

Acceleration Resource Packet

**In Support of BOE Policy/Regulation 2535
Student Academic Acceleration**

October 1, 2007



TABLE OF CONTENTS

<u>Topic</u>	<u>Page</u>
Introduction	2
Giftedness and The Gifted: What's It All About? What Does Giftedness Mean?	3
Acceleration Position Paper from the National Association for Gifted Children	10
Successful Strategies for Teaching Gifted Learners	13
Additional Web Resources	18

Introduction

Acceleration is an intervention that moves students through an educational program at rates faster, or at younger ages, than typical. It means matching the level, complexity, and pace of the curriculum to the readiness and motivation of the student.

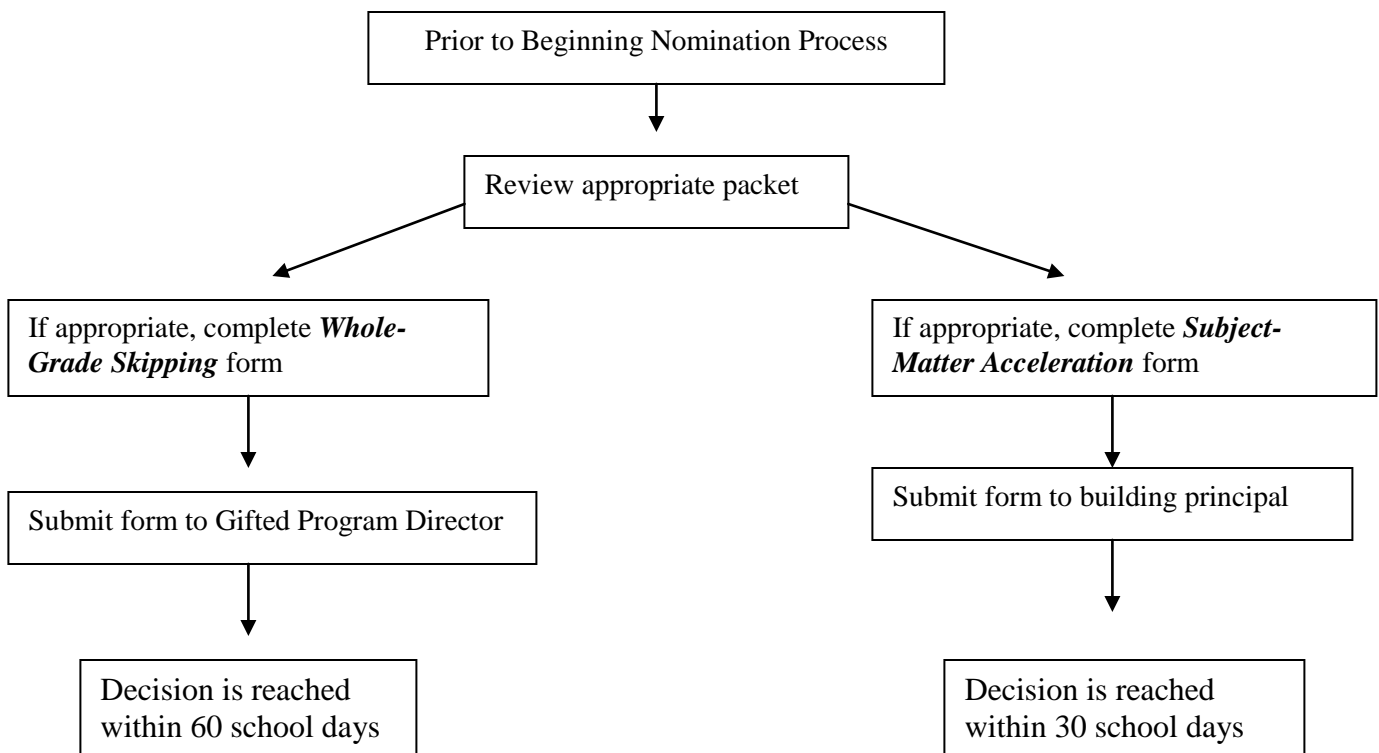
Prior to beginning the nomination process for either Whole-Grade Skipping or Subject-Matter Acceleration the information in this packet needs to be reviewed. If, after reviewing this information, you believe the student would be a good candidate for Whole-Grade Skipping or Subject-Matter Acceleration the nomination process can begin.

The *Information Packet for Whole-Grade Skipping* or the *Subject-Matter Acceleration Information Packet* should be reviewed and the appropriate nomination form completed.

The *Request for Whole-Grade Skipping* form should be submitted to the Gifted Program Director. Every attempt will be made to have a decision within 60 school days of the receipt of the *Request for Whole-Grade Skipping* form.

The *Request for Subject-Matter Acceleration* form should be submitted to the building principal. Every attempt will be made to have a decision reached within 30 school days of the receipt of *Request for Subject-Matter Acceleration*.

Questions can be addressed to any of the District Personnel listed on the last page of this packet.





ERIC Digests

Giftedness and The Gifted: What's It All About?

National Association for Gifted Children
1707 L Street, NW, Suite 550
Washington, DC 20036
(202) 785-4268

ERIC EC Digest #E476

Author: ERIC Clearinghouse on Handicapped and Gifted Children, Reston, VA
Date: 1990

Giftedness and the Gifted: What's it All About? What Does Giftedness Mean?

Many parents say, "I know what giftedness is, but I can't put it into words." This generally is followed by references to a particular child who seems to manifest gifted behaviors. Unfortunately, there are many misconceptions of the term, all of which become deterrents to understanding and catering to the needs of children identified as gifted. Let's study the following statement:

"Giftedness is that precious endowment of potentially outstanding abilities which allows a person to interact with the environment with remarkably high levels of achievement and creativity."

This statement is the product of a small neighborhood group of parents who took a comprehensive view of the concept of giftedness before focusing on any attempt to define the gifted child. They thought, first, that within giftedness is a quality of innateness (or, as they said, "a gift conferred by nature"), and second, that one's environment is the arena in which the gifts come into play and develop. Therefore, they reasoned that the "remarkably high levels of achievement and creativity" result from a continuous and functional interaction between a person's inherent and acquired abilities and characteristics.

We often hear statements such as "She's a born artist," or "He's a natural athlete," or conversely, "Success never came easy for me; I had to learn the hard way," or "He's a self-made man." Those who manifest giftedness obviously have some inherent or inborn factors plus the motivation and stamina to learn from and cope with the rigors of living.

We suggest that you wrestle with the term in your own way, by looking at giftedness as a concept that demands the investment of time, money, and energy. This will help you discuss giftedness more meaningfully with other parents, school administrators, school board members, or anyone who needs to understand the dynamics of the term.

Who are Gifted Children?

Former U.S. Commissioner of Education Sidney P. Marland, Jr., in his August 1971 report to Congress, stated,

“Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These 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” (Marland, 1972).

The same report continued:

“Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual or performing arts
6. psychomotor ability.”

Using a board definition of giftedness, a school system could expect to identify 10% to 15% or more of its student population as gifted and talented. A brief description of each area of giftedness or talent as defined by the Office of Gifted and Talented will help you understand this definition.

- **General intellectual ability or talent.** Laypersons and educators alike usually define this in terms of a high intelligence test score – usually two standard deviations above the mean – on individual or group measures. Parents and teachers often recognize students with general intellectual talent by their wide-ranging fund of general information and high levels of vocabulary, memory, abstract word knowledge, and abstract reasoning.
- **Specific academic aptitude or talent.** Students with specific academic aptitudes are identified by their outstanding performance on an achievement or aptitude test in one area such as mathematics or language arts. The organizers of talent searches sponsored by a number of universities and colleges identify students with specific academic aptitude who score at the 97th percentile or higher on standard achievement tests and then give these students the Scholastic Aptitude Test (SAT). Remarkably large numbers of students score at these high levels.
- **Creative and productive thinking.** This is the ability to produce new ideas by bringing together elements usually thought of as independent or dissimilar and the aptitude for developing new meanings that have social value. Characteristics of creative and productive students include openness to experience, setting personal standards for evaluation, ability to play with ideas, willingness to take risks, preference for complexity, tolerance for ambiguity, positive self-image, and the ability to become submerged in a task. Creative and productive students are identified through the use of tests such as the Torrance Test of Creative Thinking or through demonstrated creative performance.

- **Leadership ability.** Leadership can be defined as the ability to direct individuals or groups to a common decision or action. Students who demonstrate giftedness in leadership ability use group skills and negotiate in difficult situations. Many teachers recognize leadership through a student's keen interest and skill in problem-solving. Leadership characteristics include self-confidence, responsibility, cooperation, a tendency to dominate, and the ability to adapt readily to new situations. These students can be identified through instruments such as the Fundamental Interpersonal Relations Orientation Behavior (FIRO-B).
- **Visual and performing arts.** Gifted students with talent in the arts demonstrate special talents in visual art, music, dance, drama, or other related studies. These students can be identified using task descriptions such as the Creative Products Scales, which were developed for the Detroit Public Schools by Patrick Byrons and Beverly Ness Parke of Wayne State University.
- **Psychomotor ability.** This involves kinesthetic motor abilities such as practical, spatial, mechanical, and physical skills. It is seldom used as a criterion in gifted programs.

Other Viewpoints

Robert Sternberg and Robert Wagner (1982) have suggested that giftedness is a kind of mental self-management. The mental management of one's life in a constructive, purposeful way has three basic elements: adapting to environments, selecting new environments, and shaping environments. According to Sternberg and Wagner, the key psychological basis of intellectual giftedness resides in insight skills that include three main processes: (1) separating relevant from irrelevant information, (2) combining isolated pieces of information into a unified whole, and (3) relating newly acquired information to information acquired in the past.

Stenberg and Wagner emphasized problem-solving abilities and viewed the gifted student as one who processes information rapidly and uses insight abilities. Howard Gardner (1983) also suggested a concept of multiple intelligences, stating that there are several ways of viewing the world: linguistic, logical/mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal intelligence.

Joseph Renzulli (1986) stated that gifted behavior reflects an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. According to Renzulli, gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance.

A good source for pursuing the characteristics of giftedness in depth is Barbara Clark's informative book, *Growing Up Gifted* (1988), which presents an exhaustive list of characteristics under five major headings: Cognitive (thinking), Affective (feeling), Physical, Intuitive, and Societal.

No one child manifests all of the attributes described by researchers and the Office of Gifted and Talented. Nevertheless, it is important for parents to be fully aware of the ways in which giftedness can be recognized. Often, certain behaviors such as constantly having unique solutions to problems, asking endless, probing questions, or even the masterful manipulation of others are regarded by parents and unnatural, unlike other children, and trying to parental patience. Therefore, our recommendation is to study the characteristics of gifted children with an open mind. Do not use the list as a scorecard; simply discuss and appreciate the characteristics and let common sense, coupled with love, take over.

Some General Characteristics

(These are typical factors stressed by educational authorities as being indicative of giftedness. Obviously, no child is outstanding in all characteristics.)

1. Shows superior reasoning powers and marked ability to handle ideas; can generalize readily from specific facts and can see subtle relationships; has outstanding problem-solving ability.
2. Shows persistent intellectual curiosity; asks searching questions; shows exceptional interest in the nature of man and the universe.
3. Has a wide range of interests, often of an intellectual kind; develops one or more interests to considerable depth.
4. Is markedly superior in quality and quantity of written and/or spoken vocabulary; is interested in the subtleties of words and their uses.
5. Reads avidly and absorbs books well beyond his or her years.
6. Learns quickly and easily and retains what is learned; recalls important details, concepts and principles; comprehends readily.
7. Shows insights into arithmetical problems that require careful reasoning and grasps mathematical concepts readily.
8. Shows creative ability or imaginative expression in such things as music, art, dance, drama; shows sensitivity and finesse in rhythm, movement, and bodily control.
9. Sustains concentration for lengthy periods and shows outstanding responsibility and independence in classroom work.
10. Sets realistically high standards for self; is self-critical in evaluating and correcting his or her own efforts.
11. Shows initiative and originality in intellectual work; shows flexibility in thinking and considers problems from a number of viewpoints.
12. Observes keenly and is responsive to new ideas.
13. Shows social poise and an ability to communicate with adults in a mature way.
14. Gets excitement and pleasure from intellectual challenge; shows an alert and subtle sense of humor

A Quick Look at Intelligence

The attempts to define giftedness refer in one way or another to so-called “inborn” attributes, which, for the lack of a better term, are called intelligence.

Significant efforts have been made to measure intelligence, but, because the concept is elusive, test constructors simply aim at testing what they feel are typical manifestations of intelligence in behaviors.

Perhaps a little rhyme used for years by kindergarten teachers will help to describe this elusiveness:

“Nobody sees the wind; neither you, nor I. But when the trees bow down their heads, the wind is passing by.”

Just as we cannot see the wind, we cannot find, operate on, or transplant intelligence. Yet we see the working or manifestations of intelligence in the behaviors of people.

The man-made computation of an intelligence quotient, or IQ, is probably the best indicator of intelligence, but in no way is it infallible. All too often, a child’s IQ is misunderstood and becomes a lifelong “handle.” However, given our present knowledge, the results of a standardized intelligence test Administered by a competent examiner provide as reliable an indication as possible of a person’s potential ability to learn and cope. Until some scientific breakthrough is developed, we will rely on the IQ score to approximate how mentally gifted a person may be.....

..... We recommend that you do not become bogged down in probing into the concept of intelligence. Its intricacies and mysteries are fascinating, but it must not become a convenient synonym for giftedness. An excellent coverage of the concept of intelligence is provided by Barbara Clark in *Growing Up Gifted*.

The exciting advances in research on brain functioning, coupled with the realization that a child’s intelligence is only one key to understanding giftedness, have underscored the importance of studying all characteristics of the gifted child.

The Gifted Child Is Called Many Things

Often parents are confused by the many terms used in referring to the gifted child. Many parents hear these terms used – sometimes adopting them in their own conversations—without knowing whether they are synonymous with “gifted” or are just words that help to explain the concept.

- The term “genius” used to be widely employed but now it is reserved for reference only to the phenomenally gifted person.
- “Talented” tends to be used when referring to a particular strength or ability of a person. Thought should be given to whether the talent is truly a gift or is, rather an ability that has become a highly developed skill through practice. It is safe to say that generally the person identified as gifted is one who has multiple talents of a higher order.

- The terms “prodigy” and “precocious” are most commonly used when a child evidences a decidedly advanced degree of skill in a particular endeavor at a very early age, as well as a very disciplined type of motivation. It is interesting to note that the derivation of the words precocious or precocity comes from the ancient Greek word for “precooked” and connotes the idea of ripening early.
- “Superior” is a comparative term. When a child is classified as “superior,” we would like to know to whom, or what group, he or she is superior, and to what degree. A child may be markedly superior to the majority of children in a specific mental ability such as verbal comprehension and at the same time be equally inferior in spatial relations or memory. The looseness of the term limits its usage in most cases to broad generalization.
- A “high IQ” may be anything, depending on what it is higher than.
- “Rapid learner” is a helpful term in understanding giftedness, because it is a distinct characteristic manifested by the identified gifted child.
- The term “exceptional” is appropriate when referring to the gifted child as being different in the characteristics listed earlier.

At this point it is important to bring into focus a term that continues to be tossed around altogether too loosely in reference to education of the gifted. That term is “elitism.”

By derivation, elite means the choice, or best, or superior part of the body or class of persons. However, time and an overemphasis on egalitarianism have imparted a negative connotation to the word, implying snobbishness, selectivity, and unfair special attention.

But, in fact, gifted children are elite in the same way that anyone becomes a champion, a record holder, a soloist, an inventor, or a leader in important realms of human endeavor. Therefore, their parents have a distinct responsibility to challenge those who cry “elitism” and explain to them the true meaning of the term.

The only reason for mentioning these terms—and there are many more—is to caution parents that semantics and language usage can be tricky and confusing. Thus, your personal understanding and application of the term gifted becomes doubly important.

References

Clark, B. (1988). *Growing up gifted* (3rd ed.). Columbus, OH: Charles E. Merrill.

Gardner, H. (1993). *Frames of mind*. New York: Bantam Books.

Marland, S. (1972). *Education of the gifted and talented*. Report to Congress. Washington, DC, U.S. Government Printing Office.

Renzulli, J. (1986). The three ring conception of giftedness: A developmental model for creative productivity. In R.J. Sternberg and J.E. Davidson (Eds.), *Conceptions of giftedness* (pp. 53-92). New York: Cambridge University Press.

Sternberg, R. & Wagner, R. (1982). A revolutionary look at intelligence. *Gifted Children Newsletter*, 3, 11.

Adapted by permission from D.W. Russell, D.G. Hayes, & B.L. Dockery, *My Child is Gifted! Now What Do I Do?* (2nd ed., 1988), North Carolina Association for the Gifted and Talented, Inc., P.O. Box 5394, Winston-Salem, NC 27113-5394; and D. Sisk, *The State of Gifted Education: Toward a Bright Future*, *Music Educators Journal* (March 1990), pp. 35-39.

ERIC Digests are in the public domain and may be freely reproduced and disseminated, but please acknowledge your source. This publication was prepared with funding from the U.S. Department of Education, Office of Educational Research and Improvement, under Contract No. R188062207. The opinions expressed in this report do not necessarily reflect the positions and policies of OERI or the Department of Education.



POSTION PAPER

ACCELERATION

Educational acceleration is one of the cornerstones of exemplary gifted practices, with more research supporting this intervention than any other in the literature on gifted individuals. The practice of educational acceleration has long been used to match high level student general ability and specific talent with optimal learning opportunities. The purpose of acceleration as a practice with the gifted are 1) to adjust the pace of instruction to the students' capability in order to develop a sound work ethic, 2) to provide an appropriate level of challenge in order to avoid the boredom of repetitious learning, and 3) to reduce the time period necessary for students to complete traditional schooling. Acceleration benefits many highly capable individuals by better motivating them toward schooling, enhancing their involvement with extracurricular activities promoting more challenging options in the middle school and high school years, and preparing them to begin contributing to society at an earlier age.

Acceleration practices involve allowing a student to move through traditional educational organizations more rapidly, based on readiness and motivation. Research documents the potential academic benefits and positive outcomes of all forms of appropriately implemented acceleration strategies of intellectually gifted and academically talented learners. These research-based best practices include grade skipping, telescoping, early entrance into kindergarten or college, credit by examination, and acceleration in content areas through such programs as Advanced Placement and International Baccalaureate at the high school level. Instructional adaptations in the classroom such as compacting, which allows for more economic use of learning time in a specific subject, are also a desirable and best practice for talented students.

Both group and individual decisions can be made in respect to accelerative options. For example, both AP and IB programs by virtue of their structure and content offer college-level work. As long as students meet prerequisites and accept the rigors of such programs, gifted and other learners can and should take advantage of such group-oriented programs. At an individual level, students may be tutored or engage in online coursework at an accelerated level. Such options can be more readily tailored for individual needs.

Talent search programs at selected universities provide early assessment of advanced mathematical and verbal abilities in students such that decisions on appropriate accelerative options can be constructed inside and outside of schools. For example, several acceleration opportunities can be accessed through online coursework in specific content areas or offered at university sites. Advanced Placement as an accelerative option may be made available throughout the high school years or earlier through independent study, tutorials, or special classes.

Acceleration options should be available at each stage of development in a child's educational program from early entrance to primary school up through early college entry in order to even out the curriculum challenge. Parents may also wish to seek out accelerative opportunities beyond the school setting in order to accommodate an individual student need that cannot be met in traditional school settings.

Yet acceleration decisions should be made thoughtfully with the needs of the whole child in mind. In decision-making about the appropriateness of a particular form of acceleration and the extent of acceleration for a given child at a given time, educators and parents should consider the child's intellectual and academic profile, socio-emotional and physical development, and preferences and dispositions of the child relative to the decision since acceleration may not always be the appropriate option for every gifted child. Factors that enhance the success of acceleration practices include 1) positive attitudes of teachers, 2) timelines related to the decisions, 3) parental support, and 4) careful monitoring of the implementation.

Highly able students with capability and motivation to succeed in placements beyond the traditional age/grade parameters should be provided the opportunity to enroll in appropriate classes and educational settings. The National Association for Gifted Children program standards provide some guidance for using accelerative practices on a routine basis at all stages of development.

Acceleration policies in school should ensure that opportunities such as the ones described here are available provisions in all gifted programs for individuals and groups of learners ready to advance beyond the standard curriculum at any age and in any area of learning.

Approved 9-27-04

1707 L Street, NW • Suite 550 • Washington, DC 20036 • (202)785-4268 • www.nagc.org

Selected References

Benbow, C.P. & Lubinski, D. (1996). *Intellectual Talent*. Baltimore: Johns Hopkins Press.

This book chronicles landmark research on gifted individuals and the use of acceleration in their development. Based on the work on many researchers in the field, the volume explicates our understanding of the effectiveness of acceleration techniques with such students, the efficacy of accelerative programs and serviced for them, and views on the interplay of intelligence and productivity.

Colangelo, N., Assouline, S.G. & Gross, M.U.M. (2004). *A nation deceived: How schools hold back American's Students: the Templeton National Report on Acceleration*. Iowa City, IA: Belin-Blank Center. (Volumes 1 and 2).

In Volume 1, this report issues a wake-up call to America's schools on the need to provide accelerative options at every stage of development for gifted learners, using research evidence coupled with student vignettes of successful acceleration. The report argues convincingly for action on this key programming feature. In Volume 2, the argument for acceleration is further buttressed by actual data presented by researchers demonstrating its positive effects on the learning patterns of gifted students.

Gross, M.U.M. (2004). *Exceptionally Gifted Children*, London: Routledge.

This second edition of a longitudinal study highlights ongoing insights into the lives of highly gifted children in Australia, their families, and their schools. It provides important findings into the social, emotional, and academic needs of these children as they mature.

Rogers, K. (2003). *Reforming gifted education: How parents and teachers can match the program to the child*, Scottsdale, AZ: Great Potential Press Inc.

This comprehensive text on program development provides meta-analysis on the issue of acceleration, coupled with sound practical strategies for employing it in schools.

Southern, T. & Jones, E. (Eds.) (1991). *The academic acceleration of gifted children*, New York, NY: Teachers' College Press.

This edited volume provides a strong overview of diverse perspectives and views on acceleration in various modes and at various stages of development. It represents a compendia of important ideas for practitioners.

Swiatek, M.A., & Benbow, C.P. (1991). *Ten-year longitudinal follow-up of ability-matched accelerated and unaccelerated gifted students*. *Journal of Educational Psychology*, 83, 528-538.

This research article reports on the long term benefits of acceleration in a rigorously controlled study. Based on the Study for Mathematically Precocious Youth (SMPY) findings, the authors highlight the positive outcomes found for accelerated learners.

VanTassel-Baska, J. (2004). *The acceleration of gifted students' program and curricula*. In Karnes, F.A. & Stephens, K.R. (Eds.) fastback series, Waco, TX: Prufrock Press.

This practical guide provides administrators and teachers with ideas, strategies, and assessment protocols for using various techniques of acceleration in school, including the diagnostic prescriptive approach, compacting, testing out of curriculum standards, and selection of advanced materials.

1707 L Street, NW • Suite 550 • Washington, DC 20036 • (202)785-4268 • www.nagc.org

Successful Strategies for Teaching Gifted Learners

Author(s): Davidson Institute Team

Source: Davidson Institute for Talent Development 2003

Being a regular classroom teacher can be both an exciting and an overwhelming experience. There are so many curriculums to cover, so many standards to meet, and so many things to learn. It can seem as though you're being stretched in an infinite number of directions. And, the most challenging part generally isn't the teaching; it is managing student behavior. Without a doubt the most difficult student in your classroom is generally the one who finishes every assignment in less than five minutes and requires constant redirections. When I first started teaching, I spent a lot of time trying to figure out what to do with these students and what I discovered was that very often, if I just adjusted my perspective and offered them more challenging experiences, the problems disappeared – like magic! This is how I became passionate about meeting the needs of gifted students. I came to see how making a few simple adjustments could change the entire culture of my classroom. With that in mind, here is a list of tired and true tips I recommend.

Tip #1: Familiarize Yourself with the Characteristics of Intellectually Gifted Students

Not all gifted students in your classroom will be identified and even those who are may not always appear to be gifted. As such, it is important that you don't allow yourself to be distracted by false stereotypes. Gifted students come from all ethnic groups, they are both boys and girls, they live in both rural and urban areas and they aren't always straight A students. Students who are intellectually gifted demonstrate many characteristics including: a precocious ability to think abstractly, an extreme need for constant mental stimulation; an ability to learn and process complex information very rapidly; and a need to explore subjects in depth. Student who demonstrate these characteristics learn differently. Thus, they have unique academic needs. Imagine what your behavior and presentation would be like if, as a high school junior, you were told by the school district that you had to go back to third grade. Or, from a more historical perspective, what if you were Mozart and you were told you had to take beginning music classes because of your age. This is often the experience of the gifted child. Some choose to be successful given the constructs of public school and others school to rebel. Either way, a few simple changes to their academic experience can dramatically improve the quality of their lives – and, most likely, yours!

Tip #2: Let Go of “Normal”

In order to be an effective teacher, whether it's your first year or your 30th, the best thing you can do for yourself is to let go of the idea of “normal.” I can't encourage you enough to offer all students to opportunity to grow from where they are, not from where your teacher training courses say they should be. You will not harm a student by offering him/her opportunities to complete work that is more advanced. Research consistently shows that curriculum based on development and ability is far more effective than curriculum based on age. And, research indicated that giftedness occurs along a continuum. As a teacher, you will likely encounter students who are moderately gifted, highly gifted, and perhaps if you are lucky, even a few who are profoundly gifted. Strategies that work for one group of gifted

students won't necessarily work for all gifted students. Don't be afraid to think outside the box. You're in the business of helping students to develop their abilities. Just as athletes are good at athletics, gifted students are good at thinking. We would never dream of holding back a promising athlete, so don't be afraid to encourage your "thinkletes" by providing them with the opportunity to soar.

Tip #3: Conduct Informal Assessments

Meeting the needs of gifted students does not need to be an all consuming task. One of the easiest ways to better understand how to provide challenging material is to conduct informal whole class assessments on a regular basis. For example, before beginning any unit, administer the end of unit test. Students who score above 80% should not be forced to "relearn" information they already know. Rather, these students should be given parallel opportunities that are challenging. I generally offered these students the option to complete an independent project on the topic or to substitute another experience that would meet the objectives of the assignment, i.e. taking a college/distance course.

With areas of the curriculum that are sequential, such as mathematics and spelling, I recommend giving the end of the year test during the first week of school. If you have students who can demonstrate competency at 80% or higher, you will save them an entire year of frustration and boredom if you can determine exactly what their ability level is and then offer them curriculum that allows them to move forward. Formal assessments can be extremely helpful, however, they are expensive and there is generally a back log of students waiting to be tested. Conducting informal assessments is a useful and inexpensive tool that will offer you a lot of information.

Tip #4: Re-familiarize Yourself with Piaget & Bloom

There are many developmental theorists and it is likely that you encountered many of them during your teacher preparation course work. When it comes to teaching gifted children, I recommend taking a few moments to review the work of Jean Piaget and Benjamin Bloom. Jean Piaget offers a helpful description of developmental stages as they relate to learning. Gifted students are often in his "formal operations" stage when their peers are still in his "pre-operational" or "concrete operations" stages. When a child is developmentally advanced he/she has different learning abilities and needs. This is where Bloom's Taxonomy can be particularly useful. Students in the "formal operations" developmental stage need learning experiences at the upper end of Bloom's Taxonomy. Essentially all assignments should offer the student the opportunity to utilize higher level thinking skills like analysis, synthesis, and evaluation, as defined by Bloom. I recommend using the Internet to learn more about these two important theorists. A couple of websites that may be of interest include:

Piaget's Stage Theory of Development

(http://www.psych.ualberta.ca/~mike/Pearl_Street/Dictionary/contents/P/piaget's_stages.html)

Learning Domains & Bloom's Taxonomy

(<http://www.nwlink.com/~donclark/hrd/bloom.html>)

Tip #5: Involve Parents as Resource Locators

Parents of gifted children are often active advocates for their children. If you are not prepared for this, it can be a bit unnerving. The good news is that, at least in my experience, what they want most is to be heard and to encounter someone who is willing to think differently. Generally, I have found that if I offered to collaborate with them, rather than resist them, we were able to work together to see that their child's needs were met. For example, if they wanted their child to have more challenging experiences in math, I would enlist their help in finding better curriculum options. I generally conducted an informal assessment to help them determine the best place to start and then encouraged them to explore other options that could be adapted to the classroom. Most parents understood when I explained that I didn't have the luxury of creating a customized curriculum for every student, but that I would be willing to make accommodations if they would do the research. Flexibility and a willingness to think differently helped me create many win-win situations.

Tip #6: Learn About Distance Learning Opportunities

The choices available to teachers and parents in this area have exploded in the past several years. Distance learning opportunities have dramatically increased options for meeting the needs of gifted students. Programs such as EPGY math and the Johns Hopkins Writing Tutorials as well as online high school and college courses, including online AP classes, are a great way to substitute more challenging curriculum for students who demonstrate proficiency with grade level material. Of course, these classes generally aren't free, but they are an option. And, in my experience, they are an option that many parents are willing to fund. Search the free GT-Cybersource online resource database at www.GT-Cybersource.org to find resources recommended by students, parents, and teachers.

Tip #7: Explore Acceleration ~ It's Free and It Works!

Another option is to allow students to attend classes with other students who are at the same developmental level, rather than with their age peers. If a 9 year old can demonstrate that he is ready to learn algebra, why should he be forced to take fourth-grade math just because he is 9 years old? Same goes for language arts, or science, or social studies or any other area of the curriculum. Many well-meaning teachers worry that a student will run out of things to learn if they are given access to curriculum designated for older students. Whenever I hear this question I can't help but ask – can a person ever truly run out of things to learn? Indeed, if we let Susie, a third grader, learn fifth grade math this year, then fifth grade math isn't going to be appropriate for Susie when she gets to fifth grade. So, during fifth grade, Susie should have access to seventh grade (or higher!) math – depending upon her needs. What's wrong with that? Susie is learning at a rate appropriate to her abilities and will continue to do so whether or not we “make” her do third grade worksheets. Why not accommodate her unique learning needs with a bit of flexibility. Susie may just be the one who discovers the cure for cancer or comes up with an alternative fuel source that is more planet-friendly. Besides, and I can only speak for myself, I don't believe ANY student should have their opportunities limited because of their age, their race, or any other factor that is beyond their control. I believe education should be about creating true learning opportunities for ALL students – including gifted students. If you have a student who is ready for fifth grade work, collaborate with the fifth grade teachers. There are great tools, such as the Iowa Acceleration Scale, that can help you determine whether the student should be moved ahead for just a subject or two or should be grade accelerated.

Another reason that may teachers are afraid to try acceleration is that they are concerned about the student's level of social maturity. Research has demonstrated time and time again that acceleration is effective for many reasons and that social maturity is rarely an issue. Several studies have shown that social age is correlated with mental age – not chronological age. So, not only is it generally in the student's best interest academically to accelerate, it is in his/her best social interest as well. The same goes for students in high school. If a student is ready for college work, encourage them to take college courses or to consider an early college entrance program. Indeed the student might need a bit of tutoring to get up to speed and/or may need some extra support initially, particularly with writing and/or organization, however, gifted students learn very quickly and my experience has been that these supports can generally be removed after a reasonable adjustment period.

Tip #8: Learning from the Experiences of Others

May well-meaning teachers innocently commit the following blunders when they encounter gifted students. Don't feel bad if you have committed them. I know I have and wish someone would have pointed them out to me before I had to learn about them the hard way.

Blunder Number One: Asking Your Gifted Students to Serve As Tutors for Students Who Are Struggling. Gifted children think and learn differently than other students. Asking them to serve as tutors can be a frustrating experience for all parties involved. This should also be remembered when putting together learning teams or group projects. Putting your strongest student with you students who are struggling is likely to be a painful experience for everyone. Imagine developing a cycling team with someone like Lance Armstrong as one member and then selecting other members who have either just learned to ride their bikes or are still relying on training wheels to help them gain their balance. It is unlikely that anyone in this group is going to have a positive experience.

Blunder Number Two: Giving Your Gifted Students More Work When They Finish Early. It is common practice to give students more work if they complete their assignments early. This is counterintuitive if you consider that if the student is completing his/her work in an efficient manner, it is likely that the work is too easy. Let's once again consider our cyclist. Would you have the cyclist who finished the race first continue to ride, on a stationary bike no less, until all the other cyclists finished the race? I hope not! What is that cyclist was given an opportunity to participate in more challenging races or had the opportunity to develop his/her talents in related areas – wouldn't that be a better use of his/her time?

Blunder Number Three: Only Allowing Gifted Students To Move Ahead When They Complete The Grade/Age Designed work Assignments With 100% Accuracy. It is important to remember that gifted students think and learn differently and can be extremely rebellious. No one – not adults, not children and especially not gifted children – likes to be bored! Gifted students, thanks to their ability to reason, will purposely choose not to do something merely because they "must" do it, particularly if it seems pointless to them. They would rather spend their time thinking or reading than completing worksheets that are too easy. If you are truly interested in doing what's best for your students, it is imperative that you focus on their strengths, not their shortcomings. Offer them opportunities that are consistent with their abilities – lead them from where they are. Depending how long they have been in the system, it may take them a while to trust you. So, don't be surprised if there isn't a miraculous overnight change. Be consistent and positive and remember, you may be the first teacher who has offered them an opportunity to actually learn, rather than regurgitate and they may not know how to handle your responsiveness. Don't fall in to the trap of saying, "See, I told you he wasn't gifted, I gave him one tough assignment and he failed." Gifted students generally haven't had to work to succeed. Give them time to build their, often atrophied, wings in a safe environment.

Tip #9: Utilize Outside Resources

There is a lot of information in this article, and it is likely you're feeling a bit overwhelmed! Here is the best news so far... you are not alone and you don't have to come up with all the answers by yourself. There are several national organizations devoted entirely to assisting gifted young people and the professionals who serve them. The three most notable organizations are the National Association for Gifted Children (www.nagc.org), The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development (<http://www.uiowa.edu/~belinctr/>), and the Davidson Institute for Talent Development (www.Davidson-Institute.org). As a first step, I recommend joining the Davidson Institute's free Educator's Guild. Members have access to private electronic mailing lists and bulletin boards to exchange ideas, locate resources and professionals for personalized assistance with identification, assessment, exploration of educational options, creation of Individual Educational Plans, and location and development of curriculum for highly gifted learners. All you have to do is call to receive answers to your questions – completely free of charge. And, the Davidson Institute also provides participants of the Davidson Young Scholars program and their parents, free services as well. In addition to investigating these national organizations, you may also wish to investigate organizations at the state and local level that focus on meeting the needs of gifted students. It isn't necessary to turn your world upside down to be an effective teacher of gifted students, you just have to be flexible, knowledgeable, and be willing to try new things. Gifted students cannot fend for themselves and I wish you the best of luck as you begin the exciting adventure of making a difference to the gifted students in your classroom! After all, one person can and does make a difference.

Permission Statement:

Reprinted with permission of the Davidson Institute for Talent Development, which does not imply or constitute any endorsement of this publication. The Davidson Institute for Talent Development is a 501(c) 3 nonprofit operating foundation funded in 1999 to support profoundly intelligent young people. For more information on the Davidson Institute, please visit www.Davidson-Institute.org or call (775) 852-DITD.

Additional Resources

Additional articles on various topics dealing with gifted and talented students and academic acceleration can be found at:

<http://www.gt-cybersource.org>

<http://www.nagc.org>

Articles at either of these sites include:

- Overview of the research
- Making decisions to accelerate gifted students
- Social and emotional issues
- Parenting Strategies and Tips
- Case studies of acceleration
- Talent Development
- Identification
- Tips for Students
- Strategies and Tools for Teachers