Stated Briefly **Postsecondary education expectations and attainment of rural and nonrural students**



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This study used data from the Education Longitudinal Study of 2002 to examine the postsecondary education expectations, attainment, and realization of expectations as well as reasons for not expecting to pursue postsecondary education among rural and nonrural grade 10 students in the Regional Educational Laboratory (REL) Midwest Region. The study found that in 2002, 90 percent of grade 10 students in the REL Midwest Region expected to attend college and that rural students had lower postsecondary education expectations than did nonrural students, even after student, family, teacher, and school characteristics were controlled for. The reason that both rural and nonrural students reported most frequently for not expecting to pursue postsecondary education was financial concerns. In 2012, eight years after expected high school graduation, rural and nonrural students reported similar levels of postsecondary educational attainment, with almost two-thirds of rural and nonrural students falling short of their grade 10 postsecondary education expectations.

This brief summarizes the findings of Molefe, A., Burke, M. R., Collins, N., Sparks, D., & Hoyer, K. (2017). *Postsecondary education expectations and attainment of rural and nonrural students* (REL 2017–257). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. The full report is available at https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=1465.



Institute of Education Sciences U.S. Department of Education



Why this study?

Adolescent expectations (what one thinks will happen) and aspirations (what one hopes will happen) are important precursors to students' successful transition into adult roles and to their fulfillment of adult responsibilities later in life (Blustein, 1997; Super, 1994). Postsecondary education expectations and aspirations serve as idealistic education and occupation dreams in younger children, which lay the groundwork for specific and realistic choices and goals later in adolescent life (Burnell, 2003) and are strongly associated with subsequent educational and occupational attainment (Duncan, Featherman, & Duncan, 1972; Sewell, Haller, & Ohlendorf, 1970).

Prior research shows that rural students' postsecondary education expectations and aspirations, as well as their postsecondary enrollment and persistence rates, tend to be lower than those of nonrural students (Cobb, McIntire, & Pratt, 1989; Haller & Virkler, 1993; Hansen & McIntire, 1989). These trends have been linked to rural students' lower levels of education preparation (Byun, Meece, & Irvin, 2012; Hu, 2003) and lower participation in an academically advanced school curriculum (Byun et al., 2012; Graham, 2009, Griffin, Hutchins, & Meece, 2011). The trends have also been linked to the unique cultural and social influences of rural students' communities (Haller & Virkler, 1993), the socioeconomic status of rural students' families (Deosaran, 1978; Schaefer & Meece, 2009), and their distance from postsecondary institutions (Gillie, Isenhour, & Rasmussen, 2006; Rouse, 1995; Turley, 2009).

However, much of the prior research on differences in postsecondary education expectations, enrollment, and persistence between rural and nonrural students may not apply to today's students because it uses old data or focuses on individual states or purposive samples. Meanwhile, recent policy initiatives at both the national and state levels have emphasized increasing college-going rates. Moreover, the recent rise of online learning has reduced logistical impediments to attaining a postsecondary degree, particularly for rural students, by expanding offerings of advanced college preparatory and dual credit courses in high schools and by giving students the opportunity to attain a postsecondary degree without leaving their home.

The Rural Research Alliance¹ partnered with Regional Educational Laboratory (REL) Midwest to examine the postsecondary education expectations, attainment, and realization of expectations of rural and nonrural grade 10 students in the Regional Educational Laboratory (REL) Midwest Region and in the rest of the nation. The study also examined the reasons that rural and nonrural students in the REL Midwest Region reported for not expecting to pursue postsecondary education. It used data from the Education Longitudinal Study of 2002 to address four research questions:

- 1. Do grade 10 postsecondary education expectations differ between rural and nonrural students in the REL Midwest Region? Do the differences remain after student, family, teacher, and school characteristics are controlled for? How do the differences compare with those between rural and nonrural grade 10 students in the rest of the nation?
- 2. For students who in grade 10 did not expect to pursue postsecondary education, do the reasons reported differ between rural and nonrural students in the REL Midwest Region?
- 3. Does postsecondary educational attainment, measured eight years after expected high school graduation, differ between rural and nonrural students in the REL Midwest Region? Do the differences remain after student, family, teacher, and school characteristics are controlled for? How do the differences compare with those between rural and nonrural grade 10 students in the rest of the nation?

4. Does the realization of grade 10 postsecondary education expectations, measured eight years after expected high school graduation, differ between rural and nonrural students in the REL Midwest Region? Do the differences remain after student, family, teacher, or school characteristics are controlled for? How do the differences compare with those between rural and nonrural grade 10 students in the rest of the nation?

The findings from this study may inform policy and practice for improving postsecondary attainment and success among rural students in the REL Midwest Region. See box 1 for a brief description of the data and measures used in the study.

Box 1. Data and key measures

All analyses presented in this brief are based on data from the Base Year Restricted-Use Data File and Third Follow-up Restricted-Use Data File of the National Center for Education Statistics Education Longitudinal Study of 2002, which surveyed a nationally representative sample of grade 10 students in 2002 and then administered follow-up surveys to the same students in 2004, 2006, and 2012, eight years after expected high school graduation. The current study used data from the base-year survey and the 2012 follow-up survey. In the base year students also were administered cognitive tests in math and reading, and in the base year and first follow-up year (2004) their parents, math and English teachers, and high school principals were also surveyed.

The study team examined relationships between four outcome measures and two predictor variables, and included four categories of control variables.

The four outcomes were constructed from study participants' responses to the Education Longitudinal Study of 2002 surveys:

- Postsecondary education expectations. Grade 10 students chose one of seven options in response to the question "As things stand now, how far in school do you think you will get?" The study team collapsed the responses into four categories: 1 = high school or less (less than high school graduation, high school graduation, or general equivalency diploma), 2 = some college (attend college or complete an associate's degree but not complete a bachelor's degree), 3 = bachelor's degree, 4 = master's degree or higher (attain a master's degree or other advanced degree).
- Reason for not expecting to pursue postsecondary education. Grade 10 students in 2002 who indicated that
 they did not expect to pursue postsecondary education responded to the question "Which of the following
 are reasons why you have decided NOT to continue your education past high school?" The study team
 collapsed responses into four categories: 1 = financial concerns (I cannot afford to go on to school; I need
 to help support my family; I'd rather work and make money than go to school), 2 = does not need further
 education (I will not need more education for the career I want; I plan to be a full-time homemaker), 3 = not
 interested in school (I do not like school; I do not feel that going to school is important), 4 = insufficient
 grades (my grades are not high enough).
- Postsecondary educational attainment. Study participants chose one of 10 options in response to a question about the highest level of education attained as of 2012. The study team collapsed the responses into the same four categories used for postsecondary education expectations.
- *Realization of postsecondary education expectations.* The study team compared students' postsecondary educational attainment as of 2012 with their grade 10 expectation. Results were sorted into three categories: 1 = attainment fell short of expectation, 2 = attainment matched expectation, 3 = attainment exceeded ed expectation.

The two predictor variables used in the study were:

• School locale. School locale (rural or nonrural) was based on National Center for Education Statistics urban-centric locale codes. Schools with urban, suburban, or town locale codes were classified as nonrural, and schools with the rural locale code were classified as rural.

Box 1. Data and key measures (continued)

• *Region.* Region (REL Midwest Region or rest of the nation) was based on the location of the student's school. The REL Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. The rest of the nation comprises the remaining 43 states plus the District of Columbia.

The four categories of control variables used in the study were:

- *Student characteristics.* Gender, race/ethnicity, rating of the importance of staying close to home, average grade 10 math and reading scores, and type of high school program (general, vocational, or college preparatory).
- *Family characteristics.* Household socioeconomic status (an average of five measures: father's education and occupation, mother's education and occupation, and family income), parents' education aspirations for their child, parent involvement at home, and parent involvement at school.
- Teacher characteristics. Teachers' postsecondary education expectations for the student.
- School characteristics. School average of math and reading composite scores, percentage of racial/ethnic minority students, percentage of students eligible for the federal school lunch program, and school average of household socioeconomic status (defined above).

What the study found

In 2002, 90 percent of grade 10 students in the REL Midwest Region expected to attend college, but rural students had lower postsecondary education expectations. The reason that both rural and nonrural students reported most frequently for not expecting to pursue postsecondary education was financial concerns. Ten years after they were first interviewed, rural and nonrural students reported similar levels of postsecondary educational attainment, and almost two-thirds of them had fallen short of their grade 10 expectations. Student and family characteristics and teacher expectations were more predictive of students' expectations and attainment than was the locale (rural or nonrural) or region (REL Midwest Region or the rest of the nation) of the high schools they attended. In particular, higher expectations predicted higher attainment. However, more research is needed to understand the nature of these relationships.

In 2002 grade 10 students attending rural schools in the Regional Educational Laboratory Midwest Region had lower postsecondary education expectations than did their nonrural peers

Regardless of school locale, 90 percent of students in the REL Midwest Region expected to go to college. However, rural students tended to have lower postsecondary education expectations than did nonrural students (figure 1). The percentage of students who expected to attend some college but not complete a bachelor's degree was 9 percentage points higher among rural students (20 percent) than among nonrural students were (11 percent), but the percentage who expected to attain a master's degree or higher was 13 percentage points lower among rural students (29 percent) than among nonrural students (42 percent).

Before student, family, teacher, and school characteristics were controlled for, rural grade 10 students in the REL Midwest Region were less likely than their nonrural peers to expect to complete a bachelor's degree relative to attending some college, to expect to attain a master's degree or higher relative to attending some college, and to expect to attain a master's degree or higher relative to completing a bachelor's degree (table 1, baseline model). When student, family, teacher, and school characteristics were controlled for, rural grade 10 students in the REL Midwest Region remained less likely than nonrural students to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree or higher relative to completing a bachelor's degree (see table 1, full model). But rural status was no longer significantly associated with the likelihood of expecting to complete a bachelor's degree relative to attending some college.

Figure 1. Among grade 10 students in the Regional Educational Laboratory Midwest Region in 2002, 20 percent of rural students and 11 percent of nonrural students expected to attend some college but not complete a bachelor's degree



Note: The Regional Educational Laboratory Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Percentages are weighted and unadjusted for clustering and student, family, teacher, and school characteristics. To comply with National Center for Education Statistics reporting requirements on restricted-use data files and to ensure that reported subgroup counts sum to the total count, student counts are rounded to the nearest ten. The pairwise rural–nonrural difference for some college and for master's degree or higher was statistically significant at p < 0.5 after adjustments for multiple comparisons. **Source:** Authors' calculations based on data from the Education Longitudinal Study of 2002 Base-Year Restricted-Use Data File.

Before student, family, teacher, and school characteristics were controlled for, rural students in the REL Midwest Region had lower postsecondary education expectations than did rural students in the rest of the nation. Specifically, rural students in the REL Midwest Region were less likely than rural students in the rest of the nation to expect to attain a master's degree or higher relative to attending some college and to expect to attain a master's degree relative to completing a bachelor's degree. But after student, family, teacher, and school characteristics were controlled for, these regional variations between the REL Midwest Region and the rest of the nation became statistically insignificant.

Statistically significant predictors of students' postsecondary education expectations included student characteristics, family characteristics, and teachers' postsecondary education expectations for the student. Among student characteristics, being female, having a higher academic performance, and participating in a college preparatory curriculum were associated with higher postsecondary education expectations. Parents' education aspirations for their child and teachers' postsecondary education expectations for the student were also both positively associated with students' postsecondary education expectations. None of the school characteristics considered was a statistically significant predictor of students' postsecondary educations.

The reason that both rural and nonrural grade 10 students in the Regional Educational Laboratory Midwest Region in 2002 reported most frequently for not expecting to pursue postsecondary education was financial concerns

The reason that grade 10 students in the REL Midwest Region in 2002 reported most frequently for not expecting to pursue postsecondary education was financial concerns. Although the overall distribution of reasons differed significantly between rural and nonrural students, none of the rural–nonrural percentage

 Table 1. Odds ratios (rural to nonrural) of postsecondary education expectations in 2002 among

 grade 10 students in the Regional Educational Laboratory Midwest Region, baseline and full models

Contrast	Baseline model (Rural, region, rural by region interaction)	Full model (Rural, region, rural by region interaction, plus student, family, teacher, and school characteristics)
Some college relative to high school or less	ns	ns
Bachelor's degree relative to high school or less	ns	ns
Master's degree or higher relative to high school or less	ns	ns
Bachelor's degree versus relative to college	0.66*	ns
Master's degree or higher relative to some college	0.41*	0.64*
Master's degree or higher relative to bachelor's degree	0.62*	0.75*

* Statistically significant at p < 0.05.

ns is not statistically significant.

Note: The Regional Educational Laboratory Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Sample size: n = 2,140 (rural: 570; nonrural: 1,570). To comply with National Center for Education Statistics reporting requirements on restricted-use data files and to ensure that reported subgroup counts sum to the total count, student counts are rounded to the nearest ten. The odds ratio is the ratio of the odds of a rural student choosing a particular category of expectations relative to the odds of a nonrural student choosing the category. An odds ratio of 1 indicates that rural and nonrural students are equally likely to choose the category. An odds ratio of less than 1 indicates that rural students are less likely than nonrural students to choose the category. An odds ratio is from 1, the stronger the relationship between school locale and education expectations. For example, a rural-to-nonrural odds ratio of 0.66 means that rural students have 44 percent ([odds ratio -1] × 100) lower odds than do nonrural students, while a rural-to-nonrural odds ratio of 1.58 means that rural students have 58 percent higher odds than do nonrural students.

Source: Authors' calculations based on data from the Education Longitudinal Study of 2002 Base-Year Restricted-Use Data File.

differences for each of four categories of reasons was statistically significant.² In particular, the 12 percentage point difference in the rate at which rural students (88 percent) and nonrural students (76 percent) reported financial concerns was not statistically significant.

The order of the remaining reasons differed between rural and nonrural students (figure 2). After financial concerns, rural students reported lack of need for further education (61 percent), lack of interest (60 percent), and perceived inadequate academic ability in high school (46 percent). Nonrural students reported perceived inadequate academic ability as the second most common reason (63 percent), followed by lack of interest (59 percent) and lack of need for further education (51 percent).

Rural and nonrural students in the Regional Educational Laboratory Midwest Region who were in grade 10 in 2002 had similar levels of postsecondary educational attainment in 2012, eight years after expected high school graduation

Before student, family, teacher, and school characteristics were controlled for, the overall distribution of postsecondary educational attainment in 2012 differed significantly between rural and nonrural students in the REL Midwest Region who were in grade 10 in 2002. However, rural–nonrural comparisons in specific categories of postsecondary educational attainment revealed no statistically significant differences in the rates at which rural and nonrural students attained any of them (figure 3).

After background characteristics were controlled for, rural and nonrural students still had similar educational attainment levels, both in the REL Midwest Region and in the rest of the nation.

The characteristics of students who were in grade 10 in 2002 and their teachers' education expectations for them were associated with their postsecondary educational attainment in 2012. After student, family, teacher, and school characteristics were controlled for, students who expected to attend some college were

Figure 2. Among grade 10 students in the Regional Educational Laboratory Midwest Region in 2002 who expected not to pursue postsecondary education, 88 percent of rural students and 76 percent of nonrural students reported financial concerns as the reason



Note: Respondents could choose more than one reason. The Regional Educational Laboratory Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Percentages are weighted and unadjusted for clustering and student, family, teacher, and school characteristics. To comply with National Center for Education Statistics reporting requirements on restricted-use data files and to ensure that reported subgroup counts sum to the total count, student counts are rounded to the nearest ten. The overall chi-squared test of equality of distributions of reasons between rural and nonrural students was statistically significant at p < .05, but none of the rural–nonrural differences in each category of reason was statistically significant at p < .05 after adjustments for multiple comparisons.

Source: Authors' calculations based on data from the Education Longitudinal Study of 2002 Base-Year Restricted-Use Data File.

more likely to have attended some college or completed a bachelor's degree than were students who expected to complete high school or less. Students who expected to complete a bachelor's degree were more likely to have attended some college or completed a bachelor's degree than were students who expected to complete high school or less. And students who expected to attain a master's degree or higher were more likely to have attended some college, completed a bachelor's degree, or attained a master's degree or higher than were students who expected to complete high school or less.

Being female, having higher academic achievement, participating in a college preparatory program, and having higher socioeconomic status were also associated with higher postsecondary educational attainment. When other background characteristics were controlled for, Black, Hispanic, and Asian students had higher educational attainment than did White students. While teachers' education expectations for their grade 10 students were positively associated with students' postsecondary educational attainment, parents' aspirations for their children and students' attainment were generally were not related.

Almost two-thirds of rural and nonrural students in the Regional Educational Laboratory Midwest Region who were in grade 10 in 2002 had postsecondary educational attainment in 2012 that fell short of their expectations

Rural and nonrural students in the REL Midwest Region had similar patterns in the realization of postsecondary education expectations. In 2012, 60 percent of rural students and 63 percent of nonrural students had fallen short of their expectations in 2002; 32 percent of rural students and 29 percent of nonrural students had matched their expectations; and 8 percent of rural students and 7 percent of nonrural students had exceeded their expectations (figure 4). None of the rural–nonrural differences in the realization of

Figure 3. By 2012, 55 percent of rural students and 50 percent of nonrural students who were in grade 10 in the Regional Educational Laboratory Midwest Region in 2002 had gone to college but not completed a bachelor's degree



Note: The Regional Educational Laboratory Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Percentages are weighted and unadjusted for clustering and student, family, teacher, and school characteristics. To comply with National Center for Education Statistics reporting requirements on restricted-use data files and to ensure that reported subgroup counts sum to the total count, student counts are rounded to the nearest ten. The overall chi-squared test of equality of distributions of attainment between rural and nonrural students was statistically significant at p < .05, but none of the rural–nonrural differences in each category of attainment was statistically significant at p < .05 after adjustments for multiple comparisons.

Source: Authors' calculations based on data from the Education Longitudinal Study of 2002 Third Follow-up Restricted-Use Data File.

postsecondary education expectations was statistically significant. The findings were similar after student, family, teacher, and school characteristics were controlled for. Likewise, rural–nonrural differences did not differ between the REL Midwest Region and the rest of the nation.

Implications of the study findings

This study found that approximately 90 percent of rural and nonrural students in the REL Midwest Region expected to attain at least some college and that approximately 70 percent of rural students and 80 percent of nonrural students in the REL Midwest Region in 2002 expected to attain a bachelor's degree or higher. However, 10 years later, approximately 60 percent of rural and nonrural students in the REL Midwest Region fell short of their postsecondary education expectations. This result is consistent with prior research that has found a large gap between students' postsecondary expectations or aspirations and attainment (Roderick, Nagaoka, Coca, & Moeller, 2008; Venezia, Kirst, & Antonio, 2003).

Given the constraints of the dataset analyzed for this study, it is not possible to probe more deeply into why rural and nonrural students fell short of their postsecondary education expectations. Students may lack knowledge of the postsecondary pathways that would lead to a career that matches their interest and abilities. As a result, their postsecondary expectations may be misaligned to their career goals (for example, they may expect to attain a bachelor's degree when their career goals require only an associate's degree or certificate). Educators at the secondary level may consider working with students to set career goals, providing students with information about postsecondary pathways that will enable them to meet those goals, and providing students with information about the requirements of those pathways (for example, the

Figure 4. In 2012, 60 percent of rural students and 66 percent of nonrural students in the Regional Educational Laboratory Midwest Region who were in grade 10 in 2002, had postsecondary educational attainment in 2012 that fell short of their expectations



Note: The Regional Educational Laboratory Midwest Region comprises seven states: Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Percentages are weighted and unadjusted for clustering and student, family, teacher, and school characteristics. To comply with National Center for Education Statistics reporting requirements on restricted-use data files and to ensure that reported subgroup counts sum to the total count, student counts are rounded to the nearest ten. Neither the overall chi-squared test of equality of distributions of realization between rural and nonrural students nor the rural–nonrural differences in each category of realization were statistically significant at p < .05 after adjustments for multiple comparisons.

Source: Authors' calculations based on data from the Education Longitudinal Study of 2002 Base-Year Restricted-Use Data File and Third Follow-up Restricted-Use Data File.

courses students could expect to take, how much it costs to complete the pathway, and what financial aid options are available).

Alternatively, students may not have the academic skills, financial resources, or motivation to complete the postsecondary pathway in which they enroll. Educators at the postsecondary level may consider working with students to address barriers to realizing their postsecondary education expectations. For example, some colleges use first-year experience courses to help students develop academic skills (such as time management and study skills) and foster a sense of belonging on campus. A recent What Works Clearing-house (2016) review of first-year experience courses suggested that such courses can help students attain the credits needed to complete their degree.

Future research could help guide policymakers' and educators' efforts by focusing on why rural and nonrural students fail to realize their postsecondary education expectations. Potential reasons include enrolling in a four-year college but not persisting, changing career aspirations after grade 10 and instead enrolling in a two-year college, realizing that postsecondary education expectations were misaligned with career goals, or not being prepared to meet the academic demands of their chosen pathway. The Education Longitudinal Study of 2002 was not designed to address these questions. Future research could consider developing surveys that uncover nuanced information about the barriers students face in realizing their postsecondary education expectations.

Limitations of the study

The analysis and the Education Longitudinal Study of 2002 have several limitations. First, this study is correlational. The relationships described in this brief originated from a study design that does not identify causal relationships. Second, although the study considered numerous factors commonly thought to affect the outcomes, these variables represent only a small subset of the many measures available in the Education Longitudinal Study of 2002 data. It is thus possible that the statistical relationships (or lack thereof) found in this study are artifacts of the effects of other factors that were not considered. Also, distinctions between urban and rural areas are not always clearly defined and may not adequately separate all schools in truly rural communities from all schools in truly nonrural communities. Moreover, all rural communities are not equal in composition or resources; there may be variation in education expectations and attainment across rural communities in both the REL Midwest Region and the rest of the nation. Finally, aggregating all regions outside the REL Midwest Region into "the rest of the nation" results in a heterogeneous region that masks rural–nonrural differences across the different areas within the region.

Notes

- 1. The Rural Research Alliance is made up of six members from six REL Midwest Region states (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) and includes directors of national and local rural associations and collaboratives, administrators of cooperative educational service agencies, college faculty members, and school district directors.
- 2. It is not uncommon for a variable to have a statistically significant overall test of equality of distributions across groups but no statistically significant differences across groups at each category of the variable. One reason is that the latter comparisons adjust for the number of comparisons being made by requiring more stringent thresholds for declaring statistical significance.

References

- Blustein, D. L. (1997). A context-rich perspective of career exploration across the life roles. Career Development Quarterly, 45(3), 260–274. http://eric.ed.gov/?id=EJ551754
- Burnell, B. A. (2003). The "real world" aspirations of work-bound rural students. *Journal of Research in Rural Education*, 18(2), 104–113. http://eric.ed.gov/?id=EJ785692
- Byun, S., Meece, J. L., & Irvin, M. J. (2012). Rural–nonrural disparities in postsecondary educational attainment revisited. *American Educational Research Journal*, 49(3), 412–437. http://eric.ed.gov/?id=EJ968047
- Cobb, R. A., McIntire, W. G., & Pratt, P. A. (1989). Vocational and educational aspirations of high school students: A problem for rural America. *Journal of Research in Rural Education*, 6(2), 11–16. http://eric.ed.gov/?id=EJ407455
- Deosaran, R. A. (1978). Social class and academic guidance: A social-psychological analysis. Canadian Journal of Behavioural Science, 10(3), 239–247.
- Duncan, O. D., Featherman, D. L., & Duncan, B. (1972). Socioeconomic background and achievement. New York, NY: Seminar Press.
- Gillie, S., Isenhour, M., & Rasmussen, K. (2006). College access in Indiana and the United States 2006. Washington, DC: Indiana Pathways to College Network, Institute for Higher Education Policy.
- Graham, S. E. (2009). Students in rural schools have limited access to advanced mathematics courses. Durham, NH: University of New Hampshire, Carsey Institute. http://eric.ed.gov/?id=ED535960
- Griffin, D., Hutchins, B. C., & Meece, J. L. (2011). Where do rural high school students go to find information about their futures? Journal of Counseling & Development, 89(2), 172–181. http://eric.ed.gov/ ?id=EJ930514
- Haller, E. J., & Virkler, S. J. (1993). Another look at rural-nonrural differences in students' educational attainments. *Journal of Research in Rural Education*, 9(3), 170–178.
- Hansen, T. D., & McIntire, W. G. (1989). Family structure variables as predictors of educational and vocational aspirations of high school seniors. *Research in Rural Education*, 6(2), 39–49.
- Hu, S. (2003). Educational attainments and postsecondary access and choice: Students in urban, suburban, and rural schools compared. *Education Policy Analysis Archives*, 11(14), 1–11. Retrieved March 19, 2016, from http://epaa.asu.edu/ojs/article/viewFile/242/368.
- Roderick, M., Nagaoka, J., Coca, V., & Moeller, E. (2008). From high school to the future: Potholes on the road to college. Chicago, IL: University of Chicago Consortium on Chicago School Research. http://eric.ed.gov/ ?id=ED500519
- Rouse, C. E. (1995). Democratization or diversion? The effect of community colleges on educational attainment. *Journal of Business & Economic Statistics*, 13(2), 217–224.

- Schaefer, V. A., & Meece, J. I. (2009). Facing an uncertain future: The educational attainments and achievement of rural youth. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Sewell, W. H., Haller, A. P., & Ohlendorf, G. W. (1970). The education and early occupational status achievement process: Replication and revision. *American Sociological Review 35*(6), 1014–1027.
- Super, D. E. (1994). A life span, life space perspective on convergence. In M. L. Savickas & R. W. Lent (Eds.), *Convergence in career development theories* (pp. 63–74). Palo Alto, CA: CPP Books.
- Turley, R. N. (2009). College proximity: Mapping access to opportunity. Sociology of Education, 82(2), 126–146. http://eric.ed.gov/?id=EJ889295
- Venezia, A., Kirst, M. W., & Antonio, A. L. (2003). Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations. Palo Alto, CA: Stanford Institute for Higher Education Research.
- What Works Clearinghouse. (2016, July). Supporting postsecondary success intervention report: First year experience courses. Washington, DC: Author. http://eric.ed.gov/?id=ED567213

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