

Is enrichment or acceleration more suitable for gifted youth in rural areas?

Gifted Education: Looking at Alternatives for Small, Rural Secondary Schools

Cynthia Abbott

Small schools, whether rural or urban, have traditionally been seen as providing their students with distinctly different educational experiences from those provided by larger schools. As with many facets of life, these different experiences have elements that are seen as "better" and elements that are seen as worse. "Better" might include a strong sense of community where everyone knows a student's name; "worse" might mean that, once branded with a particular reputation, a student is hard-pressed to change it without new peers to turn to for a fresh start. "Better" can include the variety of activities in which each student participates if the school is to offer an annual play, football, and a math club; "worse" is not having access to a peer group of dedicated thespians or computer nerds or to a soccer league. There are always tradeoffs, and for academically gifted children these tradeoffs can be particularly bittersweet. For them, "better" can be the chance to develop sides of their personality that may not be strong suits-like acting or sports, but "worse" is often a lack of peers and academic programs which challenge them to develop their special talents appropriately. With approximately 25% of our children currently attending rural schools (Ornstein & Levine, 1993), this bittersweet dilemma faces a large number of academically talented students.

Beginning with a brief rationale for and history of gifted education as background, the enrichment/acceleration debate within gifted education will be discussed in this paper. The current state of gifted education at the secondary level will then be examined, with particular reference to small rural schools. Finally, potential and "proven" methods of providing for the special educational needs of the academically gifted will be explored, keeping in mind the special challenges and opportunities that small rural schools offer.

Rationale for Gifted Education

A basic tenet of our educational system is that our educational aim should be the maximization of every child's potential.

Cynthia Abbott holds a degree in biology and completed the teacher education program at Washburn University. She is interested in gifted education both as a professional educator and as a parent.

By definition this goal includes academically gifted youngsters. Contrary to the frequent response that "these kids will do all right no matter where they are", academically talented students have been shown to need increased challenge, faster pacing of the curriculum and more in-depth coverage of the curricular material than normal learners. Under-stimulation has been shown to have detrimental effects including emotional effects including emotional effects such as withdrawal, aggressiveness, poor self-concept, and social maladjustment (McLeod & Cropley, 1989). Without appropriate stimulation, these students don't learn how to learn effectively and are sometimes unable to cope when faced with academic challenges in high school or college (Terman and Oden, 1979; Ross, 1993). Furthermore, McLeod and Cropley (1989) hypothesize that the lack of stimulation can have a permanent effect on the intellectual development of these children.

All of these arguments for gifted education center upon what is best for the student. There are also utilitarian arguments about what is beneficial for our society. Page (1979) went so far as to state, "These children represent the most important resource we have for developing future solutions to the complex problems that beset us." Ross (1993) noted that "At the same time our need for the highest levels of skills and expertise is on the rise, many of America's most talented students are being denied a challenging education." She also reported that many of the top U.S. companies, such as IBM, Texas Instruments, and Bell Laboratories, are having to hire foreign-born students to fill job slots that would otherwise go unfilled of a lack of qualified applicants. It is not that America lacks the raw talent, but we often assume that academically talented students will do well without special challenge or attention. The research suggests differently.

A Brief History of Gifted Education

For most of human history, learning has been a very fluid experience, strongly based in individual abilities and the teacher-student relationship. Most learning was experiential, rather than from books, and proceeded at the pace appropriate to the competency of the individual who was learning.

Mandatory public education slowly came into being as people realized their need for the basic skills of reading, writing and arithmetic so that they could participate fully in our country's government and find work in our increasingly industrialized labor market (Ornstein & Levine, 1993). With mass education and the industrial age came the "assembly-line concept: school should start at a certain age, progress by defined steps at specified times, and culminate at a certain age with a particular set of skills and knowledge (Start, 1989). But, as Start noted, individual people aren't that clearcut. Students learn at different rates, develop at different rates, and have varying levels of motivation and interests. Before the age-grade lock step of modern public education, these differences weren't a problem; afterwards, they've led to a variety of concerns, including what to do with students who learn much faster than most of their age peers.

Ross (1993) writes of American ambivalence toward intellectual excellence, noticed as early as the 1830's by Alexis de Tocqueville. Innate academic talent somehow seems to contradict the egalitarian spirit which seems to undergird this country, potentially conferring an inborn (and thus unfair) advantage to those who possess it. On the other hand, the United States prides itself as being a land of opportunity where an individual's talents and ambitions may be pursued to his/her utmost ability. According to Ross, this ambivalent attitude toward intellectual excellence and academic talent has continually influenced educational policy over the years, leading to a waxing and waning of support for gifted education.

The concept of certain individuals being intellectually "gifted" seemed to arise with the increasing use of the

Stanford-Binet IQ test after World War I. Many authors refer back to Lewis M. Terman's longitudinal study of gifted individuals identified in the 1920s through the use of the Stanford-Binet. With the identification of measurable criteria, educators were free to experiment on how best to serve this population. The major elements of the debate emerged early: acceleration (moving through the curriculum faster than normal versus enrichment (learning the curriculum in more depth than most peers). According to Daurio (1979), acceleration was stressed at two main points: the 1920's and again in the early 1940's. Both times, events intervened to make early graduates unwelcome, since extra job market competition was not welcome either in the Depression of the 1930's or in the post World War II veteran job scramble. As an added complication, in the 1920's social maladjustment was not generally foreseen as a likely outcome of accelerating gifted students faster than their age peers. Consequently it was not guarded against and some social maladjustment did occur in certain individuals. Quickly this became an exaggerated fear. Proponents of enrichment latched onto several well known examples of maladjustment and acceleration became almost taboo in the educational community. Educators of the mid-1900's often actively suppressed rapid intellectual development, subscribing to the "early ripe, early rot" theory.

There was some resurgence in the field of gifted education during the 1950's when the Soviets launched Sputnik and Americans became concerned that they were losing the technological edge (Ornstein & Levine, 1993). Ability grouping became acceptable and was widely implemented.

In the last 30 years, however, gifted education has once again hit the rocky road of American ambivalence. While concern for individual students has led to the establishment of programs for the learning disabled, mentally handicapped, and many others, gifted students are once again being seen as capable of surviving without much additional help. Maximizing their individual potential gets lost in a sea of other priorities. To make matters worse, our identification methods have led to a preponderance of white, middle class students in the "gifted" category and to an underrepresentation of certain minorities and social classes, particularly blacks, Hispanics, and those below the poverty level. Instead of developing more accurate and equitable means to identify gifted students, it has been easier (and cheaper) to simply reiterate charges of "elitism" and minimize those programs aimed at helping these students achieve their potential. As the U.S. Department of Education report "National Excellence: A Case for Developing America's Talent" (Ross, 1993) points out, however, this is shortsighted and ultimately hurts both the gifted students themselves and our country's competitiveness in the global economy.

Current Status of Gifted Education

Certain concepts are accepted as given within our educational system as givens. Acceleration through the grades based upon time in school is one of the most basic. Students are expected to enter kindergarten at age 5, start first grade at age 6, and graduate from high school at age 18. The vast majority of students are moved together, through the grade sequence, year by year. It is interesting to note that this is the only time in our lives when we are forced into strict age-related peer groups. Certainly after our formal schooling we freely associate with those who have similar interests to us, no matter what their age may be.

Examining secondary education specifically, at the middle school level the current emphasis is on addressing student needs, but the primary area of concern in regards to gifted education is to avoid damaging the self esteem of non-identified students (Ross, 1993). Many individualized learning opportunities for the gifted have therefore been eliminated.

At the high school level, Ross (1993) points out the existence of magnet schools, specialized schools and intensive summer programs but notes that these serve only a fraction of those who might benefit. In particular, there are only limited opportunities available for gifted students in small town and rural schools. Dual enrollment in high school and college is uncommon, but does occur.

Given the relative lack of special programs for gifted students, it is not surprising that most of them spend the majority of their time in the regular classroom. However, Ross (1993) reports that regular classroom teachers make few, if any, provisions for talented students. In fact, she also reports that most high achieving high school students study for less than an hour a day which does not suggest a particularly challenging curriculum. Last, but certainly not least, Ross quotes the current figures on gifted education expenditures—two cents (\$.02) out of every one hundred dollars (\$100.00) spent on education. It seems safe to say that gifted education is not currently a priority for the majority of our educational establishment.

However, gifted education should be a priority—for the sake of the children involved, as well as for the sake of our country's competitiveness. So, what is the best way to implement an effective gifted program, particularly in small rural schools where educational opportunities are often limited by student numbers, tax dollars, and community resources? Looking at the options that have been both tried and suggested is the first step.

Acceleration vs. Enrichment: The Major Dilemma

The two major camps of gifted education which arose in the 1920's are still very much in evidence today. The "enrichment camp" has been dominant throughout much of this century. Citing potential social maladjustment for students who accelerate, enrichment proponents emphasize the importance of gifted students being able to study at greater depth topics which are normally covered in the curriculum. Some methods of enrichment are special classes, cluster grouping (where students are pulled from class for a specific allotment of time each week), tracking, use of resource teachers (which also generally involves pull-out), and the presence of resource rooms with extra study materials available to gifted students on a part time basis (McLeod & Cropley, 1989). Stanley (1979) categorizes enrichment opportunities into four levels or types:

1. busywork (increased quantity of work at same grade level),
2. irrelevant academic enrichment not related to the student's area of talent; often simply temporary relief from boredom),
3. cultural enrichment (music, art, drama, etc.),
4. relevant academic enrichment (advanced material or higher level treatment of topics in areas related to the student's special talents).

Stanley's discussion goes on to comment that busywork and irrelevant academic enrichment do little or nothing to develop the academic talent supposedly being served. Cultural enrichment, while also somewhat irrelevant, he considers worthwhile for all students, not just for those who are academically gifted. Finally, relevant academic enrichment is where the talent is truly developed and challenged—but this leads almost inevitably, through deeper subject treatment and advanced material, to acceleration.

Dean Worcester (1979) divides enrichment into good enrichment and busywork. Good enrichment is integrated with the general curriculum activities and develops meaningful relationships within the developing child. It requires thought, effort and enthusiasm on the part of the teacher. Busywork, which is much easier to provide, can consist of casual museum trips,

occasional television programs, tutoring other students, helping in the office and so forth. The distinction between busywork and enrichment can be a thin one. Worcester goes on to comment

Enrichment without acceleration is favored, at least verbally, by most administrators and most teachers. It is in keeping with the tradition that it is good for a child just to live a certain number of years in a school situation. It is a plan by which he will not leave home 'too early' . . . He has his childhood. There is truth in all of these points, but in each case only partial truth. To try to keep a bright child thinking like a baby is as unsuccessful as to continue to dress him in baby clothes.

The consensus of quite a few individuals working with gifted students (Worcester, 1979; Daurio, 1979; and Terman & Oden, 1979) is that good enrichment is worthwhile for all students, but that the needs of the academically gifted are better served by acceleration. By providing special material that many students are capable of benefiting from but only gifted students are given access to, Daurio also pointed out that the charge of "elitism" becomes more credible. He goes on to state unequivocally, "No studies have shown enrichment to provide superior results over accelerative methods. Enrichment at best may only defer boredom until a later time."

As opposed to enrichment's goal of deeper treatment of the standard grade level curricula, acceleration generally involves moving through the curriculum at a faster pace than normal. This can involve skipping entire grades, advancing in one or two subjects only, early entrance to kindergarten or first grade, curriculum compacting, early graduation from high school, enrollment in college classes while still in high school, and so forth.

The primary argument used against acceleration in educational circles has been that of potential social maladjustment of the accelerated student compared to his/her peers. Several well-done, representative studies carried out by psychologists, however, show no more problems with accelerated students than with any other group of students (Daurio, 1979). George, Cohn & Stanley (1979) forcefully state that

. . . not a single substantial study has ever shown acceleration to be harmful to the typical accelerant who is intellectually able enough to warrant the use of such procedures. On the average the results are decidedly beneficial, whereas the withholding of acceleration from able, well-motivated youths is likely to harm their academic, social and emotional development.

Regarding emotional maturity levels, Stanley (1979) notes that gifted youngsters who have been given personality measurements such as the California Psychological Inventory test—like people several years older than themselves. Even emotionally, their peers are actually older youngsters, not their actual age-mates. One caveat is worth mentioning—acceleration should only be in response to the student's desire to move ahead and should therefore be equated with "not pulling back" rather than "pushing ahead" (Anastasi, 1979).

Another concern that some people have had in relation to acceleration is that accelerated students would miss out on school activities, awards and so forth. Brady & Benbow (1987) did a study on identified gifted youngsters, following them from their identification in 7th grade until after high school graduation. After dividing their pool into four groups based upon the degree of acceleration experienced, they found that accelerated students did at least as well as nonaccelerated students in accomplishments and in College Board Achievement Tests, and better than nonaccelerated students in grade point average, class rank and the number of national and state awards they won. Those who chose to take Advanced Placement (AP) classes and/or part-time college classes were more involved in extracurricular

activities than any other group, including the nonaccelerated students. There were few differences among the four groups with regard to lifestyle plans and goals, but those who had skipped high school years or had taken AP or college classes attended more selective colleges and more frequently planned to earn advanced degrees. Last but not least, there were few personality differences evident among the four groups—including harmful social or emotional effects. The only difference was that those who skipped one or more years of high school tended to be less conservative than those who chose AP or college class attendance. Brody & Benbow concluded

For the student, accelerative strategies offer the opportunity to select an educational program that is challenging and that meets the needs of the individual student . . . For schools, acceleration offers a way to challenge highly able students without the expense and effort of designing a special curriculum. For society as a whole, it offers the promise of stimulating gifted youths to achieve more at a younger age and, thus, be more productive members of society for more years.

Renzulli (1979) does offer some notes of caution about acceleration as the total solution to gifted education, however. He notes that, although acceleration takes advantage of a gifted student's ability to comprehend more material and to do it faster, to deal with higher levels of conceptualization and abstraction, and to reach higher levels of generalization more rapidly and with greater understanding, it does not take into account two other dimensions of gifted learners: sustained interest in particular topics or disciplines, and ways in which that person becomes involved, specifically in inquiry into real problems.

Looking for Solutions for Rural and Small School Gifted Education

So where does this leave us in regard to gifted education for small, rural secondary schools?

First, it is important to examine the constraints generally specific to these types of schools. Because they are small, there tend to be only a few gifted students in each grade or even in each school—rarely enough to form special classes, even if their interests and talents did coincide. Secondly, budgets are usually stretched tightly, meaning that coaches are more important to school functioning than gifted coordinators (because they serve more students) and that teachers rarely can specialize as much as they might desire. Thirdly, educational community resources such as cultural activities, well stocked libraries, colleges or universities, and even large numbers of professionals are likely to be in short supply.

Despite these constraints, there are viable options available for rural gifted education that will go far to meet the needs of academically talented students. Flexibility—being open to a variety of options that can be considered, is a particularly crucial characteristic to keep in mind both in terms of what the gifted students need and in terms of how the school administration should provide for the delivery of the necessary coursework. Small size and individuality can work to the advantage of all parties concerned, if the reasonable mindsets are maintained.

As discussed above and working within the traditional school structures (rather than looking at comprehensive school reforms), one of the simplest, least expensive, and most effective options for gifted education is acceleration in one of its various forms. The willingness to examine accelerative options is where flexibility becomes important. Discussing some of these different options in relation to the specific constraints of rural school systems will highlight some of the approaches that can be used to individualize programs for particular schools and for particular students.

At the secondary level, one of the more recently developed techniques of acceleration, *curriculum compacting*, can work well to provide a combination of acceleration and enrichment based in the regular classroom (Reis & Renzulli, 1992; Rogers & Kimpston, 1992; Reiss & Follo, 1993). To define it briefly, curriculum compacting involves testing the students for their knowledge of new material to be presented in class and, if they already exhibit mastery of the material, substituting alternate materials more suited to their interests and abilities. Further, if the academically talented students do not know the material ahead of time, curriculum compacting can provide the framework through which the students can be rapidly exposed to new material and then be tested as soon as they are ready. Once again, this frees the gifted student to move on to more challenging material rather than spending his/her time in needless practice and repetition. This method has several definite advantages for small, rural school districts. It is very flexible and can be tailored to meet the needs of a wide range of interests and abilities. Because the student(s) is tested on each major unit or concept in the standard curriculum there is no fear that a "hole" will be left in their education that might create problems later. It is relatively inexpensive because there is no need for a separate classroom or a separate teacher, although the gifted coordinator, if there is one, can aid the classroom teacher in developing alternate material for the student work. It works for one student just as readily as it does for many students. And finally, and very importantly, curriculum compacting does not have to be confined to "identified gifted" students. If the teacher feels comfortable with the concept, it can be offered to any student who can demonstrate mastery of the proposed curriculum. On the downside, curriculum compacting does require some extra effort from the classroom teacher in overseeing the gifted student's alternate material and in helping to develop or choose that material and guide the student through it. Despite this limitation, curriculum compacting may be a very reasonable and worthwhile alternative for many small schools to consider. Reis and Renzulli (1992) summed up this instructional technique well when they commented that it "... simply follows the natural pattern teachers would follow if they were individualizing instruction for each student."

Moving on to more well known means of acceleration for academically gifted students, two of the most classic methods have involved honors classes and advanced placement (AP) classes. These methods may run into numerical problems in small, rural secondary schools: there may simply not be enough students to support separate sections of above-average learners. AP classes are particularly problematic in this regard as they involve the use of nationally determined criteria and requirements (Reiss & Follo, 1993) which small rural school districts may not have the money, expertise, or number of students to implement. Honors classes are potentially more feasible, since their curriculum is set by the teacher and the district and can take into account staff expertise, student ability levels, and district budgets.

Although advanced classes are fairly common in larger school districts for educating gifted students, the first reaction to many people is "grade skipping". Despite its bad reputation, grade skipping can have a place in the repertoire of strategies for appropriately educating gifted students (Rogers & Kimpston, 1992; Swiatek & Benbow, 1991). As noted earlier, academically talented students are often emotionally advanced for their age and may find their true peers among older students anyway. If care is taken through concept testing and spot tutoring that no educational "holes" are left, grade skipping can be very beneficial. At the secondary level, it can be done on a subject by subject basis, allowing for better individualized learning.

Taking grade skipping one step further, two more accelerative strategies at the secondary level are *dual enrollment* in

high school and college and early entrance to college (Reiss & Follo, 1993). Dual enrollment in high school and college can work extremely well . . . where it can work at all. Rural areas are rarely blessed with institutions of higher learning nearby, but where they are, these colleges and universities can be a wonderful resource for gifted students and their secondary schools. The students can have the benefit of more advanced and rigorous academic coursework while still participating in high school activities and social life. In the near future, even the physical distance constraints may be removed from dual enrollment as computer networks allow access to many college classes for anyone with a computer and modem. Or early college entrance may be determined to be the best option for a gifted student in a small, rural secondary school if further academic challenge is simply not locally feasible. In that case, student desire must be of paramount importance and considerations such as missing high school social activities must be carefully weighed.

Despite the advantages that many of the accelerative options have for small, rural secondary schools, enrichment programs still have a definite place. Efforts should be made to steer away from busywork and to keep the enrichment relevant or *cultural* in Stanley's (1979) terms.

Sharing resources between neighboring small school districts can be a very cost effective way to increase the services offered. It is also possible to bring gifted students together from different school districts, at least for occasional enrichment-type activities. More extensive and long-term multidistrict programs, allowing for increased peer interaction and challenge, might even be a possibility given committed coordinators and supportive administrators.

Opportunities for challenging gifted students outside of the traditional school system should be utilized whenever possible, as well. Mentoring, the pairing of a student with an established adult working in the student's area of interest, is an ancient idea which still can provide great benefits today. Planned outside reading, internships and visitation programs with local businesses, clubs, and community classes are also among the variety of outside options that exist.

Finally, it is important to remember, too, that it is possible to establish regular classrooms anywhere that are favorable to the development of intellectual talent at all levels. McLeod & Cropley (1989) speak of four classroom principles that provide support in this way:

1. Establish a favorable classroom climate including open goals, acceptance, respect for effort, interest in high performance, and a provocative (to learning!) environment.
2. Promote self-directed learning through content, timing, location of materials, and methods. The teacher should also set an example as a self-directed learner and not appear as having finished his/her learning.
3. Encourage self-evaluation by the students.
4. Employ a diagnostic teaching approach, establishing what the students have already mastered and what needs to be taught to fill in weaknesses.

Specific classroom activities can include challenging projects (undertaken individually or in groups), questioning beyond the basic knowledge testing levels, discussions aimed at testing ideas and sharpening thinking skills, an emphasis on task completion to teach self discipline and productivity, and plenty of opportunities to write.

Conclusion

Despite a seeming lack of available resources when compared to larger school districts, small rural secondary schools can offer a wide variety of options to their academically tal-

ented students to help them meet the special challenges and opportunities that their talents provide. In particular, because of their effectiveness, low cost, and relative ease of implementation, accelerative options can play a crucial role. Curriculum compacting, honors classes, grade skipping, dual college and high school enrollment (possibly through computer networks), early college enrollment, relevant and cultural enrichment programs, and certain school activities are all among the options that can be mixed and matched to individually challenge and develop each gifted student. Supported by regular classrooms that reward and encourage intellectual development, rural schools can truly offer their academically talented students a first class education. The commitment to do so is the important first step.

In fact, it turns out that for academically talented students the bittersweet tradeoff of academic challenge versus small school benefits is avoidable after all. Yeats said, "Education is not the filling of a pail, but the lighting of a fire." Flexibility, determination, willingness to try new paths, and support of the gifted student's desire to learn lay the groundwork that makes a successful fire possible. Gifted students ignite easily; instead of quenching their fire, let's set the groundwork and fan the flames.

REFERENCES

- Anastasi, Anne. (1979). Some reflections on the acceleration-enrichment controversy. In W. C. George, S. J. Cohn, & J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 221-222). Baltimore, MD: John Hopkins University Press.
- Brody, Linda E. & Benbow, Camilla Persson. (1987). Accelerative strategies: How effective are they for the gifted? *Gifted Child Quarterly*, 31, 105-110.
- Daurio, Stephen P. (1979). Educational enrichment versus acceleration: A review of the literature. In W. C. George, S. J. Cohn, & J. C. Stanley (Eds.), *Educating the Gifted: Acceleration and Enrichment* (pp. 13-63). Baltimore, MD: John Hopkins University Press.
- George, William C., Cohn, Sanford J., & Stanley, Julian C. (Eds.). (1979). Educational acceleration of intellectually talented youths: Prolonged discussion by a varied group of professionals (abstract I. In George, W. C., Cohn, S. J., & Stanley, J. C. (Eds.), *Educating the Gifted: Acceleration and enrichment* (pp. 183-185). Baltimore, MD: John Hopkins University Press.
- McLeod, John, and Cropley, Arthur. (1989). *Fostering Academic Excellence*. Oxford, England: Pergamon Press.
- Ornstein, Allan C., & Levine, Daniel U. (1993). *Foundations of Education*, 5th Ed. Boston: Houghton Mifflin.
- Page, Ellis B. (1979). Acceleration versus enrichment: Theoretical perspectives. In W. C. George, S. J. Cohn, & J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 208-210). Baltimore, MD: John Hopkins University Press.
- Reis, Sally M., and Renzulli, Joseph S. (1992). Using curriculum compacting to challenge the above-average. *Educational Leadership*, 50(2), 51-57.
- Reiss, Patricia L., and Follo, Eric J. (1993). Accelerated education methods for intellectually gifted secondary students. Paper presented at the 11th Annual Midwest Educational Research Association Conference, Kansas City, MO, March 4-6. ERIC ED 359708.
- Renzulli, Joseph S. (1979). Some concerns about educational acceleration for intellectually talented youth, or Are treadmills really different if we run them at a faster rate? In W. C. George, S. J. Cohn, and J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 190-191). Baltimore, MD: John Hopkins University Press.
- Rogers, Karen B., and Kimpston, Richard D. (1992). Acceleration: What we do vs. what we know. *Educational Leadership*, 50(2), 58-61.
- Ross, Pat O'Connell. (October 1993). *National excellence: a case for developing America's talent*. Office of Educational Research and Improvement, U. S. Department of Education. Washington, D. C. : U. S. Government Printing office.
- Stanley, Julian C. (1979). Identifying and nurturing the intellectually gifted. In W. C. George, S. J. Cohn, & J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 172-180). Baltimore, MD: John Hopkins University Press.
- Start, K. B. (1989, July). *The tyranny of age*. Paper presented at the 8th World Conference on the Education of Gifted and Talented Children, Sydney, New South Wales, Australia. ERIC ED 360754.
- Swiatek, Mary Am, and Benbow, Camilla Persson. (1991). Ten-year longitudinal follow-up of ability-matched accelerated and unaccelerated gifted students. *Journal of Educational Psychology*, 83, 528-538.
- Terman, Lewis M., and Oden, Melita H. (1979). The problem of school acceleration. In W. C. George, S. J. Cotm, & J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 107-121). Baltimore, MD: John Hopkins University Press.
- Worcester, Dean A. (1979). In W. C. George, S. J. Cohn, & J. C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment*. Baltimore, MD: John Hopkins University Press.