laboratory Newsletter* 13 (April 2001).
144. Ibid.
145. See <http://www.montanameth.org/>
146. Rural Assistance Center, *Substance abuse*. (Fargo, ND: The Center for Rural Health, University of North Dakota School of Medicine and Health Sciences (a collaborative of the University of North Dakota Center for Rural Health (UND-CRH), the Rural Policy Research Institute (RUPRI), and the federal Office of Rural Health Policy (ORHP) at the U.S. Department of Health and Human Services.) http://www.raconline.org/info_guides/substanceabuse/ (accessed September 10, 2009).
147. Substance Abuse and Mental Health Services Administration, *Results from the 2007 National Survey on Drug Use and Health: National Findings*. (Rockville, MD: Office of Applied Studies, NSDUH Series H-34, DHHS Publication No. SMA 08-4343, 2008).
148. Rouk, *When Rural Traditions Really Count*.

149. National Center on Addiction and Substance Abuse, Columbia University, *No Place to Hide: Substance Abuse in Mid-size Cities and Rural America* (New York: Author, 2000).
150. Ibid.
151. J. Skatrud, T. Bennett, and F. Loda, "An Overview of Adolescent Pregnancy in Rural Areas," *Journal of Rural Health* (winter 1998).
152. Ibid.
153. R. Weisheit and L. E. Wells, "Youth Gangs in Rural America," *NIJ Journal*, 251, 2–6, 2004.
154. P. Caldrella et al., "The Spread of Youth Gangs in Rural Areas: A Survey of School Counselors," *Rural Special Education Quarterly* 15, no. 4 (Fall 1996): 18–27.
155. Monk, *Recruiting and Retaining High-Quality Teachers*.
156. Provasnik et al., *Status of Education in Rural America*.
157. L. Jimerson, *The Competitive Disadvantage: Teacher Compensation in Rural America* (Washington, DC: Rural School and Community Trust, 2003).
158. Ibid.
159. Center for Rural Pennsylvania, *Trends in Rural Pennsylvania: Education Progress Report* (Harrisburg, PA: Author, July–August 2003).
160. Jimerson, *The Competitive Disadvantage*.
161. Provasnik et al., *Status of Education in Rural America*.
162. Monk, *Recruiting and Retaining High-Quality Teachers*.
163. Data obtained via personal request to Shannon Fox, director of knowledge management, National Boards for Professional Teaching Standards, August 24, 2009.
164. Provasnik et al., *Status of Education in Rural America*.
165. Harmon, H. L. "Teacher recruitment and retention in rural schools," *The State Education Standard*, 4(1), 13-17, winter 2003.
166. Harmon, H. L., J. Gordanier, L. Henry, & A. George. "Changing teaching practices in rural schools," *The Rural Educator*, 28(2), 8-12, winter 2007.
167. Association of Community Organizations for Reform Now, "Grow-Your-Own and Other Solutions to Teacher Turnover in Hard to Staff and Low-Performing Schools," <http://www.acorn.org/index.php?id=317> (accessed August 29, 2009).
168. Ibid.
169. Ibid.
170. Harmon, H. L., & K.A. Schafft. "Rural school leadership for collaborative community development," *The Rural Educator*, 30(3), 4-9, 2009.
171. L. Beaulieu and G. Israel, *It's More Than Just Schools: How Families and Communities Promote Achievement* (Mississippi State, MI: Southern Rural Development Center, 2005).
172. See, e.g., Gibbs, *Rural Education at a Glance*.
173. Provasnik et al., *Status of Education in Rural America*.
174. Harmon, H. L., & B. H. Dickens, B. H. "Reaching out in rural districts" *American School Board Journal*, 191(8), 28-31, 2004.
175. Harmon, H. L., & K.A. Schafft. "Rural school leadership for collaborative community development," *The Rural Educator*, 30(3), 4-9, 2009.
176. T. Lyson, "Importance of Schools to Community Viability," in *The Role of Education in Promoting the Economic and Social Vitality of Rural America* (Mississippi State, MS: Southern Rural Development Center, January 2005).
177. M. Woods, G. Doeksen, and C. St. Clair, "Measuring Local Economic Impacts of the Education Sector," in *The Role of Education in Promoting the Economic and Social Vitality of Rural America* (Mississippi State, MS: Southern Rural Development Center, January 2005).
178. Ibid.
179. Rouk, *When Rural Traditions Really Count*.
180. Provasnik et al., *Status of Education in Rural America*.
181. Whitener and McGranahan, *Rural America*.

182. Interview with Mary Kusler, assistant director, American Association of School Administrators, March 26, 2009.
183. Provasnik et al., *Status of Education in Rural America*.
184. Snyder, McLaughlin, and Coleman-Jensen, *The New, Longer Road to Adulthood*.
185. Partnership for Learning, *Creating a College-Going Culture*, www.partnership4learning.org/node/842 (accessed August 23, 2009).
186. Harmon, H. L. "Creating work based learning opportunities for students in rural schools," *The High School Magazine*, 6(6), 22-27, 1999. and Harmon, H. L. "Linking school-to work and rural development," *Forum for Applied Research and Public Policy*, 15 (1), 97-100, spring 2000.
187. G. Green, "Employer Participation in School-to-Work Programs in Rural America," in *The Role of Education in Promoting the Economic and Social Vitality of Rural America* (Mississippi State, MS: Southern Rural Development Center, January 2005).
188. Ibid.
189. Ibid.
190. Hudson, L., & L. Schafer. *Vocational education offerings in rural high schools*. Issue Brief 120. (Washington, DC: National Center for Education Statistics, 2002).
191. J. Casto, "Work Begins at School," *Appalachian Magazine, Journal of the Appalachian Regional Commission* (January–April 2001).



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