The Education of Promising Students in Rural Areas: What Do We Know and What Can We Do?

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Rural Schools: In Search of a Definition

The needs and issues of students in rural areas, especially those who are gifted, have been overlooked in the literature for several decades (Cramond, 2005). Recently, however, there has been a rise in the number of publications focusing on rural education research, although the numbers of articles are still small and highlight regular education and struggling students more than students who are gifted (see citations in Provasnik et al., 2007). Still, little can be generalized about this special population because a collective definition is not available. Researchers have adopted varying definitions of “rural” when conducting studies. Colangelo, Assouline, and New (1999) lamented the lack of a consistent definition when implementing a national survey on the status of gifted education in rural settings. Likewise, the Census Bureau, in conjunction with the National Center for Education Statistics (NCES; 2007), recognized the lack of a common definition after attempting to generalize research findings among rural schools. A common federal definition of “rural” has now been adopted.

Prior to 2007, between one fifth to one half of school districts in America were labeled as rural, depending on how rural
was defined (NCES, 1994). For example, some reports labeled rural communities as those with less than 25,000 persons while other reports considered rural communities as those with 2,500 persons or less. The new definition removes the population constraint and labels rural communities in varying degrees of proximity to an urban area. There are three degrees of rural: fringe, distant, and remote. Fringe rural areas are those within a 5 mile radius of an urban area, distant rural areas are between 5 and 25 miles of an urban area, and remote rural areas are those territories more than 25 miles from an urban area. (For a more detailed explanation of each of these, see Office of Management and Budget, 2000.) Under the new definition, 50% of all U.S. school districts, both private and public, are located in a rural area, with the highest concentration of rural schools being in the Midwestern and Southern portions of the United States. Of those districts labeled as rural, 33% of those are public schools that enroll approximately 25% of America’s students (Provasnik et al., 2007).

The State of Education in Rural Schools

Even though a considerable part of America remains rural, much of the focus in educational research continues to center on urban education. Perhaps this has occurred due to the overshadowing issues in urban communities such as crime, lower test scores, and homelessness as broadcast through various media sources as affecting a largely concentrated population. Because urban areas have a higher concentration of residents, those who reside there are more likely to drive policy, research, and resource allocation decisions within state and local governments, most favoring cities instead of rural communities. Moreover, there is an increased national focus on minority issues even as the majority of students in rural schools are White, while more students in urban areas are of varying ethnic backgrounds (Provasnik et al., 2007).

A recent federal report on the state of rural education described the unique challenges of rural schools and how they differ from urban locales in many ways including (1) the allocation of resources and money; (2) teacher preparation and
pay; and (3) educational attainment and parental expectations (Provasnik et al., 2007). Belief systems between rural and urban residents also differ (Spicker, Southern, & Davis, 1987). Each of these is explained in more detail.

First, the allocation of educational resources between rural and urban states is inequitable, favoring urban populations, even after being controlled for population differences. Predominately rural states (e.g., those states with more than 65% of the state population living in small towns) are more likely to report unequal distributions of school funding among districts within a state. This impacts the procurement of appropriate physical facilities for housing students in schools (Colangelo et al., 1999). Little has changed in the past 5 years. Federal reports from 2003–2004 (published in 2007) suggested that rural districts rely more heavily on state and federal aid to sustain their existence, whereas urban and suburban school districts receive a larger percentage of money from local revenue sources (Provasnik et al., 2007). Likewise, rural school district personnel, especially those in rural fringe districts, rely more heavily on federal money designated for schools of poverty than do those from urban and suburban areas (Provasnik et al., 2007).

There also are differences in the levels of teacher education, experience, salaries, and qualifications when comparing rural and urban districts. Teachers in rural settings are less likely to hold a master’s degree than those in urban and suburban schools. Moreover, a higher percentage of teachers in rural areas teach vocational and technical courses than their urban and suburban counterparts (Provasnik et al., 2007). Teachers in rural schools are more experienced in terms of years of teaching, yet they receive significantly lower salaries, and are less qualified to teach specialized advanced content when compared to their urban counterparts (Colangelo et al., 1999; Provasnik et al., 2007).

Students from rural areas also face unique challenges. They are less likely to obtain a 4-year or advanced degree (Colangelo et al., 1999; Provasnik et al., 2007). This may be due in part to parental expectations and belief systems of those who live in rural areas. Provasnik and colleagues examined parental expectations of high school students and found that parents in
rural areas were more likely to expect their children to attain a high school diploma, vocational degree, or an associate degree whereas those from urban and suburban areas are more likely to emphasize the attainment of a 4-year degree or beyond.

Moreover, rural communities typically are more conservative and view the school as a conduit for the teaching of moral and ethical values above all else (Spicker et al., 1987). In many rural communities, especially those of high poverty, local community connections and established relationships among individuals are emphasized over financial gain, lucrative job offers, and educational endeavors (Spicker et al., 1987). Community members fear that advanced education may expose students to a broader world and encourage the most intelligent students to move away from the area (Jones & Southern, 2004). When students from a rural community decide to leave their geographic location to attend college, they are less likely than their suburban counterparts to return to their rural hometown because of lower earning potential and fewer opportunities for employment (Jones & Southern, 2004).

Rural Schools and Poverty

“Poverty is the single strongest and most persistent threat to high student achievement,” especially for students in many rural communities (Rural School and Community Trust [RSCT], 2005, p. 6). Of the school-age children who live in rural communities (those with less than 25,000 persons), approximately half qualify for free or reduced lunch (RSCT, 2005). In addition, rural schools are more likely than their urban and suburban counterparts to receive Federal Impact Aid, which is awarded to high-poverty schools throughout the nation (Provasnik et al., 2007). Remote rural areas have the highest percentage of students in poverty, consistent with statistics on inner-city urban schools; moreover, students in rural areas of poverty drop out of high school at higher percentages than their urban and suburban counterparts (Provasnik et al., 2007).

In her book, Worlds Apart: Why Poverty Persists in Rural America, Duncan (1999) explained findings from her ethnographic study of life in three rural towns: one in the South,
one in the Midwest, and one in the Northeast. All areas were remote, but the Southern and Midwestern areas reported higher poverty than the Northeast, even though all faced similar struggles. Through narratives and qualitative comparisons among the three geographic locations, Duncan concluded that the impoverished areas of the Midwest and South were divided into strict social stratification classes of the “haves” and “have nots.” In these areas the lower class groups are blamed for their impoverished situations, held back by upper class politics, and hold internal belief systems that reiterate a continued life of poverty without a vision for higher education or professional endeavors, summarizing that “those good things don’t happen to us.” She explains that the “haves” could afford private schools and that the public educational systems are in a constant state of decline due to decreasing enrollment of middle- and upper class groups. In contrast, the rural areas in the Northeast integrate the “haves” and “have nots” into all aspects of society and provide opportunities for those who desire to break the cycle of poverty. The families bond together to maintain strong public school systems for all classes and celebrate diverse perspectives. There is more trust among community members and less “blaming” for situations. Teachers and community members provide mentorship options and create systems for parents who want to provide “a better life” for their children. Duncan argued for strong schools, access to rigorous courses, high expectations, and caring, capable teachers as a great equalizer for change in these impoverished rural communities.

**Rural Schools and Gifted Students**

For children who live in rural communities and also are gifted, additional obstacles may be encountered. In many instances, there is community resistance to gifted programs because these programs are viewed as elitist and inequitable (Spicker et al., 1987). Although there are positive aspects for gifted students living in rural communities, such as less competition for involvement in select activities, smaller class sizes, and more opportunity for adult-student interactions (Colangelo et al., 1999; Spicker et al., 1987), there may be fewer oppor-
tunities for academic growth, fewer professional role models with advanced academic degrees, limited exposure to advanced materials, and less access to extracurricular academic activities. In high school, rural students are less likely to have access to Advanced Placement (AP) courses and International Baccalaureate (IB) programs, when compared to their urban and suburban counterparts (Provasnik et al., 2007). Moreover, parents in rural areas (as compared to their urban and suburban counterparts) are more likely to take their children to athletic events than to visit museums, zoos, libraries, or aquariums (Provasnik et al., 2007). It is unknown whether this is due to a belief system difference of those in rural areas or simply a geographic issue of access and availability.

The quality of curriculum, instruction, and opportunities for talent development are limited in rural areas, especially those with high poverty rates. Howley, Pendarvis, and Gholson (2005) examined rural gifted students’ perceptions of mathematics instruction in a high-poverty school district. These students reported that their courses contained repetitious material and repetitive practice of lower level, basic skills. They felt there was little opportunity for advanced instruction in the regular classroom, and they had to seek assistance from parents and teachers of gifted students to provide advanced options.

This lack of rigorous coursework in impoverished rural schools is echoed in other studies as well. Gentry, Rizza, and Gable (2001) compared urban, suburban, and rural gifted students’ attitudes toward school and reported that the rural students found school to be more mundane and less challenging than their suburban and urban counterparts, especially at the middle school level. A national survey on the status of gifted education in rural schools captured pertinent quotes to support this theme of lower level coursework. As one teacher of gifted students reiterated: “It is my experience that without competition and resources, gifted students in rural areas can coast by until college” (Colangelo et al., 1999, p. 55).

Geographic isolation, fewer professional occupations, and transportation costs further inhibit talent development opportunities. Because schools and communities in rural areas are more sparsely populated and may be geographically isolated,
gifted students feel that they “stick out” or do not have enough similar peers. Their teachers report that there are fewer opportunities for mentorships, enrichment, or postsecondary opportunities, as colleges are too far away and there is limited access to a myriad of professional role models (Colangelo et al., 1999).

**Gifted Education in Rural Schools: What Works?**

The discussion of issues in rural schools is more prevalent in the literature than are interventions that work with gifted rural students. Some studies included rural schools in a larger sample. However, the data were not disaggregated by locale, and therefore one could not assume that the study intervention was effective with rural students, especially because in most studies the sample size of participating rural school districts was only a miniscule part of the larger sample. As we examine the interventions, in some instances it was difficult to separate rural and poverty as many studies included rural students of poverty as the sample. Therefore it is unknown whether the intervention is effective for all promising students of poverty or only promising rural students of poverty. Of the studies specific to rural and gifted, three categories emerged and will be discussed in detail: identification, intervention, and reform.

**Identification**

When considering identification of rural gifted students, one of the first questions one might ask is “do rural gifted students differ from other gifted students to an extent that different identification mechanisms are warranted?” The answer is “it depends.” The percentage of students in poverty, the number of minorities and English as a second language (ESL) students within the rural population, as well as the geographic and cultural context of the rural community should be considered when making decisions about identification.

Although studies could not be found that compared differences in urban and rural identification practices or differences in the characteristics of gifted students in both rural and nonrural schools, there are studies available that outline effec-
tive practices in identification for rural gifted students as well as characteristics of rural gifted students of poverty. Based on the research available, the following list of recommendations may be generalized to rural populations of gifted students, especially those of poverty.

Use Multiple Measures for Identification

Multiple identification measures are necessary, including both verbal and nonverbal assessments, to accurately identify gifted students, especially those from rural poverty or other disadvantaged situations (Lohman, 2005a, 2005b; Payne, 1996; Slocumb & Payne, 2000; VanTassel-Baska, Johnson, & Avery, 2002). Educators and leaders in gifted education cannot rely on just one assessment tool to identify rural students. Rural gifted students, especially those who are geographically or financially disadvantaged, show their talents in different ways and, therefore, may require multiple assessments to capitalize upon their unique needs. When multiple assessments are used, a larger percentage of rural gifted students are identified, not only by ability (Stephens, Kiger, Karnes, & Whorton, 1999), but in visual and performing arts as well (Clark & Zimmerman, 2001).

Include a Tailored Checklist of Observable Behaviors

A checklist of observable behaviors completed by trained teachers may be used as one of several tools for identifying rural gifted students who differ from other gifted students in terms of geographic constraints and limited resources. District leaders should be wary of adopting one carte-blanche checklist of behaviors that may not appropriately represent some of the nontraditional characteristics of rural gifted students. Instead, teachers should be trained in how to recognize disadvantaged rural gifted students based on their unique characteristics. A checklist of contextual characteristics may be crafted and piloted by district leaders to capitalize on specific characteristics of promising, rural students, highlighting opportunities and behaviors that allow these students to showcase their talents.

Project Spring, a Javits-funded project that examined identification and service options for rural disadvantaged students in Indiana, succinctly outlined differences in characteristics among
disadvantaged versus advantaged rural students. The researchers found that when compared to their nondisadvantaged rural counterparts, the disadvantaged, rural gifted students:

- are more passive in the classroom;
- are likely to speak nonstandard English;
- may not complete all assignments;
- are less likely to do well on standardized assessments;
- may have a more uneven profile on assessments (e.g., strong in math but weak in reading);
- have great ideas but poor writing skills, grammar, and handwriting;
- perform better on nonverbal versus verbal assessments; and
- are more likely to demonstrate their abilities through non-traditional or creative outlets outside of school (e.g., 4-H projects, performing arts, auto-mechanics, or rural environmental components; Spicker & Poling, 1993).

District leaders may choose to incorporate these characteristics into professional development trainings for teachers who are responsible for identifying gifted students. A checklist of behaviors also can be created as part of an ongoing screening process for finding gifted rural students who also are of poverty, as long as appropriate reliability and validation procedures are followed for the newly created forms.

Nonverbal Assessments Are Not a Sole Identifier

Nonverbal assessments may serve as one of multiple indicators to identify rural students, especially those of poverty or varying ethnicity groups (Shaunessy, Karnes, & Cobb, 2004; Spicker & Poling, 1993). The research on students of poverty and minority students suggests that nonverbal assessments may be a better indicator of ability than more verbal measures (Naglieri & Ford, 2003, 2005). However, using only nonverbal measures without other sources of data could be detrimental for some rural students, especially those of poverty, and should never be a sole determinant for identification (Lohman, 2005a). Some nonverbal tests have shown more promise with rural students of poverty than others. Shaunessy and colleagues (2004) administered three different nonverbal ability measures
to African American students in an impoverished rural school district to compare the differences in student scores on each of the three assessments. They found that the Culture-Fair Intelligence Test and Raven’s Standard Progressive Matrices identified more rural, African American students as gifted than the Naglieri Nonverbal Ability Test.

Spicker and Poling (1993) also studied rural students of poverty and found that rural students identified as gifted by alternate means performed significantly lower on verbal measures when compared to traditionally identified gifted students. However, rural student test scores on nonverbal tests of creativity did not differ significantly from the traditional gifted group in the categories of creative writing and nonverbal creativity tasks (Spicker & Poling, 1993).

Use Performance-Based Assessments

Performance-based assessments may be considered as a promising tool for identifying rural students of poverty (Hadaway & Marek-Schroer, 1992; Han & Marvin, 2000; VanTassel-Baska et al., 2002) although limited data exist for rural students. The study with the most empirical data comes from a statewide initiative, Project STAR, in South Carolina. The sample in this group included both rural and urban students. The researchers created performance-based nonverbal and verbal task demands. Preteaching of task archetypes was required to provide a common experience for all students. By using performance-based measures as a criterion for gifted identification, approximately 17% more students from low socioeconomic backgrounds were identified as gifted, when compared to statewide standardized measures of identification (VanTassel-Baska et al., 2002).

Portfolios Can Provide Supporting Evidence of Giftedness

Portfolios provide educators of promising, rural students with information about students’ interests, outside class activities, and unique abilities that may not be measured by verbal or nonverbal assessments alone, especially when linked with community activities celebrated in rural areas. Montgomery (2001) used portfolios as a means to identify rural Native American Indian students and found that the use of portfolios as a primary
identifier enabled educators to identify 50% more potentially gifted students than ability tests alone. Portfolio assessments for students in rural areas should capitalize on strengths in and outside of the classroom, including agriculture projects, religious activities, art, creative writing, and leadership activities evidenced by participation in various clubs, church functions, or the arts.

Match the Program to the Child

When alternative identification measures are used, programs must be altered to better meet the needs of students who are identified in nontraditional ways. If rural students are identified by alternative means that include nonverbal or creative assessments, districts would be remiss to provide services to these students that focus solely on a verbal curriculum. Instead, the services provided to students who are identified by alternate methods should match the identification procedures in place. This does not imply that verbal activities should be excluded; instead, students may need more scaffolding to enhance their verbal precocity while being exposed to nonverbal and creative opportunities within a subject-specific curriculum.

Interventions

The research specific to interventions with rural gifted students is less definitive than the information on identification. Some studies included rural students as part of a larger group; however, the interventions used were not disaggregated by rural or urban locale, making it difficult to generalize the effects on rural gifted students as opposed to the remainder of the sample in the study. Other interventions, such as the use of technology, also dominated the literature regarding rural gifted but did not provide evidence of effectiveness for this special population, with a few exceptions that will be discussed. Common themes on effective interventions for rural gifted students include: the role of significant others, the use of technology and distance learning, specific curriculum interventions, and instructional/management strategies such as acceleration and grouping.
Role of Significant Others

The most predominant finding in the literature was the importance of significant others as part of the talent development process for rural gifted students, especially those living in poverty. Relationships typically are valued above all else for persons of poverty (Payne, 1996), both rural and urban, making mentorship opportunities a viable option for increasing talent development opportunities for these students. Mentoring can provide mechanisms for rural students of poverty to deal with the consequences of living in poverty, help these students set appropriate goals for the future, and allow them to recognize and enhance their individual talents and skills through the building of relationships with a significant person. Therefore, the opportunity for students who are disadvantaged to work with a mentor provides emotional, professional, and familial benefits. As gifted students work with a mentor, families of these children also learn the skills necessary to develop talent in their children, thus the inclusion of family education in the mentorship process is a critical component (Montgomery, 2001; Olszewski-Kubilius, 2007; VanTassel-Baska & Stambaugh, 2007).

Of the studies perused, the relationship to the mentee varied, but there was always a significant other. In some instances the mentor was a family member, an assigned or serendipitous mentor, a teacher, or a school guidance counselor instrumental in the lives of these students. Hébert (2002) provided an in-depth look at three students living in poverty, two of whom were from rural communities. He described four main themes that significantly impacted the lives of gifted students: educators who were encouraging and held high expectations, the use of a mentoring model when working with these students, involvement in extracurricular activities, and an enriching learning environment.

Another study examined influential factors of mathematics achievement in promising, rural students living in Appalachia regions. The students who were most successful in mathematics had the support of either the teacher of the gifted or a family member (Howley et al., 2005). These students found solace, challenge, and a sense of normalcy when permitted to work with the teacher of the gifted, other gifted students, and family members on arithmetic projects of interest.
Academic Planning

The provision of educational assistance for college planning is another effective approach for students in rural settings, especially those of poverty or first-generation college-bound students (Cross & Burney, 2005; Montgomery, 2001). Lessons learned from the research suggest that high school guidance counselors should be provided professional development regarding (a) hindrances that inhibit rural students from attending college, (b) opportunities beyond the community offerings for promising students to learn about various career options that may not be evident in small communities, (c) how to be admitted to premiere colleges across the United States, and (d) how to aid students in the transition from a rural community to a college setting.

In addition, guidance counselors of students in rural areas should develop plans for helping gifted students access advanced courses in nontraditional ways (e.g., online learning) so that they have the same opportunities for rigorous coursework as students in urban settings. If courses are available, students of rural poverty often are either denied access to these classes in high school due to their lack of appropriate verbal and writing skills (Payne, 1996) or choose not to take advanced courses due to increased workloads that conflict with family time or the potential for a lower grade, as external awards are important (Cross & Burney, 2005). Because many students of poverty consider short-term versus long-term financial gains when making decisions about whether or not to enter college, guidance counselors need to make students aware of the long-term earning benefits for different career paths and help these students find cooperative work and school opportunities (Cross & Burney, 2005).

Because several careers are dependent on exposure to advanced courses in math and science, high school guidance counselors must ensure that rural gifted students have access to the most rigorous courses in these subject areas, even if it means attendance at a local community college or enrollment in online coursework. Otherwise, these students may not be as competitive for selective colleges that offer advanced degrees in these subject areas.
Cross and Burney (2005) provided professional development opportunities to middle and high school guidance counselors employed in rural areas of poverty. As they worked with these counselors, three themes emerged regarding the unique issues of providing academic counseling to rural students of poverty. First, teachers and students found that the provision of rigorous coursework takes too much time. Students and parents of poverty did not understand the reasons for needing to work as hard in school and complained that the homework got in the way of extracurricular activities or afterschool jobs. Parents also felt that schoolwork should be completed during school time as there were other things to do at home and there was little time for parental monitoring of homework. Teachers also complained that AP courses take too much preparation. In rural schools many secondary teachers are overtaxed with planning several different courses while also coaching or leading extracurricular activities.

Second, the school climate and culture has a major effect on student achievement. The authors explained that in less populated schools, such as those in rural communities, a few students can impact the culture, creating either one of achievement or a lack thereof. There also were distinct gender differences suggesting that it is not permissible for boys to achieve in school or work hard on school-related tasks.

The final theme that emerged was of the need for understanding and combating generational poverty. Counselors found it necessary to provide unique program options for first-generation college students and their families. Students needed exposure to college campus life prior to applying to colleges. Parents needed guidance and support in allowing their children to leave home to preview campuses. In addition, parents needed help with financial matters and the juggling of family responsibilities during their child’s time away, as many of these students helped with younger siblings or major chores around the house.

**Technology and Distance Learning**

Technology options are listed throughout the literature as a way for rural students to gain access to opportunities that may
not be available in their community. However, little empirical data exists on the effectiveness of technology and student achievement. In rural communities where geographic location may hinder availability to more rigorous coursework or opportunities to enroll in a variety of course offerings, technology may be a viable option, if available (VanTassel-Baska & Stambaugh, 2006). However, “teaching children with exceptional needs requires specialized skills, materials, and technology—three things not available in all [rural] schools” (RSCT, 2005, p. 9). Due to the lack of resources available in some rural schools, students may not have access to appropriate technology or advanced equipment needed for high-level experimentation, especially in technical content areas such as the sciences. Some schools in rural communities may have limited Internet access or may not be able to keep up with the ever-changing demands of technology necessary to maintain ongoing opportunities (Colangelo, Assouline, Baldus, & New, 2003).

When relying on technology as a service-provision option for rural schools in impoverished areas, access must be provided during the school day. The United States Department of Education (NCES, 2003) reported that more than half of families with household incomes of $35,000 or less rely on the school for their sole Internet usage. When access can be provided during the school day, some success has been found in using technology with gifted rural students who are deaf (Belcastro, 2004), have motor impairments of the hand (Belcastro, 2005), need more access to rigorous Advanced Placement courses (Cross & Burney, 2005), or have geographic limitations that inhibit social support networks (Spicker et al., 1987).

Specific options for advanced coursework accessible via the Internet include simulations and WebQuests, virtual field trips, ask-the-expert Web sites, telementoring, and accelerated online courses, such as those offered by Johns Hopkins University’s Center for Talented Youth, Northwestern University’s Center for Talent Development Learning Links Program, Stanford University’s Education Program for Gifted Youth, and some online Advanced Placement courses (VanTassel-Baska & Stambaugh, 2006). Each of these options may provide valuable learning experiences for advanced students in rural school.
districts; however, educators must be discerning regarding the selection of online options and ensure that the programs are appropriately accelerated for gifted students and have a marked history of research and success in terms of technical assistance, content-mentoring, and student achievement.

Educators cannot assume that technology will solve the academic issues of rural schools. Educators need to monitor student progress and encourage small-group discussions with content experts in addition to online options. Even though some of the specific programs mentioned may be costly, they generally are cheaper than hiring a teacher for a small number of students and could provide advanced coursework alternatives for gifted students. However, one must be cautious when considering learning opportunities via the various technologies. Students need to have a fast Internet connection, motivation to learn a subject area, and moderate independent learning skills—characteristics that not all gifted students possess.

Curriculum

Adelman (1999) explained the importance of student access to rigorous coursework in high school and how that coursework may be a better predictor of college success than grades or test scores. Therefore, advanced curriculum and subsequent management strategies are important catalysts for the talent development of rural gifted students. When working with rural Native American high school students of promise, Montgomery (2001) reported that a challenging curriculum in the core content areas designed to enhance the regular classroom curriculum resulted in an increase in ACT and SAT performance scores, the number of students who applied to college, and authentic growth in a content area based on portfolio assessments.

Scaffolding instruction from lower level to higher level thinking skills through the use of a critical thinking curriculum also has shown promise for rural students in schools of poverty. Slocumb and Payne (2000) suggested that students of poverty need scaffolding in order to bridge gaps from informal to formal speech and to have appropriate behaviors and academic conversations modeled for them. Specifically, the Jacob’s Ladder
Reading Comprehension Program (available from Prufrock Press) was written to provide background experiences and knowledge of advanced reading skills through scaffolding. This curriculum was piloted in two rural school districts of poverty in the Midwest. The curriculum intervention provides accelerated reading prompts of short stories, nonfiction selections, or poems and then applies an array of lower level to higher level questions that build upon previous learning so that students may increase their understanding of a passage and apply newly created background knowledge and expertise to advanced questions that promote critical reading and thinking. Teachers who use this program are trained to encourage and model student discussion, solicit appropriate responses, and build metacognition in reading through question-asking, modeling of responses, and think-alouds. Results from a quasi-experimental study suggest that when compared to students who used only a basal reading series, the Jacob’s Ladder Reading Comprehension Program students showed statistically significant and practical gains in reading comprehension and critical thinking (Stambaugh, 2009). This study suggested that when rural students of poverty have exposure to an advanced curriculum and scaffolding, they can achieve at higher levels than expected or provided by the typical on-grade-level curriculum.

Acceleration

Accelerated opportunities may be an economical option for serving gifted students in rural communities, as acceleration does not typically involve an increase in personnel resources. However, accelerated opportunities in rural schools are limited (Jones & Southern, 2004). In a study of 78 urban and rural school districts, Jones and Southern reported statistically significant disparities between accelerated offerings in urban and rural schools. Rural school districts were less likely to provide subject acceleration, Advanced Placement courses, and dual-enrollment options. Instead, these rural districts reported extracurricular options and academic contests as the primary modes of service for gifted students.
In a review of the literature, only one study was found from the past 10 years that specifically examined accelerative practices in a rural school district (see Howley, 2002). In this study, the author suggested that acceleration can be a viable option for serving rural gifted students; however, in many instances teachers were reluctant to incorporate accelerative options, especially at the elementary level. As part of this study, district and building leadership were asked to provide some form of acceleration to students in their respective jurisdiction. Accelerative opportunities included grade skipping, subject acceleration, cross-grade grouping, and in-class advanced curriculum. Regardless of the acceleration strategy employed, Howley found four themes from building teams that successfully implemented accelerative options: (1) curriculum and instruction was based on a student’s individual needs and involved multiple stakeholders; (2) instruction matched the student’s skill level; (3) student progress was continually monitored by the teacher of the gifted; and (4) pre- and posttesting was documented using a standardized achievement test.

**Grouping**

Grouping is a highly researched and controversial topic within gifted education in general. However, the research is clear regarding the positive academic results of grouping for gifted students when the groupings are deliberate and include differentiated and advanced instruction (Gentry & Owen, 1999; Kulik & Kulik, 1992; Rogers, 1998; Tieso, 2002). The deliberate placement of like-ability advanced students together in rural schools is essential to the success of these students, possibly even more so than in urban areas due to the paucity of like peers at the same age and geographic isolation. In rural areas where the geographic area is large and there are several small community schools, gifted students may feel more isolated and are more likely to be found in smaller numbers across the entire school district or multiple classrooms, instead of in deliberately grouped cohorts. In some instances, rural gifted students have been deliberately (and wrongfully) separated among several classrooms or schools so that each
building or classroom has better opportunities for passing state-mandated tests, further ignoring the needs of gifted students (Stambaugh, 2001).

Jones and Southern (2004) compared the grouping practices of urban and rural school districts by surveying coordinators of gifted programs regarding program offerings and their perceptions toward grouping. Thirteen of the school districts surveyed reported no grouping options for gifted students. Of those 13 districts, 9 were rural. If grouping options were available, rural districts reported fewer grouping options than their urban counterparts, especially at the elementary level. This held true even though the beliefs about grouping were similar across both urban and rural coordinator groups.

Gentry and Owen (1999) examined the effects of cluster grouping (deliberately placing a core group of high-achieving students in one classroom) in a disadvantaged, rural school district of students in grades 3–5. They found that high-achieving students who participated in the cluster groups showed a significant increase in reading achievement and math achievement over their non-cluster-grouped counterparts. Over time the number of high-achieving students increased across the grade levels. In the beginning of the study, many teachers expressed concern about removing the “cream of the crop” from all classrooms and placing them into one. However, by the end of the study, the majority of teachers reported that new leaders emerged within the classroom, and they were better equipped to meet the needs of all of their students by limiting the ability ranges within each classroom and focusing on areas of strengths and remediation for each of the groups. Specific interventions within the cluster-grouped classroom varied and included interest centers, curriculum compacting, and independent study opportunities. The success of cluster grouping is attributed to the administrative leaders, ongoing professional development both within and outside the school district, and strong collaboration and trust among colleagues (Gentry & Owen, 1999).

Similar effects have been noted in smaller scaled studies as well. Stambaugh (2001) compared the effects of cluster grouping on identified gifted students in grades 2–4 in a rural district of poverty. Teachers of all identified gifted students were
provided materials and professional development to aid in differentiation, including accelerated mathematics materials, advanced reading books with provided higher level questions, and independent study methods. Students in the cluster group sustained their standardized test scores in reading and math over a 3-year period, whereas those students who were provided similar differentiated activities without the cluster group showed decreased scores over time and were no longer identified as gifted by district and state measures. Moreover, teachers who were assigned the cluster groups were more likely to provide consistent differentiation for gifted students than those who did not have cluster groups, but had at least one or two gifted students in their classroom.

Reform Studies

Data specific to gifted education reform in rural schools are less plentiful than reform studies in the regular education literature. Of those that do exist, the majority suggest that the success of rural schools is linked to the support of school district leadership, ongoing professional development, community relationships, and the adequate provision of resources. In many instances, teachers in rural schools may not have access to learning opportunities specific to gifted education due to geographic barriers, cultural beliefs, and competing resources that seldom include additional monies for gifted students. Therefore, administrative encouragement and ongoing, embedded professional development are especially critical for the continuation of effective practices.

In a study funded by the Jacob K. Javits Grant from the United States Department of Education, five rural and one urban school district participated in professional development activities to educate regular classroom teachers in differentiated instruction for gifted students. Authors of this study found that in order to successfully incorporate differentiated strategies for gifted students into the regular classroom, the following four components were necessary to support change: staff development, strong district leadership, the provision of resources, and ongoing project support (Johnsen, Haensly, Ryser, & Ford, 2002).
In addition, relationships forged between teachers of the gifted, parents, and the community (Montgomery, 2001), as well as parent advocacy initiatives (Kennedy, 2003) produce positive changes in rural school district services for gifted students. Often, parents in rural school districts are more hesitant than their urban counterparts to request different services for their gifted learners (Jones & Southern, 2004). However, when parents and community members become involved in the provision of services, education for gifted students, and advocacy for gifted children’s needs, positive results for the continuation or addition of services are enjoyed (Kennedy, 2003).

Conclusion

There are positive aspects to be gained by gifted and promising students who live and attend school in a rural community, including additional opportunities for adult interaction, family-like environments, and smaller class size. However, gifted students in rural communities, especially those of poverty, are less likely to be exposed to accelerated options, homogeneous grouping with like-academic peers, professional mentorships, a variety of course options based on interests and academic precocity, or a challenging curriculum taught by highly qualified teachers in a given content area. When these opportunities are provided, gifted students in rural school districts show positive academic gains.

Teachers and leaders charged with the oversight of gifted programs in rural schools must be cognizant of the belief systems within the community and work to dispel myths regarding gifted education that are antithetical to best practices for these students. In addition, leaders of gifted programs must be prepared to provide ongoing professional development to other staff members; build relationships with community members and parents; provide in-depth career counseling and exposure to a variety of careers not typically found in the community; infuse an advanced curriculum that incorporates higher level thinking into the school day as opposed to disjointed extracurricular activities; and build solid, alternative identification systems that capitalize on the strengths of gifted students within
the local community. Moreover, leaders and teachers of gifted students in rural communities may need to find alternative and creative ways to provide appropriate services for their students that may involve technology or other types of distance learning if community resources are not readily available.

Finally, additional research specific to gifted learners in rural communities is necessary. One cannot assume that the same interventions found effective with urban or suburban students also will be effective with rural gifted students unless empirical data are available to support those assumptions.

References


