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Barriers to effective programming of rural gifted and talented students

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Abstract

Gifted and talented students in rural areas have barriers that are specific to them. Through a review of literature on gifted and talented students in rural schools this writer has determined five barriers to effective educational programming: (1) Anti-intellectualism as a societal attitude; (2) isolation of rural gifted students; (3) the all-encompassing role of the gifted and talented teacher; (4) inadequate curricular or programming opportunities; and (5) lack of funding.

The review and analysis of literature on the rural gifted and talented include the recommendation that much more research needs to be conducted in the area of service to rural gifted and talented students. Specific recommendations are made for addressing and overcoming each of the discovered barriers.

Barriers to Effective Programming Of Rural Gifted and Talented Students

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Gifted and talented students in rural areas have barriers that are specific to them. Through a review of literature on gifted and talented students in rural schools this writer has determined five barriers to effective educational programming: (1) Anti-intellectualism as a societal attitude; (2) isolation of rural gifted students; (3) the all-encompassing role of the gifted and talented teacher; (4) inadequate curricular or programming opportunities; and (5) lack of funding.

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Prior to the Mid-Nineteenth Century, whatever formal schooling existed occurred either as individualized tutoring or in small mixed-age groups. Students who went to the one-room school were not placed according to a grade level. "If you had asked a student [from a one room school of the 1800's] what grade he or she was in, you would likely have received a bewildered look." (Miller, 1989).

In his presentation to a class in 1994, Dr. William Waack, now Professor Emeritus at the University of Northern Iowa, discussed the history and development of public education. Dr. Waack pointed out that due to urbanization and the Industrial Revolution in the late Nineteenth and early Twentieth centuries, a revolutionary idea of mass public education evolved. Educating every child created a need for a system that was capable of handling the large numbers of students in a more efficient and economical way. In his lecture, Dr. Waack pointed out how Horace Mann, Secretary of the Massachusetts Board of Education, was impressed with a system of classifying students by age and dividing by grades which he had seen while visiting Prussia in 1843. Subsequently, school administrators of the day saw the system as a parallel with successful manufacturing practice that was related to the philosophies of the Industrial Revolution and quickly accepted this new idea. Thus, according to Waack, was the age-grade system introduced to the United States public school system.

According to Gaufstad (1992), during this same time period a great emphasis was placed on formal teacher preparation. Textbooks with information presented by age and grade levels were available for the first time. This combination of teacher preparation and textbook adoption helped with the eventual nationwide practice of age and grade

separation. "Legislation made the new practice official and set standards for age of entry and curricula." (Gaufstad, 1992).

For many rural educators, according to Miller (1989), multi-grade instruction continued as the norm. This was imposed out of necessity, due to economic and geographic conditions. Economic conditions included a very low numbers of students as well as a lack of adequate funding to provide teachers for each separate grade. It was simply not economical in many cases to subdivide the grades according to age. Due to my personal experience of living in two geographically remote areas of Montana, I can attest to the fact that multi-age practice has continued and exists today in rural areas, particularly in the Western United States.

Guilford (1984) addressed the early history of gifted education in rural schools. She pointed out that education was such that each child worked at his or her own pace and was promoted from reader to reader when the teacher believed the child was ready. According to Aamidor and Spicker (1995), this process represented a realistic procedure for modifying the curriculum and accommodating a particular academic profile.

Interestingly, proponents of ungraded, mixed-ability, or multi-aged classrooms prefer them for some of the same reasons as mentioned above. According to Cohen (1990), multi-age classrooms let students develop according to their own pace, letting those of differing abilities learn from each other by pushing and pulling each other along.

We live in an educational environment which is dominated by graded schools (Miller, 1989). This urban and upper-middle class philosophy of education has affected school restructuring today. According to Miller (1991), in 1918 there were 196,037 one room schools; by 1980 fewer than 1000 of these schools remained. The single grade

classroom is the norm. However, the multigrade classroom continues to persist in an attempt to better serve the educational needs of more students. This improved educational service needs to include the unique educational needs of the rural gifted and talented as well.

Historically, the one room school, or multi-age classroom, was the educational setting for all rural students. Today we need to look at sub-populations within this rural environment including the rural gifted and talented student. As presented earlier by Guilford, rural gifted and talented children need educational opportunities that will provide a differentiated curriculum according to their educational needs. This is not unlike the opportunities that were afforded to them in the one-room school, where they could learn at the pace that they needed.

From the provided historical overview, it becomes clear that one important need of gifted and talented programs is to provide a differentiated curriculum for today's children and youth who are educated in the rural setting. The uniqueness of the rural school setting creates problems for meeting the needs of gifted and talented students. Marland (1972) pointed to this need for all gifted and talented youth in all kinds of settings when he stated: "These [gifted and talented] are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society" (p. 16). Unfortunately, however, according to the National Excellence Report (1993), differentiated educational programming is not happening in many schools or is very limited in its implementation. That this same problem exists in rural schools seems a foregone conclusion.

Rationale

The rationale for this literature review is based upon a professional interest to address the specific needs of a differentiated curriculum and effective programming for rural gifted and talented students. This interest has evolved from my reading in the field of gifted and talented education, and more importantly, from a personal concern for the rural students whom I serve, as well as for all gifted and talented students in the rural schools of the United States. As a coordinator and teacher of the gifted and talented in a rural school in Iowa, I know that it is improbable that I shall effectively meet the needs of all of the students whom I serve within our pre-K-12 district. Experience as an educator has led me to the perception that most schools struggle with issues of how best to meet the needs of special populations of students who are outside the norm. Therefore, I began to question why rural gifted and talented programs seemed to struggle with the provisions of appropriate programming. I also began to ponder the possible barriers to the establishment of successful programs which would meet the unique talents of rural gifted and talented children and youth.

Statement of Purpose

The purpose of this literature review was to determine the major barriers to effective programming of rural gifted and talented students and the impact of those barriers upon such programming. According to Benbow, Argo and Glass (1992), many gifted students perform below their potential if not provided with an appropriate education. Specifically, providing for the rural gifted can be especially difficult. Indeed,

these students tend to be underserved, and, therefore, are at greater risk of not being able to take full advantage of their potential.

This review sought answers to the following questions: (1) What are the barriers to effective programming of gifted and talented education in rural schools? (2) How do these barriers affect educational programming in the rural learning environment?

Definition of Terms

For the purposes of this paper, the following operational definitions were used:

Rural. The National Rural Development Institute (1986) defined rural as: areas with a population density of less than 150 per square mile or counties where 60% or more of the population lives in communities of less than 5000.

Rural Schools. Rural schools encompass (a) communities with a population smaller than 5000; (b) schools in which the community is not in close proximity to an urban area; and (c) schools in which the communities are identified by a district representative as rural (Jones and Southern, 1992).

Programming. For purposes of this paper I have defined programming as an organized and sequenced curriculum using educational strategies and practices that are implemented with the intention of meeting the educational needs of the gifted and talented student.

Gifted and Talented Students. As defined in Iowa Code (1989), "Gifted and talented children are those identified as possessing outstanding abilities who are capable of high performance.

Gifted and talented children are children who require appropriate instructional and educational services commensurate with their abilities and needs beyond those provided by the regular school program.

Gifted and talented children include those children with demonstrated achievement or potential ability, or both in any of the following areas or in combination:

1. General intellectual ability
2. Creative thinking
3. Leadership ability
4. Visual and performing arts
5. Specific ability aptitude

It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5 percent of the school population."

Defensibly differentiated curriculum. According to Borland (1989) qualitatively differentiated curriculum is one of the most important elements of programming. It is curriculum that covers what gifted students should learn that they would not learn in the general education classroom. It is curriculum which includes a planned articulation with the core curriculum that is of a quality that allows for appropriate depth of content at a flexible pace. It is a case of not more of, but rather, a quality that is appropriate to an individual's ability.

Limitations

As a beginning researcher, I discovered some limitations of this study as it developed. First of all, literature resources related to the subject of rural gifted programming were found to be very limited in number and scope. Second, literature

published on this particular topic is usually found in very specialized journals which can be very difficult to obtain. This deters general educators, as well as the public, from finding sufficient information on this important topic.

Methodology

The search for research sources on the general subject of rural gifted students proved to be difficult since the general topic of rural education was found to be quite limited. When the topic was narrowed to gifted and talented students in rural schools, the task became even more difficult.

I used the ERIC search at the University of Northern Iowa and at home through the internet via a home computer. Key word searches included some of the following: rural gifted, rural gifted education, rural gifted and talented, rural schools, rural gifted education programming or practices, and small schools vs. large schools. The searches initiated under these descriptors yielded few sources; indeed, I found that the literature for the subject area as a whole was very limited.

The most successful searches for literature consisted of using the citations in the located research sources. In several cases literature that matched the sources was unable to be retrieved. This was due to the fact that the literature was located in publications that were not on the Rod Library subscription list at the University of Northern Iowa.

I continued my search at Simpson College and at Heartland AEA 11 using Heartland's online catalog entitled Com Cat. This online program contains all of the materials available at Heartland plus media collections of over 120 schools. Since the AEA did not subscribe to a number of the journals that I had accessed, this search expanded my bibliography by only six articles.

I found it interesting, yet frustrating, that the rural journals were very difficult to locate, even though my search took place in a state where the majority of its communities fall under the definition of rural. Because of the lack of available research in this area, this paper, of necessity, also relied on personal experiences, in addition to the reviewed literature, as a means to clarify and/or explain some of the information that is presented.

As I read and analyzed the accessed resources, it became apparent that various themes related to rural gifted and talented students reoccurred throughout the literature. Most of the themes were interrelated, so I found it difficult to determine a way to separate the issues. I also was unsure that they should be separated because they were of equal importance. In an attempt to focus my thoughts and organize the material, I developed a web of all of the main issues that occurred throughout the reviewed literature. Through this process categories or themes appeared, and those categories and themes helped me to visually organize the subtopics. Barriers to effective programming surfaced as key elements, and from these many subtopics emerged. The discovered barriers represented important issues in the provision of effective educational programming to rural gifted and talented students. Once these barriers were identified, they became the focus for organization of this literature review.

Literature Review

This review of literature is organized in a specific format. It begins by defining what we mean by the term rural. This is followed by the description and explanation of five specific barriers to effective programming for rural gifted students which I have identified from the review of the literature. The discussion of each barrier includes

information as to ways in which that barrier affects educational programming in the rural learning environment.

What Constitutes "Rural"?

One of the first issues that needed to be addressed in this literature review was a decision as to what currently constitutes the concept of "rural". I found that the definition of rural and existing general attitudes as to what constitutes rural have changed over time. According to New (1998), only one in ten rural residents currently make their living from farming. Industries that once supported rural life, such as logging or fishing or mining have dwindled and can no longer employ large numbers of rural people. Manufacturing is today's largest employer of rural inhabitants. Therefore, due to high unemployment, many rural people are underemployed, relying on part-time or temporary work. Interestingly, New states that, partly as a result of this trend, rural families and their inner-city counterparts have equally high poverty rates.

Therefore, today's concepts of rural, do not fit the stereotypes of the past. The Aamidor and Spicker (1995) study addressed the changes in rural America. Using information from the National Rural Committee, these authors stated that rural citizens are twice as likely to be poor as are non-rural citizens. According to these researchers, economic, social, political realities all have an impact on rural life. For example, due to the continuing financial crisis in agriculture, only one in 11 rural jobs was farm related as of 1989.

I can attest to the economic strains of rural life through personal experience. During one of my last trips to my farm home in North Central Iowa, I was taken-back by the changes in the countryside. Once beautiful farms were falling into disrepair. Barns sat

empty; roofs were falling in; windows were broken. Corn cribs and silos that once were landmarks along the way sat empty, only a shadow of the once majestic part that they played. Fences that once separated neighboring fields from each other were gone. The barnyards were empty of animals. Newly built homes had no barns, cribs, or sheds. The freshly painted, working farms of my childhood memories seemed to be far and few between.

The economic farm crisis has driven families from the farm. Neighboring farmers have retired, and in many cases the children have not taken over the family farms. My own father would not allow any of us to take over the farm. As early as the mid 1970's, he had to supplement the farm income with a full time manufacturing job in order to provide for the needs of our family of seven. Retired farmers have turned to crop-sharing, leasing, or farm rental to larger seed companies as a way to continue farming.

The factors of poverty and lack of farm related jobs have had a significant negative effect on the quality of life in rural communities. It is within this context that school districts identify our rural gifted students and address their specific educational needs.

In summary, then, what does constitute rural? Even the definitions are in conflict with each other. Rural is no longer a population that is dependent upon an agricultural way of life. Today what constitutes rural can even be the product of self-identification by a community themselves. The only factor that seems universal is that of low population density. Therefore, according to the researched literature the concept of rural is established as a population density of less than 150 per square mile or counties where 60% or more of the population lives in communities of less that 5000 (National Rural

Development Institute, 1986). However, some definitions, including that of Jones and Southern (1992), require the factor of distance from a major metropolitan area. Together these factors of low population density and isolation from an urban area add to the limitation of resources that are available to rural gifted and talented students. Therefore, effective programming for gifted and talented students in the rural environment is directly affected.

Perceived Barriers to Effective Programming in Rural Settings.

Programming for rural gifted students may seem to involve meeting the needs of a small, unique population. However, according to New (1998), the National Center for Educational Statistics documents about 6.9 million students attend rural schools. This accounts for more than a quarter of all public schools in the United States. Of this group, according to the Iowa Code, a minimum of three to five percent of this population should be identified as talented and gifted. New believes that this group is therefore both large enough and unique enough to warrant our attention.

In 1993, the Office of Educational Research and Improvement through the U.S. Department of Education published the report, National Excellence A Case for Developing America's Talent. This report addressed the condition of our gifted and talented programs across the United States. Among many other issues, the study focused on some populations, including the rural gifted, that are being neglected due to lack of definition. It pointed to a lack of substantial programs and services, as well as the fact that classroom teachers are not modifying the curriculum for gifted students.

According to New (1998), outside of immediate family and teachers, rural gifted and talented students see few role models. Small town and rural schools have limited

resources, or are isolated from resources due to distance factors. Accelerated or higher level course work to challenge the most talented is often nonexistent.

Out of the overview of literature and the study of rural settings some barriers to effective programming for rural gifted and talented students became evident. They include (a) anti-intellectualism as a societal attitude, (b) isolation of rural gifted students, (c) the all-encompassing role of the G/T (gifted and talented) teacher, (d) inadequate curricular or programming opportunities for learning, and (e) lack of funding for rural gifted and talented programs. This section will discuss each of these barriers, as well as their impact upon educational programming in the rural learning environment.

Barrier 1: Anti-intellectualism as a societal attitude.

Woven throughout the reviewed literature were examples of negative attitudes toward gifted and talented students. Among those attitudes were community beliefs that gifted students can make it on their own and that funding for such programs should be used for students who struggle with school. Davis and Rimm (1994) pointed out that "programs for the gifted are being cut because they are not 'politically correct.' " (p. 2). These authors stated that there tends to be a consistent swing from a strong concern for excellence to a zeal for equity and back again. They also cited Joseph Renzulli as saying, "The word gifted has become the worst ethnic, gender slur word" (p. 2). Throughout the literature the attitudes of elitism and anti-intellectualism seem to be factors which gifted and talented education programs must overcome. Therefore, the first of the barriers that was revealed by the reviewed literature, and in my opinion, the most important, is that of anti-intellectualism as a societal attitude.

According to a number of researchers, these types of attitudes frequently affect rural community sentiments related to acknowledgement of the need for gifted programs. For example, Richard Hofstader, author of Anti-Intellectualism in American Life, was cited in Davis and Rimm (1994) as stating, "Americans and others typically admire those who excel at sports, dance, music, or art. However, the label intellectually gifted elicits hostility because it threatens the self-esteem of both youth and adults" (p. 1).

Hofstader also pointed out that parents may be reluctant to acknowledge giftedness in their children. Being identified for special services in some small communities, he stated, often marks a child as different or unusual. While it is acceptable to be known in music and athletics, it is not socially acceptable to be known for intellectual prowess. Therefore, there is no public cry for more programming opportunities or funding for more teachers of the rural gifted and talented.

A study by Anderson and Kleinsasser (1987) showed that rural communities usually demonstrate great satisfaction with their schools. However, this study also showed that many teachers perceived that rural gifted students do not need special programs. Such misunderstanding of the needs of gifted and talented students exemplifies a form of anti-intellectualism even among teaching staff. Even A Nation at Risk (1993), a report by the National Commission on Excellence in Education, addressed the need for gifted education. Davis and Rimm (1994) quoted one section of the report as follows: ". . .over half the population of gifted students do not match their tested ability with comparable achievement in school" (p. 2). Thus, combining the factors of community satisfaction with status quo and lack of teacher preparation in the area of understanding

the needs of the gifted make it highly unlikely that differentiated programs for gifted students can develop in rural areas (Spicker et al., 1987).

Anti-intellectualism also seems apparent in the observation that many times proposals for community and school improvement, including the start of, or the expansion of service for gifted programs, can be viewed by local citizens as potential threats (Davis & Rimm, 1994). Societal attitudes that affect social and political values are sources of community pride and stability; and, therefore, change comes more slowly. Kleinsasser (1988) pointed out that rural communities tend to share more closely conservative social and political values. Spicker, Southern, and Davis, (1987) examined the important and central roles that schools play in rural communities. They found that local churches were the only local institutions that were most likely to compete with the schools for resources and community backing. From personal experience I can attest that, while providing funding for other organizations or sports teams is acceptable, finding funds to provide academic challenge to students who many mistakenly believe "can make it on their own" is not considered an urgent need.

Gifted programs themselves can be considered catalysts for change. Lack of understanding of the specific needs of gifted students, along with a program whose very existence is designed to be a change agent, can many times create misconceptions within the community. I have personally experienced that gifted education is many times the area within the school that introduces new programs or develops opportunities for higher level thinking that are later adopted into the regular classrooms. For example, the field of gifted education demands the need for more advanced programming and specialized instruction in order to meet the individualized needs of the students whom it is designed

to serve, thus providing models for individualized instruction for the school as a whole. However, according to Jones and Southern (1992), few rural communities have the availability to offer career or advanced academic opportunities. As a result, the drive on the part of the talented and gifted teacher to enhance programming practices for the gifted is many times in conflict with a prevalent status quo attitude of the staff (Howley, Howley, and Pendarvis, 1995). This is due to a lack of teacher preparation, as well as a community perception that gifted and talented students can make it on their own.

A specific negative effect of anti-intellectualism that has an impact on the schools in the area of programming for rural gifted and talented students is that of elitism. According to Spicker (1987), the citizens of some rural communities demonstrate misconceptions that gifted education programs will set a group of students apart as elite and siphon off some of the most capable young persons from the community's future.

Another example of anti-intellectualism is the practice of claiming gifted programs to be examples of elitism. The Des Moines Register (June 30, 1998) carried an article with the title: "Schools Lower Bar for Elite Summer Class." In this way the term is sometimes attached to the program by those who are concerned about equity issues. Howley, Howley, and Pendarvis (1995) stated that "equity is a tool for ensuring desirable economic ends" (p. 27). More recently this concern has been attached to the criticism of equitable identification practices in gifted education. Van Tassel-Baska, Patton, and Prillaman (1989) stated that there is evidence that as a field, we have failed to respond to our society's diversity by adequately identifying and serving gifted students who are economically disadvantaged. Hence, these inconsistencies have added to the debate of equity, therefore producing the sentiments of elitism and anti-intellectualism.

The new definition of giftedness presented in the National Excellence Report (1993) was designed to confront some of the issues that led to such cries of elitism. The definition states: "Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor" (p. 26). This new definition relies on a system to identify gifted and talented students by seeking a variety of talents through the use of many assessment measures that are free from bias (National Excellence Report, 1993). It is hoped that the implementation of this new practice of identification may help to eliminate some of the misconceptions of gifted education which have led practitioners such as Meyers and Slavin, as cited in Borland and Wright (1994), to urge an end to gifted programs altogether.

According to Borland and Wright (1994), "giftedness is a value-laden social construct; therefore the assessment of which often involves methods and instruments of uncertain validity. It is unreasonable to expect otherwise" (p. 164). This lack of validity, as well as an inability to define specific characteristics that are true of all populations of gifted students, has led to the cry of unfair practice and therefore, the stinging stigma of elitism.

Equity issues create mistrust for the field of gifted and talented education, thus many times associating elitism with inequity. According to Aamidor and Spicker (1995), the identification procedures of teacher recommendation supported by standardized achievement and group or individually administered intelligence test favor the cultural experiences of urban/suburban children. Therefore, they argue, there are difficulties in identifying gifted rural children who are economically disadvantaged and who do not exhibit the traditional characteristics of gifted behavior. Earlier work of Spicker,

Southern, and Davis (1987) also noted that identification standards that rely heavily on standardized tests tend to under-identify gifted students from traditional rural areas.

There are problems in the identification of, and service to gifted and talented students. The field of gifted education must work to correct assessment opportunities to make them unbiased. By addressing these issues, anti-intellectualism and elitism will hopefully no longer be synonymous with gifted education programs. It is important that we address these issues for two reasons. First, if rural gifted and talented children are not identified, they are not going to be served. Second, there is a perception that rural gifted and talented students do not need special programs. This, according to the work by Anderson and Kleinsasser (1988), is due to a lack of teacher preparation and prevailing attitudes about gifted programs being elitist. As a result, many teachers do not help either to identify or to provide programming for rural gifted students.

It seems clear from the reviewed literature that anti-intellectualism is a societal barrier that has an effect on effective programming for rural gifted and talented students. These societal attitudes reflect society's disregard for the unique needs of gifted and talented students. Challenging academic opportunities are not accepted, and funding for such programs is limited or not available. These attitudes are also reflected in the fact that many teachers do not believe that rural gifted and talented students have special needs; and, therefore, differentiated curriculum is nonexistent in some schools and limited at others. These attitudes are also reflected in the lack of attention to the field of gifted education in teacher preparation programs (Davison, 1992).

Anti-intellectualism within our society needs to be confronted, and teacher preparation in the field of gifted and talented needs to be provided. According to Howley,

Howley, and Pendarvis (1987), it takes a stable and informed faculty operating an effective academic program to deal with the misconception that rural gifted and talented students do not need special programs and attitudes from these rural communities that project a fear of elitism. Teachers, administrators, support staff and community need to understand that gifted students in rural communities are at-risk without special arrangements for programming and that rural gifted programs do produce good results (Luhman and Fundis, 1989). Equity issues need to endorse the belief that all students should have the right to learn something new every day.

Barrier 2: Isolation.

Analysis of the reviewed literature seemed to indicate that the factor of isolation was another barrier to effective programming for the rural gifted and talented student. It is a factor that affects both the students and the roles of the teachers who serve them.

Generally, isolation is indicated by a lack of resources due to geographical location. In 1994, Goals 2000: Educate America Act published Evolution of the Concept "At Risk." The definition for an "at risk" student is one "who because of limited English proficiency, *poverty*, race, *geographic location*, or economic disadvantage, faces a greater risk of low educational achievement or reduced academic expectation." [Italics added.] (U.S. House of Representatives Report 103-446, pp. 99-100). Due to the factors of isolated geographical location and the frequent existence of poverty within their home school districts, rural gifted and talented students many times fall into the category of "at risk." Therefore, these students lack the availability of resources that will provide them challenging academic opportunities.

Rural school districts are hard pressed to direct students with broad interests and unusual talents to the appropriate community resources and mentors because of lack of access to resources. Dr. Lee Wolf, Iowa Department of Education, specifically stated in lectures at CONTAG '97 (Conference on Talented and Gifted) and through personal discussion that gifted students fall into the category of at-risk because they are in danger of not having the appropriate instructional opportunities which would enable them to perform to their ability. This is in agreement with the National Excellence Report (1993) which states that rural gifted students are even more at risk because of compounded problems due to geographic isolation and lack of resources.

The issue of isolation creates programming difficulties for the rural gifted and talented. Because there are so few community resources in rural areas, the school is considered the main source of intellectual and cultural life. That source, however, can be very limiting. According to Jones and Southern (1992), rural districts lack easy access to such resources as museums, art galleries, well-stocked libraries, research facilities, universities and colleges. The lack of large manufacturing concerns, or diverse professional communities create obstacles for developing job shadowing or mentoring opportunities. Distance from universities and colleges limits rural gifted and talented students from enrolling in concurrent college classes during their high school years. Therefore, it seems clear, the barrier of isolation limits educational opportunities and special programs are sometimes nonexistent.

Not only is there a lack of access to challenging academic opportunities due to isolation, but there are also very limited opportunities to meet the affective needs of students. Students need to work with peers who think as they do. According to Benbow,

Argo, and Glass (1992), it is important for rural gifted students to have opportunities to stimulate the mind and meet and interact with individuals who are like themselves. Isolation, due to lack of peers, can therefore become as difficult a barrier to effective programming as is isolation from resources.

In some cases geographical isolation is extreme. This creates great problems for service to rural gifted and talented students. In order to obtain services for gifted and talented students, rural districts frequently must depend on consortiums with other districts (Jones and Southern, 1992). However, if districts share a teacher, the teacher wastes valuable student-contact time traveling from one site to another. Too, because the very small schools have such a low population of gifted students, they are many times overlooked or their needs are not addressed because of the need to assign funding to the larger populations of students (Ellzey and Karnes, 1991). In these cases, programming is minimal or non-existent due to isolation in terms of low population.

According to Luhman and Fundis (1997), rural schools carry out their missions among unique constraints, including a sparse student population. The small size and the isolation of the rural schools means that the differentiation of staff and students is more difficult. Each exceptionality, such as gifted education, consists of very few students within any given rural school population. Because of their limited population, rural gifted students do not have chances to take advance placement classes, participate in academic challenging programs such as Academic Decathlon, or International Baccalaureate. Also, the staff must fill multiple roles; therefore, according to Jones and Southern (1992), rural teachers have more general content area demands.

Isolation tends to affect all teachers within a rural school district. Jones and Southern (1992) found that teachers of gifted education in rural areas are more apt to lack colleagues with whom to consult, and with whom to share materials. These teachers also lack colleagues with whom to gain insight into the educational concerns. All of these factors can make provision for educational services to the gifted difficult. According to these same authors, the demands of heavy teaching workloads also require the regular education teacher to work in relative isolation as a generalist, further complicating efforts to serve gifted students.

From personal experience I have observed that teachers in isolated rural areas are more apt to lack colleagues with whom to consult, to share materials, and to provide insight to educational concerns. I have witnessed how this lack of opportunity for networking can lead to high burnout and frustration due to attitudes within the community and to staff who are slow to change or unwilling to accept responsibility for serving the needs of this population of students.

In summary, the reviewed literature demonstrated that isolation is a major factor deterring programming opportunities for rural gifted. Isolation affects rural gifted and talented students because of lack of peers for interaction and lack of resources for appropriate programming opportunities. It affects teachers due to a lack of colleagues for valuable networking opportunities. Teachers of the gifted and talented are limited in materials and resources to use for the variety of ages, interests, and abilities of the students whom they are required to serve.

Barrier 3: The all-encompassing role of the G/T teacher.

Another barrier to effective programming for the rural gifted is the all-

encompassing role of the G/T (gifted and talented) teacher. From personal experience and from discussions with colleagues from rural communities, I have found that the smaller the school, the larger the role for the teacher of gifted education. It is not unusual for the G/T teacher in rural schools to be the teacher and provider of services, as well as the program coordinator. In my present teaching position, the G/T teacher is not available to all identified gifted and talented students. This is because the time frames for providing services to so many different grade levels and curricular areas become, of necessity, very rigid. Regular classroom teachers must work within the confines of their own classroom schedules; and, as special area teachers, teachers of the gifted and talented must work within the confines of all of the classrooms from which their students come to them. Time, therefore, becomes a precious and debated commodity.

Some students have needs that are not being met because the time frame to serve them best is unavailable due the all-encompassing role of the G/T teacher. DeBuse and Shoemaker (1993) stated that insufficient time is the primary reason why special area teachers, including gifted education teachers, spend very little of their time in consultation. They commented: "When educators of the talented and gifted are required to provide both direct services to students and to teachers, they may have little time available for consultation activities" (p.60). According to these same authors, caseloads are high; and due to the demands of the job, career burn-out is high also.

Due to the demands of his/her job, the fragmented schedule of a G/T teacher in a Pre-K-12 district provides very little time to work with students each day, and in many cases, teachers do not have the luxury of meeting with students each day. This makes it very difficult to carry on a defensibly differentiated curriculum when contact with the

students is limited in length of time, or the teacher-student contact times are infrequent. The service that is provided many times is not available when students have time within their schedules; therefore, many rural gifted students are not being served.

Borland, in his book Planning and Implementing Programs for the Gifted (1989, pp. 159-165), discussed desirable traits of gifted and talented teachers. He stressed that gifted education teachers should have "a considerable amount of general intelligence," possess a strong educational background, and be an example of lifelong learning themselves. He also pointed out that the teacher of the gifted needs to enjoy the opportunity to learn from their students and to have a strong enough ego that they can "survive" the unique, frustrating, and confrontational circumstances of their job. He was convinced that teachers of the gifted need to celebrate diversity, creativity, and be able to recognize off-beat original, unique ideas. He argued that they need to possess the skills to develop curriculum and organize its presentation for each student according to their individual needs, at any and all levels of service. Most important, Borland felt that these teachers should also have training in the area of gifted education and possess effective counseling skills for service to the affective needs of gifted and talented students. When we examine the number of traits enumerated by Borland, the all-encompassing role of the G/T teacher becomes very evident.

While the barrier of the all-encompassing role of the G/T teacher occurs throughout the reviewed literature, little is presented as a solution to this problem. This lack of research leads, in turn, to the creation of a barrier to effective programming practices for rural gifted and talented students. Because of the rural G/T teacher's need to play so many roles, service to the rural gifted and talented student is limited and at times

nonexistent. Susan Winebrenner, speaker at Contag '94, stressed that gifted students are gifted all day long. Ideally, therefore, general education classroom teachers must develop an ownership for the provision of the gifted and talented student's needs within their classrooms.

In summary, the G/T teacher in the rural school district finds her or himself in a situation where she or he is responsible for meeting children and youth of all ages and grades in a school district which may be located in a number of different buildings. Times available to work with individual students may be very limited, as may contact with general education classroom teachers and other staff members. Unfortunately, her or his role is too all-encompassing, and, therefore, the needs of the gifted and talented are not able to be fully met.

Barrier 4: Inadequate curriculum/programming opportunities for learning.

The reviewed literature indicated inadequate curriculum/programming opportunities for learning as another barrier to effective programming for the gifted and talented. Ellzey and Karnes (1991) cited the concerns of Spicker et al. (1987) who stated that problems encountered by rural districts in educating the gifted include limited curriculum, limited resources, and limited support personnel such as guidance counselors, curriculum specialists, and psychologists. The National Excellence Report (1993) stated that small-town and rural schools often have limited resources and are unable to offer advanced classes and special learning opportunities. According to Benbow (1992), 76% of the school districts in Iowa have an enrollment of fewer than 1000 students, which translates to approximately 75 students per grade level. With only a handful of gifted students, and in some cases, not even one in every grade level, it is difficult to provide

appropriate programming. Consequently, gifted students in rural areas frequently are underserved and thus at greater risk to become underachievement.

Cross and Dixon (1995) reported that gifted students in rural schools experience many of the same experiences and tribulations as gifted students in suburban settings. However, they differ in that they have fewer choices of advanced courses, struggle to gain access to academic materials, and live in a community where transportation to cultural events is time-consuming and expensive. Because gifted students are much more likely to be active in extracurricular activities, those living in rural communities are much less likely to be treated according to their academic gifts. Cross and Dixon also stated that rural students, instead of being known for their academic achievements, are known for their extracurricular achievements. They have the support of their communities in these culturally valued activities.

Spicker, Southern and Davis, cited in Davis and Rimm (1987), found that a strong belief in self-sufficiency and local control makes it less likely that rural districts will seek outside assistance from state agencies or universities to develop programs to meet the needs of gifted students. As a result, many rural gifted students are not receiving curriculum or programming opportunities that are sufficient to meet their academic needs.

Borland (1989), Kulick & Kulick (1992), and Benbow (1992) documented that acceleration has been established as an effective programming practice for rural gifted students. They also stated that this practice has the most potential for appropriate service to highly gifted students and the most merit for efficiently serving rural gifted students.

Unfortunately, even though research documents its success, according to Jones and Southern (1992), acceleration is not being used in many rural districts today.

Jones and Southern (1992) conducted a study and survey: *Programming Grouping, and Acceleration in Rural School Districts.* In this study, all of the rural secondary level gifted coordinators considered that ability grouping was a necessary step in providing for the needs of the most able students in the class, whether or not ability groupings was used in their district. Eighty-two percent of the coordinators said that grouping alone was not sufficient for meeting the needs of gifted and talented students. Three-fourths of the urban coordinators, compared to one-half of the rural schools, provided for acceleration in the forms of either early entrance, or grade skipping. Only three coordinators from a total of 20 rural districts in this study enumerated accelerative options (e.g., advanced placement, concurrent college/high school enrollment, academic challenge, academic honors courses, or subject matter acceleration) among alternatives available to rural gifted secondary students.

The results of this study indicate that even though research documents the success of ability grouping and acceleration with rural gifted students, these practices are not being implemented due to a variety of reasons. Some of these reasons include barriers previously discussed, those of societal attitudes about grouping and acceleration. Other reasons include a lack of funding for provision of rigorous academic classes and lack of funding for the hiring of additional staff in order to provide these programming opportunities.

It seems evident that the barrier of inadequate curricular and programming opportunities directly affects options for programming of rural gifted students. The

reviewed literature showed limited program options which have been researched to meet the specific needs of rural gifted students. It is clear from the literature that acceleration in its many forms listed previously, as well as ability grouping, are two excellent ways to serve this population. Both are relatively simple to accommodate within the classroom or school district. Both have a great deal of research to back their use. However, as stated in the Jones and Southern survey, ability grouping was not sufficient to meet the needs of gifted students, and rigorous academic classes and opportunities are many times nonexistent within the rural setting. Therefore, effective curriculum/programming for rural gifted and talented students appears to be directly affected by this barrier.

Barrier 5: Lack of funding for rural gifted and talented programs.

Another major barrier to effective programming mentioned frequently in literature is a lack of funding for gifted programs. This lack of funding places a real burden on the effort to provide curriculum, programming and personnel for gifted and talented rural students. Jones and Southern (1992) stated that rural districts tend to be more burdened by requirements to transport students, more poorly financed, more socially and politically conservative, and more lacking in relevant community resources. Howley & Howley (1987) stated that tax bases are typically adequate to finance general education programs but inadequate to support alternatives for gifted and talented students. According to these authors, many districts choose to use local money resources to provide services for all students rather than to meet the needs of a few.

Pitts (1988) found that high transportation costs and extremely long bus routes in the very rural areas make grouping gifted students and some other special services impractical. Jones and Southern (1992) stated that rural districts tend to be more poorly

financed and more lacking in community resources. Their research also showed that rural areas have fewer programs because they lack the resources and because the implementation of programs for the gifted is more recent in these areas. Indeed, in order to obtain services for rural gifted and talented students, rural school districts frequently must depend upon consortiums with other districts.

The State of Iowa uses a formula to determine funds for its gifted and talented programs. These monies, called allowable growth funding, provide for only minimal programming opportunities. This funding tends to be barely adequate to provide for the successful functioning of the program. Indeed, in many cases this funding covers the cost of only one teacher because of the formula used for determining the budget.

Funding of a program directly affects its quality and the number of staff that can be provided. According to recommendations which accompany the Iowa Code definition of giftedness, a minimum of 3 to 5% of the school population should be identified and served. However, since it is typical policy for only one teacher to be assigned to plan and provide programming for an entire rural school district of Pre-K-12 students, a smaller percentage of the population must be identified in order to provide a reasonable teacher load. Now, if we were to make a comparison and look at the funding of special education in the same school district, we would find a number of special education teachers. Indeed, according to the severity of need, some are staffed at a ratio of one-on-one. Unfortunately, while the State of Iowa mandates gifted education programming (Iowa Code 442.31), severity of need is not currently addressed in the allowable growth budget; and, therefore, funding is set according to population of students, not according to needs within that population. For example, my own school district employs seven elementary

special education teachers and one gifted education teacher; and that one teacher's responsibilities include service to the entire school district, Pre- K-12. It is evident, then, that lack of funding for personnel has directly affected the programming options available to rural gifted and talented students.

In some circumstances, programming for gifted and talented students can be compromised due to lack of funding. According to researchers, an example of such compromised service is that of the practice of inclusion. According to Willis (1995), there are two main reasons for mainstreaming the gifted. One is the spread of a philosophy that favors mixed-ability grouping. The second, an identified barrier to effective programming for the rural gifted, is the lack of funds for provision of appropriate curriculum and programming for gifted and talented programs.

Funding also affects the role of the gifted and talented teacher because not enough money is provided to allow for effective service in the areas of adequate, challenging curriculum or programming opportunities for rural gifted and talented students. From personal experience, I am convinced that until more teachers are employed, the lack of services and program offerings will continue to be a barrier.

Summary, Conclusions, and Recommendations

Summary

The purpose of this review of the literature was to identify the major barriers to effective programming of gifted education in rural schools and to determine how these barriers affect the educational programming in the rural learning environment. Through the reviewed literature five barriers were identified. The barriers include the following:

(a) anti-intellectualism as a societal attitude, (b) isolation, (c) the all-encompassing role of the gifted and talented teacher, (d) inadequate curricular or programming opportunities for learning, and (e) lack of funding for rural gifted and talented programs. It was also determined from the literature that each of these barriers plays a unique role in the creation of difficulties which negatively affect programming for the rural gifted and talented population. The writer concluded that recognition of these barriers and an understanding of the way in which they have great impact on the educational programming of our rural gifted and talented students are first steps toward addressing and providing for the needs of this population.

Conclusions

Through this literature review, I have reached the general conclusion that there is a dearth of information concerning the education of the approximately six million children and youth who are identified as living and learning in a rural environment. In addition, there is very little, if any, attention given to the study of those rural children and youth who have been or who ought to be identified as gifted and talented.

Through my analysis of available resources and the resulting establishment of perceived barriers to effective programming for rural gifted and talented students, I have arrived at some conclusions which are specifically related to those barriers.

First, I have concluded from this study that educators and the learning community do not know and do not recognize the unique characteristics of rural gifted and talented students. This can be attributed to the lack of research in the areas of identification, programming, effective curriculum/programming practices and affective needs of

talented and gifted children and youth. As stated earlier, research in this field is not adequate and needs to be explored in much greater depth.

Second, I believe that all educational constituencies must recognize and acknowledge the existence of the barriers of anti-intellectualism, isolation, the all encompassing role of the gifted and talented teacher, the inadequate or non-existent curricular/programming opportunities, and the lack of funding for rural gifted and talented programs. The recognition of these barriers and the acknowledgement of their existence is truly essential if school districts are to plan and implement effective programs for the rural gifted and talented students. Once these barriers are acknowledged and recognized, affected constituencies must seek out and implement strategies to overcome them.

Third, there is no doubt that rural teachers, as a whole, do not receive the special training that they need to teach gifted and talented children and youth. I also believe that teacher preparation directly affects three of the identified barriers: attitudes of anti-intellectualism; the all-encompassing role of the G/T teacher; and inadequate or non-existent curricular/programming opportunities. We cannot expect teaching attitudes toward the gifted and talented child to change nor can we expect teacher development and provision of challenging curricula when teachers have not been trained in the field of talented and gifted education. Neither can we expect teacher understanding of the importance of providing opportunities for gifted children to work with other gifted peers when teachers have had little, if any, academic work or practical experience related to meeting the needs of this population.

My final conclusion is that adequate funding for rural gifted and talented programs must be made available if rural gifted and talented students are to work to their full potential. From the literature review it is evident that there are not available resources to provide adequate curricular and programming opportunities for our rural talented and gifted students. In addition, there are not enough available funds to employ the number of teachers needed within each rural school district to provide adequate service to the gifted and talented students throughout the day, as well as provide for collaborative time with fellow teachers which would result in the provision of a truly challenging curriculum.

Recommendations for Overcoming Barriers to Effective Programming

On the basis of this review of the literature I would make the following recommendations for future action or research in the field of rural gifted and talented education:

1. It is absolutely essential that more research be conducted in the area of service to rural gifted and talented students. While rural gifted and talented students are a sub-population within the rural population, researchers need to understand that a population of 6.9 million rural students (New, 1989) is not one that should be overlooked. This research needs to relate to the problems raised by each of the barriers as presented through this review of literature, as well as the effect of each of these barriers on effective programming for this unique population of students. While this review of literature did not specifically discuss any of the following practices, I also recommend more research in each of these areas: cluster grouping, collaboration, and consultation. Each has been identified as a best practice for gifted and talented populations as a whole. However, it is possible that each one, or a combination of these practices, could be successful in helping

to overcome the barriers of anti-intellectualism, broadness of the role of the T/G teacher, and unavailable or inadequate curricular or programming opportunities. However, more descriptive and empirical research is needed to document their success in the rural learning environment.

2. Both descriptive and empirical research in the field of gifted and talented education need to be published in journals or publications that are widely read by general education practitioners, as well as by teachers of the gifted and talented in the rural schools. Teachers of gifted and talented also need to make special efforts to educate the community and fellow colleagues concerning such research. This could be accomplished through provision of educational opportunities such as teacher inservice, newsletters to the community, newspaper articles, and local talented and gifted associations. It is through education that we can address the barriers of anti-intellectualism and elitism, which unfairly characterize this field.

3. It is essential that additional funding for gifted and talented program be provided from federal, state, and local sources. This funding needs to provide for additional resources for curriculum and programming. Funding needs to include special allowances for the added expenses that rural schools incur due to isolation factors such as the provision of telecommunication opportunities for accelerated classes as well as additional travel expenses. In addition, this funding needs to cover the cost of employing more teachers for the gifted and talented. Interested groups also need to develop consistent communication with the legislative and executive branches of the government in order to develop more awareness of the unique needs of this population of students including the positive impact of additional funding on their education.

4. All teachers need to be prepared to identify gifted and talented students and to provide a defensibly differentiated curriculum according to the needs of their students. Teacher preparation to meet the unique needs of gifted and talented children and youth needs to be provided in teacher education programs. This needs to include a separate course in gifted education, not just a minor unit in a special education offering.

5. From the viewpoint of effective curriculum/programming practices, it is apparent from the reviewed literature that rural school districts need to pursue innovative practices which will increase opportunities for challenge to the rural gifted and talented students. One of the least expensive ways to accomplish this is through the practice of acceleration. The use of telecommunications also should be strongly considered. Such tele-communication classes would provide opportunities for advanced coursework and expand curricular options for gifted and talented students in even the most isolated of areas.

6. Rural gifted students should have access to, and participate in, challenging and effective programming opportunities. This can be accomplished through the retraining of personnel to challenge the societal attitudes of anti-intellectualism and through provision of a variety of programming options with funds to run such programs.

Twenty-five years ago Paul D. Plowman offered guidelines for addressing the specific needs of the rural gifted. His model included access to experiences and environments as well as persons, ideas, materials, and equipment. Each of these areas can be, and should be, addressed through activities, relationships, feelings, self-understanding, academic preparations, career preparations, and life preparations. His

suggestions, according to LaVelle (1996), are still viable for rural gifted and talented students today.

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