

# Rural Youth Education Project First Wave

September 2006

In 2004, the Center for Rural Pennsylvania contracted with Pennsylvania State University to begin a longitudinal study of rural Pennsylvania school students to understand their future aspirations, the factors influencing these aspirations, whether their plans change as they age, and if they attain their goals and plans. The main research questions of the study are:

- What are the educational and occupational aspirations and attainment of rural Pennsylvania students?
- What forces influence educational and occupational aspirations and attainment?
- How do aspirations change over time and what influences those changes?
- How does educational and career attainment shape decisions about where youth decide to live and their quality of life?

The study was designed to survey a sample of Pennsylvania's rural youth every two years, beginning in 2004, when the students were in the 7<sup>th</sup> and 11<sup>th</sup> grades, and continuing through 2010.

This report briefly describes the procedures used and the information collected for the first wave of the study. Changes over time are not addressed in this report.

Results from the entire study, however, will contribute to the understanding of the educational, career and residential choices of rural youth, how these are related, and how they are influenced by family, schools and communities. This information may then be used in developing effective state and local policies that aim to promote youth educational aspirations and achievement and, at the same time, promote viable rural communities where youth want to live as adults.

## Background

Understanding the educational and career aspirations of youth, the factors that shape their choices, whether they actually attain their goals, and the forces that determine their success in meeting goals is a critical issue that has become even more so in rural areas and small towns in recent decades. Youth make many important decisions as they think about the future. Plans for education and careers are two of these decisions. Educational attainment and career choice play a critical role in providing opportunities for youth throughout their adult lives.

Education provides problem-solving skills and the ability to understand and complete job-specific tasks. It also provides the basic literacy skills needed to perform day-to-day tasks, like money management, completing forms and understanding instructions on medications, that can affect quality of life. Higher levels of education can give individuals the ability to change jobs and adapt to new situations and learn new skills as technology and labor markets change and employers come and go in a rapidly restructuring economy.

Occupational or career choices determine the tasks a worker completes, shape the quality of employment experiences in terms of income and benefits, affect job satisfaction, and place young adults on a path to particular promotional opportunities and job security.

Choices about educational and career aspirations influence decisions about family formation, such as when to get married and have children and where to live as an adult. All of these decisions are shaped by each youth's own characteristics and interests, but they are also influenced by family, peers, teachers, schools, and the communities in which the youth live.

Youth in rural areas may face especially difficult decisions about educational and career goals because these decisions are intertwined with deciding where they will live. Most rural areas and small towns do not contain post-secondary educational institutions, and many cannot support a full array of occupational choices, so rural youth often need to leave their communities to pursue educational and work goals. Often, this is not the case for non-rural youth. Even though information technology may be increasing opportunities for some occupations in rural areas and small towns, youth interested in going to a four-year college and pursuing a variety of professional occupations recognize they may not be able to live in their local community if they want to achieve their goals. This prospect may be more of a concern for youth at different ages and may depend on family relationships and how attached youth are to their schools and communities.

Understanding the plans of the generation approaching adulthood is critical for the future of rural Pennsylvania and Pennsylvania in general. The future of many rural Pennsylvania communities depends on producing and retaining well-adjusted youth who develop into competent and productive adults. This can be challenging for rural communities if youth perceive local opportunities

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to be limited and limiting to life choices. It is important to understand whether youth who want to remain in their home community adjust their educational and occupational aspirations to fit jobs that are available and whether and how youth with high educational and occupational aspirations modify their expectations on where they plan to live to fit their career goals. Youth attitudes and choices that undermine educational attainment and successful entrance into the labor force must be identified because these potentially reduce long term success of the individuals, their families and the rural communities they call home.

## Methodology

To address these issues, the study is following two groups of rural students for at least eight years, collecting four waves of data. Each age group, or cohort, contributes distinct information about the study's topics of interest, and the combination of information from each cohort over time provides complete information about the educational and career aspirations and attainment of rural youth in Pennsylvania. The study simultaneously follows one cohort from the 7<sup>th</sup> grade every other year until one year after high school, and a second older cohort from the 11<sup>th</sup> grade until five years after high school. Thus, the total sample will provide data on youth from 7<sup>th</sup> grade until five years post high school. For this first phase of the study, all students were surveyed in school. A total of 1,536 rural students participated in this first wave of data. Follow-up surveys are planned for fall 2006, fall 2008 and fall 2010.

The four main tasks for this first wave were to identify a sample of rural students, develop a survey that addresses the research questions, administer the survey to a cohort of 7<sup>th</sup> and 11<sup>th</sup> grade rural students, and analyze the survey data.

- **Identify a sample of rural Pennsylvania students.** Ten school districts in rural Pennsylvania were selected to represent the range of economic and population change conditions found in rural Pennsylvania.

All 7<sup>th</sup> and 11<sup>th</sup> grade classes in the schools in those districts were surveyed. In accordance with confidentiality agreements, the school districts that participated in the study are not named in this report.

- **Develop the survey.** Two survey instruments were developed, one for 7<sup>th</sup> grade and one for 11<sup>th</sup> grade, that asked students about their educational and occupational aspirations and attainment, family formation plans, and residential preferences in adulthood. The surveys also include questions on barriers the students see in achieving their goals and questions about individual, family, school, peer, and community factors. The influence of these factors on the development of educational and career aspirations, educational and career attainment, family goals, and residential plans will be understood better as the longitudinal follow-up surveys are completed. The 7<sup>th</sup> grade survey focuses on understanding how future aspirations and plans are formed and change during adolescence. The 11<sup>th</sup> grade survey emphasizes the educational, employment and other (family formation and residential) experiences these youth are currently undergoing and those they plan to undergo in the near future.

- **Administer the survey.** The survey was administered in class to 1,536 rural Pennsylvania students; 844 in the 7<sup>th</sup> grade and 692 in the 11<sup>th</sup> grade.

- **Analyze the survey data.** Analysis in the first year was to provide preliminary information on rural Pennsylvania students, to assess the adequacy of the sample size for future analysis, and to evaluate the data collection process and the individual survey items, so that any necessary adjustments can be made in future years.

## Key Findings

### *Education, Work Aspirations and Future Residential Plans*

- **Education.** In general, at 72 percent for the 7<sup>th</sup> grade cohort and 77 percent for the 11<sup>th</sup> grade cohort,

both groups have high educational aspirations that include plans to attend either a four-year or community college. These high aspirations may be unrealistic as they are inconsistent with earlier studies that find actual educational attainment of rural youth to be lower than youth from urban areas (Haller and Virkler, 1993; McLaughlin, Blackwell and Melz, 2000). However, these prior studies use data from the 1980s, and the high aspirations observed in this study may reflect contemporary students' recognition that a high school education will not help them reach their career goals. It is telling, though, that they generally see only college as a post-secondary educational plan—only 10 percent of the 11<sup>th</sup> graders reported vocational education as an educational aspiration.

- **Work.** Managerial and professional specialty occupations were most often cited as future work plans by both cohorts. Fewer than 10 percent of all respondents saw a future in a service occupation, and even fewer saw a future in some traditional rural occupations, such as laborers, agriculture/farming, and forestry. More than half of rural youth reported significant barriers to their future work plans. Most 11<sup>th</sup> graders do not believe their local communities provide the job opportunities they desire.

- **Future residential plans.** Residential plans in adulthood are linked with perceived local job opportunities. Despite the fact that the vast majority of all students reported that their community was a good place to raise a family, few 7<sup>th</sup> grade students and even fewer 11<sup>th</sup> grade students plan to live in rural Pennsylvania as adults. This key finding suggests that the "brain drain" problem currently facing rural Pennsylvania may continue in the foreseeable future.

## *Factors Associated with Educational Aspirations*

The findings are consistent with other studies on factors that improve youth educational outcomes, including a recently released report from

Pennsylvania Partnerships for Children (2005). Family context is important. Parent's socioeconomic status (education, work) matters, as does having a positive relationship with parents that includes regular discussions about future plans (Hedlund, 1993). Studies have shown that parents who clearly communicate their educational expectations for their children, and help facilitate these expectations, have children with higher educational aspirations.

The association between youth educational aspirations and the family context is similar for both 7<sup>th</sup> and 11<sup>th</sup> grade youth, and in many cases the associations between these variables strengthens for 11<sup>th</sup> grade students. The exception is low-income status<sup>1</sup>. Low-income status is associated with lower educational aspirations for the younger cohort, but not the older cohort. The effects of low-income on child well-being outcomes is recognized to be especially pronounced during early childhood (Duncan, Yeung and Brooks-Gunn, 1998).

School and community contexts are also important because students who are involved in school and community activities have higher educational aspirations compared to those who are not involved. Having positive feelings about one's school and community is also related to higher educational aspirations. Students who like their school and their community have higher educational aspirations. In addition, students who feel their teachers care about them have higher aspirations, as do those with parents who volunteer in their school or community. According to Israel, Beaulieu and Hartless (2001), schools and communities that provide engagement opportunities and are places where students like to be, foster youth who want to continue their educational pursuits in the future.

Peer influences have long been recognized as important factors determining child behaviors (Jessor, 1998). This is especially true for adolescents who are making the transition to adulthood, creating distance from parents, and trying to establish an identity separate from their family of origin. Peers can have an enormous influence on this transition process and early adult outcomes. Findings from this study are consistent with earlier studies and reveal that peers have an important influence on rural youth educational outcomes. This is especially true for the 11<sup>th</sup> grade students. Students with peers who are engaged in "pro-social" activities, such as school activities and volunteering, have higher educational aspirations. Students with peers who engage in risk-taking behaviors, such as smoking and taking drugs, have lower educational aspirations.

### ***Factors Associated with Future Residential Plans***

Future residential plans are mostly influenced by students' perceptions of their local community as a place that would meet their adult needs—a good place to raise a family that also has adequate educational and work opportunities. Liking a community and school is also associated with

wanting to live in the community as an adult. Community and school engagement, however, is not associated with future residential plans, nor are relationships with parents or many of the peer behaviors considered in this study.

## **Methodology for Future Data Collection**

Future waves of data for this study will ask questions of the 7<sup>th</sup> grade cohort on its perceptions of the community and the formation of those attitudes. Experiences of related adults and older siblings, media influences, and shifts in the local economy are all factors that potentially shape youth attitudes and, ultimately, behaviors. The job experiences, future education, timing of family formation and other experiences of the 11<sup>th</sup> grade cohort will be carefully tracked to understand how early adult experiences influence their future residential plans and whether they remain in rural Pennsylvania.

The longitudinal nature of this study requires that the researchers keep in contact with students and their families in the project's off years. In fall 2005, the researchers sent each student a postcard requesting an address change, updating them on web site results, and reminding them that they will be contacted again in the following year.

The next wave of data collection begins in fall 2006 as follows:

- **Time line:** Surveys were revised in the spring of 2006. At the same time, school districts were contacted to set up times and dates for data collection the following school year. The goal is to have all the data collected for the second wave in September and October 2006.
- **Methodology:** The cohort sequential design outlined earlier will be followed throughout the study. With the second wave of data collection, the younger cohort will be in the 9<sup>th</sup> grade and will be surveyed in school. The small number of students who drop out between the 7<sup>th</sup> and 9<sup>th</sup> grades will be surveyed via mail or phone at home. The older cohort will be out of school for one year and will be surveyed by either mail, web or phone.
- **Expected analyses:** Analyses of the second wave of data will follow the pattern of the first, with an additional emphasis on change in attitudes, aspirations, and perceptions and the factors that influence this change. For the older cohort, the analysis will emphasize the changes that occur for youth during this time, including employment, additional schooling, family formation, and residential moves.

## **Recommendations**

The results from this study are important for the positive development of Pennsylvania's rural youth and for shaping their future plans. The conundrum is that we want rural youth to do well in school, but those who do often have to leave their rural area to further their education, and they often stay away for better job opportunities. The solution to this problem is not easy and requires an investment of time

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<sup>1</sup>In this study, the proxy measure for low-income status is a relative measure that asks the students to agree or disagree with the following statement, "My family can afford to buy things that other families can."

and resources at both the local and state levels.

Findings from this study thus far have generated two key sets of recommendations.

• **Local schools and communities.**

The first set of recommendations is for local schools and communities to help students have both high educational aspirations and high academic achievement. More than two-thirds of this study's sample reported aspirations to attend a four-year college. Future waves of data collection will show whether these aspirations are realized.

First, the researchers recommend that rural schools and communities make efforts to provide opportunities for their youth to participate in meaningful and interesting activities. Many rural communities provide these opportunities for youth, but others do not. Even among those who do, barriers, such as transportation and cost, can be prohibitive for disadvantaged youth, who are most at risk for poor school outcomes and dropping out. Students who participate in activities can gain valuable skills, engage in positive risk-taking behaviors, and connect to a social network of other involved and active youth.

Second, parent education programs, through local parent-teacher organizations or community centers, might help parents learn about the importance of talking about schooling and education with their child and even teach basic skills on how to start and maintain these conversations. Flyers and fact sheets produced by schools or other institutions are another simple and quick way to communicate important information and skills to parents.

Third, study respondents reported the high cost of education as the largest perceived barrier to their educational aspirations. Programs that help families figure out how to fund some post-secondary education and public support for higher education are necessary to facilitate educational attainment among many rural youth.

• **Building and maintaining communities.** The next set of recommendations is aimed at building and maintaining communities where young

adults want to live, work, and raise a family, and perhaps even places that attract other young adults to live and work. Perhaps, the most sobering finding of this study, is that fewer than one-third of all students in the sample have future plans to live in rural Pennsylvania. Even though they overwhelmingly viewed their local communities as good places to live and raise a family, these students do not see a future in these places, mainly

due to the perception of limited educational and career opportunities. Rural community development policy organizations need to focus on stimulating community and economic development programs that offer opportunities for young adults to live and work. Unless this occurs, rural youth will undoubtedly continue to move elsewhere, and this will likely happen among those with higher education and skill levels.

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