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AUTHOR

Attkisson, Janice R.

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ABSTRACT

This paper presents information on various options designed to improve the education of gifted students in rural areas. The options discussed include: (1) using interactive television systems to offer more challenging courses to gifted students; (2) having rural schools collaborate and share their resources; (3) developing summer programs at universities and other institutions; (4) establishing charter schools; (5) establishing academies that bring gifted students together with teachers and resources; (6) training teachers by using correspondence courses; and (7) having gifted students engage in home schooling. The benefits and drawbacks of each option are discussed. Examples are provided of schools that have engaged in the various options. (Contains 14 references.) (CR)



Jan Attkisson **CUIN 8397** Dr. T. Monaco April 27, 1996

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Options for Rural Gifted Students Janice R. Attkisson **University of Houston**

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Gifted students in rural settings often face challenges unknown to their urban counterparts. These include a lack of distance from resources such as universities, libraries, and other cultural and educational sources of support. Since there are likely to be few gifted children in their schools, they are likely to feel "different" to feel that they don't quite "fit in." Due to decreasing farmland taxes, the tax base for rural school districts, there is frequently a lack of financial support for programs, especially when the number of students to be served is quite small. Program offerings are often inadequate to meet the needs of gifted students. Consequently, these students are underserved and unchallenged in many rural communities.

Rural settings are sometimes perceived as peaceful and without significant problems, but the fact is that there is a higher incidence of at-risk students in rural settings. Further, recenit research shows that students who learn the least are those in the smallest and in the largest high schools.

The purpose of this paper is to suggest various options that, depending on local circumstances, may be made available to gifted students. While most suggestions are decisions that may be made by the gifted learners and their families, others are options that may be selected by a school district or community seeking to more effectively serve its gifted population. Although a rural community is less likely to be able to offer the variety of programs typically available in more heavily populated or affluent areas, there is still a variety of options that may be made available to gifted learners.

Technology

Through the use of filber optics, the field of telecommunications has drastically enhanced the potential ffor providing a wide range of services to students. Two-way



interactive television classes are a boon to districts that offer more challenging courses to their gifted students. Although the initial cost is significant, the potential gains for the entire community make this option an especially effective alternative. Some schools in Nebraska, for example, have taken advantage of the communications revolution by installing state-of-the-art interactive television systems which are used by various community groups as well as by the students, thus making it a more appealing way to spend local taxes. Advances such as fiber optics and two-way video offer an array of possibilities for irural schools, which no longer need to be isolated from the information superhighway.

Collaborative Sharing

This option has been employed with impressive results by the Lostant and Winona school districts in rural Illinois and is a marvelous model for small districts with the willingness to undertake an innovative and creative approach to solving the challenge of avoiding forced consolidation while serving their students effectively. Although their collaboration endeavor was not aimed specifically at meeting the needs of their gifted students, it has obvious benefits to them.

Small districts face the dissolution of their local high schools with passionate resistance, because they know that the school system is the heart and soul of the rural community. The closing of their schools foreshadows the demise of the community. The small towns of Winona and Lostant, six miles from each other, have managed to keep the high schools viiable in both communities. The high school in one community serves as the Math/Science center and the other high school serves as the English/Humanities center. Every morning freshmen and sophomores are bused to Lostant and juniors and seniors are bused to Winona. The process is reversed in the



afternoon, and the students are bused to their home sites in the evening. The restructuring of The busing cost the most, but this was offset by impressive savings through staff reductions, and decreases in duplication of supplies and programs.

The proposal to engage in their collaboration efforts endured initial opposition by those who felt it would cost too much to be feasible. The plan required the reassignment of teachers from each school to the other. Collaborative sharing between these two small towns has resulted in the offering of 16 new courses, including several advanced placement courses. This, of course, is a great advantage to their academically abler students. In addition to offering better academic programs and increased educational opportunities, their collaboration has resulted in greater economic efficiency and a more equitably shared tax burden.

The establishment off a program such as this requires the commitment and involvement of school boards, parents, teachers, and communities involved. Citizens must understand that risk-taking is unavoidable, and they must participate as willing decision-makers. The focus must be on meeting the needs of the students involved.

Summer Programs

Summer programs, such as Project SCAMP (Science, Computer and Mathematics Program) offered by the University of Virginia, can help fill the gifted students' need for challenge. This program was developed to address the problems of the lack of available physical resources such as laboratories, libraries, and computers.

Academically able students without access to computer technology are offered the opportunity to participate in this program which links them with role models at the university.



Project SCAMP is a year long program which includes a three-week residential camp at the University of Virgiinia. During the morning students take computer based classes in geometry and mathematical modeling. Each afternoon session includes a demonstration from a Ph.D. who is an expert in a specific scientific discipline. For example, a physicist might demonstrate a nuclear reactor; an astronomer might conduct a class in an observatory; or a medical education specialist might present a hands-on demonstration of interactive videodisk simulations. Each instructor includes information regarding career options and the academic preparation necessary to achieve employment in this or her respective field.

Working with a university mentor, each student also completes a year-long project. Students receive input from teachers and other participants during three Saturday meetings held during the school year and a week of culminating activities the following summer. Students also demonstrate projects to local classes, and teachers are offered sample lessons plans that may be used with the entire local class.

Many museums, art iinstitutes, zoos, educational institutions, and other organizations offer summer courses, camps, or seminars that are appropriate for gifted students. Although these are typically not as extensive as the University of Virginia's SCAMP program, they can still be useful tools in challenging gifted children. These affective and academic offerings provide a comfortable "feeling of belonging" academically talented children, who often feel like misfits at school, due to their academic superiority.



Charter Schools

The establishment off a charter school is a challenging option that may offer exciting possibilities for gifted students. Laws governing the establishment of charter schools vary from state to state but typically permit parents, teachers, or other interested persons to establish schools, provided they secure approval from the state or local school board. The state then funnels its per-student funds into the charter school. Parents and/or teachers of gifted students might be able to band together to establish a charter school designed to meet the needs of those students.

The primary problem of charter schools is that they are typically underfunded, a problem which has already closed some charter schools. As one might expect, resistance to the establishment of charter schools is often met with resistance from local schools and school boards, who may view such enterprises as accusations of ineptness on the part of the local school system. Teachers' unions also have expressed objections to charter schools, because when students leave, fewer teachers are needed in the local system.

Teachers who seek to establish a charter school must recognize that their salaries are likely to be drastically cut if they choose to teach in such a school, and the start-up costs are often prohibitive. Still, charter schools may be especially appropriate for those students who tend to "fall through the cracks" in the regular school system. For example, a charter school for Native American children might teach them the language and culture of their people. Some charter schools serve specific handicaps, such as deafness. Other successful charter schools address the needs of drop-outs. The establishment of a charter school for gifted students is certainly an extraordinary



challenge, but it may be the best way to address the needs of gifted students in some rural settings.

Academies

Many states have established academies which bring gifted students together with teachers and resources. Typical of these is the Illinois Mathematics and Science Academy in Aurora, Illinois, and the Texas Academy of Mathematics and Science (TAMS) in Denton, Texas. Such schools are able to offer classes in greater depth and intensity than are generally offered in other high schools, particularly those serving rural communities. Academies are usually supported by state taxes, although some do charge other fees to cower such costs as room, board, and lab expenses.

Another example of an academy is the Texas Academy of Mathematics and Science (TAMS). There are negrative aspects of attending an academy. Students are often far from family and friends, and the cost of transportation may strain the family budget. However, the opportunity to take truly challenging courses or to complete some college level courses while still iin high school is enticing to students who are inadequately challenged in the regular high school. Adjustments to living away from home are compensated by participation in a program which addresses the needs of highly gifted students.

Despite the success of such programs, academies often encounter stiff opposition from local school officialls who resent that those institutions rob the local school of their best and brightest students. Removing the top students will almost certainly cause the local high school's average test scores to drop. There is also resentment against having to compete against academies in state-sponsored scholastic competitions.



OPTIONS FOR RURAL GIFTED STUDENTS

There is unquestionably a higher price tag in the education of a student in a state academy (about \$18500) per student versus the state average which is likely to be around \$5500). However, the same people who don't mind spending \$25000 on a classroom for handicapped children rebel at the suggestion of spending similar amounts on academically talented children. And those who charge that such special schools and programs are elitist often support funding sports and honoring those who are athletically, rather than academically, gifted.

Some officials opposed the perceived "brain drain" caused by academies, whose students are often recruited to leave their home states for colleges and jobs elsewhere. Some evidence suggests that academies have actually helped stop the flow of brighter students to other states. Half the students of the Illinois Mathematics and Science Academy, for example, mow remain in Illinois to attend college.

Academies in some states use technology to train teachers in local schools and offer advanced courses to high schools throughout the state. Perhaps such "sharing of the wealth" will do much to alleviate the opposition some communities have toward these schools.

Teacher Training by Correspondence

Gifted children in rural communities are often underserved because rural school districts lack the financial resources to entice experienced and well-trained teachers to remain in their district. Rural schools frequently do not have a single teacher who has received training in gifted education.



West Virginia University tackled the important task of training teachers in rural settings, by offering a correspondence course to teachers who lived too far away to attend classes. Professors developed an extensive and appropriate course for teachers wishing to improve their understanding and teaching of gifted students. Upon completion, teachers are more aware of the special needs and abilities of gifted students.

The University of Houston also offers a videotaped course concerning the teaching of gifted students. Though not specifically aimed at serving rural populations, this program offers assistance to those rural teachers seeking to better serve the gifted students they encounter.

Homeschooling

Most educators wince at the mention of homeschooling. The merits of homeschooling are illustrated by the lives of many eminent Americans. Abraham Lincoln taught himself alt home. Thomas Edison's mother taught him at home because his teachers thought he was too dull to learn. The list of prominent homeschooled Americans also includes Alexander Graham Bell, Laura Ingalls Wilder, Douglas McArthur, C.S. Lewis, Algatha Christie, and Wilbur and Orville Wright. Even in today's far more complex society, parents still choose homeschooling, citing the low level of academic content in mainy classrooms today. Parents can approach homeschooling in two primary ways: either as independent studies or with parental instruction. Older students may be able to teach themselves at home. Several educational supply companies produce curricula specifically for home schooling. Students willing and able to forego the more active social climate of the public school campus may be far happier charting their own paths; at home. Individual interests may be more easily pursued.



OPTIONS FOR RURAL GIFTED STUDENTS

With younger children parental involvement is more critical. Parents may purchase pre-packaged curricular materials for any grade level. Thousands of parents have chosen this route, and the number grows each year.

One of the striking results of homeschooling is the superior scores (on average) these children reach on standardized tests. Regardless of the fact that many teachers and administrators vehemently oppose homeschooling, the fact remains that the lessons are entirely individualized, and the pace is as fast as the child (or parents) care to go. This is an ideal siituation for those gifted children whose families are willing to commit themselves to disciplined classwork at home.

Conclusion

This list is by no means exhaustive, but has hopefully delineated some of the options for rural gifted students. There are advantages and disadvantages to each choice. The decision for the best available educational program is best left up to the individual families involved, but it should at least be clear that there are choices that can be made.



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