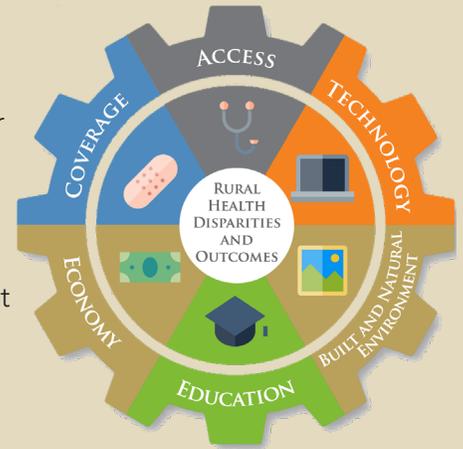


# MAKING CONNECTIONS: RURAL HEALTH AND EDUCATION

There are a number of troubling population health trends that present challenges to rural health today. Persistent issues like higher rates of risky health behaviors, lower rates of health insurance coverage, and physician shortages are creating pressure on rural health systems to intervene in order to improve care, enhance quality of life, and decrease costs.

These trends weave together to tell a story based on the interplay of multiple factors and the resulting outcomes they produce. To better understand the big picture, it is important to recognize the relationships that exist between well-being and contributing factors both inside and outside of the traditional health care system.

The Georgia Health Policy Center (GHPC) has long-standing expertise in assisting rural communities to improve health and health care delivery in an effective and sustainable manner. GHPC created this series as a supplement to its *Understanding the Rural Landscape* learning module. This series explores the range of elements that influence rural health, with special emphasis on the unique challenges and innovative solutions emerging in rural communities. This installment of the series will examine the relationship between rural health and education.



## EDUCATION IN RURAL COMMUNITIES

A robust and strong educational system has implications for individuals, communities, and the nation. From an outcomes perspective, national data show that those with lower educational attainment typically live shorter lives, have a lower lifetime earning potential, and are at greater risk for living in poverty.<sup>1</sup> Educational systems are complex systems and function within a broader environment that further impacts their success and presents challenges, particularly in rural communities.



Rural school systems are vulnerable to trends in demographics and population change, shifting funding sources and priorities, and the overall health of the economy. In addition, rural educational systems grapple with many of the other commonplace issues encountered in remote areas, such as transportation, Internet connectivity, limited economic opportunity, low wages, and poverty. Trends in rural educational attainment and the economic health of rural education systems can have far-reaching impacts on the health and well-being of individuals and communities.

Despite the many barriers, there are numerous examples of success in rural education and some promising trends. The role of educational institutions in rural communities remains critical. In addition to their role in the development of youth, many schools serve as hubs for families and community members to gather and access resources and supports. They also serve as a key source of employment for local residents. This brief will explore the current status of rural education across the country, along with emerging issues and innovations.

<sup>1</sup> Zimmerman, E. B, Woolf, S. H., & Haley, A. (2014). *Understanding the relationship between education and health*. Rockville, MD: Agency for Healthcare Quality and Research. Retrieved from <https://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>

## RECENT TRENDS IN RURAL EDUCATION



Given the relationship that education has with other social determinants, such as health and economy, it is important to consider the current state of educational systems in rural communities and the unique challenges these systems are facing. Recent data published in the U.S. Department of Agriculture's (USDA's) *Education at a Glance 2017* report indicate that rural areas are catching up to urban areas in terms of educational attainment. While disparities still exist across demographic groups (by gender and race/ethnicity), there is an overall positive trend showing rural residents achieving educational goals, such as high school completion or college-level study.<sup>2</sup>

Rural educational systems continue to evolve as the communities they serve are reinvented due to changes in demographics, funding, and policy. According to the Rural School and Community Trust, more than one in four schools are rural and 8.9 million students attend rural public schools.<sup>3</sup> The trust's report notes that for the first time in many years, the population of students in rural schools has decreased. This is linked to some outmigration, but the main cause is the reclassification of rural areas as suburban following the 2010 U.S. Census. A potential implication of this classification change is an underrepresentation of rural schools and students, which might lead policymakers to overlook the needs and issues faced by rural school systems.

Other areas where rural educational systems remain challenged include early childhood programs, resources for K-12 programming, and a pipeline to higher education opportunities. Research indicates that children who begin formal education earlier in life have better educational, social-emotional, and health outcomes than children who begin school later.<sup>4</sup>

Access to quality child care and prekindergarten or Head Start can be a challenge in rural areas because of transportation issues, a lack of funding, and low wages for the workforce. In fact, seven states — Idaho, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming — do not currently fund preschool programs, and the majority of these states have large geographic areas that are primarily rural and frontier.<sup>5</sup> Rural schools commonly work with children who come from disadvantaged families, as 28% of rural children under 6 years of age live in poverty.<sup>3</sup> In some states, there is little to no statewide early childhood education initiative, meaning families have no access to public programs before kindergarten unless there is a private early childhood provider in their area that they can afford.

Workforce issues permeate all levels of rural education, from attracting and retaining staff to the availability of training and certification. Adding to this challenge is the fact that rural areas produce fewer people who are qualified to become teachers, due to advanced educational attainment either happening elsewhere or not at all.<sup>6</sup> In contrast, teachers from urban and suburban areas tend to stay where they were raised. This scenario creates the potential for a significant lack of available teachers in rural areas. In addition, social and collegial

**MORE THAN ONE  
IN FOUR SCHOOLS  
ARE RURAL AND 8.9  
MILLION STUDENTS  
ATTEND RURAL  
PUBLIC SCHOOLS.<sup>3</sup>**

<sup>2</sup> U.S. Department of Agriculture. (2017, April). *Education at a glance, 2017*. Washington, DC: Author. Retrieved from <https://www.ers.usda.gov/publications/pub-details/?pubid=83077>

<sup>3</sup> Showalter, D., et al. (2017, June). *Why rural matters 2015-2016: Understanding the changing landscape*. Washington, DC: Rural School and Community Trust. Retrieved from [http://www.ruraledu.org/user\\_uploads/file/WRM-2015-16.pdf](http://www.ruraledu.org/user_uploads/file/WRM-2015-16.pdf)

<sup>4</sup> Malik, R., et al. (2017, October 27). *Child care deserts: An analysis of child care centers by zip code in 8 states*. Washington, DC: Center for American Progress. Retrieved from <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/>

<sup>5</sup> Barnett, W. S., et al. (2017). *The state of preschool 2016*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers Graduate School of Education. Retrieved from [http://nieer.org/wp-content/uploads/2017/09/Full\\_State\\_of\\_Preschool\\_2016\\_9.15.17\\_compressed.pdf](http://nieer.org/wp-content/uploads/2017/09/Full_State_of_Preschool_2016_9.15.17_compressed.pdf)

<sup>6</sup> Player, D. (2015, March). *The supply and demand of rural teachers*. Boise, ID: Rural Opportunities Consortium of Idaho. Retrieved from [http://www.rociidaho.org/wp-content/uploads/2015/03/ROCI\\_2015\\_RuralTeachers\\_FINAL.pdf](http://www.rociidaho.org/wp-content/uploads/2015/03/ROCI_2015_RuralTeachers_FINAL.pdf)

isolation, low salaries, teaching assignments across multiple grades or subjects, and lack of familiarity with rural schools and communities add to the challenge of recruiting highly qualified teachers.<sup>7</sup>

There are, however, advantages for rural schools, including smaller, more intimate school communities and lower teacher-to-student ratios, both of which have been associated with higher academic outcomes.<sup>3</sup> The smaller class sizes in many rural schools lend themselves to easier classroom management, as well as more individualized instruction for students. Additionally, rural areas typically offer a tight-knit community, and school staff have an opportunity to live where they work and can be truly invested in the community.

## EDUCATION AND ECONOMIC OUTCOMES

Education and economy are inextricably linked, as those who are more highly educated generally have higher earnings, including lifetime earnings, and are less likely to be unemployed. Rural areas are closing the gap with urban settings in high school completion, but are falling further behind in post-secondary education as the college completion gap grows between rural and urban areas.<sup>8</sup>

Education is closely linked with economic outcomes, so communities with strong educational systems tend to have strong economies and vice versa. For many rural areas, the cycle of low educational attainment, lack of economic opportunity, and poverty are deeply interconnected.

According to the USDA, from 2011 to 2015 rural counties with low rates of educational attainment averaged poverty rates of 24%, compared with poverty rates of 16% for other rural counties with higher levels of educational attainment.<sup>8</sup>

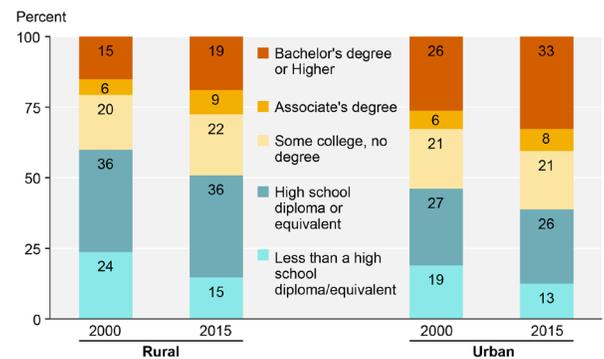
Perpetuating the problem, rural counties with low levels of educational attainment tend to have high unemployment rates.<sup>8</sup> The reasons for this include outsourcing and automation in industry, which has led to the disappearance of modest wages and stable income. The jobs remaining in rural communities are oftentimes low-wage and low-skill, which do not necessitate a pipeline to higher education.

## IMPLICATIONS

Though rural communities will continue to face challenges, there are promising innovations bridging education and the economy. A major asset in rural areas is the tight-knit communities and long-term relationships. From the innovation examples provided, it is clear that unique and nontraditional partnerships are a promising avenue to achieving success on multiple fronts. It is important to recognize the value multisector investment can contribute to the local economic engine and to bring attention to this link between education and prosperity at the individual and community levels.

Rural communities will continue to be creative problem solvers and find new ways to meaningfully collaborate for the betterment of rural education systems and the strengthening of local economies. Lastly, boosting rural economies not only correlates with better educational systems, but can have positive effects on population health.

**Educational attainment in rural and urban areas, 2000 and 2015**



Note: Educational attainment for adults ages 25 and older; urban/rural status is determined by 2015 metropolitan area definitions from the Office of Management and Budget. Source: USDA, Economic Research Service. (2017). Rural Education at a Glance 2017 edition.



<sup>7</sup> Barley, Z. & Brigham, N. (2008, July). *Preparing teachers to teach in rural schools*. Washington, DC: U.S. Department of Education Institute for Educational Sciences. Retrieved from <http://files.eric.ed.gov/fulltext/ED502145.pdf>

<sup>8</sup> U.S. Department of Agriculture. (2017, April). *Education at a glance, 2017*. Washington, DC. Retrieved from <https://www.ers.usda.gov/publications/pub-details/?pubid=83077>

## INNOVATION: INNOVATIONS THAT CROSSCUT RURAL EDUCATION AND ECONOMY



As previously described above, rural communities continue to be challenged by complex issues that are connected across economic health and educational opportunity. Despite these issues, there are numerous examples where rural education systems serve as ideal settings for innovation. Policymakers, funders, and those that can influence resources should consider rural education settings as the place where new ideas can be developed and scaled up.

At a systems level, school leadership and policymakers can focus on what works in rural settings and steer resources to solutions that match educational needs in rural communities. For example, states and local educational agencies lead a planning and implementation process as part of their compliance with the Every Student Succeeds Act (ESSA). Several components in this federal legislation specifically target rural education, including supporting school districts in purchasing technology and workforce training.<sup>8</sup> Rural school districts can leverage these ESSA mechanisms, including the Rural Education Achievement Program, which provides flexible funding for staffing, technology, and training.<sup>9</sup>

Other educational innovations taking place in communities focus on developing strategic partnerships and the infrastructure to support them. Rural education collaboratives are a promising model for bringing about sustainable solutions in rural education with long-term positive impact. They are described as a network “committed to a common purpose that creates value for rural students and reaches beyond the mission and needs of individual members.”<sup>10</sup> These collaboratives tend to focus on advocacy, resource sharing, scaling up of best practices and curriculum design, and preparing students for higher education and careers.<sup>10</sup> This model helps mitigate some of the issues previously mentioned, such as limited resources, fewer community organizations, and isolation, and leverages the often close relationships and partnerships that are so essential to the rural context.

Other unique collaborations are demonstrating the power of bringing together nontraditional partners, such as the private business sector and education. Through initiatives like Drive to 55 and Pathways to Prosperity, Tennessee is looking closely at what sectors drive its economy and creating specialty certifications for high school students. Vocational programs in high schools allow students to graduate with a certification in advanced manufacturing, meaning they are job-ready upon graduation.<sup>11</sup>

However, schools cannot solve this complex problem alone. Spurring economic development takes support from policymakers and will require recognition that rural communities can be at the forefront of design and policy. Unique partnerships between the private sector and school systems will be essential to paving the way for economic security and educational opportunity.

Harnessing technology to improve education will continue to be a major focus area as the uptake of technology in school systems continues to expand. Broadband technology is an area that rural schools are gaining ground in and utilizing to bridge gaps in education. Gaps remain in broadband access in rural areas; however, recent investments in broadband infrastructure have created more virtual learning opportunities for students and allow for more specialized learning in science, technology, engineering, and math. Teacher professional development is another area enhanced by technology. Technologies also have the potential to connect teachers and students in new ways and engage students in a cutting-edge learning environment. Leveraging technology can aid with improving the quality of rural education and offer more options where resources are tight and budgets are stretched. After the initial investment, school systems may realize efficiencies, such as freeing up cost of printed materials; maximizing teacher time with various learning levels; and quicker communication between teachers, administrators, and parents, which are all made possible by the use of technology that were not previously possible.<sup>12</sup> schools, students, families, and the community.

<sup>9</sup> Alliance for Excellent Education. (2016, May). *Every student succeeds act primer: Rural schools*. Washington, DC. Retrieved from [https://all4ed.org/wp-content/uploads/2016/06/FINAL-ESSA\\_FactSheet\\_RuralSchools.pdf](https://all4ed.org/wp-content/uploads/2016/06/FINAL-ESSA_FactSheet_RuralSchools.pdf)

<sup>10</sup> Battelle for Kids. (2016). *Generating opportunity and prosperity: The promise of rural education collaboratives*. Hilliard, OH. Retrieved from <http://battelleforkids.org/docs/default-source/publications/generatingopportunityprosperityview.pdf?sfvrsn=2>

<sup>11</sup> Battelle for Kids. (2015). *Successful students, prosperous communities*. Hilliard, OH. Retrieved from <https://drive.google.com/file/d/0B5BdbPm9jqOU1hQRWtHN3NXaU0/view>

<sup>12</sup> Evdnce Research. (2015, May). *How technology can boost productivity in rural school systems*. San Antonio, TX. Retrieved from <http://www.bscpcenter.org/resources/publications/HowTechnologyCanBoostProductivityinRuralSchoolSystems.pdf>