In popular imagination, rural places are enduring bucolic havens, harkening back to a simpler era of cohesive communities, family farming, and a slower-paced life. But today’s rural communities are far from immune to contemporary economic and social dynamics. Globalization has sent industry overseas, with many rural towns losing manufacturing plants to lower production costs in China, India, or Mexico. The farm crisis of the last quarter of the 20th century decimated family farms and the associated businesses supporting smaller-scale agriculture. Coupled with economic forces such as the recent recession, the loss of rural jobs and industries has led to diminishing tax bases—further damaging the stability of rural communities.

In this context, rural youths across the nation face a dilemma about their adult lives. If they hope to pursue postsecondary education, many must leave their local communities. After finishing school, many find that they are overqualified for jobs in their home communities. Often called “brain drain,” this dynamic fuels the exodus of young people from rural places. When “moving up means moving out,” rural youths must decide between educational and economic opportunities or attachment to their local communities.

In their recent ethnography about the outmigration of rural youths from a small midwestern town, Hollowing Out the Middle: The Rural Brain Drain and What It Means for Rural America, Carr and Kefalas (2009) show how socioeconomic status, among other factors, influences students’ decisions to remain in their local communities as adults or to leave for opportunities elsewhere.

The most striking contrast is between two groups the authors call Achievers and Stayers. Achievers tend to hail from elite and middle-class families and perform well academically. They are enthusiastically encouraged by parents and teachers to focus on high school studies, pursue higher education, and seek careers outside of their local community—which many do, even if they prefer to stay.

Stayers, on the other hand, tend to come from working-class families, often have little interest in school, and are frequently educationally neglected. They remain in their communities as adults, albeit they are often underemployed or in unstable, low-wage jobs.

Teachers in the study acknowledged that their commitment as educators was to encourage the most able students to achieve—a commitment that contributes to the outmigration of the most academically capable students as well as the underinvestment in those students most likely to remain in their rural communities.


ICF’s Attachment and Aspirations Study

The ethnography conducted by Carr and Kefalas adds greatly to our understanding of the dynamics leading to the outmigration of rural young people. Building on this research, ICF sought to explore how socioeconomic status and attachment to place influences rural youths’ educational and residential preferences across a wider geographic region. Our research questions were as follows:

- What are rural high school students’ educational and residential plans?
- What factors influence rural youths’ plans for adulthood?

Using the National Center for Education Statistics’ Common Core of Data, we identified districts with locale codes of 41 (rural fringe), 42 (rural distant), and 43 (rural remote) in eight states: Delaware, Iowa, Kentucky, New York, North Carolina, Ohio, South Carolina, and Virginia. Because we also examined the experiences of rural English Language Learners (ELL), we then selected and identified rural districts with ELL growth rates of 100% or higher between 2000–2001 and 2007–2008. Finally, we identified high schools within selected districts, for a total of 612 high schools.

In early May 2010, we contacted principals in selected schools by mail to request their participation in data collection, which included online student surveys. The surveys included a combination of closed-response options and open-ended items. The student survey also featured demographic items, a place attachment subscale, several educational aspirations and expectations questions, items about adult residential plans, a subscale assessing whether students observed the “hollowing out” dynamic, and subscales measuring eight aspects of school climate.

In mid-May 2010, we sent postcards to selected sites from which we had not yet received survey responses to request that they participate in the study. By mid-June, we had ended the first round of data collection. A second round of data collection was conducted in September 2010. Ultimately, we received responses from a total of 693 students in 18 high schools. Using SPSS software, our analyses included the calculation of descriptive statistics, such as measures of central tendency (means) and dispersion (standard deviations). We also conducted multivariate linear regression and logistic regression to explore the independent and combined effects of important variables on students’ educational and residential plans.

**What Are Rural Youths’ Educational and Residential Plans?**

The large majority (89%) of young people reported that they expected to acquire at least some level of education beyond high school. Two-thirds (66%) said they expected to earn at least a bachelor’s degree.

Rural youths who replied to our survey were moderately attached to their local communities, based on their average ratings of items comprising a scale measuring attachment to place. A mean rating of 3.28 (SD 1.04) on the 5-point scale suggests that students on average were only somewhat attached to their local communities; however, the relatively large standard deviation indicates that some

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*Strong place attachment increases the likelihood that students would prefer to live in their home communities as adults. So, too, does higher socioeconomic status.

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**Multivariate regression is a statistical technique that allows researchers to investigate the relationship between two variables while controlling for how each of these may be influenced by other variables.**

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**Figure 1: What Is the Highest Level of Education You Expect to Achieve?**

- Some high school: 10.0%
- High school diploma: 12.2%
- Some college: 10.4%
- Associate’s degree: 26.2%
- Bachelor’s degree: 27.3%
- Master’s degree: 12.5%
- Doctoral degree: 1.4%

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students were not at all attached while others were very attached. In addition, only 20% of youths in the study said they would rather live in their communities of origin than elsewhere.

What Factors Contribute to Rural Youths’ Plans for Adulthood?

When we examined the data more closely, we found some interesting relationships. Young women tended to expect to achieve higher levels of education than did young men. Not surprisingly, students with stronger grades expected to acquire more education than did those with weaker grades. Socioeconomic status also matters: the higher a student’s family’s socioeconomic status, the more education the student expects to achieve. Teachers played an important role in how much education the rural youths in our study expected to obtain. Students with high scores on the subscale that measured whether they thought their teachers had high academic expectations for them were more likely to expect to achieve high levels of education.

In terms of students’ residential preferences, strong place attachment increases the likelihood that students would prefer to live in their home communities as adults. So, too, does higher socioeconomic status—these young people, after all, tend to have had affirming experiences in their local schools and communities.

On the other hand, expectations for attaining higher educational significantly decrease the probability that the youths would prefer to remain in their communities as adults. Given that higher socioeconomic status is associated with higher educational expectations, this means that—although the rural middle-class youths who participated in our study would prefer to live in their places of origin—their high educational expectations will likely move them elsewhere.

Another interesting finding is that if young people report observing the dynamic whereby academically capable and middle-class students receive more educational encouragement than their peers (what we term the “hollowing out” dynamic), they are more likely to prefer to live elsewhere as adults. In other words, regardless of their own socioeconomic status and postsecondary expectations, rural youths in

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.419</td>
<td>.530</td>
<td>-</td>
<td>4.563</td>
<td>.000</td>
</tr>
<tr>
<td>Female</td>
<td>.433</td>
<td>.146</td>
<td>.141**</td>
<td>2.961</td>
<td>.003</td>
</tr>
<tr>
<td>Academic expectations</td>
<td>.416</td>
<td>.114</td>
<td>.172***</td>
<td>3.655</td>
<td>.000</td>
</tr>
<tr>
<td>Grades</td>
<td>.263</td>
<td>.107</td>
<td>.122*</td>
<td>2.457</td>
<td>.014</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>.177</td>
<td>.027</td>
<td>.321***</td>
<td>6.549</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p<.05 **p<.01 ***p<.001
this study report that they want to reside somewhere other than their local communities if they have seen teachers give other students differential levels of academic support based on their socioeconomic status or grades.

Table 2: Residential Preference Model 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.998</td>
<td>1.038</td>
<td>3.708</td>
<td>1</td>
<td>.054</td>
<td>.136</td>
</tr>
<tr>
<td>Place attachment</td>
<td>1.250***</td>
<td>.201</td>
<td>38.594</td>
<td>1</td>
<td>.000</td>
<td>3.491</td>
</tr>
<tr>
<td>Educational expectations</td>
<td>-.414***</td>
<td>.108</td>
<td>14.659</td>
<td>1</td>
<td>.000</td>
<td>.661</td>
</tr>
<tr>
<td>Hollowing out</td>
<td>-.604*</td>
<td>.246</td>
<td>6.028</td>
<td>1</td>
<td>.014</td>
<td>.547</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>.129*</td>
<td>.058</td>
<td>4.919</td>
<td>1</td>
<td>.027</td>
<td>1.138</td>
</tr>
</tbody>
</table>

Nagelkerke R² = .29 (p < .001). Model χ²(4, N = 693) = 75.81. % correct predictions = 81.7.

* p<.05 ** p<.01 *** p<.001

What Implications Do These Findings Have for Education Policy and Practice?

- Teachers matter, even when other factors might work against them. Our study suggests that youths whose teachers expected good things of them—and were equitable in their expectations, holding all of their students to high standards—had higher educational aspirations. This finding aligns with other recent research on the influence of school factors on rural students’ academic aspirations.7

- Gender and socioeconomic status play a role in the aspirations of the young people in our study. Girls and students from higher-income families have stronger educational aspirations. It is useful to understand that these factors are likely to work in favor of such students. But it may be even more important to focus additional efforts on boys and on youths from less advantaged families so that they, too, are able to pursue whatever postsecondary options they prefer.

- Strong educational aspirations need not necessarily herald the decline of rural populations. For example, although return migration is difficult to measure, some evidence suggests that more than 80% of migrants to high-migration rural counties are returning to their communities of origin. Such counties are still losing net population, but those returning tend largely to be natives in their late 20s and 30s who establish families and careers after acquiring education and work experience elsewhere.8 Several states facing rural population decline are leveraging this trend and are implementing various programs to entice natives to return. We also cannot ignore that some youths in our sample—particularly those with higher educational aspirations—would rather live in their home communities as adults. Although there may be various reasons for this preference (e.g., separation anxiety before leaving home for postsecondary training, college, or work; strong social networks)—considerations that could change over time as the youths age—such a preference nonetheless suggests that at least some young people will choose to remain in their home communities or to return to them later in life.

- We need to offer meaningful postsecondary and work opportunities to the young people who would prefer to remain as adults in their local communities. Although this is no easy task in an era of declining


local tax bases, state and federal budget crises, and loss of industry, rural people committed to preserving their communities and schools can accomplish a lot. One way to approach this endeavor is by linking education and the local community more tightly through place-based education,\(^9\) which allows rural schools to encourage the life of the mind without encouraging students to abandon the life of their communities. These approaches align curriculum and instruction with local community needs. For instance, students at one school in Tennessee built and now operate a greenhouse, both as a component of the school’s agricultural science program and in response to the community’s need for diversified crops stemming from declining tobacco production. In Littleton, New Hampshire, students developed a way to melt snow off roads and sidewalks by using buried pipes filled with a heating fluid, thus saving the community money and limiting the damage done by the usual snow removal methods.\(^10\) Other examples of place-based projects can be found at www.promiseofplace.org and www.pacersinc.org.

- To ensure that robust educational opportunities exist for students who do not plan to attend a 4-year college, it is also important to provide high-quality career and technical education programming; build strong relationships between local high schools and community colleges; and establish career academy, dual credit, and/or apprenticeship programs.

- Offering ample and high-quality academic options, however, is necessary but not sufficient. We must simultaneously work to ensure that rural youths will have local work opportunities. One approach to rural economic development is “economic gardening,” wherein local entrepreneurial talent is nurtured and supported by investment and gifts of land on which to build new businesses.\(^11\) Other strategies include developing partnerships between schools and local and potential businesses to provide rapid-response training, or to develop certificate or degree programs that align with regional employer needs; participation in state or regional consortia focused on improving regional markets; and creating hubs for entrepreneurial efforts or business incubators, providing office space and technical assistance for startups.\(^12\)

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