

Features:

- Advancement and Acceleration: What Is It? How Should It Be Accomplished?
- "Hasten Slowly" Thoughtfully Planned Acceleration
- Emily & Jacob and Your Child, Too: Accelerating in Language Arts
- A Road Taken: One Family's Journey through an Educational System
- Guided Investigations in Middle School Math
- ...and more!

www.openspacecomm.com 303.444.7020 303.545.6505 fax 1.800.494.6178



Dedicated to helping gifted children reach their full potential

Acceleration & Advanced Curriculum

Winter 2008: Volume 20, Issue 2

Subscribe and Read ONLINE

pen Space Communications LLC

www.our-gifted.com

Publisher Dorothy Knopper

Editor Carol Fertig

Understanding Our ®

Design/Desktop Publishing Ann Alexander Leggett

Online Publication Dana EchoHawk

Editorial Advisory Board

Alexinia Baldwin, Professor University of Connecticut

Sandra Berger Educational Consultant, VA

George Betts, Professor Special Education / Gifted and Talented University of Northern Colorado

Barbara Clark, Professor California State University

Jaime A. Castellano, Visiting Professor Lynn University, FL

James Delisle, Professor Co-Director, SENG Kent State University, OH

John Feldhusen, Professor Purdue University, IN

Maurice D. Fisher, Publisher Gifted Education Press, VA

Jerry Flack, Professor Emeritus University of Colorado

Donna Y. Ford, Professor Betts Chair, Education/Human Development Vanderbilt University, TN Julie Gonzales Educational Consultant / Advocate, CO

Miraca Gross, Professor Gifted Education Director, Gifted Education Research, Resource, and Information Centre University of New South Wales, Australia

Pat Hollingsworth University School for Gifted Children University of Tulsa, OK

Frances A. Karnes, Professor Special Education Director, Karnes Center for Gifted Studies University of Southern Mississippi

Elinor Katz, Associate Professor Educational Leadership University of Denver

Bertie Kingore Professional Associates Publishing, TX

Joel McIntosh, Publisher Prufrock Press, TX

Sheri Nowak Stewart Coordinator, Enrichment Services Blue Valley School District Overland Park, KS Rick Olenchak, Professor Psychologist Director Urban Talent Research Institute University of Houston, TX

Jeanette Parker Professor Emeritus University of Louisiana at Lafayette

Ann Robinson, Professor University of Arkansas at Little Rock

Beverly Shaklee, Professor George Mason University, VA

Dorothy Sisk, Director Conn Chair for Gifted Education Lamar University, TX

Joan Franklin Smutny, Director Center for Gifted National-Louis University, IL

Joyce VanTassel-Baska, Professor College of William & Mary, VA

Sally Walker, Executive Director Illinois Association for Gifted Children

Marilyn Wallace, Academic Director Quest Academy, IL

Susan Winebrenner Education Consulting Service, CA



Understanding Our Gifted encourages a wide range of viewpoints on education and the gifted. Authors have the flexibility to express individual opinions, which are not necessarily those of the Editor, Publisher, or Editorial Advisory Board. We welcome reader feedback.

pen Space Communications LLC

Understanding Our Gifted (ISSN 1040-1350) is published quarterly by Open Space Communications LLC, P.O. Box 18268, Boulder, CO 80308. U.S. Subscriptions Individual \$39; Institution \$49. Canadian Subscriptions Individual \$58; Institution \$68. All other International Subscriptions \$68. Online Edition and Back Issues available. Third class postage paid at Boulder, CO. For subscription address changes, notify Open Space Communications. Material in Understanding Our Gifted can be copied for personal use. No material can be reproduced for publication or distribution without permission. Copyright 2008, Open Space Communications LLC. All rights reserved. 303.444.7020 / 800.494.6178 / fax: 303.545.6505 / dorothy@openspacecomm.com / www.openspacecomm.com / www.our-gifted.com

Contents

	Dorothy Knopper
JL	Features
Curricului	Advancement and Acceleration: What Is It? How Should It Be Accomplished?
Cu	Musings: "Hasten Slowly"–Thoughtfully Planned Acceleration
ed	Emily & Jacob and Your Child, Too: Accelerating in Language Arts9 • Two different students–two different approaches Lou Lloyd-Zannini
ration & Advanced	A Road Taken: One Family's Journey Through an Educational System14 • How one family met their son's academic and emotional needs through the school system Patsy Kumekawa
Adv	Guided Investigations in MIddle School Math
1 &	Think and Link: Curriculum for a Community of Thinkers21 • Using novels to promote critical thinking Felicia A. Dixon
01	Columns
rati	Surfing the Net: Early Entrance College Options24 • Enrolling in college at an earlier-than-normal age Sandra Berger
Accelei	Software Updates: Best Computer Program Companies for Gifted Kids26 • Great software companies for gifted children Gregory C. Pattridge
CC	The Affective Side: When I'm Bored Doesn't Call for More Challenge28 • Reading between the lines Jean Strop
	Book Bag: Seven Continents–Inspirations for Students to Create Their Own Books
Understanding Our Gif	fted , Winter 2008

Between the Lines2

• Publisher's Perspective

Between the Lines

Publisher's Perspective

Dorothy Knopper

In an earlier era of gifted education, as parents and educators struggled to find challenge and strategies for their highly able children, a little jingle emerged. It went something like:

How are the **gifted lifted**? Do we **segregate, accelerate**, or **differentiate**? How are the **gifted lifted**?

It sounds simplistic in today's educational environment of ongoing research, updated testing, improved identification, practical strategies, and the presence of the Internet in all our lives. However, the three alternatives mentioned in the jingle have become widely used in gifted education, offering pullout programs, grade and subject skipping, early entrance to kindergarten and college, advanced placement, homeschooling, curriculum compacting, and many other innovative programs.

In this issue of *Understanding Our Gifted*, we visit the topic of acceleration and advanced curriculum—exciting, viable, research-based educational experience for bright youngsters. In the same early period mentioned above, my *Open Space* column in *Roeper Review* recommended acceleration, with this advice: "...conference with parents and appropriate staff members, including the student in the discussions and decision making." I also recommended the following: "...a trial period and an evaluative process agreed upon in the conference, so that the child does not feel like she has failed if acceleration does not succeed... communicate with receiving teachers so they are aware of the situation and receptive to the student's transition" (Knopper, D., December, 1989).

Over the years, the concept of acceleration has been variously viewed as a panacea or a dangerous process that might damage a child's psyche. The writers in this journal share both positive aspects of acceleration, which has proven to be successful for many bright children, and areas of concern.

Let us know your experiences with acceleration and advanced curriculum for highly able children. Contact Editor Carol Fertig: *cfertig@earthlink.net* *

Advancement and Acceleration: What Is It? How Should It Be Accomplished?

Sally Y. Walker



What are recognized strategies for moving

The *Living Webster Encyclopedic Dictionary* defines acceleration as "the act of accelerating or the state of being accelerated, increasing learning speed, or the increase in scope of a course of study to meet the needs of students who learn readily." The word brings to mind all kinds of images of "gaining speed." We think of fast, rushing, speeding cars; motorcycles; or amusement park rides.

Say the word acceleration or consider academic advancement in conjunction with school, and chances are you'll get mixed reactions among educators and parents alike. "I wouldn't do that to my child," says one mother. "My daughter needs to make friends with children who are her own age. That's the real world." "It saved my son," claims another parent. Reactions are strong.

A Nation Deceived (2004) documents the benefits of acceleration for gifted children. Supported by this groundbreaking research, acceleration has come into focus on the national scene. Our society seems concerned with making education "fair." What we need to realize is that fair does not mean the same for all. In fact, that would be very "unfair." Fair is giving each child what he needs at the appropriate time.

As a parent I try to be fair. But there are times when one child may have a greater need than another. That need has to be addressed. One child may have a health concern that the others do not have. An illness in one child does not mean that all the other children in the family must also see the doctor, take the medication, or get the shot. That would not be fair! Or there are instances where one child may have a financial problem that her siblings are not currently experiencing. Fair equates to giving the child in need what you can to alleviate the situation. The same applies to education.

When the gifted child goes unrecognized and is made to do age appropriate work that she has already mastered in previous years, the child is tied down, devalued, and unrecognized. Acceleration attempts to tailor the curriculum to meet the needs of the student. It is a way of honoring what is already known and building upon it.

One of the easiest ways to accommodate the young, advanced learner is to **enter kindergarten early**, prior to the scheduled "cutoff" date prescribed by the school or state. It is simple for the child who would benefit from schooling earlier. He does not need to readjust to new classmates and surroundings. The process is so easy, practical, and effective. It is hard to understand why some districts are reluctant to use early admission.

Early admission to kindergarten is an option that worked well for Kathy. She was reading by age 3, and by age 4 she knew her math facts and



Understanding Our Gifted, Winter 2008

Advancement, continued

could easily do addition and subtraction. Both her fine and gross motor skills were advanced for her age. She also had a large vocabulary. Kathy's parents wanted her enthusiasm for learning to continue, and they wanted her to have the opportunity to learn new information, rather than to repeat what she had already mastered. They suggested an early entrance to kindergarten. After testing revealed what the parents already knew, the school district consented. It was a simple adjustment.

"Our society seems concerned with making education "fair." What we need to realize is that fair does not mean the same for all ."

Early admission to the next grade level (grade skipping) may be needed for some students. This can occur at any time in the school year. Teachers determine if grade level acceleration is appropriate in a number of ways, including the use of tests, observations, portfolios, parent input, and evidence of work or growth over time. (A tool that may be helpful in the decision making process is the *Iowa Acceleration Scale* (Assouline, et al., 2002).

It is crucial that any gaps in learning from missed content are addressed. Otherwise, the student may miss pieces of learning that can present problems later in his school career. To avoid this, a content and skill check should be conducted to assure that nothing is overlooked. If there is a missing area, it can usually be addressed and mastered with little difficulty.

Continuous progress can be made with **content that is progressively more advanced**. The teacher(s) allows the student to advance in an area as the material for the content is mastered and completed. There is no stopping place; learning is continuous. The student is allowed to surpass chronological age-mates with increasing levels of complexity and depth in the content area. Knowledge of the subject is honored and valued; yet the child can remain within the class of age-mates for instruction in other content areas. With this method of acceleration the teacher must have access to advanced resources and be able to adjust content to meet the student's needs. Caution needs to be exercised to not isolate the youngster, but to engage him when appropriate in class discussions and other content areas.

Self-paced instruction works well when the student would benefit from becoming a "resident expert" in an area by

pursuing an interest in-depth. The classroom teacher can suggest and parents can provide the opportunity for such individualized instruction, e.g., a special summer, weekend, or evening class. The child is given the opportunity to have her interests and abilities validated with extensions to new material and ideas. The rest of the class can also benefit from the shared information.

Subject matter or partial acceleration is a good fit when a student has advanced ability in one specific area but is working at grade level in other content areas. A 2nd grader who is advanced in mathematics may go to the 4th grade classroom at math time to work at the appropriate level but stay in the 2nd grade class for the remainder of the school day. The 2nd grade subjects, other than mathematics, are the correct placement for that child.

There needs to be a clearly defined progression with a scope and sequence for accelerated learning. Teachers at future grade levels must be aware of the advancement that has taken place and commit to extending it. Planning ahead is a must!

Combined classes, or in some cases, **ungraded classes**, may allow youngsters to become engaged with advanced material and work with older students. These strategies may or may not lead to advanced grade placement at a later time. A good example of this is the old one room schoolhouse where children often learned by being in class with older, more advanced students.

Curriculum compacting is a strategy used in differentiation. The teacher reduces the time spent on the standard curriculum by pre-assessing students on their knowledge. Those who have already mastered the material do not need to do the drill and skill work required by children who are just learning the new material. This can take the form of giving select students the end of the chapter test at the beginning of the unit; having the students complete a What I Know, What I Want to Know, and What I have Learned (KWL) chart (with the focus being on what I know or think I know); making a web or mind map of the topic; illustrating key ideas related to the topic; or solving a few of the hardest problems in the unit. The student "buys" the gift of time to work on enrichment activities or proceed on to more advanced content. It avoids working on material already mastered. Curriculum compacting does not usually lead to grade advancement.

Telescoping allows a student to learn two years of work in one year. An example of this can be found in an accelerated math class in intermediate elementary school. The gifted mathematics curriculum combines both 5th and 6th grade content. Both years are taught in grade 5. In 6th grade these children progress into pre-algebra rather than following the

Advancement, continued

traditional mathematics curriculum.

In a **mentoring** program, a student is placed with an expert in the content area. This can be accomplished by pairing her with a community member who has an interest or passion for the subject or with other more advanced students who have similar interests. One school tapped into retired teachers and paired them with young children who shared their interests. Mentoring provides time for sharing, questioning, and gathering information on a topic of interest. The student can advance more rapidly and develop a deeper understanding of the content area through this process. Career possibilities arise, and students can explore what it might feel like to be a practitioner in a particular field.

"Acceleration attempts to tailor the curriculum to meet the needs of the student."

Dual enrollment or a combination of high school and college courses enables many students to graduate early. Because Ali had exhausted all the advanced classes in certain subjects at her high school, she was allowed to take courses at the local college. She valued the opportunity to extend her learning. With distance learning, online classes can be accessed even when transportation prohibits attending the school or university. Another option may be attending weekend or Saturday classes. It is necessary for a student to be self-directed for these approaches to be successful.

Community service or developing a campaign is a creative and low cost method of advancing content while contributing to society. Learning how the world outside the classroom works has lifelong implications. Researching a topic, letter writing, speaking at public forums, and contacting people in positions of power gives the learner authentic tools to apply to life. It eliminates the questions, "When will I ever use this?" or "Why do I have to learn that?" Examining occupations that are related to the topic, doing the work of a person in the field, understanding the needed skills and knowledge necessary to be successful in a job or profession are incentives to pursue learning at a higher level. Besides learning at an advanced level, working on an authentic problem is engaging and empowering. Community involvement also builds self-confidence and self-esteem.

Advanced resources, such as books at multiple levels on the

topic of study and advanced reference materials, can extend learning. Look for resources which are two years beyond the grade level to stretch the minds of young people.

Talent search programs are excellent examples of acceleration. Students who consistently perform at the top of their class on standardized tests are given an off grade level test that has a higher ceiling. One example of a talent search program has students in 6th grade who are consistently at the top of their class in language arts or mathematics take the ACT or SAT. These tests are normally given to juniors in high school. This is a way to find out in more detail what the child actually knows and can do. In addition to gaining more information about the student's knowledge, talent search programs often offer additional classes or extended opportunities for able youngsters. (Information on talent search programs can be found at *http://www.hoagiesgifted. org/talent_search.htm*)

The **study of a foreign language** is another way to accelerate learning. In other countries, most young people are expected to speak at least one or two additional languages fluently. Why is this not happening in the United States? Why wait until high school or, in some cases, college to introduce a foreign language? The study of a foreign language promotes cultural understanding as well as advancing learning.

This menu of acceleration and advancement options acknowledges that there are different ways to implement learning in the classroom. Which strategy is offered and which works depends on the school philosophy, the teacher, the student, the parents, and the available resources.

References

- Assouline, S., Colangelo, N., Lupkowski-Shoplik, A., Lipscomb, J., & Forstadt, L. (2002). *Iowa Acceleration Scale: A Guide for Whole-Grade Acceleration K–8*. Scottsdale, AZ: Great Potential Press.
- Colangelo, N., Assouline, S., & Gross, M. (2004). A Nation Deceived: How Schools Hold Back America's Brightest Students. Iowa City: University of Iowa.

Sally Y. Walker is a consultant, educator, and author in the field of gifted education. She is Executive Director of the Illinois Association for Gifted Children (IAGC).

Musings: "Hasten Slowly"–Thoughtfully Planned Acceleration

Miraca U.M. Gross

What guidelines should be considered before advancing a student?

Acceleration is, quite simply, one of the best researched interventions for gifted students. We use it readily in sports and in the performing arts. Talented young musicians and athletes are permitted to progress at their own pace, training and performing with older students when this is appropriate. The repertoire which talented young musicians prepare and perform is chosen on the basis of the performer's maturity and readiness, rather than chronological age. No one questions the common sense and practicality of this.

So why are we so reluctant to use acceleration with academically gifted students?

In 2004, with Nicholas Colangelo and Susan Assouline of University of Iowa, I published a report based on 80 years of international research on acceleration. The report, *A Nation Deceived: How Schools Hold Back America's Brightest Students (www.nationdeceived.org)*, reviewed studies by a wide range of scholars from many countries and over many decades showing the positive outcomes, both academically and socially, of thoughtfully planned and monitored acceleration. Indeed, the other authors and I criticized the *under*utilization of the 18 forms of acceleration described in the research literature (See end of article.).

So why, when I am a strong supporter of the use of acceleration with academically gifted students, do I title this article *Hasten Slowly*?

When I began to learn Latin, in 7th grade, I was fascinated by the wisdom expressed by some of the Roman philosophers—as well as the economy of language in which they expressed it. *Festina Lente, Hasten Slowly*, means "Do quickly that which needs to be done quickly—but take thought before you do it!" Just two words in Latin, but with such wealth of meaning.

And this is why I've chosen *Hasten Slowly* as the title for this article. Certainly I'm an advocate of acceleration. However, advocating for the thoughtful, carefully judged employment of a procedure with well researched effectiveness does not imply approval of cases where the procedure is used without sufficient thought—especially where it is used in violation of the very safeguards that research has shown to be necessary for its optimal effectiveness.

I regret to say that I have sometimes come across cases where parents have argued repeatedly and forcefully for acceleration in situations

_┏┛┑

Hasten Slowly, continued

where it has been, quite clearly, inappropriate for their child. Giftedness, by itself, does not indicate that acceleration is desirable; we have to look at the whole child, not only his intellectual capacity.

Practical Guidelines

The following guidelines for acceleration (Feldhusen, Proctor, & Black, 1986) should be followed when schools or parents consider advancement for an intellectually/ academically gifted student:

1. There should be a comprehensive evaluation of the child's intellectual functioning, academic skill levels, and social-emotional adjustment by a psychologist.

2. The child should have an IQ of 125 or higher or have a level of mental development above the average for the grade she desires to enter.

3. Academically, the student should demonstrate skill levels above average for the grade he desires to enter.

4. Socially and emotionally, the child should be free of serious adjustment problems and should demonstrate a high degree of persistence and motivation for learning.

5. Physically, the child should be in good health; however, the child's size should be considered only to the extent that competitive sports may be viewed as important in later years.

6. The psychologist must determine that the child does not feel unduly pressured by the parents to advance.

7. The receiving teacher must have a positive attitude towards the child's acceleration and be willing to help him adjust to the new situation.

8. Teachers are sometimes pessimistic about a gifted child's maturity, confusing misbehavior and unhappiness with immaturity. Judgment about the child's maturity should, therefore, include input from the psychologist.

9. Acceleration should be planned for "natural transition points." This does not have to be at the start of the school year; indeed, Feldhusen has commented that midyear transitions allow sending and receiving teachers to confer about how best to make smooth transitions.

10. All cases of acceleration should be arranged on a trial basis.

11. Neither the child nor the parents should build up excessive expectations. The child should not be made to feel like a failure if the acceleration does not go well. Feldhusen, Proctor, and Black noted that, for a *very few* gifted children, additional grade advancements might be necessary later in their schooling.

12. Acceleration decisions should be based on facts rather than myths. When adjustment problems occur they tend to be minor and temporary. By contrast, failure to accelerate a gifted student who needs this intervention can result in apathy, lack of motivation, and poor study habits.

I completed my graduate studies in gifted education at Purdue during the 1980s, and I have had the pleasure and privilege of knowing John Feldhusen as a mentor and dear friend. He has been careful to emphasize that acceleration should *not* be employed, even with the most highly gifted child, without a thoughtful application of these guidelines to ensure that the student is a suitable candidate for acceleration. Most gifted children arebut not all of them.

"...we have to look at the whole child, not only his intellectual capability ."

Feldhusen and his colleagues readily acknowledge that adjustment problems in gifted students can arise from boredom and frustration with work set at too low a level and that acceleration can remedy this. They also acknowledge that what *appears* to be social or emotional immaturity may arise from emotional distress if a gifted student is socially rejected by classmates or if she pretends to be less mature than she really is for the sake of social acceptance. However, they stand strongly by their insistence that acceleration should not be undertaken without due thought or a careful evaluation of the child's readiness. It is also necessary that the key stakeholders—parents, receiving teacher, principal, psychologist, and, of course, the student himself—agree on the form and timing of the acceleration intervention and its evaluation.

In my country, Australia, as acceleration is gradually gaining acceptance, schools are becoming a little less wary than they were 10 years ago. This is a great advancement because, used properly and with planning and forethought, acceleration

Understanding Our Gifted, Winter 2008

Hasten Slowly, continued

can indeed be a gift to gifted students. However, the growing readiness of schools to thoughtfully consider acceleration can be jeopardized by teachers, parents, and community members whose enthusiasm causes them to *push*, rather than advocate, for a student to be accelerated. No one likes to feel pushed into a decision, especially one that experts emphasize must be taken with careful judgment and sound planning.

"Acceleration should not be undertaken without due thought or a careful evaluation of the child's readiness ."

In addition, I am concerned about a tendency among some well-meaning advocates to advise the use of *radical acceleration* in cases where it may be unnecessary or even unadvisable. Radical acceleration is the "umbrella term" for a set of acceleration procedures which, spaced over several years, result in the gifted student graduating from secondary school three or more years earlier than usual. It is suitable only for the most highly gifted students (for example, students of IQ 160+) who are also *very* socially and emotionally mature. (Feldhusen's IQ threshold of 125 was not intended to cover all forms of acceleration.) Radical acceleration must be used thoughtfully and judiciously, with the grade skipping spaced over several years.

Many of the 60 exceptionally gifted young people of IQ 160+ whom I have followed over 25 years in my longitudinal study (Gross, 2004) have benefited enormously from radical acceleration, but I would not think of advising it for more moderately gifted students.

As I indicated at the start of this article, there are 18 different forms of acceleration, and each advancement should be planned in the light of the academic and social outcomes of the previous one. It can't be planned in its entirety when a child is 6 or 7 years old; a child's development progresses at different rates as she moves through childhood and adolescence.

Acceleration is a valuable and effective educational procedure that should be used more frequently than it is currently, but let us continue to use it with the thought, care, and respect that it demands. Let's hasten gifted children's *progress* through school—but let's not *hurry* it. *Festina Lente*!

References

Colangelo, N., Assouline, S.G., & Gross, M.U.M. (2004). A Nation Deceived: How Schools Hold Back America's Brightest Students. Iowa City: University of Iowa.

Feldhusen, J.F., Proctor, T., & Black, K. (1986). Guidelines for Grade Advancement of Precocious Children. *Roeper Review*, 9(1), 25-27.

Gross, M. U.M. (2004). *Exceptionally Gifted Children*. Oxford: RoutledgeFalmer.

Miraca U.M. Gross is Professor of Gifted Education and Director of the Gifted Education Research, Resource, and Information Centre (GERRIC) at the University of New South Wales in Sydney, Australia.

Types of Acceleration Discussed in *A Nation Deceived*

- 1. Early admission to kindergarten
- 2. Early admission to 1st grade
- 3. Grade skipping
- 4. Continuous progress
- 5. Self paced instruction
- 6. Subject matter acceleration/partial acceleration
- 7. Combined classes
- 8. Curriculum compacting
- 9. Telescoping curriculum
- 10. Mentoring
- 11. Extracurricular programs
- 12. Correspondence courses
- 13. Early graduation
- 14. Concurrent/dual enrollment
- 15. Advanced Placement (AP)
- 16. Credit by examination
- 17. Acceleration in college
- 18. Early entrance into middle school, high school, or college

Emily & Jacob and Your Child, Too: Accelerating in Language Arts

Lou Lloyd-Zannini



What are some creative ways for working with advanced students both at home and at school?

"I can't believe that they're going to do this to my child," the voice at the other end of the phone said frantically, ending what had been a peaceful mid-July day at the office. For the past two years, I had been serving as the headmaster of a small, private school, and I knew that the words "can't believe that they're going to do this to my child" were probably a signal that something was amiss. Seriously amiss.

"What exactly are they going to do to your child?" I asked the distressed parent. "And how can we help you?" I added, realizing that somehow this parent clearly thought that our school might be able to do something to aid the child in distress.

As the words tumbled out, the picture became much clearer. "My child" was Emily, 4 1/2 years old at the time, who had a rather unusual problem: She was already reading. In fact, she was reading at a 3rd-grade level, according to a nationally recognized, local center for gifted children where Emily had been assessed. The center confirmed that indeed, she was gifted, and her comprehension and technical skills were those of a 3rd grader.

Emily had been attending a local preschool where, because of the structure of the curriculum, accommodating her individual needs was not a problem. But now, Emily was kindergarten age, and when the parents went to register her for fall attendance at the local elementary school, they were told that even though "they thought she could read," she would be expected to do what all the others in her grade were doing: cut and paste, tear out pictures and use invented language to tell stories, and learn the letters of the alphabet.

When the parents objected, reaffirming that Emily already KNEW the letters and could write using conventional English — documenting her abilities with the professional assessment report and samples of her work— they were firmly told that she would get no "special treatment." She would cut and paste and learn letters, period....amen. The parents attempted to explore alternatives within the school system, but at each point they met a firm wall. Emily obviously did not fit the mold, and frankly, no one knew what to do with her or cared to find out.

In 50 plus years on the planet, my experience has been that, if one looks hard enough, even bad news typically has a bright side. But in this case, I discovered that there was yet more bad news to come: Emily had a friend.

Jacob was also 4 1/2 years old, and he, too, had been assessed as having the

comprehension and technical facility of a 3rd grade reader by the same center that had worked with Emily. In fact, the two of them had participated in the center's weekend enrichment programs and had done very well. Both children attended the same preschool and lived down the street from each other. Before I knew it, Jacob's parents were on the phone with me, too.

Rather than working twice through the situation, I invited both sets of parents — with the children and all the records to come to the school to talk. Come they did, with two cuteas-a-button little ones, and with what seemed a tractor trailer load of records and projects which the kids had completed.

My plan had been to explain how that 3rd grade rating on the reading tests was actually an indicator of how a 3rd grader taking the kindergarten test would have scored, not an indicator of how a prekindergartner would do on a 3rd grade test; however, I quickly discovered that these two had actually been tested using the 3rd grade instrument—and that they had each scored in the 90th percentile. They were truly reading on a 3rd grade level! So much for that plan.

"Sir, could I just go into the 3rd grade class?" she asked in her most mature voice. "After all, I am almost 5."

One of the joys of being a small school — and a relatively new one — is that with the absence of a long history of "always been this way," one can quickly improvise solutions to problems that others can't or won't address. In our case, the lower school was actually formulated with four classrooms: one for entering 5-year-olds (our kindergarten), and one each for clustered 1st/2nd, 3rd/4th, and 5th/6th groups, each of which accommodated no more than 16 children. We had set up our schedule so that lower school reading times overlapped, and math times did the same, enabling kids to move between classrooms based on their needs in those core subjects.

Accommodating Emily and Jacob didn't look like it would be much of a problem. We were in our second year of working with Kevin who last year, as a 1st grader, had already plowed halfway through the 3rd grade math program and this year was looking like he'd have similar progress. Kevin's agemates thought it "cool" to have a friend who understood math so well, and none of the kids seemed to think it odd that a younger child would be in a higher level math class.

For Emily and Jacob, my thought was that we'd simply insert them into appropriate reading times, and home-base them in the 5-year-old classroom. It was a worthy thought. Wrong, but worthy.

Emily didn't fit in the 5-year-old class. She was affectively well beyond her agemates and had advanced small and gross motor skills. It also appeared that her math skills paralleled her verbal ones, so we needed to address that issue, too. On the other hand, Jacob was a perfect fit socially in the kindergarten room. His small motor skills were actually underdeveloped, which led us to consider some additional accommodations for him.

What is important to remember is that Emily and Jacob entered school in post-Marland (1972) and post-*Nation At Risk* (Gardner *et al.*, 1983) but pre-*Prisoners of Time* (Jones *et al.*, 1994) and pre-*A Nation Deceived* (Colangelo, Assouline, & Gross, 2004) America. Like most of my administrative colleagues, I knew virtually nothing of gifted education. I had missed the three-hour session where gifted children had been discussed, and not entirely unlike today, that was about all the exposure to the topic that a master's or doctoral level education administration student could expect to receive.

I had two personal experiences with giftedness not being adequately served. My son, an early reader with a prodigious literature appetite, read a book a day and remembered virtually everything in it. Though he had accelerated through middle school, and eventually graduated high school at 16, his teachers often complained to me that he would answer complex questions in class — usually correctly — without ever looking up from his reading material or breaking his reading pace. (Sometimes, even the administrator's child has trouble getting appropriate services after middle school!)

I well understood my son's frustration in school. Growing up as an identified-but-unserved gifted child myself, I knew the mind-numbing agony of existing day by day in school, being unintentionally and unnecessarily remediated in class after class, and reveling in whatever distraction I could find or create to escape. When I entered the field of education, I vowed to do everything in my power to make sure that no one else endured that kind of madness in my classes or school. Both my son's experiences and my own drove my decisions for our school to accommodate Emily and Jacob.

In Emily's case, the solution seemed fairly straightforward, but after a couple of days of working from the kindergarten room and going to appropriate reading classes, Emily approached me as I visited the dining room during lunch. "Sir, could I just go into the 3rd grade class?" she asked in her most mature voice. "After all, I am almost 5." I discussed her request with her parents, teachers, and the school guidance director, and we all agreed that since her math skills were high level as well, and she was affectively precocious, this was a solution worth trying. For Emily, it worked like a charm. She was welcomed by the 3rd graders and did well in that setting. Her language arts skills allowed her to continue to move forward quickly, and she was soon reading more complex material and focusing on writing stories and poetry.

For Jacob, the solution was more difficult. He truly needed the more playful and discovery-oriented nature of the kindergarten class, as well as the opportunity to develop his small and gross motor skills. He went to other classrooms for appropriate language arts and math classes (as determined by diagnostic assessment) and spent the rest of his day with his chronological and social peers doing "normal" kindergarten things. Because Jacob didn't have the physical capabilities for writing that he needed to succeed in 3rd grade language arts, we provided him with a volunteer transcriber who wrote verbatim what Jacob said in response to questions read in the language arts materials. He also used a computer to create his own compositions. These two steps helped alleviate his frustration with his inability to physically write as quickly as his peers and allowed him to interact cognitively at an appropriate level.

"For Jacob, the solution was more difficult. He truly needed the more playful and discovery-oriented nature of the kindergarten class, as well as the opportunity to develop his small and gross motor skills."

Of the plethora of curriculum models suggested as appropriate for high ability learners, I believe that the most effective and efficient — as well as the most sensible and well-researched — is the one advanced by Joyce VanTassel-Baska(1986, 1995). Her Integrated Curriculum Model (ICM) consists of three interrelated dimensions which are Understanding Our Gifted, Winter 2008 responsive to the differing ways that gifted learners learn: an advanced content dimension, a process-product dimension, and an issues/themes dimension. Critical to the success of any curriculum for high ability learners is its combination of both acceleration and enrichment opportunities.

We used diagnostic-prescriptive instruction, focusing on organizing content into skill-related groupings. This allowed for acceleration based on learner mastery, something that is a critical part of appropriate learning for gifted kids (Colangelo, Assouline, & Gross, 2004).

Ten Suggestions for Parents

1. First, do no harm. Be sure that reading is something that your child wants to do and is ready to do. You'll know when, I promise! But understand that I've seen parents of children, who were not developmentally ready to read, turn their kids against reading for life by attempting to get them reading at age 3 or 4 or even 5. So, fill your home with words. Read to your kids. Have age-appropriate books accessible to your children. Make story time a special time. Encourage reading by reading yourself. But please, don't force the technical process of reading on your child if he isn't ready for it.

2. Once she starts reading, encourage your child to read widely and diversely. Kids — even really young kids — can and do get into reading ruts where they never venture outside a certain author or genre. Promote diversity in your child's selection of reading materials.

3. Though it may sound contrary to the suggestion just made, help your young reader to start thinking about his favorite type of literature. If your young one seems to read without finding any particular type of material that he prefers, help him think about the sorts of reading he finds most enjoyable — whether it be what most challenges, excites, or provokes the imagination — and why it is so. Even if he doesn't choose a favorite, at least he will begin to grow familiar with the language of literature and will start to think critically about what he reads.

4. Spark critical thinking. Talk with your child about the meaning of the literature and how it relates to her own life experiences. Ask questions about selections, their themes, their characters, and the choices made or actions taken.

5. Stimulate metacognition. Encourage your child to think about reading strategies, ranging from how he determines the meaning of an unfamiliar word to how he projects and predicts outcomes in the story. Conscious awareness of

reading strategies will empower your young person to read better and more effectively. Assist your children to identify themes and concepts that go across subject disciplines and to see connections.

6. Writing is right. Good readers make good writers, but only if they practice their craft. Many prizewinning authors relate that they began to write at an early age. Encourage your child to express herself in the written word and to explore the many varieties of writing that exist. Help your youngster to create a "book" with her own story and illustrations. With computers, scanners, and desktop publishing programs, it's possible for every student to become a published author. Best of all, writing is habit forming, and like most good habits, it is best established while the child is young.

7. Model good reading habits by choosing to read many types of literature. Talk about what you're reading, and encourage your child to do the same. As a fun parent-child activity, why not read the same book, and then critique it together? Or do a "point-counterpoint" sort of review? Write it up. If it turns out well, send it in to the local newspaper for their weekend section where they preview and review movies, plays, music, and books. You might both get in print!

8. Maintain good records. Keep a list of books read, especially if your child starts reading early and quickly moves into difficult material. Also, have your young person's skill assessed and documented by specialists who understand gifted kids. You will need that documentation when advocating for appropriate services in school. Without it, Emily and Jacob's parents would have had a horrific time getting anyone to pay attention. With it, they were able to get their kids placed appropriately. Keep a portfolio of your child's writing. Remember, a portfolio must show growth over time, so with your child, choose entries carefully, date them, and safeguard them. They are more than a series of snapshots in time of your child's work. They are the story of his life as a reader and writer. (Side note: It was a portfolio of Kevin's math work that allowed him to continue on track when his family moved cross country at the end of his 2nd grade year.)

9. Advocate for your child. Like Emily's and Jacob's parents, you're going to find an appropriate educational setting for your early reader. Schools should be able to work with your child, but whether they are willing to is an

entirely different matter! Get in there early, and make it clear that you'll do whatever is necessary to see to it that your youngster gets appropriate services. Many parents of gifted kids really lose it on this point. Remember....You're not asking for a special privilege for your child. You're asking for what she's legally entitled to and what she needs and deserves — the opportunity to learn in the least restrictive environment. Don't be shy. It's your child's education that's at stake, and it can have a huge impact on the quality of her life. So get out of your comfort zone and into her school. Earlier is better.

10. Get a library card! If you've got an early reader with a prodigious appetite for books, and you're not independently wealthy, you're going to need help keeping him in reading material. Sure, you'll want to buy some books because some stories will become treasured favorites. But when your kid loads up the library card with 15 books every two weeks, like mine used to, you really grow to appreciate the investment in libraries that your tax dollars represent.

Four Suggestions for Teachers

1. Use diagnostic-prescriptive teaching and grouping to be sure that all your students are working at their appropriate ability levels and not being remediated in skills which they've already mastered. D-P allows you to accommodate the pace of the learners, to compress the curriculum, and to offer extensions as well as opportunities for building depth and complexity for your students.

2. Settle for nothing but excellent curriculum and learning materials. Examine what you've been given carefully, and if it doesn't make the grade, work to improve or replace it. Given the chance to impact materials selection, do so willingly, knowing that the kids and you are all going to benefit from your work. And when you make a selection, don't go for the newest, flashiest thing on the block unless you know it has quality and data-based support solidly behind it.

3. Listen to parents. Sometimes in the crush of getting everything done, it's easy to forget that our job as teachers is to support parents in the education of their children. We have these kids for five or six hours a day. They live with them the rest of the time. So when a parent comes to you saying things like, "Esmirilda can already do this skill," or "Buford is bored because he already knows this stuff," be willing to listen, to look at whatever records or documents they may produce, and if it's warranted, to change your attack plan for dealing with Buford or Esmirilda.

4. Advocate for your students—all of them. If you've got a student with special needs and that child isn't identified, we both know that you're going to do everything you can to change that situation. It shouldn't be any different with the gifted child in your class. She needs some modifications in curriculum and instruction as well. So become an advocate for kids in your class who you know are being held back by the regular curriculum.

Together, we, as parents and teachers, must do our best to meet the needs of gifted and talented learners. Accelerating the curriculum to their optimal pace is one small but important step along the way.

References

- Colangelo, N., Assouline, S. G., & Gross, M. U. M. (2004). A Nation Deceived: How Schools Hold Back America's Brightest Students. Iowa City: University of Iowa.
- VanTassel-Baska, J. (1986, Fall). Effective Curriculum and Instructional Models for Talented Students. *Gifted Child Quarterly*, *30*(4), 165-169.
- VanTassel-Baska, J. (1995, December). The Development of Talent through Curriculum. *Roeper Review*, 18(2), 98-102.

Lou Lloyd-Zannini is a former teacher of language arts and parent of a gifted child. He is Associate Professor of Education at Regent University in Virginia Beach, Virginia.



A Road Taken: One Family's Journey Through an Educational System

Patsy Kumekawa



What kinds of aids and barriers were evident?

Our 12-year-old 8th grader took the bulk of his courses at the local high school. To maintain contact with his age peers, he was bused to the middle school two days a week to eat lunch with his friends, practice in the school band, and take gym and health classes. This was part of a succession of unique acceleration strategies created each year. The efforts to accommodate his academic needs within our school system were born out of a combination of circumstance, luck, and cooperation. Though the path was not always smooth, our son was well served academically in our town. And through it all, with willing and, at times, not-so-willing teachers and administrators, we came to realize that a child's intelligence alone is likely not enough. It is also helpful if the child possesses social awareness, humor, and confidence.

The work my husband and I do requires familiarity with giftedness and gifted education. Hence, we have been able to follow our son's academic experiences with the benefit of our professional knowledge. While our town likely would not show up on anyone's radar screen in the realm of gifted education, it has a strong reputation for its accommodation of children with special needs, such as physical, emotional, or learning disabilities. I doubt that it was intended that gifted students be included in these special needs, but we found this to be a coincidental and happy outcome of our school district experience.

As many of the teachers in the primary school are trained to work with students with unique learning requirements, they are accustomed to developing individualized instructional strategies. They intuitively understand that a student with intellectual talents also requires a specialized curriculum and approach. Thus, when the 1st grade teacher recognized our son's capabilities, he devised a program to help accommodate the child's needs. The teacher regularly kept us and the assistant principal informed. We were fortunate to have this highly regarded administrator whose involvement enabled a continued commitment to maintaining relevant educational programs over the next several years.

Our son was grouped with the 3rd graders in his integrated 2nd/3rd grade class. The teacher, wishing to provide appropriate materials and to make sure there were no gaps in understanding and knowledge, suggested that an intelligence test be administered. While the subtest ceilings for the test that was used (WISC-III) were too low, the test results and our son's school performance made it a foregone conclusion that he would skip 3rd grade and enter the district's school for 4th and 5th graders the following fall.

The experience at this next school proved to be generally positive. Almost two years later, in the spring preceding entry to middle school,

A Road Taken, continued

the 4th/5th grade school principal volunteered to introduce us to the middle school principal. It was in middle school where the challenge to accommodate a gifted student truly began. It would have been simplest to have accelerated our son another year, but all of us involved in the decision were concerned about the widened age differential between him and his potential classmates if he jumped ahead another grade. It was agreed that he would begin middle school as a 6th grader. Because of our son's reputation and perhaps because of the presence of his current principal at our joint meeting, the middle school principal suggested that a few advanced courses be added to the typical 6th grade classes, expressing optimism that scheduling difficulties could be overcome.

In reality, scheduling posed a big problem for the middle school principal. Although she had offered her services to try to make advanced classes available, it became clear that she was hesitant about burdening her faculty with any such specialized program. She was also leery of opening her administration to requests of other parents advocating for their children who are gifted or, in some way, outside the mainstream. Thus, in our next meeting, the principal was less receptive to addressing scheduling challenges than she had been earlier. If our son were to take any advanced classes, he would have had to be prepared to miss certain core courses every week. Given this new situation, we agreed to reconvene in a few months to allow our son to experience and assess his new environment before deciding to embark on an individualized program of study.

That introductory experience lasted through the first term. The 6th grade teachers were enthusiastic about their new student, but the school's heightened emphasis on standardized testing, especially in assessing the school's efficacy, created an atmosphere that limited flexibility and dampened intellectual stimulation for our son. In addition, the middle school program steered away from the one-classfor-core-subjects format of elementary school and moved to the high school model of separate classes for each subject. This caused scheduling challenges for any student qualified to pursue advanced courses in conjunction with in-grade classes. We realized that if scheduling and its inherent inflexibility was the main barrier toward developing a more appropriate program, perhaps we could help to clear the way. We met with the principal and the math teacher and offered to tutor math at home to create time for an upper level class in history, foreign language, or anything else that could sustain our son's interest and also be feasible for the school.

We learned that the principal had never looked at our son's file, but the legitimacy of our situation was established when she saw our son's intelligence test results, and, perhaps as a consequence, she passed the decision-making responsibility to others. Over the next two months, the superintendent, assistant superintendent, guidance counselor, director of special services, and school psychologist all became involved, but with little progress. Ultimately, it was only the teachers, who were the most directly involved in the educational efforts, who bore the greatest burden of any adjustment, and who expressed the most willingness to help with the accommodation. It was this positive attitude that kept the options on the table.

"The efforts to accommodate his academic needs within our school system were born out of a combination of circumstance, luck, and cooperation."

Three quarters of the school year had passed by the time school officials presented a proposal to us: Our son could withdraw from the 6th grade social studies and math courses and be placed in the ongoing 8th grade American history and first year French classes. To enable the scheduling, he would have to be in multiple sections in each course, requiring him to adjust to several sets of older students simultaneously. He could fulfill his math education at home. We agreed to the plan which turned out to be an overall rewarding change. Accustomed to unusual programs provided to him in his previous schools, our son adjusted and performed well in his 8th grade classes. Emotionally, he felt comfortable with older students who treated him as a peer and with teachers who validated his abilities.

But now it was apparent that the school district, by following its own precedent, was apprehensive about the potential not only for other parents to seek special services or programs for their talented children, but also for the schedule to again be disrupted in accommodating these students. Nobody disputed our son's academic abilities or his maturity to handle the pace and challenge of an accelerated program. However, the recurring theme of administrators' arguments was the need to "update" our son's IQ test to be able to "justify" the continuation of his special program to teachers, administrators in the high school, and other parents. To us, the district's insistence on administering another IQ test made us suspect that the district either intended to use the scores our son would achieve as an unofficial cutoff for other talented students or that it thought that the earlier scores might not be replicated. This could allow the district to end its accommodation altogether.

A Road Taken, continued

Throughout our dialogue with school officials and the superintendent's office, we maintained that while we would allow the administration of necessary achievement tests needed for course placement purposes, we required a more cogent rationale for further intelligence testing. We finally offered our permission to the school district to again administer an intelligence test provided the district would classify our son as a "special needs" student who would then qualify for full accommodation of his educational needs under our state and federal laws. The administration would not agree to these conditions. On the day before the 7th grade classes were to begin, we were told that unless we would submit to having our son re-assessed with an IO test, provision of higher level courses would not be guaranteed. This meant that our son would have had to repeat his year or even enroll in classes at levels two years behind him.

This sudden ultimatum caught us by surprise. Aside from what we perceived was the district's fear of a flood of bothersome requests from other families looking to accommodate their children, we wondered about the families whose children legitimately warranted special accommodations, even beyond giftedness, and who might never be heard. In our town, we understand there has been very little abuse of the school system and the resources and programs it offers students' families. In the end, I believe that the superintendent realized that the situation presented to us was inherently unfair. Within hours of our meeting, he rescinded the school district's demand for a re-test and allowed our son to continue with his course of study.

"Though the path was not always smooth, our son was well served academically in our town."

The 7th grade year was positive, thanks to the support extended by teachers and students alike. Nonetheless, we mapped out possible programs for 8th grade when advancement to high school level courses would be made. At this point, both the middle and the high school principals were open and obliging. A convenient morning course rotation at the high school mitigated scheduling conflicts, aiding officials from middle and high schools and the district's education department as they worked together on an arrangement that provided the best of all worlds. Inspiring teachers and thoughtful students welcomed our son in the high school freshman honors program, while the opportunity to maintain friendships with peers and perform with a masterful band director at the middle school enabled balance and fulfillment.

We feel extremely fortunate about the experience provided by our school system. Our community has a wide spectrum of income levels, and we think this diversity contributes significantly to the tolerance that is evident in all of our town's school environments. In high school, there is little pressure to conform to a particular mold or to pursue a certain type of college experience. For those who seek knowledge and intellectual engagement, there are capable teachers committed to both their work and their students. In fact, such teachers may be found throughout the system to the benefit of all. The educational experience for our son also engendered a heightened awareness of the process of change and compromise, helping him develop as an individual and maintain a healthy attitude in many other areas of his life. He is now a senior who has essentially exhausted his high school's courses. Yet, with the consideration and endorsement of current administrators he is able to pursue independent studies with outstanding teachers, a college course, and an off-campus internship while remaining active in high school activities. 🚸

Patsy Kumekawa has served as an administrator in universities and independent schools. She is a founder of Scholar Search Associates, a firm that establishes relationships between schools and organizations supporting and advocating for families with gifted children.

Guided Investigations in Middle School Math

Stephen T. Schroth Jason A. Helfer



What are some applications for guided investigations in middle school?

Gifted middle school mathematics students often exhibit boundless energy, a desire to exert some degree of control over their learning, and an ability to think logically and abstractly in ways that astound their parents and teachers. Middle school math curriculum that combines guided investigations of real-life problems with product-based assessment can maximize student interest and achievement. Guided investigations (the exploration of real life problems to which students can relate) prove an ideal instructional strategy for the teacher, enabling him to provide all students with optimal degrees of challenge, regardless of the mix of youngsters involved.

Mrs. A is a middle school mathematics teacher with 14 years experience. This year, she is teaching two 7th grade honors sections. She must consider how to meet the varied needs of all the youngsters, even within this high-level group.

Ms. B is a 6th grade gifted education specialist who serves her students in a pullout setting. She needs ways to tie her group's work in with that of their regular education classmates. If Ms. B covers different material than the regular education class, teachers complain; if she does not, parents are dissatisfied.

Mr. C, an 8th grade algebra teacher with responsibility for the "standard" track students, finds that even though his classes contain many very capable students, they have never formally been identified as gifted. He must serve these students while also providing appropriate instruction for his other charges.

In each of these classroom situations, guided investigations may

• use a variety of instructional approaches when teaching and learning math.

• provide gifted students in a variety of settings with the types of experiences they need to thrive.

• make available the teaching and learning recommended by the National Council of Teachers of Mathematics (NCTM).

Guided Investigations in Theory

When a young person investigates real-life problems that touch his world, instruction becomes meaningful and exciting. Open-ended problems and

Guided Investigations, continued

solutions intrigue gifted students. This excitement manifests itself in greater engagement and stronger effort in the classroom.

Guided investigations fit nicely within classical models of learning theory, providing each gifted child with the challenge necessary to maximize her learning (Tomlinson, 2003; Vygotsky, 1978). The best teachers will hang back, allowing the child to accomplish as much as possible independently and step in only when the student is floundering. Even then, the teacher raises questions that help the child understand what went wrong rather than providing an answer. In doing so, teachers guide student investigations to become optimal learning experiences.

The teacher must play an active role in the gifted child's investigation for the process to be effective. Gifted students need support, guidance, and monitoring as much as any student, although sometimes in different ways. A capable teacher is able to balance issues, concepts, and motivation to assure that the gifted child is on track and on task.

"...the teacher raises questions that help the child understand what went wrong rather than providing an answer."

Guided Investigations in Practice

Education does not take place in a vacuum. Teachers work in environments where they face daily challenges, make decisions, and deal with real-life situations. While all three instructors are responsible for teaching the same mathematics standards, Mrs. A, Ms. B, and Mr. C each confront unique classroom dilemmas. While some solutions will meet the needs of all teachers, others will work best in a particular setting.

The Honors Classroom

Mrs. A serves a group of 7th grade students in her honors classes who are well prepared and motivated. Their ability and performance levels, however, are at least as varied as those in regular education classes. She must organize the instruction and activities so they are appropriate for the needs of each student. Unless she does so, Mrs. A is guaranteed to have children who are bored because the work is too easy or frustrated because it is too hard. Fortunately, pre-assessment, curriculum compacting, and replacement strategies can help improve instruction and performance for the highly capable in such settings.

Before Mrs. A begins teaching a new unit, she looks at state and national standards. Using these tools, she defines the goals and outcomes of a particular unit or segment of instruction. She next determines and documents those students who have already mastered most or all of a specified set of learning outcomes. The teacher uses paper-and-pencil assessments, her observations, and standardized test data to make these decisions. Using these pre-assessment tools, Mrs. A is able to identify students who are candidates for curriculum compacting, a proven tool for accelerating instruction for gifted students (Reis, Burns, & Renzulli, 1992).

Mrs. A uses curriculum compacting to shorten or eliminate those parts of the units students have already mastered. Instead of trudging through material at a lockstep rate, this technique allows students to engage in replacement activities. Such activities may include acceleration where a child moves more quickly through material or enrichment where she works at greater depth. This allows the teacher to be more effective with Robert, who has demonstrated mastery of measurement but not geometry. He participates with the class on days they learn concepts he has not mastered, and he works on math enrichment activities on other days.

The Pullout Classroom

Ms. B, with her 6th grade gifted pullout class, faces additional challenges.

• The 6th grade teachers from whom she pulls her students are concerned if the gifted children are not working on the same standards as the rest of the class.

• Gifted children's parents are anxious if their children are not engaged in activities that distinguish them from the rest of the grade level.

• Ms. B's administrator wants everyone to cooperate. To meet all of these concerns, the teacher uses guided investigations.

After conferring with the 6th grade teachers, Ms. B examines the NCTM standards they are currently studying in class—

Guided Investigations, continued

Algebra and Data Analysis and Probability (2000). Knowing that two of her students, Libby and Maddie, are intrigued by Miroslav Sasek's books, the teacher considers an openended investigation in which the two girls can engage. Ms. B selects several of the Sasek titles-This Is New York (2003), This Is Hong Kong (2007), This Is London (2004), and This Is Rome (2007). She is struck by the emphasis the colorful books place on the unique goods and services sold in each location. Therefore, she puts together a project where Libby and Maddie create an annual report for an imaginary company that trades goods and services between the four nations represented in the books. The annual report will include charts and diagrams demonstrating the girls' understanding of currency exchange rates, the amount of warehouse space necessary to store goods and commodities, and projected profit-and-loss statements.

In crafting such an investigation, Ms. B satisfies the various groups who have an interest in Libby's and Maddie's progress.

• By studying the same *Algebra* and *Data Analysis and Probability* standards as the other 6th graders, Ms. B assuages the classroom teachers' concerns that the girls are not working on the same standards as their classmates.

- By creating a guided investigation that allows Libby and Maddie to engage in accelerated activities, parents' apprehensions are satisfied.
- By placating both groups, Ms. B also responds to the administrator's concerns of cooperation.

The Regular Education Classroom

Mr. C is faced with a different, and in some ways more complicated, set of challenges. First, some very capable children in his 8th grade algebra class have not been identified as gifted. Second, he is teaching a "regular" track class and is not expected to create, deliver, and assess instruction that is individualized or differentiated. Thus, while he may recognize that some students have different instructional needs, he has neither the relevant information nor the specialized resources to implement such opportunities. Fortunately, Mr. C does have some flexibility in terms of instructional planning that will assist him in meeting gifted students' needs within his 8th grade classroom. The scope and sequence of instruction is clearly outlined in the curriculum. While the curriculum does not suggest that students be pretested for readiness, Mr. C feels that it is necessary. Though the results of the pretests provide helpful information, he still needs a strategy for working with those children who show mastery of skills and understandings within the unit. Curricular compacting is not a viable option in his classroom. Even if students are able to complete the "regular" track material with ease, above grade level materials are not available.

Sam and Eli—both in Mr. C's algebra class—have not been identified as gifted, although they demonstrate mastery of the content through their scores on pretests. Both children would benefit from additional instructional opportunities, but there is no "place" for them to go.

Mr. C decides to rework the structure of the class based upon the premise that mathematics instruction ought to be more than the development of skill acquisition or the memorization and application of algorithms. One day, he brings in a math problem that considers how the operating cost data of a fictitious video game changes over time. The teacher informs the class that he is stumped. He places the problem on the board using graphics and explains some possible ways to think about the data. Mr. C then asks the students to consider what sorts of other problems could benefit from a variety of graphic representations. This focus on the *representation* of data is aligned with NCTM standards.

When students are provided the opportunity to "go backstage" with Mr. C, a number of important pedagogical steps occur.

- First, the teacher uses pretests to ascertain where *each* student is in terms of skills acquisition and conceptual understanding.
- Second, he develops a general problem that allows *all* students entry into the specific content area.

• Third, by allowing *all* students to "go backstage" with him, Mr. C uses the individual expertise of students in ways that challenge them.

• Finally, by allowing children to construct and focus on additional problems of interest, students like Sam and Eli are more likely to make connections.

Mr. C serves as a guide for children like Sam and Eli, allowing them to work at their own pace on problems of interest while challenging them to consider a variety of approaches based

Guided Investigations, continued

upon their work. He also provides children who demonstrate the need for additional direct instruction opportunities to see their work as meaningful while assisting them in developing the repertoire of skills and understandings required by the curriculum.

Unfortunately, no magic panacea exists which allows all gifted children to be properly identified. Creative and resourceful teachers, however, can use tools available in any school to meet the needs of these highly capable students. Ensuring that all students receive the mathematics instruction they require and deserve implies a deep understanding of the academic, social, and emotional needs of young people. Fortunately, everyday wonderful teachers, like the ones discussed in this article, deliver these services to our children. \diamondsuit

References

- National Council of Teachers of Mathematics. (2000). *Principles* and Standards for School Mathematics. Reston, VA.
- Reis, S. M., Burns, D. E., & Renzulli, J. S. (1992). Curriculum Compacting: Complete Guide to Modifying the Regular Curriculum for High Ability Students. Mansfield Center, CT: Creative Learning Press.
- Tomlinson, C. A. (2003). Fulfilling the Promise of the Differentiated Classroom: Strategies and Tools for Responsive Teaching. Alexandria, VA: Association for Supervision & Curriculum Development.
- Vygotsky, L. S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.

Stephen T. Schroth teaches in the Educational Studies Department at Knox College, Galesburg, Illinois. He has over 10 years experience working with gifted students on mathematical investigations. His research interests include talent development of diverse students, mathematics instruction with gifted middle school students, and working with English language development.

Jason A. Helfer teaches in the Educational Studies Department at Knox College, Galesburg, Illinois and taught in public schools for nine years. His research expertise includes mathematics, music, and philosophical issues facing education.

Download and Listen Today

Keynote Presentation: **Donna Ford**

from Beyond Giftedness XV

Presentation Topic: Creating Culturally Responsive Classrooms for Gifted Students: For Our Sakes -For Their Sakes

> Download Direct to your Computer - \$12

Other Beyond Giftedness Keynote Downloads:

Gender and Giftedness - Kerr Tipping the Balance: Risk to Resilience - Neihart Instructional Decisions - Kingore Growing Up Gifted - Galbraith Neither Freak nor Geek - Delisle

Order More than One and SAVE!

1 - \$12 /2 - \$22 /3 - \$32 /4 - \$42 /5 - \$52 /6 - \$62

Open Space Communications LLC 1-800-494-6178

303-444-7020 dorothy@openspacecomm.com

Order an iJournal Subscription and Save Shipping/Handling charges!!! Think and Link: Curriculum for a Community of Thinkers

Felicia A. Dixon



What specific books can be used for high level reading and discussion?

They are verbal. They make connections well and obviously. They ask many questions, some of which you had not considered nor probably would think of considering—especially not at their ages. They enjoy the pursuit of knowledge because they are inquisitive and desire to know more. Knowledge to them does not have to be attached to school assignments. These students stand out in class because they care about both content and process which they want to express in products of their own choice. They may ask for more information on a topic, or they may ask you to suggest other readings. Some may even ask you regularly, "Have you read...?" You may sheepishly grin and say "not yet," fully knowing that these small persons are better read at their young ages than you are at your age!

The type of students presented here are perfect candidates for learning experiences that extend and enrich what is available in most schools. Actually, these children need an advanced curriculum because they are already ahead of other students in the class. Teachers can create a community of learners through high-powered learning that allows young people to question texts read, activities assigned, and each other. Important issues include the focus of the texts chosen, the activities used to inspire thoughts, and the role of the teacher as a catalyst for critical thinking.

In addition to school, students gain information from many venues, including the Internet which has access to world wide information, high definition television with its precise pictures and great variety of programming, and cell phones with quick text messaging capabilities. Add to the mix the qualities of gifted students, and one understands the serious nature of collaborative thought that can advance understanding and further the pursuit of scholarship. The design of substantial curricula must be a scholarly endeavor to snag and keep student interest. Creating a community of thinkers is a good way to do that.

Halsted (1994) suggests that verbally gifted students share the following characteristics:

• They have a large vocabulary and are able to use advanced terminology correctly.

- They read early and may be self-taught.
- They read enthusiastically and widely, often above grade level.
- They understand language subtleties and use language for humor.
- They write words and sentences early, and they produce superior creative writing (poetry, stories, and plays).

• They display verbal ability in self-expression, choice of colorful and descriptive phrasing, and ease in learning a second language.

In addition, Halsted recommends that gifted students should

• use their full vocabulary and develop it further with intellectual peers.

• read books at an appropriate intellectual and emotional level.

• be introduced to books that represent a variety of literary conventions and styles that use language gracefully.

• express ideas verbally and in depth by writing or speaking with others who challenge and thus refine their views and concepts.

The idea of a community of learners, which supports Halsted's suggestions, came together in a curriculum plan with the Javits Project, Project CLUE. As the developer of the language arts curriculum for 3rd, 4th, and 5th grade students in an urban school district, I was charged with developing meaningful units for study and discussion.

Trade books were chosen to develop curriculum units that were highly infused with critical thinking. The definition of critical thinking that permeates the units is that of Robert Ennis (1985): "Critical thinking is reasonable and reflective thinking that is focused on deciding what to believe or do." We began with this definition and a list of essential qualities that would serve as standards for all units. Each book must

- have a multicultural theme or element.
- have highly challenging vocabulary and writing style.
- include Newbery Award winning books or authors who had at least one such award in their repertoires.

• contain ideas that would lead to critical thinking within a group setting as well as individual activities.

• be tied to the standards set forth by the National Council of Teachers of English.

• include male and female protagonists.

Following are the books that were chosen at each grade level:

3rd Grade

Charlotte's Web

E.B.White

Charlotte's Web is a classic book that can be interpreted in a sophisticated manner by treating Charlotte the spider as a scientist and Wilbur the pig as a humanist. Such a high level of discussion fosters and encourages a community of thinkers. White's use of sensory images throughout the book encourages critical thinking and careful reading. High ability students can discuss the book, create webs, and write as they

collaborate.

In the Year of the Boar and Jackie Robinson Bette Bao Lord

Lord's treatment of a young Chinese girl coming to America is a perfect choice for the multicultural standard. In addition, the interdisciplinary aspects of this book are endless. Whether one chooses to emphasize history, language arts, geography, athletics, or any combination, this book provides many possible directions for learning. Opportunities to discuss a variety of issues as a thinking community are abundant. Role playing events in the story as well as critical thinking inspired by the events are also valuable.

The Sign of the Beaver

Elizabeth George Speare

This book is the most abstract of the three. It is set on the frontier with a Native American theme and introduces many activities that demand careful literary analysis. Passages that challenge and encourage thinking provide forums for discussion. The difficult vocabulary encourages the use of literature webs, learning words in context, and reference to the dictionary.

All three of these books build on each other, so that by the end of the year, the teacher has a series of three complete units with daily lesson plans that provide graphic organizers (thinking maps, vocabulary, and literature webs), consistent writing strategies, suggestions for flexible grouping, and product suggestions. Critical thinking pervades all aspects of the curriculum.

<u>4th Grade</u>

From the Mixed-Up Files of Mrs. Basil E. Frankweiler E. L. Konigsburg

Students use critical thinking to establish criteria from which to judge all events in the book. They practice map reading skills as they follow the children throughout the various places mentioned. The interdisciplinary opportunities of including art with history are always present, and the gender balance is evident with the two major characters being brother and sister. The unique narrative style coupled with the age difference between Mrs. Frankweiler and the young protagonists provides for rich discussion.

Island of the Blue Dolphins

Scott O'Dell

O'Dell won the Newbery Award for this book in 1961. It is based on the true story of a Native American girl who lived alone on an island off the coast of California for 18 years after her family and all of her tribe were killed. The curricular focus for this text is on its multicultural theme.

Think and Link, continued

It presents a rich historic tie that enables the incorporation of interdisciplinary projects. The text is full of figurative language that encourages students to dig into the study of language as they focus on someone who survived real hardships. Additionally, both writing and geography are emphasized in many of the lessons.

A Single Shard

Linda Sue Park

I absolutely love this book. It provides advanced reading, a cultural and historical context, and occasions to analyze, synthesize, and evaluate. Interdisciplinary opportunities are prevalent, and there are many possibilities for rigorous examination of major themes.

"Teachers can create a community of learners through high-powered learning that allows students to question the texts read, the activities assigned, and each other."

5th Grade

The Witch of Blackbird Pond

Elizabeth George Speare

This book can be compared with *The Sign of the Beaver*, written by the same author and read in 3rd grade. *The Witch of Blackbird Pond* is probably the most challenging of all the texts chosen. In addition to the historical context, gender and appropriate growth of the protagonist provide ample challenges. More than in other units, group work is a daily focus encouraging a strong development of community.

Bridge to Terabithia

Katherine Patterson

Because of its sophisticated themes, textual analysis using specific passages to examine and confront issues are hallmarks of this unit. Contrasting fantasy and reality are also essential elements. Writing becomes increasingly more important as students record daily in journals and then translate these daily entries into longer persuasive pieces. Gender balance is constantly emphasized in this novel as the two main characters are a male and his new friend, the gifted girl who moves in next door. There are many opportunities for discussion based on difficult themes, such as adjusting to a new school, to a family with a totally different set of values from the norm, and to the death of a young person. Contrasting this work with other books read during the 5th grade year is important.

Bud, Not Buddy

Christopher Paul Curtis

This book is included because it has an African American male protagonist, and it takes place in Detroit, where the focus is music. Although the actual writing style is not as challenging as the other two choices at 5th grade, it still promotes essential understandings. Cultural sensitivity and historical context are both interesting and instructive. Students engage in map activities and study the power of music and writing. The culmination of this novel focuses on all of the themes in the three years of curricula, comparing and contrasting each. The students are encouraged to consider the "big picture" of life's complexities.

The positive points of this three-year curriculum are that it

- moves sequentially through skills from 3rd through 5th grade without over saturating students with one type of activity.
- builds skills as the students mature.
- leads to longer, more challenging writing assignments through the use of vocabulary, webbing, and journals.
- forms the foundation for a community of thinkers through critical thinking activities that permeate the lessons in increasingly challenging ways.
- allows quality discussion among individual students and between both small and large groups.

These curriculum units are all appropriate for advanced learners. Lesson plans can be modified for individuals who have greater needs than the rest of the gifted cluster group, and good literature titles can be added. The ideas presented here represent ways to develop curricula for gifted learners in the context of a thinking community. Students must be challenged to think and link: to think about what they have read and to link the reading to other great texts.

References

Ennis, R. H. (1985). Goals for a Critical Thinking Curriculum. In A. Costa (Ed.), *Developing Minds: A Resource Book for Teaching Thinking* (pp. 54-57). Alexandria, VA: Association for Supervision & Curriculum Development.
Helsted J. W. Goads, *Supervision & Curriculum Development*.

Halsted, J. W. (1994). Some of My Best Friends Are Books. Dayton, Ohio: Psychology Press.

Felicia A. Dixon is Professor of Psychology at Ball State University and directs the license/endorsement in gifted education. She is coeditor of the *Handbook of Secondary Gifted Education*.

Columns

Surfing the Net: Early Entrance College Options

Sandra Berger

High school was the flat, black-and-white landscape of Dorothy's Kansas. Simon's Rock was the wonderful land of Oz, in color. Instead of being ashamed of my curiosity about what was going on over the rainbow, I could wear that curiosity proudly and openly. I left a culture that promoted ignorance and traded it for a culture that promoted learning. Graduate, Simon's Rock College (Olszewski-Kubilius, 1998, p.231)

In *College Planning for Gifted Students* (Berger, 2006), I encourage gifted young people to develop a 4-year academic plan by the end of 8th grade with academic courses required for graduation as well as courses for college planning.

For those who opt to enter college early—a viable option for many gifted young people—students and their parents must consider whether they are ready to enter college as 16- or 17year-olds, able to handle dorm life, manage their own affairs with maturity, and take advantage of the college environment, without special attention or parental presence. Intellectually, they are adults, but socially and emotionally they may not be able to handle the challenges of a college campus. Some colleges will offer help and support for younger students, but such supervision and counseling are not always available.

Highly gifted students can accelerate and enroll in postsecondary education before completing high school through dual enrollment, early admission, and early entrance.

The Belin-Blank Center at The University of Iowa has amassed a large collection of personal stories about students who were accelerated in all ways, including the ones listed here. To get a flavor for the experiences that others have had, visit *www.education.uiowa.edu/belinblank/acceleration/ stories.asp*

Dual Enrollment

Dual enrollment allows students to take college courses while still enrolled in high school. This form of acceleration is more common than early admission or early entrance, and it provides young people with an opportunity to supplement high school coursework. Some students earn dual concurrent credit—that is, credit for both secondary school and postsecondary courses at the same time. In some cases, particularly where a student has taken all the available high school curriculum offerings in one subject, a college or university course may be taken instead of the high school academic subject. Some public schools will pay for these postsecondary courses. Most colleges will allow a motivated student to enroll in one or two classes while still completing high school, especially if the student has proven ability to master college level work.

Early Admission

Early admission is a program for gifted high school juniors who have exhausted the high school curriculum. Some of these students meet state graduation requirements by the end of their sophomore or junior year. Early admission programs allow them to skip their senior year and go on to college. Students who have exhausted most of the high school curricula and who have a reasonably high grade point average should not hesitate to contact any college to request early admission. Be persistent and patient.

Early Entrance

Early entrance programs enable students, some as early as age 12, to start college or university work. These students might never attend traditional high schools. This acceleration strategy is a viable option for highly gifted students.

Many academically gifted students are intellectually ready for college one or two years before their age-mates. However, not all of them are suited for early entrance. Following are some things to think about when considering whether your young person should leave home to attend college:

• The most academically successful and perhaps best adjusted early college entrants have been described as focused, goal oriented, persevering, driven, self-disciplined, and hard-working. They have a certain *joie de vivre* or passion for learning, even if it's just one area, such as physics, math, or music.

• Strong family support seems to be a factor in an early entrant's success. A parent of a 14-year-old admitted to Princeton rented an apartment nearby and stayed with her son while he attended the university for four years.

• The selected college must have supportive instructors who understand how teaching a 15-year-old college student is different than teaching older college students. The young person may have the intellect of an adult, but not the maturity.

• Everything is a trade-off. Early entrants give up some activities that high school youngsters enjoy; for example, the prom and dating, sports, and leadership roles. In addition, some prestigious academic competitions and summer programs are open only to high school seniors. If your student talks about missing such activities, early entrance may not be the best choice. If your student has academic deficits that could preclude her from attending a highly selective school, another year of high school might close those deficits and open other opportunities.

Early Admission/Early Entrance Programs

Early Honors Program Alaska Pacific University, Anchorage *www.alaskapacific.edu/programs/eh/* Alternative to senior year

The Early Entry Program California State University, Los Angeles *www.calstatela.edu/academic/eep/*

Surfing The Net, continued

Qualified students from age 11	The Texas Academy of Leadership in the Humanities Lamar University, Beaumont		
Residential Honors Program	dept.lamar.edu/taolith/		
University of Southern California, Los Angeles	Two-year residential honors program for high school		
www.usc.edu/dept/LAS/general_studies/RHP/	juniors and seniors		
Students who have exhausted high school curriculum	Students complete last two high school and first two		
and are capable of college work	college years concurrently		
	Program is completed with high school diploma and 60		
Advanced Academy of Georgia	plus college hours		
State University of West Georgia, Honors House,	The Program for the Exceptionally Ciffed		
Carrollton	The Program for the Exceptionally Gifted Mary Baldwin College, Staunton, VA		
www.advancedacademy.org/			
Students apply during sophomore or junior year	<i>www.mbc.edu/peg/</i> Academically talented female students apply after 8th		
Accepts younger, high ability students	grade		
Concurrent high school and college credit	Residential program with supervision		
	Four year program to complete college during high		
Georgia Academy of Math, Engineering, & Science	school years		
Middle Georgia College, Cochran			
www.mgc.edu/academic/scimathenga/games/	University of Washington, Seattle		
Selected high school juniors and seniors with special	The Transition School and Early Entrance Program		
interest in math, engineering, science, allied health	depts.washington.edu/cscy/programs/earlyentrance/		
fields	Transition School students no more than 14 years old		
Associate degree, high school diploma, classification as	Early Entrance program for full-time university students		
college junior for completing two-year program	who are graduates of Transition School		
The Farly Entrance Drogram	Students take one or more progressively challenging		
The Early Entrance Program Shimer College, Chicago	university courses with Transition School work until		
www.shimer.edu/academicprograms/undergraduate/	ready for full-time university enrollment		
earlyentrantprogram.cfm			
Juniors and seniors accepted	University of Washington, Seattle		
valiers and seniors accepted	Academy for Young Scholars		
National Academy of Arts, Sciences, and Engineering	www.depts.washington.edu/cscy/programs/academy/		
University of Iowa, Iowa City	Students apply during 10th grade. If accepted, they		
www.education.uiowa.edu/belinblank/programs/naase/	withdraw from high school at end of sophomore year		
Selected students who have completed equivalent of	and enroll as freshmen at University of Washington		
junior high school year	It is also smooth head in a state TO 1 CO 11 UT 1 CO 1 1		
Academy students accepted automatically as freshmen	It is also worth looking at the Early College High Schools,		
in university honors program	Bill & Melinda Gates Foundation.		
	Visit <i>www.gatesfoundation.org</i> / and search on Early College		
Simon's Rock College, Great Barrington, MA	High Schools. *		
simons-rock.edu/			
Accredited four-year college of liberal arts and sciences	SandraBerger@erols.com		
specifically designed for young scholars			
Entrance after completing 10th or 11th grade			
Missouri Academy of Science Mathematics and	References		
Missouri Academy of Science, Mathematics and			
Computing Northweet Missouri State University Marwyille	Berger, S.L. (2006). College Planning for Gifted Students. Waco,		
Northwest Missouri State University, Maryville www.nwmissouri.edu/MASMC/	TX: Prufrock.		
For juniors and seniors	Olszewski-Kubilius, P. (1998). Early Entrance to College:		
i or juniors and solitors	Students' Stories. Journal of Secondary Gifted		
The Clarkson School	Education, 10, 231.		
Clarkson University, Potsdam, NY			
www.clarkson.edu/tcs/			
One-year residential program for high school seniors			
who have demonstrated high interest and excellence in			
academics			
	Sandra Berger is an educational consultant in Virginia. She is the		
The Early College at Guilford, Greensboro, NC	author of College Planning for Gifted Students.		
www.guilford.edu/			

Two years of high school and then two years of college, beginning at 9th grade

Software Updates:

Best Computer Program Companies for Gifted Kids

Gregory C. Pattridge

The sights and sounds of the political season are all around us as we move through an important presidential election year in the United States. Candidates have been analyzed and scrutinized, and nonstop coverage will continue right up to Election Day. Keeping with this theme, three of the top software companies in gifted education are analyzed here to determine which one should receive your vote. Listed below are software titles and credentials for each company. Criteria used:

1. Includes wide range of levels

Software is expensive, so a title should be enjoyed for many years. I look for a minimum of a four-year range, but really hope that use can extend into adulthood. The perfect title is one that both you and your children can enjoy separately and together.

2. Teaches curriculum standards

Material that is challenging and has academic value is important. Titles should be equally usable at home and at school. Many titles claim to be educational but are really only fast paced arcade games.

3. Develops higher level thinking skills

Software for the gifted child should be more complex and multifaceted and not merely request answers to knowledgebased questions. Expanding the already high level thinking skills of the gifted youngster is an accomplishment rarely found in today's software market.

4. Requires outside research/ decision making

The student should be encouraged and motivated to do research away from the software program. This may include the library, textbooks, and the Internet.

5. Provides extensive feedback

Good teachers provide continuous verbal reinforcement. Computer programs should also provide feedback to let students know they are on the right track.

The candidates for best software companies for gifted students come to us with a wide variety of claims as being the best. The companies on our ballot are:

Knowledge Adventure www.knowledgeadventure.com

This Los Angeles based company started in the 1980s and is now one of the largest software makers in the world with over 100 titles.

Math Blaster (ages 6-12)

This venerable award winning software puts students in a game situation that is motivating and fun. There are currently three overlapping versions (ages 6-8, 7-9, & 9-12), and particularly bright math students can move through the easier challenges and find the level that meets their needs.

Jump Start Series (ages 5-9)

This popular series has over 20 titles to enable students to jump into appropriate content that may not be offered in their present classrooms. There are separate titles for pre-K through 4th grade along with typing, Spanish, artist, and math.

Dr. Brain Series (ages 10-adult)

This series includes three titles (Mind Venture, Puzzleopolis, and Action Reaction). There are dozens of challenges throughout each title that will immerse those with curious and inquisitive minds. In each adventure, Dr. Brain puts the student into a problem solving situation that creates many long hours of play.

The Learning Company www.learningcompany.com

The Learning Company is in its 28th year. Its claim of now being the fastest growing software company in the United States can't be argued, especially because of its affiliation with once rival Broderbund software.

Sammy Science House

(ages 4-7)

Early learners who are eager to explore science concepts will find that this program will meet their needs. There are multiple levels that grow with a child's increasing abilities and five fun activities to explore.

The Oregon Trail (ages 10-adult)

This classic simulation, now in its 5th edition, gets accolades for its problem solving, critical thinking, and logical

Software, continued

reasoning. Students will find history, geography, social studies, and math knowledge increasing as they participate in this lifelike Oregon Trail scenario. Very motivating format!

Where in the World and USA is Carmen Sandiego? (ages 8-12)

This bundle of two separate programs has the student using deductive reasoning skills to track down Carmen Sandiego. The visuals help learning become memorable and fun.

Zoombini's Logical Journey (ages 8-12)

Twelve challenging puzzles are engaging and help learners think like mathematicians. The goal is to help the "Zoombinis" safely navigate an island. Each puzzle has four levels of difficulty allowing for automatic differentiation.

Encyclopedia Britannica 2007 (ages 8-adult)

Even with the Internet and its wealth of information, every young researcher should have access to a solid encyclopedia. This one moves to the top of the class. The 6 CD set or 1 DVD includes three exclusive encyclopedias: one each for young children, school age youngsters, and adults. As users grow with their abilities, they simply move into the next encyclopedia level. The best part is the price at less than 40 dollars!

Scholastic Corporation store.scholastic.com and tomsnyder.com

This is the big player in our group with the longest history, starting back in 1925. The software division is a small part of this conglomerate that includes publishing books (including Harry Potter series), producing videos, and the production of children's shows. It recently acquired one of its software rivals—Tom Snyder Productions.

I Spy Series (ages 6-10)

The brain building puzzles in this series are based on the popular books with the same name. Critical thinking, problem solving, logic and reasoning skills, and memory games are woven into each title. There are currently seven different programs available including I Spy Mystery, Fantasy, Junior, Spooky Mansion, and Treasure Hunt.

MaxData (ages 8-12)

This program introduces students to the world of databases. It is easy to use and progresses in difficulty with three readiness levels. Managing information and creating reports is the end result of this classic learning tool.

Tessellation Explorations (ages 10-14)

The exploration of principles of geometry has never been so much fun as it is in this program. Users learn about geometric transformations, angles, shapes, and symmetry. A built-in tutorial allows users to create and see their results immediately. Creating tessellations is a great motivator for the visual spatial learner along with its solid connection to art.

Operation Frog Deluxe (ages 10-16)

Dissecting a frog in this virtual world allows users to see the similarities between the internal organs of humans and frogs. Students will quickly get a feel for the program dynamics and learn about a frog's respiratory, circulatory, and digestive systems. The best part is there is no smell or cleanup after each dissection!

The votes are in, and my endorsement goes to the Learning Company with Scholastic as a close second. They, in fact, would make great running mates with their ingenious and varied software packages that grow with each gifted mind. These gems can be enjoyed for years, and even the adults will find that they want to spend time with each title. \clubsuit

Gregory C. Pattridge is a consultant to school districts and private schools. He teaches technology classes nationally for Lesley University and presents on technology, gifted education, and differentiated instruction through his staff development company *IDEAS LLC*.

The Affective Side:

When *I'm Bored* Doesn't Call for More Challenge

Jean Strop

Joshua is a 10th grader, always accelerated in mathematics. However, when he was placed in honors geometry in 8th grade and in honors trigonometry as a 9th grader, he faltered and received low average grades. Because he said that he was bored, his parents advocated for his continued placement in honors mathematics classes. When pre-calculus concepts eluded him, Joshua met with his math teacher and admitted that math had been difficult throughout high school. After assessment, it was apparent that Joshua needed to be placed in a regular algebra II class, as he had significant gaps in his math knowledge. In his case, I'm bored really meant that math had become too difficult and abstract.

Often the words *I'm bored* are a call to action for parents of gifted students. They acquaint themselves with the latest research on "the need for challenge" and approach educators with fervor and knowledge. Their advocacy focuses on acceleration for their gifted student in the subject area that is the source of *boredom*. What many parents and educators fail to realize is that *I'm bored* has a myriad of underlying meanings. By understanding the possible meanings, we are better able to determine the best programming options for each student. Acceleration is not always the appropriate option.

Definitions of Bored

Educators and parents must observe carefully, have frank discussions with students, and listen to what is not said as well as what is spoken.

I'm truly bored—For some gifted students, the curriculum is too easy and *I'm bored* means just that. When this is the case, there is a definite need for more stimulating and challenging work. At this point educators need to decide whether to provide enrichment materials, to advance the student in a given subject area, or to accelerate the youngster in multiple subject areas. For a few students, the need to accelerate by an entire grade level or more is in order.

Affective Side, continued

extremely high intellectual abilities, reach a point where academic work is extremely challenging. These students often define themselves by how easy learning comes to them, by how quickly concepts are mastered, and/or by how little work they must do. Often they find it difficult, if not impossible, to admit that the subject matter has become hard, and then they use the words *I'm bored* to save face when they really mean "This is too hard for me, and I don't know how to struggle to attain mastery."

Educators and parents of students in this position need to talk openly about personal limitations, explaining that all people have limits and that it is sometimes necessary for all of us to struggle in order to succeed. Such students must be encouraged to seek extra help from teachers and/or tutors. They also are helped from direct teaching of study skills for that particular subject. These young people may benefit from study groups with other bright students who are also struggling to understand the concepts. Short-term counseling/therapy should be considered to overcome perfectionism, to increase frustration tolerance, and to rebuild fragile self-esteem.

I don't like this—Some gifted students, especially those who have a history of underachievement, use the words *I'm bored* to really mean that they don't like doing what is required of them: homework, outside reading, attending class, studying for tests, and/or completing long-range assignments. For them, doing something they don't like feels very toxic and is often labeled as *boring*.

These students may suffer emotionally and underachieve when accelerated in a subject they don't like. They may feel like outsiders when surrounded by other high achieving students who love the subject and challenge of the class. It is important to allow these gifted youngsters to accelerate in areas of passion and to take age-appropriate classes in areas of less interest to them.

I'm afraid I'll fail if I try—For the students who have a deep fear of failure, the words *I'm bored* really mean "I'm afraid to try because I might fail, and that would be embarrassing."

These students need encouragement to try challenging classes while working with the teacher or counselor on strategies for overcoming the deep fear of failure. Pretests and placement tests help assure appropriate class placement. Sometimes taking an easier class to rebuild confidence in a subject area is necessary.

I have other things I prefer-Many gifted students are

It's too hard-Many gifted students, even those with

Affective Side, continued

passionate about their interests to the point of obsession. In a matter of time, all other activities pale by comparison. These young people resent required school assignments because they divert from their passions. For such a student, *I'm bored* really means "There are things I want to do in lieu of the things you want me to do."

These students need help finding time in the day to pursue their areas of interest. They can learn to reward themselves for doing a non-preferred activity by finding time to pursue a preferred project. By taking non-accelerated classes in areas of minimal interest, extra time is created to spend on topics of deep passion.

If I do well on this, I'll be expected to do more and harder work—Many underachieving gifted students fear success as much or more than failure. Success in non-preferred activities such as homework, tests, and some core classes can lead educators and parents to encourage (and sometimes expect) placement in advanced classes. In response, these students often deflect that response with *I'm bored* when they really mean "If I do well on this, I'll be expected to exert even more effort. I'm not at all willing to do that."

We have all, at times, said one thing when we meant another. So, it is paramount for both educators and parents to investigate further before responding to the literal meaning of the words *I'm bored*. We must hear and interpret the real meaning of those words and plan appropriate programming for *bored* gifted students. \clubsuit

DO YOU HAVE A WRITER HIDDEN IN YOU?



IF YOU ARE INTERESTED IN SUBMITTING AN ARTICLE FOR

Understanding Our Gifted

CONTACT US FOR FUTURE TOPICS, WRITERS GUIDELINES, AND DEADLINES:

dorothy@openspacecomm.com

WE WELCOME PARENT WRITERS DESCRIBING POSITIVE SCHOOL EXPERIENCES!

Jean Strop, long-time psychologist, gifted resource teacher, and counselor, is currently a consultant and writer in affective education and college planning for gifted students.

Book Bag:

Seven Continents—Inspirations for Students to Create Their Own Books

Jerry Flack

A great way to inspire talented youngsters to produce original books is by immersing them in a world book tour that includes diversity of people, customs, places, and animals. Here are some great books that can be used for such inspirations.

Africa: Here Comes Our Bride!

Africa, divided by the Equator, is the location of the world's longest river, the Nile, and the hottest desert, the Sahara. Africa is also home to remarkable animals such as giraffes that often tower above the continent's most ubiquitous tree, the acacia.

Ifeoma Onyefulu, in *Here Comes Our Bride!* (Francis Lincoln, 2004), relates the excitement of a young Nigerian boy who is anxious for his uncle to marry. From his youthful perspective, the boy wonders why all of his uncle's family are called together to meet with his grandfather. In fact, the grandfather is directing the gifts the groom and his family must produce as evidence that the husband-to-be will support his new bride. Within a short time, gifts for the bride such as gold jewelry, envelopes of money, plus much food and drink are brought forth. The entire community joins in games, singing, and dancing. The author then informs readers that in Nigeria a couple has two weddings. There is the exuberant and traditional joining of two lives which is followed by a second and more modern or formal wedding in a church or mosque.

Onyefulu's photographs reveal childhood innocence, curiosity, joy, surprise, and the great desire to belong to and be loved in a community. The author-artist proves that every picture DOES tell a story. Teachers and parents can use *Here Comes Our Bride!* to inspire students of any age to create original photo books documenting life in their own homes, schools, and communities. Students can record field trips, classroom tableaus, soccer games, family vacations, or even the growth and care of a beloved pet.

Book Bag, continued

Antarctica: 365 Penguins

Antarctica is the coldest, windiest, driest, and southernmost of the Earth's seven continents. The most remote of all continents, it has no countries and no permanent human residents, although seven nations claim territory and nineteen countries maintain permanent research stations there.

365 Penguins (Abrams, 2006), written by Jean-Luc Fromental and illustrated by Joelle Jolivet, is a 2007 Boston Globe-Horn Book honored for illustration. A youthful narrator unveils a large package delivered to his family home on New Year's Day. It is from his ecologist uncle. Surprisingly, the gift is an emperor penguin bearing a puzzling message: "I'm number 1. Feed me when I'm hungry." Each day for an entire year another penguin arrives bearing a similar message. Increasingly, the narrator, his sister Amy, mother, and father are hilariously confronted with ever-growing problems of how to accommodate these uninvited guests that love television, are always hungry, and quickly take up every available inch of space in their modest home. Fromental's very funny story consists of equal parts mathematics, ecology, and creative problem solving.

This book can be used as a model for young readers to create their own books. What comic possibilities may occur when animals and people are moved out of their natural habitats? What might have occurred if the ecologist uncle had been working on another continent such as Asia, Africa, or Australia? How would the family cope with 365 pandas, elephants, or kangaroos?

Asia: To Market! To Market!

Asia is the largest and most densely populated of Earth's seven continents. It is also the home of many of the world's longest rivers, largest deserts, and the site of the lowest place in the world, the Dead Sea. More languages are spoken in Asia than anywhere else, with India alone having sixteen official languages.

Set in a colorful Indian bazaar, *To Market! To Market!* (Tara, 2007) is an account of a young girl on her first solo shopping expedition. For the first time she has money in her pocket and the freedom to spend it in any way she chooses, but there are so many choices: a book, a toy, a new hat, a mask, a shiny clock, exotic bracelets, and even a pet.

Anushka Ravishankar, one of India's most eminent children's poets, gives a familiar nursery rhyme a joyful twist with her bouncy verbal symphony of sounds. "Jangle Jangle Jangle, I'm a bangle-holding stand," the heroine exclaims

Book Bag, continued

in a venue filled with seemingly endless bracelets. "Nosy Nosy Nosy, I'm a posy. I smell grand," she calls out with equal enthusiasm in the flower market. "Tutti Tutti Tutti, I'm a fruity kind of dish," she chants as she discovers fruits in a rainbow of colors.

The young shopper sees multicolored geese and regal roosters, exceptional creatures from land and the sea, succulent fruits, bright and aromatic flowers, vendors and shoppers in their brilliantly hued Indian clothing and jewelry, and even five men riding a single bicycle.

Budding book creators will learn much from repeated readings of *To Market! To Market!* Simple and traditional nursery rhymes can be given fresh new lives when afforded different settings. *To Market! To Market!* also exhibits three notable design features. First, it has a unique format. The spine of the book is top most and horizontal; the cover and pages are read and turned like the pages of a calendar.

Second, great expanses of white space are used to frame, accent, and highlight the exceptional beauty of the illustrations of paintings.

Third, the most prominent feature of the book is its typography. The words are presented in an energetic and exuberant use of font style, size, and arrangement. Words come alive as they swirl and pivot boldly on the pages. For example, as the young narrator explores a seemingly endless jungle of silks and other precious fabrics, she imagines herself a spy on a secret mission. The glorious visual is set off by bold typography presented in a tiger-like stealth in the positioning of the words, "Creeping Creeping, I am peeping. I'm a spy."

Australia: Are We There Yet? A Journey around Australia Australia is the smallest and flattest continent. Nicknamed "the land down under," it is bordered by the world's longest coral reef. Many children associate this continent with its highly unusual animals, such as koalas and kangaroos.

Alison Lester's *Are We There Yet? A Journey around Australia* (Kane/Miller, 2005) is a comical, yet informative family vacation saga that introduces readers to the only country that is also a continent. It is a sprightly travel guide. The author's youngest son supplies the main title with his repeatedly asked question, "Are we there yet?"

Eight-year-old Grace and her family see great white sharks and whales. They also go snorkeling with dolphins in Turquoise Bay. They visit the continent's interior region and the largest rock in the world, Uluru, in the heart of Australia. On another occasion, Grace's family is shown cave paintings that are 20 thousand years old. Cattle ranches, rain forests, sheep shearing, and surfing also figure into the family adventures. Cascading fireworks highlight the great architectural masterpieces of Sydney. Grace is delighted to meet little penguins on the shore of Phillip Island.

A creative child can read *Are We There Yet*? and respond with the affirmative, "I can do that." One of the hallmarks of this charming family odyssey is found in the countless "amateur" maps featured on nearly every page. The line drawings of simple maps are easily replicated regardless of where children live or travel. Outline maps of the United States, Canada, or states and provinces may be traced from atlases or found in free online clip art collections. In a manner not unlike Grace's family album, all students may document trips from family reunions to school outings with simple narration, penciled journal entries, postcard-like illustrations, and colorful maps.

Europe: *The Wall: Growing Up Behind the Iron Curtain* Europe, the second smallest of the Earth's continents, has 48 countries. Russia is largest, and the Vatican is smallest.

In *The Wall: Growing Up Behind the Iron Curtain* (Farrar, Straus, Giroux, 2007), author/illustrator Peter Sis explains what it was like to grow up in the once Communist Bloc nation of Czechoslovakia during the oppressive time of the Soviet Union's domination of Eastern Europe.

Communist symbols, celebrations, and monuments were visible everywhere. Education was indoctrination. Children were taught to report "transgressions" of both their friends and parents to the Secret Police. All communication to and from the West was jammed or eliminated. Personal communications were censored. Creative people such as Sis's cousin mysteriously disappeared. Ultimately, Sis chose the United States as his new homeland while on a State assignment to make a documentary film of the 1984 Olympics in Los Angeles.

The Wall is an amazing fusion of art, symbolism, and design. Sis integrates exquisitely painted double page spreads alongside tiny illustrations, photos, childhood drawings, propaganda poster art, and Western popular culture figures (e.g., Beatles and Harlem Globetrotters).

Students can tell their own life stories by visually documenting the times and places in which they live. They can use symbolic colors, graphic techniques, and unique typography to relate any story.

Book Bag, continued

North America: Wow! America!

North America contains the second and fourth largest countries in the world—Canada and the United States. Many students may be surprised to learn that this vast continent also includes the ice covered and frigid climate of Greenland, as well as tropical island nations such as Jamaica.

Robert Neubecker's *Wow! America!* (Hyperion, 2006) reveals two young sisters, Izzy and Jo, playing tag as they travel through the United States. Neubecker's oversized poster art highlights the great urban centers of New York City and Chicago as well as magnificent natural landmarks including the Rocky Mountains and Hawaii's fiery Kilauea Volcano.

Traveling east to west, *Wow! America!* begins with a giant horizontal spread of New England and lobstering and then moves on to the harbor of New York City and Niagara Falls. Students open gatefold pages to enjoy large images of the mighty Mississippi River and the spectacular Grand Canyon.

The book design of *Wow! America!* will challenge gifted students to incorporate uniquely interactive features in their own self-generated picture books. Readers who are open to the "Wow!" elements of Neubecker's picture book art will discover two similar delights in *Wow! City!* (Hyperion, 2004) and *Wow! School!* (Hyperion, 2007).

South America: *Mia's Story: A Sketchbook of Hopes & Dreams*

South America is a continent of extremes. The impressive snow covered Andes Mountains dominate the continent's western coast while the great Amazon rainforest, home to more species of plants than any other site on Earth, dominates the north and northeast regions. The Amazon River is 4,000 miles long and carries more water than any other river in the world.

Mia's Story: A Sketchbook of Hopes & Dreams (Candlewick Press, 2006), written and illustrated by Michael Foreman, is set in Chile, the longest and thinnest country in the world. In Mia's nation there are not enough houses for everyone, so the poorest people must live in shantytowns on the edges of large cities in shelters made from cardboard, wood, and scrap metal. In better days, Mia's mother and father were farmers, but the only remnants of such times are a rickety old pickup truck and Sancho, an elderly horse.

One day Mia rides Sancho, traveling farther than she has ever

been, high into the Andes Mountains. She finds beautiful white flowers that she believes are gifts from the stars. She carefully gathers a small handful, roots and all. Mia plants her precious star flowers and tends them every day. Soon a miracle occurs. The fragrant flowers bloom and spread rapidly. Indeed, they blossom so profusely in the spring that Mia is able to pick armfuls and sell them in the city's marketplace. Her father helps her market them, and perhaps he and Mia will sell so many flowers that their dream brick house will become a reality.

Mia's Story is a gallant account of a resilient child who uses both creativity and task commitment to help her family have better lives. The illustrations show gifted readers how artists make the most of serendipity and use their tools to create wonderful books.

Jerry Flack is Professor Emeritus of Education and President's Teaching Scholar at the University of Colorado. He is a reviewer of children's literature and the author of 10 books and numerous articles on creativity and curriculum development.



Understanding Our Gifted Back Issues

Volume 9 🔲 \$14 each

- 9-1 Perfectionism 9-2 Gifted Ed. & the Law
- 9-3 Inside Giftedness □ 9-4 Learning Differences

Volume 10 🛛 \$14 each

- 10-1 Educational Options
- 10-2 Intelligence Revisited
- 10-3 Parenting & Advocacy
- 10-4 Curriculum

Volume 11 \$14 each

- 11-1 The Total Child
- 11-2 Gifted Girls
- □ 11-3 Asynchrony
- 11-4 Teaching Teachers

Volume 12 \$14 each

- □ 12-1 Millennium
- 12-2 Levels of Giftedness
- 12-3 Technology
- □ 12-4 Nature vs. Nurture

Volume 13 🛛 \$14 each

- □ 13-1 Definitions Giftedness
- 13-2 Addressing Giftedness
- □ 13-3 The "G" Word
- 13-4 Creativity

Volume 14 🛛 \$16 each

- 14-1 Options -Education
- 14-2 Twice Exceptional
- 14-3 Social/Emotional
- 14-4 Critical Thinking

Volume 15 \$16 each

- 15-1 Differentiation
- 15-2 Dumbing Down
- 15-3 Identification
- 15-4 Parenting

Volume 16 🛛 \$16 each

- 16-1 Early Childhood Elem.
- 16-2 Middle & High School
- 16-3 Alternative Schools
- 16-4 Closing the Gap

Volume 17 \$16 each

- 17-1 Professional Development
- 17-2 Curriculum Possibilities
- 17-3 Outside Interests
- 17-4 Technology

Volume 18 🔲 \$16 each

18-1 Parenting

pen Space Communications LLC

Publications

for Gifted/Talented Education

- 18-2 Social / Emotional
- 18-3 The Arts
- 18-4 Learning Problems

Volume 19 🛛 \$16 each

- 19-1 Unique Techniques
 - & Programs
- 19-2 Revisiting Differentiation
- 19-3 Gifted Kids at Risk
- 19-4 Online Learning

Volume 20 \$16 each

20-1 Cultural Diversity

Order ONLINE Back Issues and Read Today! (Volume 13 through 19) Save Shipping Fees - Download Today - \$12 each Request a FREE Sample at: www.our-gifted.com

Call 800-494-6178 / Fax: 303-545-6505 / dorothy@openspacecomm.com

ONLINE Publications	PRINT Publications		
<u>onente r'abrications</u>	Subscription: U.S.: \$39 Individual-\$49 Institution	\$	Order Form
Subscription:	Canada: \$58 Individual-\$68 Institution	\$ \$	Name
\$35 Individual	Other Countries: \$68 U.S. Funds plus S/H	\$	
\$47 Institution	Back Issues: Vol. 4-8 \$8 ea/Vol. 9-13 \$14 ea/Vol.14-19 \$16 ea	\$	Institution
\$	(Special Volume Set pricing: 4-8 \$30/6 issues / 9-13 \$40/4 is	sues)	
	International Vol4-8 \$15 ea/Vol9-13 \$20 ea/Vol14-19 \$25 ea US	\$	Address
Subscription	(Attach Back Issue List plus shipping/handling)		
Group Rate:	Professional Development Series Books		City
\$47	Affective Education \$14.25	\$	Ohata an Danuinan
Plus \$11 per ea. user.	Parent Education \$14.25Spanish Version \$10	\$	State or Province
# Users	Teens With Talent \$15.45	\$ \$ \$	Zip or Postal Code
\$	Smarter Kids \$15.45	\$	
	All 4 Books SPECIAL \$49.95	\$	Country
Online Back Issues	(Add shipping/handling)		
Vol. 13-19 Available	Conference CDs		E-mail
\$12 each	Gender and Giftedness - Kerr		REQUIRED FOR ONLINE SUBSCRIPTIONS
\$	Tipping the Balance: Risk to Resilience-Neihart		VISA/MasterCard #
(attach list)	Instructional Decisions-Kingore		
	Growing Up Gifted-Galbraith		
	Neither Freak nor Geek- Delisle		Expiration
Total U.S. Funds	Culturally Responsibe Classrooms - Ford		
\$	Order More than One CD and SAVE!		P.O. #
	1 CD \$12 / 2 CDs \$22 / 3 CDs \$32		
	4 CDs \$42 / 5 CDs \$52 / 6 CDs \$62	\$	Mail to: Open Space Communications LLC
	(Add shipping/handling)		P.O. Box 18268, Boulder, CO 80308
	S/H U.S.:10%-\$5 min. /Canada: 20%-\$10 min. (all publications)		Place your order on our web:
	All other countries: 20%-\$25 min. (all publications)	\$	www.openspacecomm.com
	Total Enclosed U.S. Funds	\$	

Subscribe Now! Understanding Our Gifted Online iJournal

Easy to Log on and Read! \$25 Annual Subscription (4 issues) Limited Offer

Two FREE Bonuses With Online Subscriptions

 Four Additional Online Back Issues
 Download and Listen to a Conference Keynote Presentation Order, Download and Listen Today - \$12 Keynoter: Donna Ford from Beyond Giftedness XV

Creating Culturally Responsive Classrooms for Gifted Students: For Our Sakes -For Their Sakes

www.our-gifted.com (303) 444-7020 /800-494-6178 dorothy@openspacecomm.com



pen Space Communications LLC P.O. Box 18268 Boulder, CO 80308 Change Service Requested PRSRT STD U.S. POSTAGE PAID BOULDER, CO PERMIT NO. 94