Increasing the Postsecondary Expectations of Rural High School Graduates Through Alumni College and Career Networks

A Rural-Specific Education Policy



Report by Rachel Brown-Weinstock

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About the Author

Rachel Brown-Weinstock is a senior at Syracuse University, where she majors in Sociology, Policy Studies, and Citizenship and Civic Engagement on a Coronat Scholarship. The Roosevelt Institute was founded on her campus during her junior year, when she promptly became Education Center Director and won the 10 Ideas for Education Policy of the Year nomination for her policy "Increasing the Graduation Rate: Syracuse Students as Reverse Mentors." She currently serves as interim President of her chapter. Rachel is also the founder and director of Glove to Glove, an alumni career mentorship program in her rural hometown which she is now working to institutionalize and expand to the county-level as Roosevelt's Emerging Fellow for Education. Outside of Roosevelt, Rachel is President of the organization MESH, which teaches poetry as a form of empowerment to over sixty Syracuse City School District students each week. Rachel's true passion is using sociological research for the public good, and to this end she has conducted both independent and collaborative research projects in rural upstate New York and South Africa. Upon graduating Syracuse this spring, she will begin a PhD program in Sociology on a National Science Foundation Graduate Research Fellowship grant with plans to conduct ethnographic research to explicate the micro-cultural mechanisms involved in the reproduction of persistent rural poverty



Executive Summary

Emerging Fellow for the Roosevelt Network Rachel Brown-Weinstock illustrates how the problem of low education and career expectations among rural youth can be ameliorated through a policy specifically designed to overcome the challenges of and utilize the assets inherent in rural schools. The educational and career expectations of rural high school graduates are lower than those of metropolitan graduates. This white paper argues that the reason for this difference is inherent to the rural context and thus, the most effective and feasible policy solution is one specifically designed for the rural context. Using rural Fulton County, New York, as a case study, this policy suggests that Fulton County's Career and Technical Education Center should establish an alumni career network that is used to organize college and career development activities for students of all grade levels in each district county. Policy action is important now more than ever, as increasing young peoples' educational attainment has the potential to mitigate rising poverty rates in rural America..

Introduction

Although America has become increasingly urbanized, a significant percentage of youth live and are educated in rural areas. About 27 percent of students enrolled in American public schools and 19 percent of students enrolled in private schools attend a rural district (Rural Education in America 2016). Around 25 percent of American public schools, 33 percent of all schools, and 57 percent of all school districts are rural. The total number of children educated in rural public schools is equivalent to the aggregate populations of Wyoming, Vermont, North Dakota, Alaska, South Dakota, Delaware, Montana, Rhode Island, New Hampshire, Maine, Hawaii, Idaho, and the District of Columbia (Schafft 2016). Moreover, enrollment rates in rural schools are increasing; between 2008 and 2012, rural school enrollment rose by 9.1 percent, while the enrollment rate for metropolitan districts declined (Johnson et al. 2014).

Despite the growing significance of the rural student population, rural education scholars (Schafft 2016; Sipple and Brent 2009) and advocates (Johnson et al. 2014) have illustrated multiple ways in which rural schools are often overlooked by policymakers. One major problem faced by rural schools that has received little policy attention is the low college matriculation rates of rural high school graduates. Only 64 percent of rural high school graduates pursue postsecondary education, in comparison to 69 percent of metropolitan graduates (Koricich 2014). This locale-based gap is a consistent trend. Lower college enrollment rates suggest lower educational and career expectations among rural students. Because low educational attainment rates are a major cause of individual-level poverty and high rural poverty rates in particular, immediate policy action is necessary.

Policies to address these low educational and career expectations must be rural-specific. The educational context of rural and metropolitan schools is fundamentally different, each with their own unique challenges and opportunities



(Ayers 2011). This suggests that policy solutions suitable for metropolitan schools are often not suitable for rural schools. Educators and policymakers agree; a report jointly published by the Rural Opportunities Consortium of Idaho and the Bellwether Education Partners found that 80 percent of Idaho superintendents and 78 percent of state and national policymakers surveyed agreed that "most education policies are designed primarily for urban and suburban districts and are poorly suited for rural districts" (Johnson et al. 2014).

This white paper will delineate a rural-specific policy to address the low educational and career expectations of rural youth using a case study of rural Fulton County, New York. The policy recommends that the Fulton County Career and Technical Education Center—a subsidiary of the localized collective education agency called the Board of Education and Cooperative Services (BOCES)—build an alumni college and career network. The network would be comprised of alumni from Fulton County school districts who would volunteer to provide career development services to current students. The network would be used to coordinate career activities for students across grade levels, with an alumni career-mentoring program available to high school students. As will be illustrated, this policy is the best solution for increasing the low college and career expectations of rural youth because it is effective and feasible through its rural-specificity, addresses gaps in current services, and expands on a successful pilot program.

This paper will begin by defining key concepts and explaining why it is so necessary that education policies are designed differently for different locales. In the following sections, it will supply evidence of the low educational and career expectations of rural youth, argue why these low expectations are a problem, and outline the specific causes of low expectations for rural students. It will then describe the problem of low expectations and its potential causes specifically in rural Fulton County. After this, the policy and its benefits will be outlined. The paper will conclude with a few guidelines for implementation.

DEFINITIONS

Before diving into the argument of this white paper, two terms must be defined: "rural schools" and "education and career expectations."

Education and career expectations, referred to collectively as "postsecondary expectations," are defined as the specific education levels and career students believe they will be able to obtain. Education and career expectations represent "pursuits that an individual considers realistic and accessible" (Metz 2009: 155). In contrast, aspirations represent those careers students would like to pursue under ideal circumstances with no barriers present. Aspirations become expectations when perceived barriers such as limited financial resources for college are taken into account. Due to this, expectations are more closely aligned to students' actions in relation to career preparation (Metz 2009).

This paper's definition of rural schools is based on the codes that the National Center for Education Statistics (NCES) uses to classify schools in different locations. These locale codes are given to school districts based on their distance from an urbanized area (Common Core of Data 2006). Schools with one of the five locale codes of 32 (Town, Distant); 33 (Town, Remote); 41 (Rural, Fringe); 42 (Rural, Distant); or 43 (Rural, Remote) are rural.ⁱ

ⁱ While not all policy designates the town locales of 32 and 33 as rural, this definition of rural is preferable for this policy because its unit of analysis is a county that serves districts with both town and rural designations. Rural schools have been defined using both the town and rural locale codes by the Rural Schools and Community Trust, one of the most well-known rural school advocacy groups.



THE IMPORTANCE OF RURAL-SPECIFIC EDUCATION POLICY

Education policy must be locale-specific because the context in which rural schools and metropolitan schools operate is fundamentally different. Five such fundamental differences are outlined.

First, rural and metropolitan schools face unique challenges in solving educational problems common to schools in all locales, such as high dropout rates and low academic achievement rates among low-income students. Rural schools have trouble attracting and maintaining high quality teachers and administrators that increase achievement (Ayers 2011). The low population density and isolation of many rural communities pose unique barriers to providing rural students access to health and social services that increase academic achievement and reduce dropout (Sminck and Reimer n.d.). Additionally, lower property tax revenue (Lambert 2009), per-pupil state funding formulas, and the challenges of applying for grant opportunities with few staff all lower the financial resources that rural schools can leverage to make changes (Johnson et al. 2014).

Second, rural and metropolitan schools have different policy implementation contexts. This has been well illustrated by federal policy that is not feasibly implemented in the rural context. As just one example, in 2009 the United States Department of Education (DOE) monetarily incentivized each state's lowest achieving schools to adopt one of four DOE-approved school improvement models. Each improvement model posed major challenges for implementation in rural schools. For example, one model—firing and replacing administrators and teachers—was excessively arduous if not impossible given the constant challenge of recruiting and retaining school staff in rural communities (Miller and Hansen 2010).

Third, the underlying causes of educational problems often differ, or differ in magnitudes, across locales. As just one demonstration of this, negative peer influence leads to school dropout in both urban and rural contexts but in different ways. Research has shown that peer participation in drugs and gang life greatly affects dropout in urban schools, while peers' habitual absence from school affects rural dropout (Jordan et al. 2012). Additionally, although living in a single-parent household is a risk factor for youth in all locales (Barajas 2011), it has less of an effect on rural student achievement because fewer are in that living arrangement (Swenson n.d.).

Fourth, the extent to which the outcomes of schools and the communities they serve are linked differs across locales and thus requires different levels of consideration when architecting education policy. The choices of rural schools have the greatest impact on community vitality. For example, many rural scholars—including Michael Corbett (2007) and Patrick Carr and Maria Kefalas (2009)—have demonstrated how rural schools teach students that success is found outside of their rural community, causing them to leave. This undermines community health; the loss of an educated young person is the loss of a "worker, taxpayer, homeowner, or parent" (Carr and Kefalas 2009). Likewise, when schools fail to provide important career skills to the youth who choose to stay in the area, the remaining workforce lacks the young human capital that attracts industry and catalyzes development. While metropolitan areas generally receive young in-migrants, in-migration to rural communities is limited and typically occurs among persons over 30 (Smith et al. 2016). Thus, the success of rural communities is more affected by the success of its school in retaining and training young people. Struggling rural communities have negative implications on the outcomes of local schools as well. For example, some aspects of low-income, low-amenity rural communities are associated with factors that create or exacerbate lower achievement, including teacher shortages, lower quality teachers (Player 2015), and limited property tax revenue. Because the fate of rural schools and communities is especially linked, any rural education policy should be explicitly beneficial to community development.

The fifth and perhaps most important difference between rural and metropolitan schools that must be considered when crafting education policy is the difference in the unique assets inherent in each school context. For example, rural schools are smaller and thus offer greater opportunities for student–teacher interaction (Lawless 2009). Differential assets can be leveraged in determining policy solutions. In all, these five differences between rural and metropolitan



education contexts suggest that any education policy affecting rural communities should be rural-specific.

RURAL-METROPOLITAN DIFFERENCES IN EDUCATION AND CAREER EXPECTATIONS

The rural-specific policy proposed in this white paper addresses a critical problem: the postsecondary expectations of rural youth are too low. When examining rural-metropolitan differences in college matriculation rates, two significant trends emerge:

- Fewer students from rural schools enroll in college after graduating high school. There is a 5 percent locale gap: 64 percent of rural high school graduates pursue some form of postsecondary education, as compared to 69 percent of graduates from metropolitan areas (Koricich 2014).
- Fewer students from rural schools enroll in four-year colleges in particular. Here there is a 9 percent locale gap: 53 percent of rural high school graduates who attend college enroll in four-year colleges, in comparison to 62 percent of metropolitan high school graduates (Koricich 2014).

These statistics suggest that rural students have lower educational and career expectations than their urban counterparts. Educational expectations are indicative of career expectations, because most careers have a specific minimum requirement for level of education. Educational and career expectations can be classified into three levels: low, medium, and high (Figure I). Policy must be aimed at increasing the number of rural graduates with both medium and high expectations.

Figure 1

THE IMPORTANCE OF INCREASING RURAL HIGH SCHOOL GRADUATES' EXPECTATIONS

Raising the college degree attainment rates of rural graduates is of extreme importance for both rural individuals and the rural communities in which they live and work.

Rural poverty rates are and have historically been higher than metropolitan poverty rates. A report released by the United States Department of Agriculture (USDA) found that in 2014, 18.1 percent of rural Americans were living in poverty in comparison to 15.1 percent of Americans in metropolitan places. Locale differences in child poverty are even more extreme. The report found that 25.2 percent of rural children but only 21.1 percent of metropolitan children were living in poverty (Farrigan 2016). Since the 2007 recession, poverty rates in rural areas have increased substantially. In



another report, the USDA found that rural counties with low levels of college degree attainment have higher poverty and child poverty rates (Marré 2016). Increasing the educational and career expectations of rural youth may therefore play a major role in reducing rural poverty.

At the individual level, median annual earnings increase with successive degree attainment across the United States, in rural America, and in Fulton County specifically (see Figure II). The gap in median earnings between bachelor's and associate's degree holders is much larger than the gap between those with an associate's degree and those with only a high school diploma for each geographic indicator. Increasing the number of rural students with high postsecondary expectations in particular is thus most beneficial in terms of individual socioeconomic outcomes.

Figure II: Median Income by Educational Attainment for Geographic Indicators (2014)			
	United States	Rural US counties	Fulton County
	(American Factfinder 2014)	(Marré 2016)	(American Factfinder 2014)
Bachelor's degree	\$50,515	\$40,253	\$43,892
Associate's degree	\$33,988	\$30,162	\$31,459
or some college			
HS diploma only	\$27,868	\$26,220	\$28,601

Further, poverty rates decrease with successive degree attainment (see Figure III). Each increase in education level, especially between Associate's degree and Bachelor's degree attainment, is met by a substantial increase in economic security.

Figure III: Poverty Rates by Educational Attainment for Geographic Indicators (2014)			
	United States	Fulton County	
	(American Factfinder 2014)	(McMann 2015)	
Bachelor's degree	4.5%	1.7%	
Associate's degree or some college	10.5%	10.3%	
HS diploma only	14.2%	14.5%	

Non-economic benefits accrue to college degree recipients as well. College degree attainment is related to better health outcomes, lower divorce rates, and lower crime rates. People's happiness and amount of social capital also increase with successive degree attainment (Hout 2012).

On a final note, it is also imperative to strengthen the rural postsecondary education pipeline from an equality perspective. The DOE's mission includes "assuring access to equal educational opportunity for every individual" (Mission 2011). According to this perspective, school locality should not correlate with graduates' postsecondary degree attainment.

THEORIES OF POSTSECONDARY EXPECTATION DEVELOPMENT

While there are many theories about how educational and career expectations develop, this report will focus on two that are most relevant to the effects of rurality on expectations. Ultimately, by addressing characteristics of each theory, rural education institutions can increase students' expectations.

Social Cognitive Career Theory (SCCT)

A popular theory of career decision-making is Social Cognitive Career Theory (SCCT). This theory suggests that education and career choices are related to two variables:



- 1.) *Self-efficacy,* defined as an individual's beliefs about their ability to perform tasks successfully. Youths' self-efficacy beliefs develop from their personal performance, their perceptions of the performance of persons they think they are similar to, and from the expressed beliefs of others, such as their parents.
- 2.) Outcomes expectations, defined as an individual's prediction of the outcome of a particular education or career choice. This prediction is formed in relation to past personal experiences and the past experiences of similar others.

As such, young people pursue careers that they believe they will be competent at and that will lead to favorable outcomes (Lent et al. 1994). Career expectations are structured by where young people live, which mediates what learning experiences (vicarious experiences with role models; activities available in the home, school, or community environment to test and practice competence; etc.) are accessible. Low career expectations develop when the small size, social isolation, and economic situation of rural places constrain the quantity, quality, and type of learning experiences available.

Social Comparison Theory

Social comparison theory posits that "people tend to compare themselves to groups with similar beliefs and abilities – thus acting to limit levels of aspiration, especially when the group is cut off from other groups" (Collier 1994: 8). Under this theory, expectations develop when young people are socialized to specific group postsecondary norms and social control moderates deviance from such norms. Young people decide what level of education and careers they are capable of obtaining based on the levels of the comparison group (Leavy and Smith 2010).

This theory shows how rural settings uniquely lower expectations, as the strength of social comparison is positively related to the isolation of the group. Research suggests that rural communities serve as the comparison group for rural youth and that the isolation of many rural places, as well as their limited population size, strengthens the effects of comparison (Bajema et al. 2002). Wuthnow found that rural youths' career expectations are highly influenced by local community members who serve as role models (Wuthnow 2013).

RURALITY AND THE CREATION OF LOW CAREER EXPECTATIONS

Factors that are unique to or have a stronger effect in the rural context lower postsecondary expectations. Career expectations are limited by many interconnected and compounding factors related to rurality, including:

Limited perception of the benefits of a college degree

Rural teachers make less on average than their metropolitan counterparts due to lower property tax revenue and federal and state funding formulas that favor urban districts. Often, teachers are the most visible people in rural communities with a college degree. Factory workers or laborers—the parents of many rural youths—can make up to \$10,000–\$20,000 more than local teachers (Antos 2002). This results in lowered "outcome expectations," a factor stated in Social Cognitive Career Theory that affects the development of educational and career expectations. One study found that "outcome expectations" was one of the two main causes of lower educational and career aspirations for a sample of rural youth (Ali 2006).

The outcome expectations of a college degree may also be lower for rural youth because the economic rewards of successive degree attainment are lower in rural places. The incremental gain in median income between people who only hold a high school diploma and those who have some college or an associate's degree was \$1,810 lower in rural locales than in metropolitan ones. Further, bachelor's degree holders earn over \$10,000 less in rural locales than in metropolitan ones (Marré 2016).

Further, status differences related to education and income are harder to detect in rural America. For example, the quality of a rural resident's house is less likely to reflect his or her educational attainment than in metropolitan locales.



Further, social control in rural areas discourages the display of status symbols, contributing to a notion that everyone is relatively equal despite educational differences. This disincentivizes the attainment of a bachelor's degree through social norms that render the financial benefits of college ambiguous (Wuthnow 2013).

Limited College Knowledge

While parents are often valuable sources of college and career information, the parents of rural youth are less likely to have a college degree than those of metropolitan youth. In 2013, 48 percent of rural adults age 25 and older had at least some college experience, whereas 61 percent of metropolitan adults did. Bachelor's degree discrepancies are even higher; 18 percent of rural adults had a Bachelor's degree in 2013 in comparison to 32 percent of metropolitan adults (Marré 2016).

Low levels of parental assistance in navigating educational and career decisions pushes rural students to alternate sources for postsecondary guidance. A study of rural Pennsylvanian youth found that young people repeatedly declared career decision making as a school, rather than home, activity (Ferry 2006). Unfortunately, rural schools often do not have the funding to hire enough counselors to fill the demand for college and career guidance. Guidance in financial aid and scholarship options is one necessity that often falls through the cracks, and translates to lower four-year college matriculation rates and lower educational and career expectations for rural youth who believe they are not able to attend a four-year school for financial reasons (Ali 2006).

Additionally, rural youth are often limited in their college knowledge because they participate in few if any college and career activities. Penn State's Rural High School Aspirations Study found that a majority of Pennsylvania's rural students declared that they had not participated in any school-to-work transition programs (mentoring, job shadowing, interning etc.). Further, the study highlighted that schools with smaller student enrollment were less likely to offer college preparatory or advanced placement classes (Rural High School n.d.). Rural students who participate in postsecondary preparation activities are more likely to report career expectations that require a higher amount of education and training (Meece et al. 2013). Social Cognitive Career Theory suggests that rurality lowers self-efficacy beliefs and thus expectations by limiting the preparation activities through which youth can successfully perform postsecondary-related tasks.

Community Attachment

Metropolitan youth can usually obtain a college degree and a professional position while staying in their home communities. Rural youth do not have this luxury. Community attachment is an emotional bond to the social landscape of a geographic locality. Rural youth often feel attached to their community and want to stay, live, and work there despite openly acknowledging its limited educational and career opportunities. Marshall found that career aspirations of youths from rural British Columbia are lowered based on a desire to stay and work in their home community (Marshall 2012). Howley and Kuemmel (2011) found a similar inverse relationship between place attachment and educational aspirations among youths in a study in North Carolina.

Low Self-Efficacy

Low levels of self-efficacy by definition indicate that young people have lower expectations for their postsecondary achievement. The connection between self-efficacy and educational and career expectations is posited by Social Cognitive Career Theory. A study of rural youth in Appalachia concluded that one of the two most significant contributors to lower career aspirations was low self-efficacy due to perceived obstacles (Ali 2006).

Social Cognitive Career Theory also highlights the role that social interaction plays in affecting self-efficacy, particularly in the case of how others' perceptions can impact our own self-efficacy. In terms of rural youths' postsecondary expectations, rural parents in general have been found to have lower educational expectations for their children (Byun et al. 2013).

Rural youths have fewer college-educated role models (perceived similar others). Since rural graduates that decide to



attend a four-year institution often earn degrees that they cannot use in their home communities, they do not return after college. This ensures that rural youths have fewer role models with bachelor's degrees. This effect is particularly pronounced for youths of low socioeconomic status (SES), as they are more likely than their higher-SES peers to base their expectations on role models (Phipps 1995). This is particularly significant because the rural childhood poverty rate is higher than the metropolitan rate (Farrigan 2016). Social Comparison Theory suggests that rural youths in particular are most likely to base their postsecondary expectations on the educational attainment and careers of local community members.

High Poverty Rates

While only about 6 percent of urban residents inhabit high-poverty counties and only 4 percent inhabit persistentpoverty counties, 35 percent of persons in completely rural counties inhabit high-poverty counties and 26 percent inhabit persistent-poverty counties (Farrigan 2014). These high poverty rates have manifest effects, including tighter budgets for rural schools, which leads to fewer resources for advanced placement classes and accelerated tracks (Antos 2002). Rural school poverty is associated with lower levels of college and career readiness; only 33 percent of students attending resource-deficient rural schools in New York State are college- and career-ready, as compared to 48 percent of students in schools with an average level of resources and 40 percent of all NYS public school students (Blakely-Armitage and Vink 2016). This is significant, as Social Cognitive Career Theory suggests that limited success in postsecondary-related activities is related to lower self-efficacy and lower expectations. Family poverty is a significant predictor for many of the other variables that lower expectations, including lowered outcome expectations and limited knowledge of jobs that require a bachelor's degree. Poverty has also been shown to guide youth toward present-future trade-offs; they put the basic survival and economic needs of their families above personal wants, ultimately forgoing long-term career planning and a future time orientation in the process (Marshall 2002).

Relative isolation

Living near postsecondary institutions normalizes higher education as a typical part of the life course and thus increases the chance that youth will want to go to college. Unfortunately, while about 89 percent of urban youth live in counties with a college, only about 50 percent of rural teens do (Antos 2002).

Living in relative isolation from larger metropolitan communities means that rural youth are exposed to fewer careers and college-educated role models. This isolation not only limits rural youth's knowledge of career choices in a psychological sense, but also practically in the nature of their social networks. The social landscape of rural areas is built on strong social ties such as family and close friends and neighbors, yet studies show that career choices are often informed through weak ties such as acquaintances (Wuthnow 2013). Rural youth's imagination of potential careers is especially circumscribed for high-skill careers; only 18 percent of people in rural America are employed in high-skill college-degree requiring jobs, while that rate is 27 percent for metropolitan areas (Young 2013). According to Social Comparison Theory, rural isolation strengthens the likelihood that rural youths' expectations will be based on careers visible in the local community.

THE CASE: FULTON COUNTY

This report suggests piloting a policy to increase postsecondary expectations in one rural county: Fulton County, located in upstate New York. American Community Survey estimates for 2015 predict Fulton County's population at 53,992 residents (American Factfinder 2015). Fulton County was chosen as the case for this white paper for four reasons:

1.) New York has one of the highest bachelor's degree attainment (ranked eighth: 32.4 percent) rates in the country (American Factfinder 2009). Despite the fact that the state as a whole is highly educated, the low postsecondary expectations of youth in rural Fulton County highlights a consistency in rural-metropolitan



disparities in expectations. This limits the validity of the argument that postsecondary expectations are lower for rural graduates because most rural schools are in states with low-performing education systems in general.

- 2.) Despite being rural, Fulton County does not have an overall poverty rate higher than the state average (McMann 2015). This suggests that the low postsecondary expectations of Fulton County graduates are not simply a function of the county's overall low socioeconomic status.
- 3.) The author suggests that this policy be implemented by the Career and Technical Education Center servicing Fulton County school districts, a subsidiary of a tri-county BOCES. BOCES institutions provide programs to multiple districts to meet collective needs. BOCES institutions are unique to New York State. Thus, suggesting the program be implemented in a county in New York State provided a framework for collective action and thus broader localized impact.
- 4.) One Fulton County school—Gloversville High School—has already taken the initial steps to institute an alumni career mentorship program. More on this program will be provided later.

Postsecondary Educational and Career Expectations of Fulton County Graduates

The low education and career expectations of Fulton County youth are evident in the reported plans of students graduating from Fulton County schools. Of the 551 students graduating from district schools in 2013-2014, 28 percent planned on attending a four-year college, 45 percent planned on attending a two-year college, and 15 percent expected to go straight to employment (Fulton County n.d.). At the state level, 47 percent planned on attending a four-year school, 31 percent planned on attending a two-year school, and 6 percent expected to go straight to employment (NY State n.d.).ⁱⁱ These rates are indicative of broader trends for rural schools: that fewer graduates pursue a college education (5 percent gap between Fulton County and NYS) and that fewer graduates pursue a bachelor's degree in particular (19 percent gap).

Additionally, though the percent of students attending a two-year college is high in Fulton County, few graduate. For Fulton-Montgomery Community College (FMCC)—the only two-year institution in the county—only 23.41 percent of Fulton County students in the 2009-2010 incoming cohort graduated within two years. Only 31.35 percent had graduated within three years and 35.32 percent in four years (Retention Rates n.d.). Thus, even more students end up going straight to work without earning a college degree than reported upon graduation. This suggests that postsecondary expectations are lowered while attending two-year institutions. Additionally, of the students who do graduate from FMCC, only 48 percent transfer to another postsecondary institution (Transfer Rates n.d.). While associate's degrees can be stepping stones to bachelor's degree attainment, this is not overly common within Fulton County.

Causes of Low Expectations in Fulton County: Demographic Characteristics and Guidance Counselors' Perceptions

Important facts and demographic trends that may play into the lowered postsecondary expectations of Fulton County youth are summed up below:

• The main industries in which adults in Fulton County are employed are less likely to require a college degree than the industries in which the majority of New York residents are employed; the percentage of adults employed in the manufacturing sector and in retail trades is higher in Fulton County than the state as a whole, while the percentage of adults in the county employed in "professional, scientific, and management, and administrative and waste management services" is lower (American Factfinder 2014). This suggests that awareness of careers that require a college degree may be limited in Fulton County, lowering students' career expectations and then their educational expectations.

ⁱⁱ Note that the sum of these percentages do not equal 100 percent because other postsecondary plans, such as entering the military, are not specified in this report but do account for a smaller percentage of graduating students.



- The poverty rate in Fulton County (15.4 percent) is equivalent to the poverty rate of the state as a whole (15.9 percent). However, there are some areas in Fulton County for which the poverty rate is higher (for example, Gloversville's poverty rate is 25.8 percent). Additionally, the poverty rate in Fulton County may not be substantial, but the median income is much below the state average: \$45,722 in Fulton County, compared to \$58,687 in the state as a whole (American Factfinder 2014). Lower median incomes and high poverty in some parts of the county suggest some level of economic precariousness that may impact students' abilities to plan for their future.
- Only 16.6 percent of adults in Fulton County have a bachelor's degree. The county has the fifth lowest percentage of adults with a bachelor's degree of all 62 New York counties (McMann 2015). This is significant because it suggests that the majority of parents are likely unable to help their students navigate the four-year college application process. It also suggests that there are few adults with a four-year degree whom students can envision as role models.
- Fulton County is home to just one community college, Fulton-Montgomery Community College (FMCC). There
 are no four-year institutions in the county. The three postsecondary institutions nearest Fulton County are all
 community colleges, with the nearest four-year institution—Union College—being 42 miles away (a 54-minute
 drive). The relative isolation of Fulton County from four-year institutions may limit the normalization of fouryear college going, impeding a college-going culture.

A survey was sent out to all local high school guidance counselors to identify their perceptions of the specific causes of Fulton County graduates' low postsecondary expectations. The survey prompted counselors to specify the degree to which they believe six factors act as barriers that lower the educational and career expectations of students in their district. The six factors listed in the survey were among those found by previous research to lower expectations. Space was left for counselors to write in an additional barrier. A guidance counselor from each of the five county school districts that has a high school responded.^{III} The results are captured in Figure IV. The number of counselors who selected a specific choice are noted in the boxes.

One additional barrier was noted by two counselors: the financial difficulties of paying for four-year schools. Overall, the results indicate that the majority of counselors believe that the greatest barriers stem from students' experiences outside of school: limited help/support from parents and difficulties planning for the future due to problems at home. It should be noted that these potential barriers are not mutually exclusive, but overlap and represent cause-and-effect relationships. For example, limited support or help from parents may be an extreme barrier because it reduces college and career self-efficacy.

Figure IV

Potential barrier	Not at all a barrier	Somewhat of a barrier	Moderate barrier	Extreme barrier
Lack of knowledge about four-year schools and careers which require a Bachelor's degree (n=5)	1	1	3	0
Low educational and career self- efficacy (n=4)	0	2	1	1
Limited support/help from parents (n=5)	0	0	1	4
Problems at home make it more difficult to plan for the future (n=5)	0	1	0	4

ⁱⁱⁱ Wheelerville School District does not have its own high school.



Lack of college-going culture at school and/or in the community (n=5)	0	1	1	3
Don't want to leave their home community for college or career (n=5)	0	2	1	2

The Outmigration of Fulton County Residents

The outmigration of Fulton County's young adults seeking a college degree elsewhere has led to the loss of many college-educated role models for the county's current students. Fulton County has experienced significant outmigration since the middle of the twentieth century due to deindustrialization and the loss of local glove and leather manufacturing, which provided much of the county's employment (McMartin 1999). For example, in the Fulton County city of Gloversville—where a majority of manufacturers were located—population has declined by 36.43 percent since its peak in the 1950s (Gloversville Comprehensive Plan 2015). An interview with a Gloversville guidance counselor in 1958 makes clear the reason for much outmigration: "Of the high school students who leave their home community to attend college, only a few return...In recent years a very small percentage of college graduates have entered the glove industry or accepted positions with local business firms" (Vosburgh 1958: 162-163). The outmigration of rural youth for postsecondary education without returning has been a trend across rural America since the 1950s; between 1950 and 2000, there was a consistent trend of youth outmigration from rural to urban areas coupled by relatively consistent inmigration of adults over 30 (Smith et al. 2016).

Rural youth who choose to leave their home communities tend to have higher levels of academic achievement (Schafft 2016). The outmigration of high-achieving youth is referred to as "the rural brain drain" and has been a major factor in sustaining rural poverty (Carr and Kefalas 2009). This selective outmigration is a large contributor to the discrepancy between the percent of rural and metropolitan adults who have college degrees. The history of local and rural outmigration, local counselors' perceptions, and the county's demographic characteristics illustrate the potential ways in which postsecondary expectations are lowered in Fulton County.

Hamilton-Fulton-Montgomery Board of Cooperative Educational Services

One party responsible for the preparation of Fulton County youth for postsecondary education and careers is the Career and Technical Education Center (CTEC) that is part of Hamilton-Fulton-Montgomery Board of Cooperative Educational Services (HFM BOCES). In 1948, the NYS legislature passed a bill authorizing the creation of boards of cooperative educational services, which are education institutions designed to meet the collective needs of local school districts that, alone, could not provide the resources for important services. They were originally created specifically to meet the needs of small, rural schools. There are currently 38 BOCES serving 721 school districts in NYS. BOCES is considered its own "district" and is administratively led by a superintendent and governed by a board of education, whose members are appointed by component districts (Ed Management n.d.).

The mission of HFM BOCES is "to provide innovative leadership and to build partnerships that result in exciting educational opportunities for our students and efficient shared services for our component school districts" (Mission n.d.). HFM BOCES provides career and technical education (CTE) programming, services for students with disabilities, and adult education programming, among other services (Ed Management n.d.).

THE POLICY

The HFM Career and Technical Education Center (CTEC) should establish a volunteer alumni career network by recruiting college-educated alumni from Fulton County school districts who live both inside and outside of the community to provide educational and career development services to current students.



With the network, CTEC should pursue the following actions:

1. Coordinate an alumni career awareness initiative that connects a series of alumni to elementary schools for students to become aware of the diversity of career and college options.

2. Coordinate an alumni college and career exploration initiative that allows middle school students to explore careers and colleges they may be interested in through communication with alumni

3. Facilitate a county-wide mentoring program that pairs high school students with alumni whose careers they are interested in for one-on-one career mentoring that includes planning for college

4. Grant counselors at the seven school districts access to the network to plan their own career development initiatives

5. Provide select community-based organizations in the county, including the Fulton Montgomery Chamber of Commerce, access to the network for their own community development initiatives. Members of the network may be willing to establish an endowment to support these development initiatives based on their attachment to the community.

According to the New York State Association for Career and Technical Education (NYSACTE), different grade levels should participate in different types of career development. As such, the alumni network will be used for different types of career activities for different grade levels. Students in kindergarten through fifth grade would participate in career awareness activities, which introduce students to the diverse world of career possibilities (Action 1). Students in sixth through eighth grade would engage in career exploration activities, which are more individualized than career awareness activities and allow students to explore personal career interests and aptitudes (Action 2).

According to NYSACTE, students in grades nine through twelve should participate in career preparation activities. These types of activities involve intensive guidance (for example, through mentoring), CTE coursework, and working towards concrete goals established in their individualized Career and Academic Plan (CAPs). These CAPs are currently provided on the New York State DOE's website as an optional postsecondary planning resource for students and counselors. CAPs involve choosing a Career Cluster and Career Pathway (defined in Figure V) which may evolve as the students' interests develop. They also ask questions related to "Knowledge," "Skills/Application," and a "Culminating Activity" and has signatures for review by the student, parents/guardians, teachers, counselors, and an "other" category appropriate for a career mentor.

Figure V

Definitions of Important Terms		
Career and Technical Education (CTE):	"a term applied to schools, institutions, and educational programs that specialize in preparing students for careers primarily in skilled trades, applied sciences, or modern technologies" (National Forum 2015)	
Career Cluster:	"a group of related jobs and industries. The National Career Clusters® Framework has defined 16 Career Clusters" (National Forum 2015)	
Career Pathway:	"small groups of occupations within a career cluster. Occupations within a pathway share common skills, knowledge, and interests." Examples of separate Career Pathways within the "Finance" Career Cluster are "Accounting" and "Insurance" (Career Pathways n.d.)	

The county-wide alumni mentoring program hosted by CTEC as outlined in the third action of this policy would follow



NYSACTE guidelines for high school students by focusing on career preparation activities. The mentoring program would provide two different routes with two different levels of rigor to accommodate the various amounts of career readiness students want to acquire. This first route includes participating in the mentoring program as a two-semester elective course sequence, while the second would require more extensive and rigorous activities and provide a technical endorsement on the student's high school diploma. Elective courses must align with high school learning standards created for the "career development and occupational studies" subject area (Office of Academic 2016).

The second route allowing students to obtain the technical endorsement would need to adhere to a set of criteria outlined by the New York State DOE. The approval criteria are organized under five elements: curriculum, certification, technical skills, work-based learning, and a work skills, employability profile (to see the individual criteria for each element, see Appendix I). To obtain a technical endorsement, the student would need to complete a three-part technical assessment (written, demonstration, and project components), the program's work-based learning experiences, and a work-skills employability profile, which a Career and Academic Plan can substitute for.

In both routes, alumni mentors would do some of the following activities:

- Share the steps they took in high school and beyond to gain employment in their field
- Set short-term and long-term educational and career goals with their mentee (as part of their Career and Academic Plan)
- Provide advice on extracurricular activities to partake in, organizations to volunteer for, scholarships to apply for, and colleges to consider in order to help meet these goals (as part of their Career and Academic Plan)
- Facilitate CTE lessons based on their own knowledge of important information for their occupation
- Coordinate work-based learning experiences (job shadowing, internships of various lengths and degree of intensity)
- Help mentees design and execute a "culminating project" that requires use of the skills needed in their career
- Provide extra guidance in applying to colleges, answering questions about their own experiences
- Provide socioemotional support and encouragement

Alumni are specifically well-suited to provide career guidance to students. Because they currently work in the field, they have in-depth knowledge to draw from for lessons and are up-to-date on industry trends. A CTE instructor would provide trainings to alumni mentors to help them acquire basic teaching skills and to set forth expectations. Further, alumni have been in the very same position as current students, which may lead to a stronger bond.

WHY THIS POLICY?

Rural-Specificity

This policy will be effective and feasibly implemented because it addresses the five ways in which location structures the educational context.

First, it addresses one of the main challenges rural districts have in improving educational outcomes: lower school budgets due to state and federal funding formulas that favor urban areas, difficulties in writing grants, and lower property tax revenue. This policy is cost-effective. Though individual districts must pay BOCES a per-student fee for its services, BOCES legislation provides that most of this money is reimbursed to individual districts. Additionally, such a comprehensive service would be very costly for one district alone to provide, but BOCES provides a framework that increases cost efficiency.

Second, it considers how rural schools have unique implementation contexts. The policy capitalizes on BOCES as an implementation context designed specifically to help rural districts meet collective needs. BOCES, while not unique to



rural areas, are especially useful for implementing services that would not be feasible for individual districts.

Third, this policy recognizes the especially strong connection between rural school outcomes and community outcomes. As such, it was intentionally designed to catalyze community development. First, if CTEC partners with the Fulton County Chamber of Commerce to recruit alumni, owners of local alumni-owned businesses in need of well-trained employees may be recruited as mentors. This would ensure that local students are receiving the education necessary to fill community needs. Further, Action 5 of the policy specifies that the alumni network will be made available to community-based organizations. Alumni who volunteer for the network likely feel attached to the local community but many no longer live there. Individuals attached to their community are more likely to be civically engaged and give philanthropic contributions to local initiatives (Sundblad and Sapp 2011). As many of the alumni that will participate in the network left the county in pursuit of a four-year degree and better career opportunities, many will have more money that they could donate to local organizations and unique pro-bono services they could offer as well. The alumni network consolidates a pool of attached individuals dispersed throughout the country and connects them back to local development activities they may know little if anything about. Local organizations have relied on the resources of former residents in the past to help achieve development goals.^{iv}

Finally, this policy was also created with consideration for the unique assets of rural communities. Though rural brain drain is a detriment to community vitality, if the successful alumni who left were to be reconnected in a network back to the community, brain drain can become refashioned as an asset to increase rural philanthropic giving and the postsecondary expectations of current students. Asset-based programs and development efforts such as this one are cost-efficient (Summary Report n.d.). As such, this rural education policy better contributes to rural community development because it considers locale-specific assets.

Addresses the Specific Causes of Low Career Expectations

This policy is also rural-specific and more effective because it addresses each of the five categories of why rurality may lower educational and career expectations including:

Self-efficacy: Successful, college-educated alumni serving as role models provide the vicarious learning experiences that would help students increase their self-efficacy as specified by Social Cognitive Career Theory. This is especially the case for students in elementary and middle school, when these habits are formed. Working closely with alumni mentors in high school through HFM BOCES programming would increase self-efficacy as students would get to participate in structured work-based learning activities and likely find success at these activities with their mentors' guidance. Additionally, while parents may have low college and career expectations for their children, alumni mentors may set higher expectations, which increase efficacy.

Relative isolation: Alumni from all over the country would be connected back to their home county to expose students to college options and a greater set of careers than exist in their immediate community (where there is only one community college and limited employment opportunities for college-educated individuals). Additionally, college and career knowledge is gained through weak ties rather than strong ties most common in rural communities; an alumni career network would institutionalize a network of weak ties for student use. Social Comparison Theory posits that isolation makes choosing careers similar to those of our loved ones and community members more common. This isolation will be breached by continuous exposure to people from similar backgrounds that pursued a greater diversity of careers.

Limited knowledge about college and the benefits of a college degree: Alumni can help communicate information about colleges and careers in the face of low levels of parental and community knowledge of such pathways. This knowledge

^{iv} For example, the Gloversville Public Library is hosting a multi-year capital campaign to make necessary renovations to the library. One appeal being made to potential donors is packaged as the "Alumni Challenge." As of November 1st, 2016, a total of 282 alumni—many of whom no longer live in the county—have donated a combined total of \$95,442.07 to the campaign (Brown 2016).



will be conveyed at all school levels so that perceived barriers (such as not having enough money to go to a four-year college) do not become major points of college and career orientation integrated into the habitus that can lower expectations. Alumni volunteers will help meet the high demand for college and career guidance that is not met by current guidance counselors in a cost-effective manner. Alumni can also increase students' outcome expectations for bachelor's degree attainment by discussing their perceptions of how the degree has improved their quality of life. Community attachment: Alumni giving back to their community demonstrates to students that they can leave the community and still maintain a connection to and help improve it.

Poverty and community restructuring: This policy would address multiple consequences of poverty on career development. For example, it is a cost-effective way to provide more career guidance to students in light of low property tax values and limited school budgets. It increases the visibility of careers not common in high-poverty areas. Additionally, mentors would help economically disadvantaged students stay on track in planning for their futures in spite of having to live day to day sometimes.

The Precedent: Glove to Glove

This policy is also efficacious because there is a precedent for it: the "Glove to Glove" program, created by the author of this paper in partnership with a district in Fulton County, the Gloversville Enlarged School District. Through Glove to Glove, successful Gloversville High School (GHS) alumni volunteers, who are currently in college or have successful careers, are connected with current GHS students for the purposes of college and career exploration, preparation, and planning. Over 100 alumni (and some community members who did not graduate from the district) volunteered to be part of the program within the first year, and the 16 career clusters identified in the National Career Clusters Framework were represented among the careers of alumni. These alumni range from graduates of the class of 1961 to the most recent class. They live in diverse parts of the country and even internationally. See Appendix II for an example of an alumnus profile. Alumni advise students in class projects related to career exploration, participate in career days, serve as guest speakers in college and career alumni lecture series, make YouTube videos about their colleges and careers, and provide pro-bono services to class projects. These career activities occur in district elementary schools, middle schools, and high schools.

The creation of the Glove to Glove pilot program demonstrates that building an alumni volunteer network is feasible. The generosity of its participants suggests a willingness, and even an eagerness, on the part of alumni to get involved in such an initiative. The diversity of the responses in terms of careers is significant in that it shows that this policy would be an effective way to increase career awareness and help combat some of the effects of rural isolation. Further, over 50 alumni volunteers agreed to allow students to shadow or intern for them, suggesting that mentors are willing to provide work-based learning experiences that are required to earn a technical certification. Qualitative evidence suggests that the program is successful at engaging students in college and career activities. For example, one Glove to Glove alumni mentor stated, "a Glove to Glove student is in the [Radiologic Technology] program this year [at FMCC] due to the mentoring that happened last year. He is very happy and an excellent student. He thinks the mentoring program was one of the best things at the school."

Filling Gaps in Current Career Development Services

Currently, CTEC provides two career development programs to students in Fulton County: CTE Courses and Pathways in Technology Early College High School (PTECH). Multiple gaps in services exist between these programs that can be filled by an alumni career development policy. First, each existing program is targeted only to high school students. My policy would integrate alumni throughout the school year in both elementary and middle schools for career awareness and exploration activities. While PTECH and CTE Courses provide services for a plethora of career pathways, they are limited primarily to careers found in the region and thus do not help students think about the variety of careers in other parts of the country (and even those in the region not represented through current programming). Further, current CTEC students must enroll in their programs at a specific point in their education (for PTECH, eighth grade and for CTE, tenth grade) and are not able to partake in them otherwise, limiting flexibility for students. They also do not address the selfefficacy component of career development so critical to Social Comparison Theory and Social Cognitive Career Theory.



IMPLEMENTATION, A RECOMMENDATION AND CONCLUSION

This policy can be implemented in one of two ways: through its adoption by the Director of the CTEC or by the request of its implementation by multiple districts who would purchase the alumni network service from CTEC. In order to fund an HFM BOCES service, Fulton County districts pay a per-pupil rate. Much of the payments districts make for BOCES services are refunded by the state. Given this, much of the \$203,000 budget for this policy, delineated in Figure VI, would be covered by the state.

Figure VI

Item	Number	Cost
CTE Instructor	2 (one instructor per three districts)	\$180,000
Robust Video Conferencing System	6 (one per district)	\$6,000 (only one-time purchase necessary)
Chrome Book Cart	2 (one to travel with each instructor)	\$5,000 (only one-time purchase necessary)
Alumni Background Checks	100	\$10,000 (only one-time purchase only, though if 10 alumni are added to the network each year, this would be a \$1,000 annual cost)
Misc. Supplies		\$2,000
	Total Start-Up Cost: \$203,000 Total Annual Cost: \$183,000	

The implementation of an alumni college and career network will play a major role in increasing the educational and career expectations of rural Fulton County youth. The high probability of success for this policy lies in its rural specificity. Adoption of such a network addresses the major factors that lower the postsecondary expectations of rural youth, including isolation, lowered outcome expectations, limited college and career knowledge, diminished college and career self-efficacy, community attachment, and poverty.

Low college matriculation rates, and especially low four-year college matriculation rates, are not unique to Fulton County; they are characteristic of the rural educational landscape. With proven success, the Fulton County network should serve as a model for expansion to other rural areas in New York, and then to other states or regions in which the infrastructure for collective action exists.

Policy action is urgent. Rural poverty rates are consistently higher than metropolitan poverty rates and are currently rising. Increasing the educational attainment of rural high school graduates is crucial to disrupting historic rural poverty trends and improving the socioeconomic outcomes of rural youth. As enrollment rates in rural schools keep increasing, this problem can no longer be ignored.



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APPENDICES

Appendix I: CTE Program Approval Criteria New York State Education Department CTE Program Approval Elements

Curriculum: Section A

- Defined outcomes, structure/sequence, and accessible
- CDOS: Career Development and Occupational Studies standards
- Industry level standards
- CFM: Career and Financial Management; 54 hours
- Alignment to post-secondary education
- Validated crosswalks to CCLS: Common Core Learning Standards
- Identified academic integration and interdisciplinary instruction
- Identified soft skills/21st century skills
- Provides the foundational basis for integrated academic and CTE HS credit as well as Technical Endorsement on HS diploma.
- Record of CTE program modifications

Certification: Section B

- Proof of appropriate certification in subject matter
- Proof of Professional Development
- Proof of relevant industry experience/training



Technical Assessment: Section C

- Industry /SED approved national written exam: prescribed testing modifications for students with IEP's.
- Industry /SED approved national performance exam
- Student portfolio of achievement and student demonstration of technical skills that meet industry standards which are developed by the instructor with the input, support, and approval of a <u>local</u> advisory committee.

Work Skills, Employability Profile: Section D

- Work skills employability profile is maintained for each student to document attainment of technical knowledge, skills, and work-related skills, achievement, and certificates.
- Maintain student records for attendance, Internship, and attainment of (soft) 21st century skills.

Work – Based Learning: Section E

- All students in the program engage in a work-based learning experience
- Work-based learning experiences are consistent with applicable New York State laws and Department of Labor regulations and guidelines.
- Work experience supervisors are appropriately qualified and certified.
- Work-based learning experiences are specific to CTE program instruction
- Work-based learning instruction includes resumes writing, cover letters, and job interview skills.

Post-Secondary Articulation: Section F

- High school graduation credits and college credits to be earned are clearly specified.
- CTE faculty teaching college courses at the secondary level shall demonstrate their competence through training, earned degrees, scholarship, experience and exemplary classroom teaching performance or other evidence of teaching expertise, and are acceptable to the post-secondary partner.
- Articulation agreements exist within a context of equal access and full equity.
- Full copies must be submitted to SED for their review.
- Each agreement must be current and fit into the program approval cycle.



APPENDIX II: GLOVE TO GLOVE MENTOR PROFILE



Jessica S. Mansmith, MNA

Current Occupation: Principal Consultant, Jessica Mansmith, Inc. GHS Graduating Class: 1994

Educational Background: 1994 GHS, 1999 SUNY Albany, Bachelor of Arts, English & Fine Arts minor (3.4 GPA), 2009 University of San Francisco, Master of Arts, Nonprofit Administration (3.9 GPA)

Job Description: My consulting firm helps nonprofits with fundraising, marketing, communications, event planning, management and strategy. In the community, I volunteer as the President of the Board of Directors for an arts nonprofit and mentor a child through Big Brothers Big Sisters.

Q: How did GHS prepare you for your career?

A: Just like any other student at GHS, I had good days as well as bad. However, I also had a lot of problems at home and acted out at school, skipped classes, ignored assignments and paid the price by going to summer school every year. I was one of those bright kids you hear about: high IQ, bored with limiting coursework, dealing with emotional issues, ignored by most adults and falling through the cracks. Halfway through 11th grade, I realized that if I didn't get with the program, I was already living my future. I decided to apply myself, get involved at school and look toward attending college. If I wanted more and felt I deserved more out of life, then I had to work for more. It was that simple. Absolutely nothing was going to be handed to me on a sliver platter. This sparked a determination that shaped me over 15 years, from a student who graduated GHS as #154 out of 185 students, to earning a Master's Degree with a 3.9 GPA... in San Francisco, of all places.

My experience at GHS taught me that if I want something badly enough and I'm willing to work for it, it can be mine. When dreams or goals seem like they are out of reach, they really aren't! I just need to make a plan, be willing to take baby steps as well as giant leaps of faith, maybe go down a more twisting path than I would like, and just keep pushing forward.



