

Impoverished Students Academic Promise in

10 Lessons From Pr

What can we do to improve the lives of rural students with high abilities who are in environments of poverty? How can we increase the odds that these students can enter and be successful in college and subsequently break away from the limitations poverty imposes?

Project Aspire, funded by a Jacob K. Javits federal grant, sought to answer these questions by increasing the number and success of rural students from poverty in rigorous courses. Professional development opportunities were provided for the counselors of schools affiliated with Project Aspire. This article describes Project Aspire and its foundations; the relevant lessons learned from the literature on poverty, small schools, rural schools, and gifted education; and the lessons learned from the counselors who work with students in these environments. These lessons are about what we know of the difficulties high-ability students of poverty face and how school personnel might assist these students more effectively. If the academic talent of these students is nurtured and developed, it will assist them in gaining the level of

education needed to break free of the bonds of poverty.

Cross and Coleman's (2005) school-based conception of giftedness (SCG) served as the foundation for Project Aspire. In this model young children may be thought of as gifted if they possess certain learning characteristics such as rapid learning, complex thinking, and/or creativity. These children have the potential for later high performance or accomplishment in academic domains. However, in order for them to demonstrate that high level of performance during adolescence and beyond, the school must provide them with opportunities for advanced and challenging work. The students must then "seize" such opportunities in order to become independent learners. Students with potential need challenging academic work during the elementary school years to be prepared to take advantage of advanced opportunities during their adolescent years. In homes with the benefit of higher socioeconomic status and/or higher level of parent education, the young child with high potential may be provided with early intellectual stimulation, outside enrichment opportunities, and resources to develop indepen-

dent learning. Not all students experience such advantages. It is vital that schools provide advanced educational options in grades K–12 because these are likely the only opportunities for gifted students from poverty to develop their talents.

Project Aspire was also based on findings from Adelman's (1999) analysis of longitudinal data for a national cohort of 10th-grade students until they were age 30. The study, not restricted by ability, found rigorous academic preparation in high school was the most accurate predictor of bachelor degree attainment. The academic resource component consisted of academic intensity and quality of the curriculum, test scores, and grade point average (GPA); of those, "intensity and quality" of the high school curriculum emerged as more important than either test scores or GPA in predicting college graduation. The curricular component itself examined the number of units of English, math, science, social studies, and foreign language as one element, the highest level of math completed as another, and the number of Advanced Placement (AP) courses as the third. Finishing a course in trigonometry or precalculus more than doubled the



nts With n Rural Settings: oject Aspire

by Virginia H. Burney
and Tracy L. Cross

odds that a student who entered college eventually graduated. In looking at Advanced Placement, students who had taken no AP courses completed a bachelor's degree at a rate of 33%; those who had completed one AP course completed college at a rate of 59%; and those who had taken two or more AP courses completed a 4-year degree at a rate of 76%. The only demographic variable that proved important in the study was socioeconomic status (SES), but it was much less important to eventual completion after the first year of college; high school academic resources was a stronger variable than SES in explaining what makes a difference in degree completion. Students from the lowest SES quintiles who had the best academic preparation earned bachelor's degrees at a higher rate than most students from the highest SES quintile without such preparation. Collectively, these findings build a powerful argument for identifying capable students from all demographic groups and providing them with advanced curriculum. In fact, Adelman indicated that the most important component over which we have control is to ensure students have the opportunity to learn challenging

material and to ensure that they take advantage of that opportunity.

With the above foundation, Project Aspire was created to identify poor rural students with academic potential and to provide them with academic and counseling support in AP courses and their prerequisites. AP courses were provided to the schools through distance learning. Teams of teachers by subject area from grades 7–12 were trained to provide continuity in techniques of critical thinking and approach in order to help students prepare in a systematic way for eventual success in AP courses. Counselors were provided with professional development to enhance their knowledge of low-income and high-ability students and their needs. Professional development and support were provided for the 21 school counselors in the 14 rural school corporations with significant incidence of poverty. The first lessons learned were from reviewing the literature and the authors' professional experience; the later lessons presented are from conversations with the counselors about that literature and how it applied to their experiences and settings. Each of the lessons is described below in detail.

Lessons Learned

Lesson 1: The rural population is difficult to define and is not homogeneous. According to the National Center for Education Statistics (2001) using locale codes, about 10% of U.S. public school students were in rural schools not located near any metropolitan area and another 10% attended schools in areas with a town, but were not located near any metropolitan area. The same report showed 55% of all public school districts in the United States were in these small towns or rural locations not near metropolitan areas. Three states had no districts in these areas, and others had hundreds of such districts. We found that even defining the term *rural* was not entirely clear. At least three major coding systems are used to determine the type of classification a geographic area receives. One system does not specifically identify small towns and uses one classification for an entire county; one type does not have an exact definition of rural; and the third is used by the National Center for Education Statistics but applies a single code for an entire school district (National

Center for Education Statistics, n.d.). As an illustration, a recent report, *Why Rural Matters* from the Rural School and Community Trust (Malhoit, 2005), differed in the statistics it offered from those listed above. Some groups include only rural areas, without considering how near they might be to a metropolitan area, and some literature includes small towns with rural areas because of the similarity in population density. Regardless of the issues in finding and comparing data that relate exactly to students in small towns or rural areas, it was clear that while the total number of students attending rural schools was a fairly small percentage of all U.S. students, the majority of school districts in the United States were not located near the resources of larger metropolitan areas. In addition, the issues relating to educating students in small and/or rural schools did not affect all states equally.

The situation described above illustrates the limitations of national statistics; such statistics may mask significant differences in characteristics and challenges faced by students in rural schools. Fasko and Fasko (1998) noted that rural and small town communities vary on dimensions of racial composition, religion, socioeconomic status, social structure, values, and source of local employment. As such, small and rural schools remain difficult to categorize fully, and local initiatives need to be determined according to each local context. For those accustomed to working with students with high ability, the challenge rings familiar: to work effectively with students already out of the mainstream, one must tailor services to meet individual needs. Although one can attempt to describe general characteristics of gifted adolescents or rural schools, tremendous individual variation exists, resulting in the need

for unique solutions for individuals and settings.

As with gifted children and their needs, myths and misconceptions related to the homogeneity of rural schools also prevail. For example, crime and drug abuse are presumed to be less prevalent in rural areas, but recent statistics indicate that rural areas face increasing challenges from drug use and crime. Adolescents in rural areas and towns not near metropolitan areas were found as likely or more likely to abuse substances as teens in metropolitan areas (National Center on Addiction and Substance Abuse, 2000; Scheer, Borden, & Donnermeyer, 2000). The Project Aspire counselors emphasized the increasing problem of methamphetamine labs operating in their rural areas. Indeed, rural areas are well-suited for this drug due to the greater ease of hiding such labs and the accessibility of the ingredients used in production (e.g., anhydrous ammonia). To define or characterize rural areas as not having the problems of drug use and crime facing urban areas is erroneous. The above issues convey the problems in defining what constitutes "rural" and illustrate the heterogeneity of rural environments.

Lesson 2: Much remains unknown about poverty in rural areas and the gifted children it affects. Another look at statistics is needed when evaluating poverty. We found that nearly 40% of all students in the United States qualified for Free or Reduced Price Lunches (F/RL) in 2003; 38% were eligible for F/RL in areas considered rural by the National Assessment of Educational Progress (National Center for Education Statistics, 2003). While a considerable research bank on students from economic disadvantage exists, relatively little research has been conducted specifically with students of poverty in rural settings.

Most of the research has focused on poverty in combination with minority populations and/or urban settings. Rural schools with the combination of high populations of poverty and little racial or ethnic diversity have not been studied in depth. Sherwood (2001) summarized this problem by saying, "Time and again, rural areas have been declared the orphaned 'stepchild' of the national education research program, which has largely failed to adequately identify and address conditions specific to them" (p. 1).

Not surprisingly, little research has examined the combination of rural and/or small towns, poverty, and high-ability or gifted students. Indeed, looking at two recent and lengthy reports focusing on issues for high-quality education in rural schools, the word *gifted* or the term *high ability* was never mentioned (Johnson & Strange, 2005; Malhoit, 2005). The field of gifted education has produced some research, but researchers examining poverty or rural schools have been silent on high-ability learners. We need more information on this combination of characteristics. This is a special population and we must learn the most effective ways to develop the talent that is present within it.

Lesson 3: Small schools, small towns, or rural areas have both advantages and disadvantages for students, including the gifted. Cotton (1996) performed a synthesis of 103 research studies and reviews related to school size and found benefits of small schools to students, as well as teachers. Students in smaller schools experienced more positive attitudes about school, higher academic self-concepts, at least equal academic achievement, fewer disciplinary incidents, better attendance, higher participation rates in extracurricular activities, lower drop-out rates, and

a greater sense of belonging. Gifted students from rural areas viewed the competition for valedictorian as positive, while gifted students from larger school settings described feelings of greater anxiety and stress (Cross & Stewart, 1995). A family-like atmosphere of school is often described by gifted students in small rural schools (Cross, Coleman, & Stewart, 1993). Gifted students in rural high schools did not experience the stigma of giftedness (Coleman, 1985), as others often identified them with their extracurricular activities instead of just their academic talent. Cross and Dixon (1998) found gifted students in these environments were less likely to be seen in the one dimension of giftedness but rather as a composite of their activities and talents. These positive experiences allowed the gifted student in a small or rural high school greater social latitude than gifted students from larger schools.

On the other hand, students of high ability in small or more isolated schools also have a smaller number of academic and/or social peers. Providing challenging curriculum in these environments may require different models, approaches, and options than serving gifted students in larger or urban environments (Colangelo, Assouline, & New, 1999). Because of the small number of professional staff in these districts and the small number of students with these special learning needs, teachers and administrators are less likely to have the special training required to adequately plan for needed services. In a review of the literature, Cross and Dixon (1998) noted that providing services to gifted students in rural areas may be complicated by a lack of proximity to resources, limited access to academic materials, fewer choices of advanced courses, and extended travel time to attend

afterschool opportunities. So, while gifted students in small towns or rural areas may have more opportunities to be treated as individuals, the geographic distance from advanced resources may be a roadblock in their talent development.

Lesson 4: Identifying and serving gifted rural students from poverty requires consideration of their differing circumstances and values. Identification protocols often use standardized achievement measures and do not begin to find students until third or fourth grade, by which time achievement gaps between income groups may be wide. Students with high ability who did not have access to reading materials or someone to nurture their academic readiness in the preschool and primary years are at a disadvantage for identification. Program designers may want to consider nonverbal measures and performance assessments in an early identification schema to find and nurture talent that occurs in children of poverty.

In addition to issues with identification, children from poverty may also experience challenges resulting from limited resources when participating in gifted programs. For example, programs and class assignments for high-ability students usually involve more project work that requires supplies, more research, more group work outside of class time, and more trips to other locations for field trips or contests. Library and Internet access, computers, printers, and photocopying enhance a student's ability to produce a professional product. Additionally, students need transportation and pocket money for admissions and meals while at these locations. Program facilitators may need to carefully review services to ensure the availability of necessary

resources for all students to fully participate.

Opportunities located beyond the school campus or outside the parameters of the school day may exclude participation of children of poverty living in rural areas. For example, magnet programs, university programs, or academic contests may not be realistic options for these students. Slocumb and Payne (2000) noted that friends and family of the gifted child of poverty may not be a part of the advanced academic scene, so the child may elect not to participate in order to preserve his or her group identity.

Ruby Payne (1998) proposed that the culture of poverty may have a differing value structure that must be understood by school personnel if we are to help poor students break free of their limitations. Poor students' language and response to correction may be different from that of other students, and we may need to teach them responses that will further their opportunities. When trying to plan opportunities for academic support, we must be mindful of transportation availability and students' responsibilities for siblings. Materials with which to work and a quiet, orderly place to study in the home may not be available. The poor often survive in the present and planning for college may be too remote, distant, and unlikely to have much meaning. Relationships take on added significance and school personnel may want to cultivate a positive, personal relationship with students from poverty and their parents. The counselors from Project Aspire validated these underpinnings of poverty while affirming their own need to remind themselves that some students have never shared the middle class values held dear by most school personnel. These students may not have been

taught the benefits of delayed gratification, goal setting, respect for teachers, the importance of education, and career planning that are more common in the middle class.

Lesson 5: Rural high-ability students may lack foundation for success in advanced courses. Counselors from Project Aspire schools reported that some of their students resisted taking courses that demanded significant outside preparation and intensive study (Cross & Burney, 2005). If these students did not have a history of appropriately challenging class work, they resented a new demand on their time. Many of them held part-time jobs or family responsibilities that required their attention during afterschool hours. Often, their friends were not involved in advanced courses and taking the less challenging option had social appeal. Some parents looked unfavorably upon the expectation that the student would work “overtime” for no apparent immediate benefit. Few, if any, high-achieving students are available to serve as models of rigorous study. The lack of a critical mass of high-achieving students illustrates the need to begin developing academic talent early in the elementary grades. Challenging work inside the classroom and within homework is more likely to be accepted if it has been the expectation since the early school years. More students would achieve at higher levels, making it less unusual to be in advanced courses. This problem is not confined to students of poverty or rural areas, but it affects them as well.

The counselors reported few students from their schools had ever achieved recognition from the National Merit Scholarship Competition or the Advanced Placement Scholars Recognition, or had applied successfully to highly

selective postsecondary programs. Consequently, counselors did not have much experience with advising highly qualified students applying for highly selective postsecondary options. This is unfortunate, as the counselor may be unfamiliar with the extensive demands and competitive nature of that admissions process. The lack of foundational experiences, as highlighted above, places another number of obstacles before rural students as they try to succeed in advanced courses.

Lesson 6: School climate and policies may inhibit academic advancement. More rigorous courses may require too much preparation time for some teachers, as well as some students. In small schools a teacher is more likely to have many different class preparations, and the demand of preparing for an AP course may be too time consuming on top of the other assignments. Teaching an AP course may also involve participating in professional development related to teaching the AP curriculum that is less likely to be offered nearby or at a time convenient for the teacher. Other teachers trying to differentiate within the classroom for a small number of high-ability students may find it difficult if they are already preparing for multiple courses on a daily basis. In addition, new requirements for highly qualified teachers require teachers to have earned a major or minor in the subjects they teach; this may restrict the course assignments a teacher can be given. Counselors, too, reported feeling overwhelmed with their varied responsibilities and consequently had trouble finding time to seek out their students of poverty for extra support. These are not issues confined to rural schools, but the nature of rural schools (small, more isolated, and with fewer spe-

cialized staff) may make them more likely to have these issues.

School policies also can inadvertently undermine advanced academic achievement. The competition for valedictorian may seem to positively promote high achievement, but if schools do not reward participation in Advanced Placement with a weighted grade, some top students will elect to take an easier course so as not to jeopardize their cumulative grade point average. Weighted grading systems are used in about half of the nation’s high schools, but they are not consistent in what they reward, nor are they without critics (Manzo, 1998). Some smaller schools also are reluctant to encourage their top students to attend college early, as this would then deny the school their leaders for many extracurricular activities. In addition, the school would not receive the state per-pupil payment for the student during what would have been his or her senior year. Schools that do not promote early algebra, do not allow middle school students to take high school courses for credit, do not arrange dual enrollment at local colleges, or do not allow early matriculation deny their students the opportunity to experience these high-level challenges.

Lesson 7: Students from poverty who have no family members experienced with higher education require exceptional levels of support in order to successfully graduate from college. Project Aspire counselors identified the lack of role models for advanced academic achievement within the family and lack of parental assistance with the college planning process as huge barriers for their students. They reported their students felt intimidated by advanced courses and lacked confidence in their ability to achieve success in advanced mathematics or science courses. The counselors expe-

rienced the greatest possibility of success when they arranged for students to visit nearby colleges, taking them on planned visits to familiarize them with the campuses and helping them develop an understanding of the college experience. Summer programs with a residential component on a college campus allowing students to experience dorm living were suggested as being powerful for first-generation college students. College visits or summer programs required counselor follow-up with individualized attention, support, and encouragement through each step of the college application process.

The 2000 U.S. Census reported that 23.3% of all adults living outside a metropolitan area do not hold a high school diploma or equivalent; the comparable statistic for those inside a metropolitan area is 18.7%. Students in nonmetropolitan areas are not as likely to have parents with college experience as are those in more populated areas. These students are likely not to have anyone at home with experience in advanced academics, the college admissions process, completion of forms, writing college essays, interviewing, seeking recommendations, or taking the SAT. When announcing or posting scholarship or program notices, school personnel will likely have to personally track down these students, encourage their participation, explain the procedures, and provide them assistance in completing required paperwork.

Because parents and family members may not possess the background necessary to assist with homework, school personnel will need to provide consistent, comprehensive, and ongoing support to help the student persist in the face of challenge in a strong high school curriculum. Rigorous curriculum with ongoing encouragement and support from

teachers and counselors can significantly affect rural high-ability students of poverty.

Lesson 8: Rural high ability students from low-income families frequently require support to help overcome problems of inadequate self-efficacy, low self-esteem, and self-concept. Project Aspire counselors variously cited poor self-concept or low self-esteem as being among the foremost reasons low-income students of high ability fail to complete rigorous coursework. Self-efficacy, while not specifically identified, may be a contributing factor, as well. Indeed, Bong and Skaalvik (2003) discuss the differences among the terms and maintain that self-efficacy is a precursor of the development of self-concept. Regardless of the differing terms, it is these opinions about one's own abilities and self that significantly influence further growth and development.

Students' perceptions of their own ability to perform affects their willingness to try new things and to persist in the face of challenge. Observing someone else similar to themselves modeling successful strategies also proves helpful for students. Receiving encouragement and support from others for their efforts will likewise increase feelings of self-efficacy. Research concerning rural students and self-esteem is lacking, but Fasko and Fasko (1998) suggest early intervention to enable impoverished students to have success experiences, resulting in self-efficacy. When students can experience success early in a challenging curriculum, they can develop a confidence in their own ability to handle difficult academic work. Schools must provide that challenge so students will be prepared to do well in those high school courses that are the best indicators of college completion. Schools that pro-

vide this challenge will also develop a cohort of students, increasing the likelihood of an appropriate role model for persistence. Kitano and Lewis (2005) provided an excellent review of the literature on resiliency as it relates to gifted students and at-risk students. Their review identified strategies likely to enhance outcomes for those students. One of those recommendations specifically relates to overcoming hardships by supporting self-efficacy. Although this was not specific to the population of high-ability rural students from poverty, the larger group described would appear to encompass the population of interest here.

Lesson 9: Students need to develop good study skills in order to be successful in rigorous courses. Students with high academic potential assimilate new information more rapidly than average learners. If the school does not have an advanced curriculum for its most able learners during the primary grades, these students may find school tasks too easy and therefore never learn how to study. Grade-level curriculum does not provide enough challenge for high-ability students to learn to work hard in school; they get good grades without working hard in the elementary grades. They do not learn how to manage time, to overcome academic difficulties, to prioritize, to be organized, or how to study. They do not expand their thinking skills. They equate *smart* with *easy*, so when things inevitably become more difficult, they have few strategies and may have little confidence. Just because a student is smart does not mean he or she knows how to study effectively, how to synthesize, how to analyze information, or how to organize and present important points. These skills must be learned and must be practiced in context.

An advanced class in high school may be the first time a student of high ability has experience with something academically challenging. If a student has always succeeded in the past by skimming the material, paying attention only partially during class, and completing homework on the bus on the way to school, the demands of a calculus course or a second year of chemistry without appropriate study skills may be more than he or she is equipped to handle. When they find something hard, students frequently conclude they must not have been smart after all.

High-ability students need curriculum and instruction to match their instructional needs from kindergarten to grade 12. In this way, they can learn how to study and gain self-confidence. Students of poverty also face the additional challenges of lack of resources and sometimes familial support, so it is of added importance that they are given the needed instruction in organization and time management while at school. It is also important for them to experience college-level work while they are in the more supportive high school environment. In this way they can prepare themselves for the challenge of college before they face the additional, nonacademic adjustments of a first-generation college student.

Lesson 10: Developing a personal relationship with students of poverty is of key importance. This lesson provides the most comprehensive and most important message. With few material resources available, relationships take on additional significance as they are critical to one's survival (Payne, 1998). The societies of poverty are predominantly matriarchal, with the primary caregiver exerting the greatest influence on the child. The development of a close, trusting relationship with the student and with

the primary caregiver is an important key to the success of the student from poverty. We noted this in Lesson 7 as it relates to college matriculation, but we note it again because it significantly influences all aspects of the student's development. The school counselor, or another person with an interest in the student, must provide that solid support for educational persistence and attainment that is customarily provided by the parent in middle class families. The school faculty member will need to do this in a way that communicates that he or she cares about what happens to the student and has confidence in his or her ability to be successful at the next level. This effort is more likely to be successful if the child's caregiver has enlisted as a comrade in the cause. Because of the strength of relationships, it may prove difficult for a child from poverty to leave his or her family to go to college. The family undoubtedly relies on this capable adolescent, and it will be difficult for the student to "desert" siblings and other family members to go to college. The caregiver will need to offer support of the plan in order for it to have a chance of success.

The school counselor of rural students will need to invest a tremendous amount of time in individual students. The Project Aspire counselors overwhelmingly agreed that when they provide extra attention and support to help these students from poverty, it has a positive effect on their achievement. They agreed that these high-ability students from rural poverty can attend college with surprising frequency when the counselors take the time to help them with goals and regularly check on their progress. Leaving the family or other important relationships may be an impossible barrier to attending college. By developing a constant and

personal relationship with a high-ability student from poverty and his or her parent or guardian, the school faculty member may be able to direct the student to the right opportunity that will result in college graduation.

Conclusion

Rural students with academic promise living in poverty are members of a special population that has received little attention in the literature and in their environments. We have lessons gleaned from related literature and from those with experience as school counselors in rural schools with a high incidence of poverty that might guide us in researching this population. Our lessons highlight the importance of a personal relationship with these students and their parents. If they value the relationship, it is likely they will try hard to perform in a way that pleases. The early identification of academic potential in all demographic groups allows nurturing through appropriately challenging curriculum and support that will provide the foundation for academic success. We must always be sensitive to the many limitations imposed by poverty. Finally, we must find what strategies work best to encourage the rural gifted from poverty. We must find what works best in supporting their academic efforts. We must find what works best in convincing them to do what no one in their family has done before them: achieve their American Dream. These 10 lessons from Project Aspire offer a beginning point from which studies can be designed that identify the specific strategies most effective in finding and developing these students. Despite the overwhelming challenges faced, it is with these students that we may make the most significant differ-

ence. They need the public schools and school personnel to assist them in finding the way out of the bonds of their circumstances. **GCT**

References

- Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review, 15*, 1–40.
- Colangelo, N., Assouline, S. G., & New, J. K. (1999). *Gifted education in rural schools: A national assessment*. Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Coleman, L. J. (1985). *Schooling the gifted*. Menlo Park, CA: Addison-Wesley.
- Cotton, K. (1996). *School size, school climate, and student performance* (School Improvement Research Series Close Up #20). Portland, OR: Northwest Regional Educational Laboratory.
- Cross, T. L., & Burney, V. H. (2005). High ability, rural, and poor: Lessons from Project Aspire and implications for school counselors. *Journal of Secondary Gifted Education, 16*, 148–156.
- Cross, T. L., & Coleman, L. J. (2005). School-based conception of giftedness. In R. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (2nd ed., pp. 52–63). New York: Cambridge University Press.
- Cross, T., Coleman, L., & Stewart, R. (1993). The social cognition of gifted adolescents in schools: Managing the stigma of giftedness. *Journal for the Education of the Gifted, 15*, 44–55.
- Cross, T. L., & Dixon, F. A. (1998). On gifted students in rural schools. *NASSP Bulletin, 82*(595), 119–124.
- Cross, T. L., & Stewart, R. A. (1995). A phenomenological investigation of the *lebenswelt* of gifted students in rural high schools. *Journal of Secondary Gifted Education, 6*, 273–280.
- Fasko, S. N., & Fasko, D. (1998). A systems approach to self-efficacy and achievement in rural schools. *Education, 119*, 292–300.
- Johnson, J., & Strange, M. (2005). *Why rural matters 2005: The facts about rural education in the 50 states*. Arlington, VA: Rural School and Community Trust.
- Kitano, M. K., & Lewis, R. B. (2005). Resilience and coping: Implications for gifted children and youth at risk. *Roeper Review, 27*, 200–205.
- Malhoit, G. C. (2005). *Providing rural students with a high quality education: The rural perspective on the concept of educational adequacy*. Arlington, VA: Rural School and Community Trust.
- Manzo, K. K. (1998). Weighted grades pose dilemmas in some schools. *Education Week, 17*(40), 1–2.
- National Center for Education Statistics. (2001). *Number of public school districts, by locale code (CCD) and state, 2001*. Retrieved December 12, 2005, from http://nces.ed.gov/surveys/ruraled/data/SDU_Locale.asp?path=def
- National Center for Education Statistics. (2003). Participation in education: Concentration of enrollment by race/ethnicity and poverty. In *Condition of education, 2003* (table 5.1). Retrieved December 12, 2005, from <http://nces.ed.gov/programs/coe/2004/section1/table.asp?tableID=38>
- National Center for Education Statistics. (n.d.). *What's rural: Urban/rural classification systems*. Retrieved December 12, 2005, from <http://nces.ed.gov/surveys/ruraled/Definitions.asp>
- National Center on Addiction and Substance Abuse. (2000). *No place to hide: Substance abuse in mid-size cities and rural America*. New York: Columbia University.
- Payne, R. K. (1998) *A framework for understanding poverty* (Rev. ed.). Highlands, TX: aha! Process.
- Scheer, S. D., Borden, L. M., & Donnermeyer, J. F. (2000). The relationship between family factors and adolescent substance use in rural, suburban, and urban settings. *Journal of Child & Family Studies, 9*, 105–115.
- Sherwood, T. (2001). *Where has all the 'rural' gone? Rural education research and current federal reform*. Washington, DC: The Rural School and Community Trust. Retrieved December 12, 2005, from <http://www.ruraledu.org/docs/ruralgone.pdf>
- Slocumb, P. D., & Payne, R. K. (2000). *Removing the mask: Giftedness in poverty*. Highlands, TX: aha! Process.
- U.S. Census Bureau. (2000). Adults with a high school diploma or GED (Summary File 3 [SF3] GCT-P11. "Language, School Enrollment, and Educational Attainment: 2000). Washington, DC: U.S. Census Bureau.