# Pursuing Higher Education in Rural Pennsylvania Schools: Shaping the College Path 

Erica Lopatofsky Kryst<br>The Pennsylvania State University, ell140@psu.edu<br>Stephen Kotok<br>University of Texas at El Paso, steve.kotok@gmail.com<br>Annelise Hagedorn<br>The Pennsy/vania State University, acd199@psu.edu

Follow this and additional works at: https://scholarsjunction.msstate.edu/ruraleducator
Part of the Education Commons

## Recommended Citation

Kryst, E., Kotok, S., \& Hagedorn, A. (2018). Pursuing Higher Education in Rural Pennsylvania Schools:
Shaping the College Path. The Rural Educator, 39(1), 1-15. DOI: https://doi.org/10.35608/
ruraled.v39i1.211

This Research Article is brought to you for free and open access by Scholars Junction. It has been accepted for inclusion in The Rural Educator by an authorized editor of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

# Pursuing Higher Education in Rural Pennsylvania Schools: Shaping the College Path 

Erica Lopatofsky Kryst<br>Stephen Kotok<br>Annelise Hagedorn


#### Abstract

Rural youth are now graduating from high school at rates comparable to their peers in urban and suburban schools, however far fewer rural youth pursue postsecondary education. Using a comparative case study method, we explore postsecondary preparation efforts at three rural school districts. Each case represents a different classification of rural: fringe, distant, and remote. We find that while all three districts offered similar postsecondary preparation programs, the amount and array of available course offerings and levels of additional support provided by the community differed. We also explore how the values and philosophies of school administrators shaped the postsecondary preparation efforts. These findings are considered through the lens of previous research on factors that influence the educational outcomes of rural youth, including literature on rural brain drain.


Today's rural youth are completing high school at rates equal to or above urban and suburban students, yet fewer rural students enroll in college and even fewer complete college degrees (National Center for Education Statistics [NCES], 2013; Byun, Meece, \& Irvin, 2012). Recent literature on the educational trajectories of rural youth highlights the role of communities, schools, and individuals in shaping the educational trajectories of rural youth (Tieken, 2014; Brown, Copeland, Costello, Erkanli, \& Worthman, 2009; Carr \& Kefalas, 2009). Research on this topic is also closely intertwined with a growing body of literature on rural brain drain, the phenomenon of educated youth leaving rural communities. While high-achieving rural youth may choose to leave rural communities for several reasons, the pursuit of higher education has been classified as particularly important. Opportunities to pursue higher education locally are often limited in rural communities, so the decision to go to college is coupled with leaving the home community (Carr \& Kefalas, 2009). For those students who move to attend and complete college, returning to the home community may present challenges. For youth who wish to live within the home community, the burden of leaving home for higher education may be too much to bear. This may contribute to lower rates of rural students attending and completing college. Understanding the choice to pursue higher education is critical for rural communities and schools who wish to prepare their youth for higher education and $21^{\text {st }}$ century employment, but also wish to create
opportunities for these youth to remain at home or return after completing their education.

While socioeconomic factors and family background greatly influence students in all contexts, teachers, parents, and other community members play a unique role in the educational trajectories of rural youth. Carr and Kefalas (2009) posit that rural teachers, parents, and community members focus more attention and efforts on the best and the brightest students in their communities. These mentors encourage rural students to leave the home community to pursue higher education and career opportunities elsewhere, and this attention diverts efforts from other rural students who may be more likely to stay in the home community. However, more recent work questions the influence of rural schools and educators on students' educational and residential choices. Petrin, Schafft, and Meece (2014) find that the majority of students who pursue higher education feel strong connections to their home communities, but feel that limited economic opportunities at home necessitate leaving town. Keeping in mind these conflicting findings, this study closely examines the efforts of three rural school districts to prepare students for postsecondary options, with a particular emphasis on preparation for higher education.

Through this comparative case study, we seek to answer the question: How do rural high schools support or influence students' pursuit of postsecondary options (i.e. military, technical school, community college, four-year institutions)? In order to examine this line of research, this study utilized
data from three rural school districts of varying sizes, resources, and educational values. This study contributes to the ongoing dialogue about factors that influence the educational trajectories of rural youth, questions about rural school resources, and the roles of educational leaders considering students' pursuit of higher education. In addition, this research adds to the existing discourse on the phenomenon known as "rural brain drain."

## Rural Education

Though half of all school districts (57\%) in the US are located in rural areas (NCES, 2013), the experiences of rural students, teachers, and schools are understudied in educational literature. There are important differences between urban and rural schools that can influence the educational experiences of students, and necessitate the study of rural schools separately from their suburban and urban counterparts. One of the defining characteristics of rural schools is their size. Rural districts and schools are generally small, and rural students are more likely to attend a small school than are students in suburban and urban areas (Provasnik, Kewal-Ramani, Coleman, Gilbertson, Herring, \& Xie, 2007; Khattri, Riley, \& Kane, 1997). Small schools can benefit students, as these schools tend to have high levels of student-faculty engagement, strong relationships between the school and the local community, and positive learning environments for students (Tieken, 2014; Khattri et al., 1997; Kearney, 1994).

At the same time, small schools in rural areas face challenges. Many small rural schools are unable to provide the wide array of course offerings, extracurricular activities, technology and educational resources found in urban and suburban settings (Hardré, 2012; Khattri et al., 1997; Provasnik et al., 2007; Hardré, Sullivan, \& Crowson, 2009; Hardré \& Hennessey, 2010). Budget constraints contribute to many of these challenges, and can be further exacerbated by limited staff (Hardré et al., 2009; Preston, Jakubiec, \& Kooymans, 2013). Teachers in small rural schools can be required to teach in multiple subject areas and across grade levels (Colangelo, Assouline, \& New, 1999), impacting the quality of instruction and the variety of available courses. Fewer rural schools offer Advanced Placement (AP) courses (69\%) as compared to urban schools (93\%) or suburban schools (96\%) (Provasnik et al., 2007). Course availability, particularly of AP
courses, impacts rural students’ college preparation. Without the opportunity to take AP courses, rural students enter college with fewer earned credits than their peers, and will likely be considered lower quality candidates for admission (Anderson \& Chang, 2011).

In addition to the implications of school size, the proximity of rural schools to institutions of higher education and the presence of local industry can differentiate the experiences of rural students from urban and suburban peers, as well as students from varying rural locales. King (2012) cites several studies that found relationships between residing near higher education institutions and students' pursuit of higher education. The number of nearby colleges is significantly associated with an increased likelihood that rural students will apply and attend a four-year college or university (López Turley, 2009). Exposure to local career opportunities also impacts students’ pursuit of postsecondary education. While research has shown that most rural students aspire to achieve two- or four-year degrees, many of these youth experience misalignment between their educational and vocational goals compared to urban and suburban youth. This may be due, in part, to geographic isolation and limited exposure to career opportunities (Meece, Hutchins, Byun, Farmer, \& Weiss, 2013). Remote rural schools often face the multifaceted challenges of small size, great distance from institutions of higher education, and limited local industry. All of these aforementioned challenges can impact students' understanding of and interest in higher education as well as their ability to pursue different post-secondary options.

## The Role of Rural Adults

Adults, in their roles as school leaders, teachers, parents and community members, can greatly affect the educational trajectories of rural students. The structural constraints and opportunities of rural schools are regularly shaped by adults' decisions, and adults can help or hinder students' pursuit of higher education through philosophically grounded policies, and individual actions. School administrators can play a large role in creating the overarching message students' receive about the purpose of schooling and its relationship to the pursuit of higher education. Kliebard (1987) identified several philosophical viewpoints espoused by administrators and teachers that shape the nature of school curriculum, structure,
and reform. The philosophical positions identified by Kliebard (1987) include:

1. Humanist: The humanist perspective emphasizes a common curriculum for all students and does not differentiate between students who pursue college and students who do not.
2. Social Efficiency: This perspective emphasizes a business-like approach to education, where education is a means for students to pursue career goals.
3. Developmentalist: The developmentalist perspective highlights developmentally appropriate education, and considers students' interests and needs as important components of curricula.
4. Social Meliorist: In this perspective, education is considered as means to a more just society, where the backgrounds of students are considered in curricula and teaching (Kliebard, 1987; Brouillette, 1996).
Each of these perspectives can offer a lens for understanding decisions made by school leadership, and each can have different impacts on rural students' pursuits of higher education.

As Brouillette (1996) found in a study of rural school reform, competing philosophical viewpoints among administrators can hinder efforts for reform and impact students. School leaders can set the academic tone of a high school campus through course offerings, tracking, and instructional time (Edmonds, 1979; Rumberger \& Palardy, 2005; Shouse, 1996). Moreover, in rural schools, it can be much more likely for principals and superintendents to have regular communication with students than in other contexts, strengthening their influence. Understanding the guiding principles behind administrator decision-making can uncover specific school policies that promote or discourage students’ pursuit of higher education.

Those with direct influence and daily interaction with rural students also greatly shape the educational trajectories of these youth. Teachers are important sources of information about postsecondary options for students, particularly students who are low income or are from rural communities (Griffin, Hutchins, \& Meece, 2011). Compared to urban and suburban teachers, rural teachers are found to be more connected to their student populations, and play more direct roles in student motivation. In fact, researchers argue that rural teachers contribute more to student motivation than students' peers (Hardré et
al., 2009; Hardré, 2012). Similar to teachers, guidance counselors can also offer advice and share experiences about postsecondary opportunities. Guidance counselors in rural schools are found to help students navigate future aspirations, and have significant influence on students' aspirations to attend colleges (Griffin et al., 2011). Teachers and guidance counselors can help students navigate structural constraints within their local environment as students pursue postsecondary options, and can select students to groom for higher education. The attention of teachers and guidance counselors can help some students pursue higher education, but the selective attention may be detrimental for others in the student population (Carr \& Kefalas, 2009). However, when combined, effective motivation by school administrators, interpersonal relationships among students and staff, and an overall motivational culture in the school environment can increase student achievement (Hardré, 2012). Together, teachers, guidance counselors, and school leaders play influential roles in the academic success and postsecondary planning of rural students. More broadly, connections between schools and members of the surrounding communities can also serve as sources of educational advantage for rural students (Tieken, 2014; Carr \& Kefalas, 2009). Formal school-community partnerships provide opportunities for students to connect with varied community members, increase students' knowledge of vocational opportunities, and can create networks of support for students (Alleman \& Holly, 2013). With knowledge of the economic prospects in local communities, students can make more informed decisions about their postsecondary plans. Increased support networks and varied sources of information about higher education can also inform students about the processes for pursuing college paths. When making decisions about higher education, and the possibility of leaving home, this information and attachments to community members that grow from these interactions, can be critical (Glendinning, Nuttall, Hendry, Kloep, \& Wood, 2003; Petrin et al., 2014). Overall, adults involved in partnerships between rural schools and communities, as well as teachers, counselors, and school leaders, can all shape students’ educational trajectories through their shared knowledge, actions, and philosophies.

## What is at stake?

With limited economic growth, and declines in agricultural work and manufacturing in rural communities (Albrecht \& Albrecht, 2000; Carr \& Kefalas, 2009; Mcmanus, et al., 2012; Sherman, 2009), many scholars suggest an association between rural youth pursuing higher education and the economic decline of rural areas. This is highlighted in current discourse on the out-migration of rural youth, or rural brain drain (Corbett, 2009; Carr \& Kefalas, 2009; Sherman \& Sage, 2011). In this view, formal education is associated with leaving rural areas, and educational institutions are the means for loosening rural students' ties to home communities (Corbett, 2009). Rural communities lose young adults to economic opportunities outside the community, resulting in a stratification of moral and class divisions associated with higher education, which is then replicated through the postsecondary preparation in local schools (Sherman \& Sage 2011; Petrin et al., 2014). However, even with the concern of brain drain, rates of rural students entering and completing college remain below rates for students from urban or suburban contexts (NCES, 2013).

To combat both challenges, rural schools and community members may need to pursue avenues that both encourage youth to obtain higher education and incentivize them to return to the home community to work as adults (Corbett, 2009). Several studies document rural youth using their educational degrees to enable return to local communities (Farmer et al., 2006; Wright, 2012; Cuervo \& Wyn, 2012). Additionally, Carr and Kefalas (2009) remind rural adults to attend to the needs and postsecondary pursuits of students who will remain in the communities after high school rather than pursuing higher education. This study seeks to better understand how rural schools influence the postsecondary paths of students, considering both
preparation for higher education and incentives to remain connected with the home community.

## Methods

This is a comparative case study of three rural school districts in Northern Pennsylvania. Sites were selected in Pennsylvania for two reasons: (1) according to the 2010 census, Pennsylvania has the third largest rural population of any state, after Texas and North Carolina (United States Census Bureau, 2012), and (2) the researchers' geographic location in the state and their proximity to rural districts in varyingly rural locations enabled access to the selected school districts. The districts selected for this study represent a stratified sample of the rural classification of school districts in Pennsylvania as defined by the U. S. Census and consisted with measurements used by the National Center for Education Statistics (NCES). Rural districts are differentiated by NCES classification of fringe, distant, and remote, and are described in Table 1.

## Sample

School districts were selected across the northern part of Pennsylvania that fit into each of these classifications. The decision to select school districts in the Northern region of the state was based in part on the availability of rural school districts in this region that fit all three of the rural classifications, including a greater number of rural remote districts. Within each school district, one high school was also selected. The schools selected for the study fit into one of the rural classifications and represent communities of varying size. Once a list of possible schools was identified, school districts were contacted and invited to participate in the study. Pseudonyms are used for the names of all school districts, schools, and school leaders.

Table 1.
Rural Classifications
Fringe Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
Distant Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
Remote Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster

Source: National Center for Education Statistics, 2014

Table 2. Characteristics of Study Sites within Pennsylvania

|  | Western Area School District | Central Region School District | North Central School District |
| :---: | :---: | :---: | :---: |
| County Characteristics |  |  |  |
| Population | 44,996 | 54,865 | 17,497 |
| (10 year \% Pop. Decline) | (-4.9\%) | (-2.8\%) | (-3.3\%) |
| \% High School Degree | 87.0\% | 88.7\% | 87.6\% |
| \% Bachelor's Degree | 12.6\% | 14.7\% | 13.6\% |
| Median Household Income | \$40,719 | \$41,814 | \$40,970 |
| \% Below Poverty | 14.5\% | 16.3\% | 14.3\% |
| Top Industries | 1) Education | 1) Education | 1) Education |
|  | 2) Manufacturing | 2) Manufacturing | 2) Manufacturing |
|  | 3) Retail/Trade | 3) Retail/Trade | 3) Retail/Trade |
|  | 4) Professional SciMgmt. | 4) Professional SciMgmt. | 4) Construction |
|  | 5) Arts/Recreation | 5) Arts/Recreation | 5) Transportation |
| School District Characteristics |  |  |  |
| Rural Type | Fringe | Distant | Remote |
| Population | 6,451 | 2,126 | 660 |
| \% High School Degree | 88.6\% | 90.4\% | 87.2\% |
| \% Bachelor's Degree | 19.0\% | 11.9\% | 8.6\% |
| \% Non-White | 8.2\% | 0.2\% | 0.8\% |
| Median Household Income | \$35,368 | \$32,121 | \$44,327 |
| \% below Poverty | 17.7\% | 14.6\% | 11.4\% |
| \% Free/Reduced Lunch | 47.0\% | 43.0\% | 51.0\% |
| School Characteristics |  |  |  |
| Graduation Rate | 93.3\% | 97.8\% | 91.3\% |
| \% College Bound | 56.8\% | 66.0\% | 65.2\% |
| \% 2-4 Year University Bound | 51.0\% | 63.8\% | 37.0\% |
| Students per Guidance Counselor | 308 | 215.5 | 251 |
| Dual Enrollment | Yes | Yes | Yes |
| Matriculation Agreement | No | No | Yes |
| Vocational Education | Yes | Yes | Yes |

Sources: U.S. Census Bureau, 2008-2012 American Community Survey; Pennsylvania Department of Education; School Reported Data.

Table 2 provides an overview of pertinent information for each participating high school, school district, and the county within which the school district is situated. County information offers a broad overview of the demographic and economic contexts
of each community. Notably, all three counties had declining populations, though the Western Area had the largest decline. Within the school district delineations, demographic data varied more widely. The size of each school district's population varied, as
did the range of percent of the population holding bachelor's degrees ( $8.6 \%-19 \%$ ), and median household incomes.

## Western Area School District (Fringe).

Western Area High School is situated in a small residential community in Northwestern Pennsylvania. The closest public, four-year university is located approximately 30 miles southwest of the school district. The high school is comprised of 616 students in grades nine through twelve. The high school principal, Principal Smith, one of the high school guidance counselors, Guidance Counselor Martin, and the school district superintendent, Superintendent Johnson, were interviewed. In addition, school administrators provided researchers with supplementary materials about the high school's academic offerings and a breakdown of the postsecondary paths of the Western Area High School graduating class of 2013.

## Central Region School District (Distant).

Central Region Junior and Senior High School is located approximately 100 miles from a large urban center in the state. The nearest four-year, public university is located approximately 64 miles from the school district, and a larger four-year public university is approximately 75 miles from the school campus. The school serves students in grades seven through twelve and has a student body of 431 students. The Central Region School District superintendent, Superintendent Marshall, high school principal, Principal Williams, and one of the school guidance counselors, Counselor Jackson, were interviewed for this study. Follow-up interviews were conducted with the superintendent and the principal approximately two months after the initial visit.

## North Central School District (Remote).

North Central School District is located approximately 20 miles south of the New York state border and comprises 230 square miles. North Central Junior/Senior High School encompasses students in grades seven through twelve and has a student body totaling 251 students. Both the elementary school and the middle/high school are located on one campus, along with the district offices. The superintendent, Superintendent Gardner, the high school principal, Principal Wilson, and the school's only guidance counselor, Guidance Counselor Swanson, were interviewed for this study. A follow-up interview was conducted with the school
superintendent approximately two months after the initial visit.

## Protocol

Semi-structured interviews were conducted with the superintendent, high school or junior/senior high school principal, and the school guidance counselor. The interview protocols were similar for each participant with some variations depending on their role in the school. Interview questions sought information that can be categorized into five themes

1) The individual's role in the school, including their interactions with teachers and students regarding postsecondary education
2) School activities that promote or inform students about postsecondary education
3) The local community and postsecondary opportunities in the area
4) Students' postsecondary paths
5) Beliefs about students' choices, and the attributes of students who pursue higher education.
The guidance counselors were also asked questions about the ways they assist students who want to pursue higher education, as well as questions about time spent on college preparation. These interviews lasted approximately 45 minutes to one hour in length and were completed on-site in the high schools and districts' offices. After transcribing the initial interviews, follow-up interviews lasting approximately 30 minutes were completed via phone with participants from Central Region School District and North Central School District. Follow-up interview questions focused on gaining a more nuanced understanding of specific programs or policies related to postsecondary plans at both school districts. Two out of three members of the research team toured the local area in all cases and recorded pertinent observations about the local community.

Because only two out of three members of the research team were available to conduct on-site interviews for each case, the interviews for each site were transcribed by the member of the research team who was not present. After transcribing, the transcripts were distributed and read by all three members of the research team. After the initial read, the data was analyzed using open-coding, identifying broader themes found in the interview data. At this stage, researchers coded all of the data individually and wrote memos about the themes identified in the data. The researchers then discussed their codes and
identified themes across the analyses. Once these initial themes were identified, the researchers used selective coding (Corbin \& Strauss, 1990) to identify the presence of themes across the three cases. Regular meetings were held to discuss the themes and to identify initial findings. Findings consist of the themes present across all cases, as well as characteristics that are specific to each individual case.

## Findings

Across the three cases presented here, there were many common programs and activities employed to prepare students for postsecondary opportunities, including higher education. In this section, we discuss our findings about what these school districts did to prepare students for postsecondary opportunities. Then we discuss our findings for each individual case, highlighting how the rural school tackled the challenges associated with preparing students for postsecondary paths. We find that each school district exhibited a unique perspective that guided the approach to postsecondary preparation for rural youth.

## Rural Schools and Postsecondary Preparation

All three rural school districts implemented a number of programs and strategies to prepare students for postsecondary education and career opportunities. First, all three school districts offered dual enrollment courses as a means for preparing students for higher education opportunities. Student enrollment in these courses, however, varied across each school district. In Western Area School District, not one student enrolled in these courses during the 2013-2014 school year. The dual enrollment program in North Central School District saw moderate success. In this district, school leadership emphasized dual enrollment rather than AP courses because, as Superintendent Gardner said, "guarantee[ing] credits far outweighs the potential where you have to pass the test and you may or may not get credit." North Central School District also had a matriculation agreement for agricultural programs with State University of New York (SUNY) Cobleskill, enabling high school graduates who have completed agricultural courses at North Central to count these classes towards an undergraduate degree at the university. Central Region School District had perhaps the most successful dual enrollment program of the cases examined here, with 42 students, or
approximately $19 \%$ of eligible juniors and seniors, participating during the 2013-2014 academic year. Participation may have been encouraged by the costfree enrollment, as the Central Region Foundation funded dual enrollment courses for students in this district. Yet, Superintendent Marshall wished for greater enrollment, and hoped the free courses would incentivize more participation.

Districts also interacted directly with postsecondary institutions. At Western Area, visits from career and technical school representatives occurred frequently, and were far more common than visits from representatives of four-year colleges. At Central Region, visits from college representatives occurred frequently and the school also held an annual alumni college fair where Central Region graduates were invited back to share information about the colleges they attended. At North Central, Guidance Counselor Swanson took groups of students on campus visits to colleges in Northern and Central Pennsylvania so that students could learn about the college experience. The remote location of this school district limited other opportunities for students to engage with campus representatives. In addition, all schools held financial aid night programs to provide parents and students with information about the Free Application for Federal Student Aid (FAFSA) and other financial aid opportunities. However, all three school districts reported consistently poor attendance at financial aid night programs.

The schools varied in terms of the academic offerings made available to students. Test preparation programs for the SAT or ACT differed across cases. Western Area offered SAT prep courses, but participation in these courses was low. North Central did not offer any on-site standardized test preparation and Central Region offered SAT and ACT through their cyber academy but not on site. Central Region also offered all sophomores the opportunity to take the PSAT as the result of a grant from the Central Region Foundation. AP offerings and enrollment in AP classes also varied. Central Region offered six AP classes including the option of taking the AP subject exam for college credit. Western Area offered five AP courses, but again participation in these courses was low, with "ten or under" in most AP courses, according to Superintendent Johnson. As previously mentioned, North Central decided not to offer any AP courses.

All three districts offered vocational education to provide students with technical skills and to prepare
students for career paths immediately following high school. In the Western Area School District, all students toured a nearby vocational training center during ninth grade and eligibility in this program was based on students' "interest, your grades, your behavior, [and] your attendance" according to Guidance Counselor Martin. The tour of the facility and the academic requirements necessary for enrollment in the program were both cited as motivators for non-college bound students to participate. According to Guidance Counselor Martin, "it's a good incentive for some of our students that aren't college bound...it's a good reason for them to work hard cause they want that spot over there." Approximately 150 of the 600 students enrolled in Western Area High School participated in the vocation program. Central Region students also could enroll in vocational and technical programs at local institutions, including dual enrollment courses. Students in the North Central district could participate in a vocational program at a vocational education center shared with five other rural districts. In the 2013-2014 academic year, approximately 26 students were enrolled in the vocational program, taking a bus to the center each afternoon. Outcomes from the vocation program at North Central were mixed. According to Superintendent Gardner’s approximations, about half of each graduating class from the vocational program went directly into vocations, while other students pursued two-year degrees that sometimes lead to four-year degrees.

Lastly, community support played an important role in how each district was able to provide resources and programs focused on postsecondary educational outcomes. North Central School District partnered with five nearby small, rural districts to share resources, including the vocational education center. One recent initiative from this collaboration involved creating a position for a county-wide business liaison to help students secure capstone experiences and internships with companies that could lead to future employment. At Western Area, local community organizations, like the Rotary, Elks, and Eagles, provided scholarships for students who wanted to pursue academic or technical degrees in two- or four-year programs.

Alumni from Western Area also created an educational foundation to raise money for scholarships for high school graduates. Finally, Central Region School District benefited from the existence of the Central Region Foundation, which was created by Superintendent Marshall
approximately three years before our data collection. The Foundation provided financial support for the total cost of dual enrollment courses, artist in residency programs, and classroom technology. Beyond the foundation, community members also provided financial support through scholarships and other programs.

These three rural districts provided a number of programs and support mechanisms to help students pursue postsecondary educational opportunities, from four-year degrees to career and technical education. AP courses, SAT preparation, financial aid information, and the opportunity to enroll in dual enrollment courses were all means to prepare students to pursue postsecondary education at fouryear institutions. The vocational tracks available at each district also provided students with education and support for career opportunities beyond their high school diploma. While all three districts offered similar programs, they differed in the amount and array of offerings, as well as the levels of additional support provided by the community, which may have contributed to varied levels of student participation in these opportunities.

We also identified an additional factor at play that appeared to affect the postsecondary educational outcomes of rural youth: the values and philosophies of school administrators. In order to better understand each individual case, we explored the uniqueness of each case in light of both administrators' values and school district characteristics in the next section.

## Western Area School District - "Not everybody should be trying to get a four-year degree."

Administrators at Western Area High School questioned the need for all students to pursue postsecondary educational opportunities, particularly four-year degrees. Each year, guidance staff met with students in eighth grade to discuss students' course options. When students reached ninth grade, guidance counselors began to monitor students’ grades and conduct career assessments. Students could participate in career exploration projects that often included job shadowing and career research throughout high school. According to Guidance Counselor Martin, the ultimate goal was for every student to have a plan for the future. Therefore, career preparation was emphasized as the purpose of high school. The highly individualized approach to academic and vocational programming used by the school district reflected this purpose; emphasizing
that each student should develop a career goal, and from that goal consider the appropriate educational training. According to Guidance Counselor Martin:
. . . We're trying to get the kids to figure out what they want to do rather than where they want to go, so you know I'll say to kids what do you want to do after high school and they'll say 'go to college' and I'll say, why? Do you have a career in mind, cause how do you know you want to go to college?
The guidance counselor cited parental influence as one reason that students had plans to attend college, even if they did not have career plans. The goal for students to attend college immediately after high school was also called into question by Principal Smith, who stated that "in a perfect world, I would say students don't go to college right out of school." Principal Smith explained that school administrators would like to see more students exploring work and career opportunities immediately after high school. Through these opportunities, administrators hoped that students could better understand and articulate career goals, because coming up with career plans was "a lot of responsibility."

In a recently created strategic plan for the school district, preparing students for service jobs and technical jobs was identified as a key goal. However, Principal Smith questioned the sustainability of this strategy, citing that the "community can't support that many students year after year." Guidance Counselor Martin believed that students who chose to stay in the community and those who participated in the vocational training program would have more opportunities in the community upon graduation, especially if the students took advantage of cooperative education opportunities during senior year. Ultimately, however, employment opportunities in the surrounding area were limited to low-wage service jobs, technical jobs, a limited number of manufacturing jobs, health careers, and careers in education. According to Guidance Counselor Martin, "unless there’s some kind of vocational training occurring in school, it's very hard for kids with no kind of education to make it."

The school administrators' emphasis on having a career plan prior to making decisions about pursuing postsecondary education could help some students contemplate their educational goals. But, it could also adversely impact the number of students pursuing two- and four-year degrees from this school district, especially considering the significant impact of teachers and staff on the educational lives of students
in rural school districts (Khattri et al., 1997, Kearney, 1994; Carr \& Kefalas, 2009).

## Central Region School District - A Plan for All

Administrators at Central Region High School espoused a philosophy that all students should feel connected to the school and feel encouraged to take challenging courses. According to Superintendent Marshall, the school created a culture where "you're expected to take the courses that you're capable of taking, regardless of what your destination is." For example, students who could be successful in calculus were encouraged to take calculus, regardless of whether or not their postsecondary plans require this course. The administration also promoted a culture where all students felt connected and engaged. It was not accidental that the school reported a 98\% graduation rate the year prior to our site visit. The superintendent and principal actively pursued ways to engage apathetic students through extracurricular activities, community partnerships, and innovative courses such as an engineering/CAD course where students learned to use a 3-D printer. They believed all students benefitted from possessing a high school degree no matter the students' postsecondary plans.

Central Region exhibited many proactive strategies to encourage students to pursue higher education, and coupled these efforts with means to attract high-achieving students to return to the local community after college. For instance,
Superintendent Marshall convinced a local metals factory to help pay for one of his students’ college tuition, with the stipulation that the student would return after college and work at the factory in a highlevel role. Central Region teachers and administrators also acted as role models for students who wanted to pursue higher education and return to the community. The $11^{\text {th }}$ grade English teacher, a Central Region graduate, was Pennsylvania Teacher of the Year in 2013, and one of three finalists for National Teacher of the Year.

Although school leaders at Central Region claimed to encourage all students to consider the college path, other comments made by administrators conveyed a more stratified, or at least pragmatic, approach to student expectations. Central Region's tracking of students into courses played a role in students' level of preparation to pursue postsecondary education. Students chose either the college preparation track or the academic-technical
track in the tenth grade after meeting with the guidance staff. Guidance Counselor Jackson said guidance staff emphasized that if students "even have the slightest hint of thinking about going to college . . . take the college prep, see how it goes." Despite the encouragement from the counselor, around $40 \%$ of students chose to pursue the academic-technical track. Student motivation and parental buy-in were cited as factors keeping enrollment low for the college prep track. Furthermore, school administrators confirmed that most of the students enrolled in dual credit and AP courses were on the college prep track, despite the espoused philosophy that track placement was not a sole determinant of course placement. While Superintendent Marshall prided himself on engaging traditionally apathetic students through technology, hands-on courses, and extracurricular activities, he also challenged the notion that lower track students need to meet the same standards as college prep students. In Superintendent Marshall's view:

You teach them enough English and writing for them to fill out a work order and to understand that and comprehend that, that's where I think it should be. So you know I have kids not doing well academically, they're doing okay in their shop.
This comment indicates that despite the intention to engage all students in postsecondary planning and preparation, Central Region continues to treat students of varying abilities quite differently.

## North Central School District - Small School Advantage: "You have to know your kids."

North Central administrators cited both advantages and disadvantages for small schools in small communities. Administrators repeatedly emphasized their ability to know each student on a personal level because of the small size of the school. They attributed positive student outcomes, particularly students' pursuit of postsecondary education, to these connections. According to Superintendent Gardner "teachers will . . . take those kids under their wing, and working in a small district you can really get to know those kids much better than if you were in a larger district." The superintendent emphasized the "personal touch" administrators and teachers can have in a small district. In this context teachers had the opportunity to serve as positive role models for students who were struggling or who did not have any role models
at home, providing students with the opportunity to "at least have somebody positive in their life." Guidance Counselor Swanson felt he was able to connect with each student since there were only about 40 students per grade. Because of this, he was attuned to students’ strengths, challenges, and postsecondary plans.

Administrators also shared examples of how living in this small community encouraged interaction with students and students’ families both on and off the school campus. This enabled administrators to communicate directly with parents and learn more about students. Guidance Counselor Swanson shared a story about encountering a senior's parents at the local restaurant, letting them know that a college representative would be visiting, and facilitating a meeting with the representative for their son. Superintendent Gardner shared similar stories. School Board members also approached administrators with concerns about students who, as Principal Wilson said, "needed more motivation to go to higher learning." Being part of a small school in a small, close-knit community enabled these administrators to have a more personal impact on their students.

According to North Central administrators, they primarily focused on two groups of students: Students who were designated as high-achievers and who would likely leave the area, and students who might stay in the community, which the administrators referred to as "stayers." Students who were high-achieving were described as intrinsically motivated and likely to be engaged in sports and other extracurricular activities. These students "have a personal desire to achieve and be successful and are more likely to take on a challenging academic schedule as a senior, than an 'easy' schedule," according to Principal Wilson. Administrators did not view academic motivation as something that could be encouraged or created for students, rather, as Superintendent Gardner said, "some have it and some don't, but we try to work with that." According to Superintendent Gardner, high-achieving students were less likely to return to the area after receiving a four-year degree:

There isn't a lot for kids to come to, but we have been successful in getting some of them to come back if there are jobs available...often those kids don't come back that go to a four-year school. The administrators recognized the challenge of getting students to return to the community after pursuing higher education, but still encouraged
students to go to college. Superintendent Gardner described the situation as "shooting ourselves in the foot sometimes."

Family support was cited by all administrators in this district as a significant challenge. Students and their families were coping with poverty, drug use, and a lack of support for education, according to Principal Wilson. In order to combat the lack of support from family, the school developed the "Adopt-a-Stayer" program, which paired teachers with potential "stayers" and high-risk students in the high school. According to Superintendent Gardner, the purpose of the program was to give high-risk youth a caring adult in their lives to help guide them. Administrators hoped that through the relationships facilitated by this formalized mentorship, students would be able to consider more viable postsecondary opportunities that aligned with remaining in the local community.

## Discussion

This study compares findings from three rural school districts to explore how each supported and prepared students for postsecondary opportunities. The research uncovers the roles that rural schools and educators played in students’ educational trajectories. Special attention is paid to the programs and services that rural schools provided to prepare students for postsecondary opportunities, and the relationship these programs and services had to the values held by administrators. Ultimately, our findings suggest a strong relationship between the values of rural school administrators and the programs and options available to rural youth.

One way to interpret the values or educational philosophies espoused by administrators in this study is through the lens of philosophical viewpoints about education developed by Kliebard (1987). These philosophies shape programming, services, and the overall tone espoused by school staff in regard to students' postsecondary pursuits, which can ultimately shape students' personal goals for the future. In the case of Western Area School District, administrators emphasized choosing a career first before considering whether or not to pursue postsecondary education, which aligns with the philosophical position of social efficiency espoused by Kliebard (1987). These administrators held that the education received in high school should meet the needs of students' postsecondary plans, and therefore deemed it important that students develop career
plans before pursuing postsecondary education. It is plausible then that students in this district may forego higher education immediately after high school if they have not yet identified a career goal. While it is important to help students develop career plans, many students who enroll in college do so as "undecided" students, and colleges and universities often have structures in place to help students find a career path. The benefits of emphasizing career decisions at 17-years of age, particularly when considering rural students’ limited exposure to varied career options, may limit student opportunities to pursue higher education.

At North Central, administrators appeared to combine elements of the humanist and social meliorist perspectives. Following the humanist approach, administrators did not emphasize students' career goals or academic abilities, but stressed the importance of all students pursuing postsecondary education. Frequent interactions between school staff, parents, and students, deepened the connection and investment of administrators in the success of the students, and increased opportunities for administrators to demonstrate their goals for every student to succeed. North Central staff also demonstrated aspects of the social meliorist worldview. Contrary to Carr and Kefalas’ findings (2009), teachers and administrators at North Central paid particular attention to students who were struggling because of their socioeconomic backgrounds, those who lacked support at home, and those who were least likely to pursue higher education. The "Adopt-a-Stayer" program formalized relationships with students who were most likely to stay in rural communities, and demonstrated belief that the purpose of education was to level the playing field for all students.

The administrators at Central Region espoused a complex set of philosophical positions. In some ways administrators' approached education from the humanist position, particularly when arguing that all students should pursue coursework that they are most capable of completing regardless of their postsecondary plans. Yet, at the same time, administrators also followed the philosophical position of social efficiency, and focused the bulk of their postsecondary preparation efforts on their highest achieving students who were college bound. Similar to the findings of Carr and Kefalas (2009), many of the postsecondary preparation efforts were focused on higher education, such as advanced coursework, AP classes, dual enrollment, and others.

These were promoted among students on the college track, and fewer efforts were made for students on the academic-technical track. The juxtaposition of the two philosophical worldviews caused contradictory statements and actions among administrators, where administrators both claimed to encourage all students to pursue rigorous academic coursework, but also acknowledged that not all students have the ability to achieve in academic settings.

These differences in underlying philosophies, programming, and services among the three school districts may be due, in part, to the context of each rural community. School leaders regularly referenced local economic opportunities, and occupational histories in the communities when discussing their programs and students. Of the three districts, North Central is distinct because of its small size and remote location; both factors that could contribute to limited post-secondary preparation offerings available in this district. College preparation was the most limited, with no SAT or ACT preparation offered and no AP courses available. North Central also had the lowest percentage of students intending to pursue two- to four-year degree programs, yet had a high percentage of students intending to pursue either two- to four-year degree programs or nondegree opportunities (United States Census Bureau, 2012). This, along with accounts from school administrators, implies that graduates more often intended to pursue technical training to use towards a trade despite limited local employment opportunities. This may have influenced administrators' emphasis on nurturing the "stayers", who would face challenges with employment upon graduation. Community involvement and local economic opportunities may also have contributed to the success of the educational foundation at Central Region, which allowed for the varied programming targeting students on the college and technical tracks. Western Area school district faced rapid population decline in the county and a large student to guidance counselor ratio, but streamlined their postsecondary message with a firm emphasis on career-focused preparation. Each method could be viewed as both a response to current community circumstances and preparation for anticipated future community contexts.

## Conclusion

This comparative case study explored the role of schools in the educational trajectories of rural youth.

Rural school leaders face conflicting challenges when considering the programming and services that will best prepare rural youth for the future. One challenge is to combat the lower rates of college enrollment and completion among rural students compared to their urban and suburban peers by encouraging and preparing more rural students to pursue higher education. The other challenge is to combat rural brain drain, where college-bound youth leave the rural community and do not return after graduation. The philosophies underlying rural school administrators’ actions can structure opportunities, preparation strategies, and incentive programming that shape rural students' educational trajectories.

While many aspects of the rural context can influence students' pursuit of higher education, this study placed particular emphasis on the role of school leaders-principles, superintendents, and guidance counselors-in shaping the college path. This study has several limitations. Each case study is unique, and while findings from each case have broader implications for the role of rural schools in students' postsecondary preparation, findings were drawn from a small sample. Additionally, data for this research was limited in the Western Area school district, which did not respond to requests for follow-up interviews. Future work in this area could be enhanced through a larger survey with a representative sample of rural schools at the state or national level.

As other rural school administrators envision programming to overcome the challenges of preparing students for postsecondary pursuits, the three cases examined in this research offer encouraging portraits of different programmatic options. While the rural context may limit some opportunities for school leaders to pursue all avenues of postsecondary preparation, these school districts utilized local resources through school-community partnerships, selected academic coursework, academic partners, and different philosophical viewpoints to cater to the needs of students. Rural schools can greatly shape the educational trajectories of their students. Through the coupling of preparation for higher education and incentives for college-bound rural youth to return to the home community, rural school administrators can tackle the challenges of $21^{\text {st }}$ century postsecondary preparation.

## References

Albrecht, D. E., \& Albrecht, S. L. (2000). Poverty in nonmetropolitan America: Impacts of industrial, employment, and family structure variables. Rural Sociology, 65(1), 87-103. doi: 10.1111/j.1549-0831.2000.tb00344.x

Alleman, N. F., \& Holly, L. N. (2013). Multiple points of contact: Promoting rural postsecondary preparation through school-community partnerships. The Rural Educator, 34(2), 1-11. Retrieved from: http://epubs.library.msstate.edu/index.php/rurale ducator/article/view/110
Anderson, R., \& Chang, B. (2011). Mathematics course-taking in rural high schools. Journal of Research in Rural Education, 26(1), 1-10. Retrieved from: http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/26-1.pdf
Brouillette, L. (1996). A geology of school reform: The successive restructurings of a school district. Albany, NY: SUNY Press.
Brown, R., Copeland, W. E., Costello, E. J., Erkanli, A., \& Worthman, C. M. (2009). Family and community influences on educational outcomes among Appalachian youth. Journal of Community Psychology, 37(7), 795-808. doi:10.1002/jcop. 20331
Byun, S., Meece, J., \& Irvin, M. (2012). Ruralnonrural disparities in postsecondary education attainment revisited. American Educational Research Journal, 49(3), 412-437.doi: 10.3102/0002831211416344

Carr, P. J., \& Kefalas, M.J. (2009) Hollowing out the middle: The rural brain drain and what it means for America. Boston, MA: Beacon Press. http://www.beacon.org/Hollowing-Out-the-Middle-P840.aspx
Colangelo, N., Assouline, S. G., \& New, J. K. (1999). Gifted Education in Rural Schools: A National Assessment. U.S. Department of Education. Iowa City, IA: University of Iowa. Retrieved from: https://eric.ed.gov/?id=ED430766
Corbett, M. (2009). Rural schooling in mobile modernity: Returning to the places I've been. Journal of Research in Rural Education, 24(7), 1-13. Retrieved from: http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/24-7.pdf
Corbin, J. M., \& Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative
criteria. Qualitative Sociology, 13(1), 3-21. Doi: https://doi.org/10.1515/zfsoz-1990-0602
Cuervo, H., \& Wyn., J. (2013). Young people making it work: Continuity and change in rural places. Victoria, Australia: Melbourne University Press. https://www.mup.com.au/books/9780522867534-young-people-making-it-work
Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership, 37(1), 15-24.
Farmer, T. W., Dadisman, K., Latendresse, S. J., Thompson, J., Irvin, M. J., \& Zhang, L. (2006). Educating out and giving back: Adults’ conceptions of successful outcomes of African American high school students from impoverished rural communities. Journal of Research in Rural Education, 21(10), 1-11. Retrieved from http://jrre.psu.edu/?page_id=1760
Glendinning, A., Nuttall, M., Hendry, L., Kloep, M., \& Wood, S. (2003). Rural communities and well-being: A good place to grow up?. The Sociological Review, 51(1), 129-156. Retrieved from: https://doi.org/10.1111/1467-954X. 00411
Griffin, D., Hutchins, B. C., \& Meece, J. L. (2011). Where do rural high school students go to find information about their futures? Journal of Counseling and Development, 89(2), 172-181. Retrieved from:
http://aca.metapress.com/openurl.asp?genre=arti cle\&issn=0748-
9633\&volume=89\&issue=2\&spage=172
Hardré, P. L. (2012). Standing in the gap: Research that informs strategies for motivating and retaining rural high school students. The Rural Educator, 34(1), 12-18. Retrieved from: https://files.eric.ed.gov/fulltext/EJ1000099.pdf
Hardré, P., \& Hennessey, M. (2010). Two rural worlds: Differences of rural high school students' motivational profiles in Indiana and Colorado. Journal of Research in Rural Education, 25(8), 1-32. Retrieved from: http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/25-8.pdf
Hardré, P., Sullivan, D., \& Crowson, H. (2009). Student characteristics and motivation in rural high schools. Journal of Research in Rural Education, 24(16), 1-19.
Kearney, J. (1994). The advantage of small rural schools: Final report to the Idaho Rural School Association. Boise, ID: Idaho Rural School

Association. Retrieved from:
http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/24-16.pdf
Khattri, N., Riley, K., \& Kane, M. (1997). Students at risk in poor, rural areas: A review of the research. Journal of Research in Rural Education, 13(2), 79-100. Retrieved from: http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/13-2_5.pdf
King, S. B. (2012). Increasing college-going rate, parent involvement, and community participation in rural communities. The Rural Educator, 33(2), 20-26. Retrieved from: https://files.eric.ed.gov/fulltext/EJ987617.pdf
Kliebard, H. (1987). The struggle for the American curriculum 1893-1958. New York, NY: Routledge.
López Turley, R. N. (2009). College proximity: Mapping access to opportunity. Sociology of Education, 82(2), 126-146. Retrieved from:
http://journals.sagepub.com/doi/abs/10.1177/003804 070908200202
Mcmanus, P., Walmsley, J., Argent, N., Baum, S., Bourke, L., Martin, J., Pritchard, B., \& Sorensen, T. (2012). Rural community and rural resilience: What is important to farmers in keeping their country towns alive? Journal of Rural Studies, 28(1), 20-29. https://doi.org/10.1016/j.jrurstud.2011.09.003
Meece, J. L., Hutchins, B. C., Byun, S. Y., Farmer, T. W., Irvin, M. J., \& Weiss, M. (2013). Preparing for adulthood: A recent examination of the alignment of rural youth's future educational and vocational aspirations. Journal of Educational and Developmental Psychology, 3(2), 175-192. DOI: http://dx.doi.org/10.5539/jedp.v3n2p175
National Center for Education Statistics. (2013). The status of rural education. Retrieved from http://nces.ed.gov/programs/coe/indicator_tla.asp
National Center for Education Statistics. (2014). School Locale Definitions. Retrieved from http://nces.ed.gov/surveys/ruraled/definitions.asp
Petrin, R., Schafft, K., \& Meece, J. (2014). Educational sorting and residential aspirations among rural high school students: What are the contributions of schools and educators to the rural brain drain? American Educational Research Journal, 51(2): 294-326. Retrieved from http://journals.sagepub.com/doi/abs/10.3102/0002 831214527493

Preston, J. P., Jakubiec, B. A., \& Kooymans, R. (2013). Common challenges faced by rural principals: A review of the literature. The Rural Educator, 35(1), 1-12. Retrieved from https://files.eric.ed.gov/fulltext/EJ1022612.pdf
Provasnik, S., Kewal-Ramani, A., Coleman, M. M., Gilbertson, L., Herring, W., \& Xie, Q. (2007). Status of Education in Rural America. NCES 2007-040. National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs2007/2007040.pdf
Rumberger, R., \& Palardy, G. J. (2005). Test scores, dropout rates, and transfer rate as an alternative indicators of high school performance.
American Education Research Journal, 42(3), 342. Retrieved from http://journals.sagepub.com/doi/abs/10.3102/000 28312042001003
Sherman, J. (2009). Those who work, those who don't: Poverty, morality, and family in rural America. Minneapolis, MN: University of Minnesota Press. Available at https://www.upress.umn.edu/book-division/books/those-who-work-those-who-dont
Sherman, J., \& Sage, R. (2011). Sending off all your good treasures: Rural schools, brain-drain, and community survival in the wake of economic collapse. Journal of Research in Rural Education, 26(11), 1-14. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/26-11.pdf
Shouse, R. (1996). Academic press and sense of community: Conflict and congruence in American high schools. Research in Sociology of Education and Socialization, 11(1), 173-202. Retrieved from https://link.springer.com/article/10.1007/BF0233 3405
Tieken, M. (2014). Why rural schools matter. Chapel Hill, NC: UNC Press Books.
United States Census Bureau. (2012). Growth in urban population outpaces rest of nation, Census Bureau reports [News Release]. Retrieved from https://www.census.gov/newsroom/releases/archi ves/2010_census/cb12-50.html
Wright, C. J. (2012). Becoming to remain: Community college students and post-secondary pursuits in central Appalachia. Journal of Research in Rural Education, 27(6), 1-11. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/27-6.pdf


#### Abstract

About the Authors: Erica Lopatofsky Kryst is a doctoral candidate in Educational Theory and Policy with a minor in Comparative and International Education at Penn State University. She also serves as an Assistant Director of the Fleishman Center for Career and Professional Development at Binghamton University. Her research interests include the educational trajectories of rural youth, rural education and communities, equity in access to higher education, and rural identity. Contact Erica at ell140@psu.edu

Stephen Kotok is an Assistant Professor of Administrative and Instructional Leadership at St. John’s University in Queens, NY. Stephen's research examines issues of school-level leadership such as school climate, school community, and detracking as well as policy-level equity issues such as school choice, resource allocation, and segregation. Contact Stephen at steve.kotok@gmail.com

Annelise Hagedorn is a doctoral candidate in Rural Sociology and Demography Program in Agricultural Economics, Sociology, Education and Demography at Penn State University. Annelise's research interests include education and community in rural Appalachia, youth and child in rural communities (including youth aspirations, family studies, and early childhood education) as well as teaching. Contact Annelise at acd199@psu.edu


