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Keynote Topic
Gender and Giftedness: Milestones and Danger Zones for Smart Girls & Boys

Breakout Session:
Positive Psychology and Guiding Gifted Students

Features:
- Mentoring
  Mathematical Minds: An Innovative Program to Develop Math Talent
- Prime Mentors Program
- Creating Culturally Responsive Classrooms for Gifted Students
- Success Express: Building on the Butterfly Effect
- Reasoning, Resilience, & Responsibility

...and more!
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Strategies for gifted education have evolved over the years. Options used to be limited to pull-out programs, acceleration, grouping, in-class enrichment, special classes and schools, and independent study. Some of these techniques worked well, while others were inadequate.

Then came “differentiation.” At first the definition of the word was ambiguous, but from presentations, articles, books, and actual classroom practices, the meaning became clearer. Most exciting was that differentiation offered ways to work with previously unrecognized, unaccepted, and/or misunderstood gifted children.

And now teachers are using even more practical and meaningful strategies for working with the gifted. “Unique Techniques and Programs,” the title of the current issue of Understanding Our Gifted, evokes a feeling of hope for the gifted children in our homes and schools. We are exploring innovation and creativity in teaching and home activities for children who need individualization....and that’s what education is all about.

Please share your unique programs and techniques. Contact Editor Carol Fertig: cfertig@earthlink.net.
Earnest chatter and excited laughter is coming from the corner room at the end of the hall. Intrigued, you approach the room and notice a bold sign over the door that reads, “Our Awesome Algebra Mall, Where We Do the Coding and You Do the Solving!” Desks are lined up like a horseshoe, and student pairs sit behind them with homemade posters enthusiastically advertising their products. Your eye is drawn to the rainbow colored flowers at “Mo and Joe’s Garden Shop,” diary locks and keys at “Unlocking the Key,” and skateboards and soccer balls at “E. T. Sports.” Parents, teachers, and other students gather at each shop and try to determine the price of every item by solving the equations listed on the posters.

Mo and Joe explain to their customers that the value of each flower stays the same in every equation: \(2 \text{\color{red}{f}} + \text{\color{red}{f}} = \$5\) and \(\$3 = \text{\color{red}{f}} + \text{\color{red}{f}} + \text{\color{red}{f}}\). The talk at “Unlocking the Key” is about how you can make an organized list to narrow down the solution for: \(\text{\color{red}{f}} + 2 \text{\color{red}{k}} = \$11\) and \(\text{\color{red}{f}} - \$2 = \text{\color{red}{k}}\) instead of guessing the price of each item. You overhear a discussion about how the values or expressions on either side of the equal sign have to be the same at “E. T. Sports.”

This math talk takes you back to your own experience with algebra. You recall trying to determine the values of all those \(X\)s and \(Y\)s—not always knowing how to go about it. But that was in high school, and these students are only in the 4th grade! How can this be?

Project M³: Mentoring Mathematical Minds
The students are part of an innovative program called Project M³: Mentoring Mathematical Minds. This program was created under a United States Department of Education Javits curriculum and research grant and is currently in its fourth year of implementation. Project M³ is a five-year collaborative research effort of faculty at the University of Connecticut, Northern Kentucky University, and Boston University. Included in the project are teachers, administrators, and students in 11 schools of varying socioeconomic levels. A team of national experts in the fields of mathematics, mathematics education, and gifted education created a total of 12 curriculum units (four units at three different levels) of advanced mathematics that are appropriate for talented elementary students in grades 2 through 6.

The Challenge of Providing Challenge
Meeting the needs of mathematically talented elementary students has always been a real challenge due to the lack of appropriate curricular resources and training for teachers. Mathematics is not generally a strength area for elementary or gifted/talented teachers; rather, their talents and interests often lie in the language arts realm. This is coupled with the fact that, in general, elementary mathematics curriculum provides few to no advanced options for talented students. Materials labeled “enrichment worksheets” are often extra practice sheets that are neither interesting nor challenging for bright
children. With that said, there are certainly some interesting creative problem solving books filled with logic puzzles, mind-benders, and non-routine problems, and these have a place in a challenging math program. However, they should not be the math program. What has been lacking and sorely needed is a curriculum that develops mathematical concepts in depth and with complexity, provides a cohesive structure in which students can explore these concepts, and requires youngsters to think and act at high levels akin to the process mathematicians use in discovering new theorems and advancements in the field.

**A Passion for Mathematics**

Project M³ units provide such a challenge. These units engage young people to think deeply about math concepts and to make sense of them. They also engage students in interesting mathematics relevant to their lives so that they enter into a “romance with the discipline,” as described by Renzulli (2002, p. 36). As a result, teachers actually see students hugging their Mathematician’s Journals as they enter class eager to get started with a lesson. One student recently stated, “I used to like math, but now I love it!” In order to encourage the younger generation to accept the challenge of becoming mathematicians, a profession sorely needed in our technological society, we must instill in them a love for the subject, so that they will want to eagerly pursue this line of work.

**Combining the Best of Both Worlds**

So what does the mathematics in Project M³ look like? First of all, it is not difficult arithmetic. You won’t find our 3rd grade students grappling with multiplying a three-digit number by a four-digit number. A calculator can crank that out faster and with less error. Rather, we focus on the development of concepts. The content is closely aligned with the expectations that the National Council of Teachers of Mathematics (NCTM) outlined in **Principles and Standards for School Mathematics** (2000). At each of the three levels, there is a Project M³ unit investigating important ideas from each of the content standards: number and operations, geometry and measurement, data analysis and probability, and algebra. We also have incorporated the NCTM process standards of communication, reasoning and proof, problem solving, connections, and representation.

**Verbal Communication**

Project M³ encourages teachers to facilitate discussions where students reach deeper understanding of complex problems. Children explain their thinking and revise their thoughts in light of their peers’ comments. They persist in their attempts to find a solution because they understand that it takes time to process and come up with different solutions. They develop the ability to organize ideas, consolidate and clarify their thinking, analyze and assess strategies, and use precise mathematical language (NCTM, 2000).

One such discussion that took place in a Project M³ class while studying *At the Mall with Algebra: Working with Variables and Equations* (Gavin, Chapin, Sheffield, & Dailey, in press) centered on a key mathematical idea—the same variable in a set of equations has the same value in each equation. Classes investigated the following two equations that had two variables:  

\[
\begin{align*}
\text{Equation 1: } & x + y = 18\text{¢} \\
\text{Equation 2: } & x + z = 16\text{¢}
\end{align*}
\]

The discussions began similar to the one below.

**Teacher:** Who can tell us how much they think the pencil costs? Janie?

**Janie:** I think it costs 11¢ because if the scissors costs 7¢, then 11¢ + 7¢ = 18¢.

**Teacher:** Is there someone who agrees or disagrees with that idea and can tell us why?

**Marley:** I disagree with that idea because that means that the pencil plus the pencil in the second equation would sum to 22¢, not 18¢ like it says.

**Teacher:** Derron, can you explain what Marley just said in your own words?

**Derron:** I think she said that your numbers have to work in both equations, and having the pencil cost 11¢ does not make the second equation true. Taking 11¢ plus 11¢ does not equal 18¢, so the value of the pencil cannot be 11¢.

**Teacher:** Marley, is that what you said?

**Marley:** Yes, pretty much. You have to look at both equations, not just one.

**Janie:** Oh! I just figured out that both equations would work if the pencil costs 8¢ and the scissors cost 10¢.

As in the dialogue above, Project M³ teachers use
talk moves (Chapin, O’Connor, & Anderson, 2003) to cognitively engage students in the process of solving mathematics problems. One talk move is **revoicing** and occurs when a teacher repeats a student’s idea, then verifies with the youngster if the idea was heard accurately. For example, a teacher may state, “So you think the value of the eraser is 5¢ because 12¢ - 7¢ is 5¢? Is that what you said?” This allows teachers to clarify student contributions and encourages the class to grapple with the idea further.

A second talk move is **repeating**, which is the same as revoicing, except other children rephrase the idea. The teacher asks, “Can someone please repeat what Tyrone said in his own words?” This talk move allows students to clarify their thinking.

A third talk move is **agree/disagree and why**, which is used when students already have had time to process ideas. A teacher may ask, “Do you agree or disagree that the value of the eraser is 5¢? Please explain why.” This move encourages justifying ideas with mathematical evidence.

A fourth talk move is **adding on**, which serves to expand the discussion. Teachers ask, “Who can add on to this with your own ideas?”

The final talk move is **wait time**, when teachers wait to call on someone for a response after posing a question to the class. Comments like, “We’ll wait for your idea,” give students time to process their responses and make them clear enough for others to understand.

**Written Communication**

The challenge in the Project M3 units comes not just from advanced and comprehensive mathematics but also from written communication. Students respond to Think Deeply questions that encourage them to reflect in-depth on what they have learned about the big mathematical ideas of the units. They are encouraged to clearly express their ideas using precise mathematical language.

Before writing the equations to be used at the mall, children compared and contrasted expressions and equations. Below is a segment of what one student wrote.

*An expression can be a statement that includes operations, letters or variables, and numbers, like a ÷ 2. It is not being compared to another value, so no equal sign is used. An equation is a statement that gives the value of an algebraic expression that is equal to another algebraic expression. An example of an equation is (N x 3) + 6 = 21. It uses an equal sign.*

**Differentiation**

Unique to the Project M3 units are Hint and Think Beyond Cards that function to support the progression of student learning. Hint Cards are used with children who need additional guidance in trying to solve a challenging problem. For example, the hint, “Now write a second equation using only one of the items and the total price,” steers them towards writing a second equation that only has one variable. Think Beyond Cards are used with those needing to be challenged further. For instance, students asked to solve the equations: $\frac{a}{2} + \frac{b}{4} = 18$ and $2 - \frac{b}{4} = 6$ are encouraged to determine the amount of pens and crayons using different strategies, such as refining their guesses after testing, using an organized list, and adding the two equations together to eliminate the variable representing the number of crayons.

**Culminating Projects**

After seeing the 4th graders “at the mall” solving sets of equations, you are curious about what is happening in other Project M3 classes and decide to visit a 5th grade classroom. As you approach, you hear laughter and applause. At the door, you are greeted by a sign for the “Carnival of Chance.” The 5th grade Project M3 students are sharing games they created with the visiting 6th graders. The laughter is coming from one particular table, at which a 6th grade student lost at a game created by a boy with a long, curly blond wig and another boy wearing a Santa hat. After a few more minutes of the Carnival of Chance, the teacher gathers both groups of students together. The boys approach the SmartBoard and use a Carroll diagram (See [en.wikipedia.org/wiki/Carroll_diagram](http://en.wikipedia.org/wiki/Carroll_diagram)), theoretical probability, and experimental probability to explain how their game is “slightly” unfair.

*Project M3 definitely helped me in math because I used to dread going to math class, but now I’m so happy to go.... Yes, it’s math finally!*

Project M3 mathematicians sharing their work and teaching others is not unusual. Project based learning provides the opportunity for choice, challenge, creativity, and real life application, and each unit has a unique culminating project. From the cor-
rectly proportioned enlargement of Juggles the Clown to unraveling the mysterious numeration system of the MoLi Stone, students apply what they have learned throughout the units and often share their learning with parents, other students, teachers, and even superintendents. Each time they begin a unit, children enter the room eager and excited, knowing that they will use their new skills to complete a motivating culminating activity and have an opportunity to share their mathematical knowledge with others. The opportunity to work with others and apply what they have learned inspires and excites students, as illustrated by one teacher’s “success story.”

Ramon always wanted to sit by himself and never wanted to participate in group work or partner talk. Then one day, he was asked to design a game that was “slightly” unfair. It was explained to him that 6th graders were going to play these games and that we didn’t want them to realize the games were not fair. This boy got so excited at the idea of the Carnival, and he walked around the classroom telling everyone his great ideas. He used all of his free time to work on his game, and he was beaming. He has since become the math student who joins in with other students, the student with his hand in the air first, the student always smiling with that sparkle in his eye, and the student who says, “Thank you, Mrs. M., for everything.”

Evidence of Success
The teachers piloting the Project M3 units have shared many success stories with us. These stories reveal individual student success, such as a second language student, who previously was not identified as talented, succeeding in the program and dramatically increasing her use of mathematical vocabulary in speaking and writing; a learning disabled student who was able to shine due to his mathematical insightfulness and eagerness to participate in the units; and the increased confidence of several talented girls who had previously exhibited math anxiety. They also highlight the engagement and excitement of all Project M3 students, their sense of being a “community of mathematicians,” the active participation of youngsters in mathematical discussions, and the improvement in their mathematical writing. The students’ enjoyment is evident by the following comments:

- M3 is better than any other math class I’ve ever been in because some math classes [are] boring, and they don’t challenge me as much. I know the answer quickly, but for M3 I have to think a lot.
- M3 definitely helped me in math because I used to dread going to math class, but now I’m so happy to go....Yes, it’s math finally!

Project M3 has not only extremely positive qualitative results but also statistically significant quantitative results. Project M3 students have made significant gains on the total scores of each unit test, the Iowa Tests of Basic Skills (ITBS), open-ended response questions from the Trends in International Mathematics and Science Study (TIMSS), and the National Assessment of Educational Progress (NAEP). These results demonstrate that mathematics knowledge and abilities improve as a result of the program. This may be due partly to the beliefs that Project M3 teachers have in the capabilities of their students. As one father said, “I’m so truly amazed at the high expectations you have for our students. If only more adults had the same expectations for themselves.” These expectations challenge children to reach new levels. As one student shared, “We got out of the comfort zone.”

Resources
Project M3: Mentoring Mathematical Minds
http://www.projectm3.org

[Editor’s Note: For information on all M3 Projects, visit www.kendallhunt.com and search on “project m3.”]

References


[Editor’s Note: The work reported herein was supported under Jacob K. Javits Gifted and Talented Students Education Act, PR/Award Number S206A020061, as administered by U.S. Department of Education.]
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Professor of Counseling Psychology, University of Kansas

Gender and giftedness: Milestones and
danger zones for smart girls and boys

Breakout Session:
Positive Psychology and Guiding Gifted Students

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* Differentiation
* Curriculum
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* ADD & Gifted
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Understanding Our Gifted
Canadian Rockies Public Schools (CRPS) serves approximately 2300 students in the Bow Valley, just west of Calgary, Alberta, encompassing some of the most beautiful scenery in Canada. The close proximity of Banff National Park (Canada’s oldest national park), Bow Valley Provincial Park, and Kananaskis Provincial Park afford our students rich opportunities in the areas of physical education, outdoor education, and science. Add to this spectacular physical location, the Banff Centre for the Performing Arts whose productions feature world-renowned artists, the Nordic Centre (site of some 1988 Olympic Games events), and residents and visitors from all over the world. What results is a very rich environment for learning.

There are six schools located in the towns of Banff, Canmore, and Exshaw, serving students from kindergarten to grade 12. The three Canmore schools are dual-track, offering French immersion programs in addition to the regular program.

As a school division, CRPS is committed to the development of professional learning communities in all our schools. Teachers meet regularly to work collaboratively to improve practice and enhance student learning and performance. For the past three years, differentiation has been a focus for our teachers as we provide quality programs for all students in dynamic learning environments.

In CRPS, educators are committed to meeting the needs of all students. While much of the attention and resources go to the students with special needs who have difficulty learning, the group of students identified as talented and gifted is largely left to the classroom teacher to accommodate.

Lawrence Grassi Middle School (LGMS), grades 5-8, has a very special mentor program that helps to address this issue. While many mentor programs are focused on the social-emotional relationship between an adult mentor and a student, this program has an academic focus and a project component. Modeled on Prime Mentors of Canada (PMC) from Ontario Institute for Studies in Education (OISE, www.oise.utoronto.ca/), this program was developed in 1999 in response to parents and teachers who identified the need for student enrichment beyond the curriculum. Prime (Positive, Interested, Multitalented, and Exemplary) Mentors states in its guidebook that teachers select students whose creative potential is at risk of being lost.

The program was brought to the attention of the school administration in LGMS by two parents of children identified as gifted. These parents, in conjunction with the assistant principal, began a journey that continues to this day. One of the first steps was a presentation to the school staff about the program, asking for their cooperation and support. The LGMS staff has been very supportive, and teachers are delighted with the results.

**Prime Mentors Program**

**How can a school set up an effective mentor program?**

Yvonne Machuk

Yvonne Machuk is Coordinator of Instructional Program Supports and a sessional instructor at University of Calgary in the Faculty of Education.

An educator for 34 years, she has been teacher, assistant principal, and principal in Canadian Rockies Public Schools.
Students are identified by their teachers as candidates for the program. No formal assessment is used to identify students; teachers select students who, in their professional judgment, need enrichment beyond that provided in a classroom setting. An orientation session is held with the students to ascertain their willingness to participate. Then a letter is sent home to parents advising them that their children have been selected for the program and asking for their permission. Rarely does a student or parent decline to be part of the program. Once permission has been received, the school personnel begin the labor intensive search for a good match with a mentor.

Students, with the assistance of their parents, are asked to complete a strengths and interest inventory that was adapted from the PMC program at OISE. [Editor’s Note: For a copy of the inventory, contact the author: ymachuk@crps.ab.ca.]

Students identify more than one area of interest, if possible, in order to maximize the chances of finding a suitable mentor. In some cases, only one very specific area appeals to the student. A young girl wanted to study rodents—not animals, rodents. Fortunately, we were able to find an adult on our school council who shared her passion and the “rodent lady” has been a mentor more than once.

Mentors have been found through a variety of means: teachers’ personal contacts, previous mentors, professionals listed in the phone book, and an ad in the local paper. All potential mentors are interviewed by the school contact person, and they complete the necessary documentation for school volunteers. Then a meeting is held with the student, homeroom teacher, parents, potential mentor, and school contact to determine if there is a good match. The involvement of the homeroom teacher is key, as there is some flexibility in scheduling required. Every attempt is made to find a time in the student’s schedule that is acceptable to the child, parents, and teacher, while still respecting the volunteer’s time constraints.

Each year, 20 to 25 students are matched with mentors. Each student meets with his mentor once a week for a period of 8 to 10 weeks. Most of the meetings are on the school campus, but some have taken place in an artist’s studio, in the engineer’s office, or out where the horse is corralled. Each child is different, and therefore each project is different. Upon completion of the project, the student shares what he has learned with the homeroom class or in a school-wide assembly. Students have produced architectural house plans, computer programs, garments, foreign cuisine, photographic exhibitions, art work, and even taken rides with the pilot mentor in a small plane as part of these learning experiences.

Feedback from all parties concerned has been overwhelmingly positive. Students look forward to weekly meetings with their mentors, teachers have incorporated the projects into the regular expectations of the students’ programs and been pleased with the student growth, parents are grateful for the enrichment of their children’s programs, and mentors often comment that they probably had more fun than the students. Mentors have developed a greater appreciation of the work of teachers and are amazed at the amount of preparation needed to meet with one student for two hours once a week.

As with any program, this one has some difficult aspects to manage. One of these is the busy time between September and December as school contacts look for student matches. Another is the rare case of an unsatisfactory match or a mentor unable to complete the program. In these cases, a second mentor may need to be found or the program discontinued for that student. In a few cases, no match is found in the first year that the student is recommended for the program, and she must wait until the next school year. However, the smiles on the faces of all involved as the students present their projects is testament to the value of the program and motivation enough to find the time and energy to continue it. We are committed to meeting the challenges presented by the learning needs of our students and will continue to include the Prime Mentors Program as part of our ever-expanding repertoire of strategies to meet those challenges. ❖
Creating Culturally Responsive Classrooms for Gifted Students

Donna Y. Ford

How can we be more sensitive to the needs of diverse student populations?

I am a gifted education teacher and have been working with Kevin, a 2nd grade African-American boy who scored the highest of all our students on the Naglieri Nonverbal Ability Test (NNAT). He was identified as gifted, and I met with the parents to let them know of our gifted pull-out program. They signed him up. I told the parents that if they needed additional help or services to let me know. Two weeks later, they called at a crisis point because their son was miserably unhappy at school. The classroom teacher, the principal, and I met with the parents and decided that he would receive a daily half session with me, and I would use that time to provide enrichment and test him for additional services. Through the subsequent testing, it was clear that this youngster was achieving well above 2nd grade. We immediately moved him to 3rd grade for reading and collected data on a possible double promotion. The classroom teacher was adamant that this child was too immature for double promotion and in fact has ADHD. I used the Iowa Scale for Acceleration to determine if double promotion was the appropriate service for him. Kevin scored in the “good candidate” range. Even with the extensive data collected, the classroom teacher disputed the recommendation for double promotion. The parents were informed of both my recommendation and the classroom teacher’s strong disagreement. The parents are caught in the middle and have the responsibility of making the decision of whether to double promote him. They have researched area private schools to see if any of them will meet their son’s needs. They mentioned to me that they are having difficulty choosing because they need to find a challenging environment that also has diversity. This is a big issue in our town, because the more challenging private schools have low minority ratios.

At this point, I am extremely frustrated with my colleague’s continued focus on this highly talented youngster’s perceived problem behaviors.

An All Too Familiar Situation

As I was putting the final touches on this article, the above email was sent to me. Sadly, the situation is all too familiar. How do culturally and linguistically diverse (CLD) parents find classrooms and services that are both challenging and culturally diverse? How do they find teachers who see that culture matters in the teaching and learning processes? How do CLD parents find educators who are culturally responsive? How do they work with teachers who may see only deficits or disadvantages in their children, even if identified as gifted? How do teachers and parents meet the social-emotional needs of these students?

Several issues need to be addressed in Kevin’s situation and with many others who I have written about for over 15 years. First, one needs to address the classroom teacher. She is failing this gifted black youngster in several ways. She does not appear to be his advocate, as indicated by her lack of support for acceleration. Clearly, she
**Culturally Responsive** continued

is focusing on his perceived shortcomings (ADHD) rather than his strengths (gifted), and using this as an excuse to justify her decision or lack of support. This deficit thinking plays a fundamental role in students’ quality of life (Ford et al., 2002).

While the parents believed that their son was unhappy in the new classroom because it lacked diversity, one must consider if he also felt detached from and unsupported by his teacher. Deficit thinking contributes to the quagmire of underrepresentation in gifted programs. When we focus on what is “wrong” with students or what they cannot do well, we may fail to recognize their strengths.

Also, one needs to address the parents and their concerns. They want the best for their son, which appears to be finding a school setting that is diverse and challenging. At this point, they have found possibilities in the option of accelerating Kevin, but doing so means placing him in another classroom where student diversity is low or absent. In seeking a diverse setting, they want their son to be happy and to fit in.

Also, one needs to address the parents and their concerns. They want the best for their son, which appears to be finding a school setting that is diverse and challenging. At this point, they have found possibilities in the option of accelerating Kevin, but doing so means placing him in another classroom where student diversity is low or absent. In seeking a diverse setting, they want their son to be happy and to fit in.

**How do they work with teachers who may see only deficits or disadvantages in their children, even if identified as gifted?**

Finally, one needs to address the young black male student and what Kevin wants and needs academically, socially-emotionally, and culturally. The probability of isolation from different peer groups is all too real for CLD gifted students: Will white students include or exclude Kevin in their social lives? Will black friends support or tease him for doing well?

Before responding to this case and the topic of creating culturally responsive classrooms, it is important to present an overview of recurring issues in gifted education relative to working with students who are gifted and culturally diverse. For at least 20 years, I have focused personally and professionally on the problem of black students being underrepresented in gifted education programs. My son was referred for gifted education screening during kindergarten. At that time, I was a naïve, uninformed 24-year-old with no formal training in gifted education. While I was not interested in this field as a professional, I was interested as a mother. This focus changed when my son was in 2nd grade. He hated school and immensely disliked his teacher. The dislike was mutual. By the middle of the year, he was getting very poor grades and numerous (almost daily) negative notes from his teacher. We had countless parent-teacher conferences. My son soon began the morning ritual of being “too sick” to go school. This lead to his talking about dropping out of school. Not surprising, my personal interest in gifted education became professional. How could a gifted student dislike school? How could a gifted student get such low grades in school? How could a teacher—an educator and professional—not appreciate the gifts and talents of a child? What role did racial or cultural differences play in his experiences? How common or unusual was my situation? This search for answers and for comfort changed my career trajectory. I went from majoring in counseling to majoring in educational psychology and concentrating specifically on gifted students.

**Gifted Education: Equity Unrealized Then and Now**

The field of gifted education is relatively young, becoming widely accepted during the Sputnik era of the 50s. Despite its short history, one problem remains old—the under-identification of African American, Latino, and American Indian students as gifted. CLD students remain sorely underrepresented in gifted education. There are a number of factors that contribute to this unacceptable situation.

**Teachers as Gatekeepers**

Most school districts rely on teachers to begin the identification and screening process. Yet, teachers tend not to refer CLD students. Thus, I have argued that teachers are the initial gatekeepers to gifted education. While it is difficult to admit, teachers—those we entrust with our children—do have biases, prejudices, and stereotypes. Their low expectations for diverse students, also called deficit thinking, blind them to seeing strengths, potential, and promise in this population. Perhaps the worst consequence of deficit thinking and orientations among educators is the devastating impact on social-emotional and psychological development of students. The work of Ford (1996, 2005) and Steele (1997) reveals that many gifted or high-achieving African American students internalize deficit orientations imposed upon them from others. Many highly able African American students question their own abilities and then sabotage their own achievement.

**Tests as Gatekeepers**

Most districts, particularly after teacher referral, also administer an intelligence and/or achievement test to students. Because a disproportionate number of CLD students score lower on these tests than their white classmates, they are less likely to be identified as gifted.
Other Instruments as Gatekeepers

Besides using traditional tests of intelligence or achievement in the identification process, many districts have checklists that teachers complete. In addition to problems associated with instrument validity and reliability, the subjective nature of these tools serves to compound the problem of underrepresentation. If teachers are not advocates for a student, they are likely to complete the instrument with bias and prejudice.

Criteria as Gatekeepers

If a CLD student is referred for screening and scores at the appropriate intelligence or achievement level, he will still face hurdles related to identification criteria that may be indefensible. I have consulted with school districts that add such variables as school attendance and behavior as criteria for further identification consideration. If a student has missed a certain number of days, or received negative comments for her behavior, she may be disqualified from further consideration. Given the vast amount of data on inequitable school discipline with African American and Latino students, the behavior criteria are problematic. Thus, a Latino male who has an IQ of 140, accompanied by poor remarks for behavior or poor school attendance, is not likely to be referred and identified as gifted. I have yet to find a defenseable reason for using behavior and attendance as gifted education criteria.

Weighted Matrices as Gatekeepers

In their efforts to avoid decisions based on a single test score and also to avoid using only test scores to make decisions, some schools use matrices. However, when these matrices are weighted, test scores often receive the greatest weight. In some school districts, I have seen test scores receive 70 percent of the weight, with grades, products, and parent checklists receiving the remaining percent. This is pseudo-scientific and indefensible. Only a child who tests well can be identified as gifted.

Social-emotional Needs as Gatekeepers

Beyond issues related to teacher judgment or subjectivity and testing concerns, it is important, as the above case illustrates, to attend to the social-emotional needs of Kevin and all students. How fulfilling is coming to school for 180 days when you have no friends or a meager social life? I have maintained in my work that, compared to their white classmates, CLD gifted students are more likely to face this challenge. Until gifted programs are more diverse, many students such as Kevin will experience social isolation and alienation.

Same-culture Peers as Gatekeepers

Admittedly, too many students face peer pressures, with some coping better than others. A spate of research in the last two years has focused on black peer pressure, specifically the accusation that those who do well academically are “acting white.” This charge takes its toll on the motivation and psyche of many gifted black students, forcing them to choose between having high grades and having friends. I have witnessed how this achievement tax has been too high a price to pay for many CLD gifted students. But there is hope.

Culturally Responsive Gifted Education

Whether we like it or not, we have witnessed and will continue to witness a drastic increase in the number of culturally and linguistically diverse students in our schools. This increase is not being mirrored in gifted education. Why do gifted programs remain so stubbornly void of diversity? I believe that attitudes in the form of deficit thinking are the sole reason for this historical and contemporary problem. To repeat, deficit thinking affects our expectations of and relationships with CLD students (and their families), the instruments we adopt, interpretations of resultant test scores, and the strengths of our efforts to change. As Einstein said, “The world we have created is a product of our thinking. We cannot change things until we change our thinking.” With this sage advice in mind, I propose the following recommendations for creating culturally responsive classrooms for gifted students. The recommendations are grounded in a philosophy of inclusion—desiring and then ensuring that CLD students are included in gifted education. We must break down human-made barriers, beginning with teacher preparation.

Teacher Preparation

Teachers working with students who are gifted and culturally diverse need formal and ongoing preparation in two areas: (1) gifted education and (2) cultural diversity. All educators, not just teachers but also counselors, psychologists, and administrators, must begin to prepare their schools and classrooms for the CLD students who are here and those who are surely coming. This proactive preparation will help our schools to be culturally responsive.

Several authorities have written extensively about the need to create culturally responsive classrooms (e.g., Banks, 2006; Banks & Banks, 2004; Castellano, 2003; Ford & Harris, 1999; Shade et al., 1997). All seem to agree that the first step consists of self-reflection and self-appraisal. How prepared am I to work with students who are different from me? How do I feel about working with students who
may hold values and beliefs that differ from what I value and believe? How do I work with students who have different customs and traditions? How do I feel about working with students who have different learning styles and communication styles? Do I even want these students in my classroom? What fears, stereotypes, or biases do I have about people who are different from me? How will these beliefs get in the way of my teaching and working with these students?

Without an honest and thorough self-appraisal, it is difficult for educators to seek out the resources they need to be effective with and supportive of all students. It is difficult to make the classroom a welcoming one if educators do not invest time and effort into examining who they are as cultural beings. The literature on teacher expectations guides this premise. Our beliefs, attitudes, and values influence our expectations of, and interactions with, students. Honesty and integrity dictate that we acknowledge that teachers often hold lower expectations for culturally and linguistically diverse students (i.e., African American, Hispanic American, and Native American) than for white students and Asian American students.

After self-appraisal, we must seek to change and grow. One way is to acquire formal training to work with CLD students. In my classrooms and workshops, I remind participants that “the less we know about each other, the more we make up.” While we can never fully anticipate the needs of our students, we can get training in understanding cultures and how groups tend to differ culturally.

Culturally Responsive Classrooms

A culturally responsive classroom is a broad concept that encompasses components of the entire learning environment, from relationships to curriculum to materials to pedagogy. Students who bring their differences to our classrooms want to be respected, appreciated, affirmed, and validated. In addition to rigor and a high quality education, what might CLD students be looking for in school settings? I believe that students want a classroom environment where

1. diversity is recognized and honored, and color-blind and culture-blind philosophies are avoided and discouraged;
2. cultural mismatches are minimal among students, and among teachers and students;
3. teachers take time to get to know students for the unique cultural individuals they are;
4. students feel physically and emotionally safe to be themselves, especially culturally;
5. curricula and materials are culturally relevant and meaningful, and students’ backgrounds and experiences are deemed central to teaching and learning;
6. lesson plans and activities are infused with multicultural content that is respectful;
7. teachers display cultural awareness and sensitivity, and seek to acquire a high level of cultural competence.

(Ford, 2005)

Increasing diversity in gifted education and creating culturally responsive classrooms does not end with attitudinal changes and becoming more culturally competent; instead, it continues with making changes in behaviors, practices, policies, and procedures.

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### Figure 1.

**Sample Cultural Characteristics and Teaching Strategies**

<table>
<thead>
<tr>
<th>Sample Cultural Characteristics</th>
<th>Sample Teaching Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmony (desire to fit in, to feel part of the classroom community)</td>
<td>Creative movement, dance, drama</td>
</tr>
<tr>
<td>Movement (active, enjoyment of physical activity)</td>
<td>Role plays, simulations, theatre</td>
</tr>
<tr>
<td>Verve (energetic, dramatic, lively)</td>
<td>Field trips</td>
</tr>
<tr>
<td>Oral Tradition (prefers to express ideas verbally, enjoys playing with words, to speak is to perform)</td>
<td>Physical activity; tactile and kinesthetic activities</td>
</tr>
<tr>
<td>Expressive Individualism (creative, has flair, unique ideas, risk taker)</td>
<td>Singing, humming, whistling, chanting</td>
</tr>
<tr>
<td></td>
<td>Creating melodies, songs, etc.</td>
</tr>
<tr>
<td></td>
<td>Background music in classroom</td>
</tr>
<tr>
<td></td>
<td>Seminars, discussions and dialogues</td>
</tr>
<tr>
<td></td>
<td>Oral presentations and speeches</td>
</tr>
<tr>
<td></td>
<td>Debates</td>
</tr>
<tr>
<td></td>
<td>Word games (e.g., idioms, jokes, riddles, homonyms, anagrams)</td>
</tr>
<tr>
<td></td>
<td>Poetry, creative writing, journaling</td>
</tr>
<tr>
<td></td>
<td>Storytelling</td>
</tr>
<tr>
<td></td>
<td>Reading (choral, peer, individual)</td>
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Culturally Responsive Pedagogy

Culture matters in teaching and learning. For example, cultural groups differ on such dimensions as:
- cooperation/individualism
- indirect/direct communication style
- high context/low context communication style
- adult/child relationships
- male/female relationships
- internal/external locus of control

What are some of the potential conflicts for CLD students when the teacher places a high value on students working independently, but the young people are social and prefer to work in groups or cooperatively? How will teachers change their strategies with a student who believes that teachers should not be questioned, even if the learner is confused about the lesson? How will teachers who are focused and deadline oriented work with CLD students who see time as social, unlimited, and flexible, and who view time constraints as a nuisance? These differences—cultural mismatches—hinder our efforts to teach and to create safe, responsive learning communities for all students. In Figure 1, sample culturally responsive teaching strategies are provided.

Culturally Responsive Curriculum

There are at least four approaches to infusing multicultural content into the curriculum. In the lowest and most basic level, we focus on heroes, holidays, and cultural artifacts when teaching about diverse groups (e.g., slavery, Trail of Tears, Cinco de Mayo, tepees, pyramids). While this level is necessary because it provides background and history, it is inadequate as a stand alone level. Here, we risk the possibility of creating or reinforcing stereotypes about CLD groups (such as the misperception that all American Indians lived in tepees; all blacks celebrate Kwanzaa, etc.).

In the next step, diverse concepts, topics, and themes are included in the curriculum, but during certain times (e.g., Black History Month). Further, only issues and concepts that are relatively safe and less controversial are discussed. For example, topics such as discrimination and racism are avoided for fear that children are not yet ready to deal with these social ills, and slave revolts are not discussed.

It is only when one teaches at the third level that education becomes multicultural or culturally responsive. For example, students are given opportunities to view issues, concepts, and events from multiple viewpoints: How do you think it feels to be discriminated against? Research two other factors that contributed to the Civil War and explain how you think many African Americans would have handled the situation. Students are given the tools and strategies to make educated, informed, and balanced decisions.

At the highest level is social action, whereby students feel empowered to make a difference, to challenge the status quo, and to otherwise address injustices.

Many culturally and linguistically diverse students do not do well academically in schools. A litany of reports discusses inequities in school settings and provides suggestions redressing these injustices. I am troubled by the lack of attention given to closing the cultural gap as a way of increasing achievement among CLD students.

Demographics change in our society and school populations cannot be ignored; we cannot wish away diversity. Thus, we have the option of managing diversity or letting it manage us. I am convinced that we can more effectively teach and reach gifted students who are culturally and linguistically diverse. Doing so takes self-reflection, desire, effort, courage, and commitment. If we can consider culturally and linguistically diverse students as our children and our future, we will see the urgency of making changes both for children’s sake and for our own sake.

References

Makayla sits cross-legged on the floor, intently listening to her teacher share information about the kangaroo, and quietly adds, “The baby is called a joey.” Sitting two rows behind her, I immediately begin scanning my memory bank for facts about kangaroos and conclude: She’s right—the baby kangaroo is called a joey. The teacher enthusiastically reinforces Makayla’s observation saying, “The baby kangaroo is called a joey, a JOEY!” and gives the children one of her sunshine smiles. At this point, all the children are engaged, and the teacher asks, “What is the kangaroo baby called?” And they chorus, “A joey.” When the children transition to art, I approach Makayla, and ask, “How did you know that about the kangaroo?” She matter-of-factly replies, “From Discovery,” and continues to work on adding a pouch to her kangaroo apron that the children will wear during music/dance time.

Makayla is participating in a project called Success Express, planned and implemented as part of a collaborative 1990 Javits project for gifted students between Lamar University and Texas A & M. The program has been continued by Lamar and Beaumont Independent School District as a two week summer program to identify high-potential, low-income 4-5 year olds and provide them a boost for success in kindergarten. This year’s group of 36 children, primarily from Head Start, was nominated by their teachers. The teachers are asked to use a wide lens to nominate youngsters who actively engage in learning, are persistent, are able to take risks, are capable of sustained attention, ask a lot of questions, are eager to participate, and have high energy. Most teachers nominate one or two from each of their classes. The parents provide transportation to the neighborhood school where the program is conducted. The children nominated in 2005 were mostly African American, with one Asian and three Hispanic youngsters. Beaumont ISD’s student population is 68 percent African American, 25 percent Anglo, 6 percent Hispanic, and 1 percent Asian.

When the children leave for home at 1:00 p.m., the teachers participate in a seminar focusing on gifted children. I connect the interaction between Makayla and the teacher to what physicists call the “butterfly effect”—small influences create dramatic effects—derived from the idea that the mere flap of an insect’s wing in one’s backyard might ignite a chain of meteorological events leading to a hurricane on the other side of the globe. Success Express can provide endless opportunities for the teachers to build on these small influences, similar to the one with Makayla, to bring about big changes in the quality of the students’ learning.
In some years, the program has been supported through Title I funds, Eisenhower or Quality Teacher Programs, and for the last few years by ExxonMobil. Each year a team of six co-teachers and two lead teachers work with a group of high potential 4-5 year olds, divided into two groups with 18 children in each group.

Breakfast and lunch are provided not only for the children in the program, but for the neighborhood as part of a federal program. Because of this, many parents and siblings of the children share two meals at the school.

The program focuses on expanding the gifts and talents of the children through an active engaging curriculum, integrating reading and algebraic thinking. The teachers create two theme rooms. Last year, using the theme of animals, one room emerged as a farm with a large barn, bales of hay, and wall-high murals of farm animals. The second room was a zoo with vines that moved realistically as the air conditioner blew whiffs of air. A real live parrot moved with the music and the children’s singing, periodically providing raucous cries to add to the realism of the zoo.

The children were given pretests to identify their levels of knowledge based on state standards for kindergarten in reading and algebraic thinking and on National Association for Education of Young Children (NAEYC) standards. At the end of the two weeks, 85 percent of the students mastered the standards, and three children were recommended for the district’s gifted program with Stanford Binet scores ranging from 132-148. These three children represented youngsters who would neither have been nominated nor identified as gifted from a low income minority group of youngsters.

The parents of the participating children were very supportive of the program, and both classes had perfect student attendance. One child finished the program and the following week had open heart surgery—surgery that his family had postponed so he could attend the program. He is doing fine and went on to participate in a gifted pull-out program with 1st grade students at his school. Success Express teachers have provided demonstrations of the curriculum and disseminated lessons to all pre-K teachers in Beaumont ISD. Their goals are to encourage more teachers to become “talent scouts” and “talent developers” of children and to capitalize on the butterfly effect.

The curriculum for Success Express can be accessed at the Lamar University website for gifted education: http://dept.lamar.edu/connchair. Once at the site, go to Projects and then Success Express. ♦
Reasoning, Resilience, & Responsibility

Jeanine C. Cogan
Rena F. Subotnik

In what ways can this model be used to empower teachers and students in positive ways?

The Other 3Rs (Reasoning, Resilience, and Responsibility) training allowed me to push my students more in my day-to-day teaching. I noticed I was becoming more resilient as an educator.

Other 3Rs 3rd Grade Teacher

Educators today want to enhance academic achievement without sacrificing other important values and skills. Every teacher knows that no matter how intelligent or academically accomplished a student is, he needs social and emotional skills to succeed optimally in school and in life. A child who earns stellar grades but cannot collaborate with peers may struggle in reaching her goals.

Background on Other 3Rs Project

The Other 3Rs Project (www.apa.org/ed/cpse/threershome.html) began with an investigation into the most important psychological components of academic success (Cogan, Sternberg, & Subotnik, 2006). The research pointed to reasoning, resilience, and responsibility. The objective of the project was to integrate these components into a useful problem solving model that could, with practice and guidance, be applied both inside and outside the classroom.

Reasoning incorporates critical thinking or good intellectual functioning and is one of the strongest predictors of academic success and resilience. Expression of developed skill in reasoning is embodied in logical and thoughtful approaches to problem solving. When students learn to solve problems successfully they experience positive outcomes including increased academic achievement (Sternberg, 1999).

Resilience is important for both success in life and student learning and is reflected in an individual’s ability to approach stumbling blocks as challenges to overcome, rather than obstacles that hinder progress. To be resilient is to keep going, persevere, and even capitalize on setbacks. Although some factors that support development of resilience, such as a positive family environment, are beyond a teacher’s reach, resilience is a teachable skill (Benard, 1995).

Responsibility is also associated with improved student outcomes (Eccles, 2006; Zimmerman, 2006). When individuals are responsible, they are accountable for the consequences of their actions and inactions, ideally seeking outcomes that reflect the common good (Sternberg, 1999).

Since reasoning, resilience, and responsibility are each related to student success, we designed the Other 3Rs Project to incorporate strategies for teaching the three in unison. Skills of reasoning offer students a toolbox of strategies to solve problems. Resilience helps students focus on overcoming learning obstacles rather than feeling despair over failure. Skills of responsibility help them take charge of their achievement through effort and self-regulation.

Assumptions and Definitions

Three fundamental assumptions are central to the Other 3Rs Project.

1. Reasoning, resilience, and responsibility can be learned.

2. Once learned and internalized, reasoning, resilience, and responsibility lead to improved problem solving skills in academic

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and social domains.

3. The Other 3Rs derive their greatest power when they interact in the course of problem solving.

To help students better understand the meaning of the terms, we present them in the following ways:

**Reasoning**
- What strategies would help me solve this problem?

**Resilience**
- Challenges are normal. We all have them.
- What can I learn from this stumbling block or set back?
- How can I approach this challenge in a different way?

**Responsibility**
- It’s up to me to create the results I want.
- How I act matters.
- I will listen and care about what you have to say.
- I care about what is good for all of us, not just for me.
- I will help if you want or need it.
- I’m glad I can ask you for help.

**Testing the Other 3Rs Project in a Real School Setting**

The goal of the Other 3Rs Project was to investigate whether promoting the interaction of reasoning, resilience, and responsibility in the form of a problem solving model would have a positive impact on both teachers and students. In 2003, the American Psychological Association (APA) was funded to design and pilot a professional development intervention that integrated reasoning, resilience, and responsibility into a standards-based 3rd grade public elementary school curriculum.

In order to have the most impact in terms of time and money, we focused on activities with teachers rather than on direct services to students. We designed two sets of monthly five-session professional development experiences for teachers. The first set of sessions was based on the Other 3Rs Project, and the second set, a comparison group, focused on memory skills. The mnemonics training was a rigorous and well researched instructional program developed at Yale University and was selected because it had been shown to be effective in increasing achievement of students at various grade levels.

Session 1 was an overview and introduction to the concepts and problem solving model. In sessions 2 through 5 teachers practiced applying the Other 3Rs Problem Solving Model to the curriculum within two subject/interpersonal areas each session, as follows:

- **Session 2**: Mathematics, Reading
- **Session 3**: Mathematics, Interpersonal
- **Session 4**: Mathematics, Science
- **Session 5**: Mathematics, Social Studies

Each session included the same components: 1) review and discussion, 2) introduction of new material, 3) hands on practice, 4) brainstorming applications to the existing curriculum.

The Other 3Rs professional development materials offered sample lessons that infused reasoning, resilience, and responsibility into existing curriculum standards. The centerpiece of this training was a new problem solving model that encouraged students to reason well, be resilient in the face of challenges, and take responsibility for their learning (See Figure 1). Although there are many available problem solving models, they are missing explicit references to resilience and responsibility that students must access, in order to persist with problem solving until a solution is found.

**Collaborative Design**

Too often professional development for teachers is designed and implemented from the top down rather than collaboratively. In order for us to generate an optimal professional development program, we invited many players to the table including:

- Researchers on reasoning, resilience, and responsibility—to provide scientific evidence for the project goals
- Professional development experts—to design a thoughtful set of sessions for participating teachers
- Curriculum developers from the school district—to create model lessons that employ district curriculum standards
- Teacher trainers—to facilitate the professional development sessions
- Program implementation experts—to help us find an ideal number of schools to represent the district
- Design and evaluation consultants—to assess the quality of the products and services we provide and the effectiveness of the intervention
- Elementary school teachers and principals—to advise us on how to negotiate the ins and outs of the district including permissions, etc.

Individuals from the Montgomery County Public Schools (MCPS) in Maryland, where the project was conducted, played a key role in every step of the process from designing the curriculum, to teaching it, to successfully implementing the project.

The Other 3Rs Project was tested in 17 MCPS elementary schools. Forty-three 3rd grade teachers from the 17 schools, balanced by school characteristics, were randomly assigned to receive either the Other 3Rs intervention or the comparison that focused on mnemonics. The average years of experience for participating teachers was 9.6 years.

**Project Outcomes for Teachers**

In comparison to teachers in the mnemonic sessions, teachers attending the Other 3Rs sessions perceived greater self-efficacy in their ability to influence children’s learning, even in the context of
decreasing student achievement and increasing student anxiety about testing. They also expressed greater confidence in their ability to help children use reasoning skills to solve problems, to become more resilient learners, and to be more socially responsible. Teachers in the Other 3Rs training held significantly stronger beliefs that resilience can be taught than teachers in the comparison group.

In addition to gathering survey data, we conducted focus groups with the teachers after the training sessions were completed. The following are some sample open-ended responses that elaborate on the main findings:

1. Teachers attending the Other 3Rs sessions perceived greater self-efficacy in their ability to influence children’s learning than teachers in the comparison group, particularly in empowering students to take charge of their own learning.

   I use the 3Rs Model to help empower the kids to become independent learners and problem solvers and to encourage them to be accountable and responsible for their own learning—to take ownership.

   If you need to find a new solution, go back through the problem-solving model and find the right place to begin again.

2. Teachers attending the Other 3Rs sessions expressed greater confidence in their ability to help children use reasoning skills to solve problems, to become more resilient learners, and to be more socially responsible.

   After the training, students do not give up as easily as they used to. If (the Other 3Rs Model) has also helped me as the educator to pinpoint specific vocabulary and slogans to push my children to become more independent learners. Students are more likely to read a question twice to reason through a problem without immediately raising their hands for my assistance.

3. Teachers attending the Other 3Rs sessions demonstrated a stronger belief that resilience can be taught.

   I had a student who was really struggling with an assignment so he put his head down and gave up. I brought him to the Other 3Rs bulletin board we made as a class and showed him what he had put up about resilience. He then smiled and set a goal of

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**Figure 1. The Other 3Rs Problem Solving Model**
what he wanted to complete.

Additional lessons emerged from the focus groups with teachers attending the Other 3Rs sessions:

1. The sessions provided teachers with a way to “teach” behavior skills.
   I enjoyed being able to ‘teach’ behavior skills. I like to have the common vocabulary to communicate expectations and give feedback to my students. It is easy now to say, ‘Don’t give up; be resilient’ and not have to explain what that means. Or I might say, ‘Are you being a responsible 3rd grader?’ if I want the student to change a particular behavior. It aids self reflection of the learner.

2. The Other 3Rs had a positive impact on classroom climate.
   The Other 3Rs allowed/encouraged a platform where the students were made aware of personal and social behaviors that positively and negatively affected the culture of the class. They were offered a language to communicate about skills essential to the success of the individual as well as the whole. The problem solving process will carry them across curriculum and real life. Hearing my kids say, ‘Come on, you can do it!’ or ‘Resilience leads to success!’ is rewarding. My students have developed a wonderful sense of being a ‘3rd grade family.’ It’s hard to say what is truly behind the camaraderie, but I feel the 3Rs definitely helped. The impact in my classroom is more clearly seen in social responsibility—students started looking out for each other.

3. Some students were using the Other 3Rs Problem Solving Model not only in their learning but in their interactions with each other.
   Three girls who have been unable to get along all year have finally become friends. They used the Other 3Rs Model to work out their differences and are working towards a continued friendship.

Clearly, the Other 3Rs Project had a positive impact on participating teachers by way of their increased ability to influence students’ learning. When teachers feel efficacious they spend more time on their instruction, display persistence in the face of failure, and tend to be more committed to their profession (Coladarci, 1992). It is not surprising that teacher self-efficacy is also associated with student achievement and motivation.

Implications for Talent Development

Participating teachers in the Other 3Rs Project commented that the model was as useful for high achieving students as it was for on-grade level and low achieving students. As one teacher summarized, “Some of these kids have one way of trying to solve a problem, such as math, and they have a hard time conceiving of other approaches.” This teacher found it helpful for high achieving students to brainstorm a list of strategies for solving a problem, as it “opened their eyes to more possibilities.”

Although many gifted students are outstanding achievers in school, we cannot claim that they are better prepared than their classmates to deal with unexpected obstacles or social dilemmas. The discrepancy between academic and social/emotional coping abilities is especially obvious during transitions between stages of school and when gifted students are brought together for special services. When challenge increases, students may lean on their previously effortless recall or reasoning strategies. When these reliable resources fail, or the source of the problem is less predictable, new strategies and persistence are needed.

Athletes and musicians are assisted in their development with psychological strength building (Subotnik & Jarvin, 2005). Our academically able students need similar support. According to Gagne (2005) and Tannenbaum (1986), the development of giftedness involves a concerted effort on the part of the talented individual, interacting with supportive adults and peers, to enjoy his strengths in creative and productive ways. The Other 3Rs is a mechanism for teaching problem solving that can resonate for all children. Perhaps, in a more targeted way, the Other 3Rs can help gifted children become like their teachers, more self-efficacious.

References


How can the natural curiosity of children be used to teach science?

The important thing is not to stop questioning. Curiosity has its own reason for existing. One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality. It is enough if one tries merely to comprehend a little of this mystery every day. Never lose a holy curiosity.

Albert Einstein

Small children are enmeshed in a world full of bugs, flowers, strange-looking-green-gunk on top of the pond, and those shiny metallic trails that crisscross the sidewalk. Perhaps because they are so much closer to it, or perhaps because they are not yet too busy to pause, children focus on the rich details of the natural world around them. They are naturally observant—the first essential trait of good scientists. A second essential trait of a scientific mind is the inclination to ask questions. If there is a slime trail on the sidewalk, a child must follow it to find out where it goes, what made it, and why (which can be frustrating when one is trying to get somewhere in a timely manner). If the trail simply stops, young children don’t lose interest; they switch their energies to experimentation. This third essential trait of scientific thinking can keep a little person busy for hours asking: What will stick in the slime? Is it sticky or slippery? What will an ant do if the slime blocks its path? If school were more like this, and less like school, more students would be motivated to learn science.

If the science skills of observation, curiosity, and experimentation come naturally to small children, what makes the gifted learner different? Curriculum for gifted students should consider the following questions:

• Should all kids do it?
• Could all kids do it?
• Would all kids want to?

When applied to the unit Hard Science, the answer to all three of these questions is “NO!” This unit is not designed to be a robust and rich unit for all learners; rather, it is for those who

• notice and articulate questions about exceptions to rules;
• require explanations that are accurate and factual;
• enjoy accurate working definitions for important scientific concepts;
• understand complexity.

Hard Science is designed to teach 1st grade gifted students accurate and high level science concepts. It is based upon their experience of the world and attempts to build a foundation for continued love and enjoyment of science. Hard Science provides field experiences and opportunities for hands-on discovery working beside experts in the field whenever possible. The unit begins with the difference between living and non-living things and then introduces the science...
Scientific classification system of dividing all living things into six kingdoms based upon their characteristic properties. Students also learn that concepts in science may change as we understand and learn more about our world. Children are fascinated to know that, until a few years ago, there were only five kingdoms, and many books and websites still identify only five kingdoms. The level of information provided to students in *Hard Science* is not distilled or "dumbed-down." An example is that plants are frequently defined to elementary students as living organisms characterized by roots, stems, and leaves. A better scientific definition of a plant is that of a living organism with a cellulose structure and the ability to convert solar energy into food using chlorophyll and water in a process called photosynthesis, which results in the production of sugars. So often we tell students half truths or completely inaccurate information because we believe it is easier for them to understand. Young people can learn the accurate and authentic process of classification that scientists use to sort and categorize living things. *Hard Science* gives accurate information that may be difficult initially, but when given time to explore, question, and apply concepts, students can understand and extend their learning into areas of interest.

Not only can gifted 1st graders learn complex definitions, they immediately start applying these understandings to the world around them. Plants are green; therefore, mushrooms must not be plants. How can trees be plants in the winter when they aren’t green? Why does the plant make sugar? Is that where sugar comes from? The students drive the learning in *Hard Science* and many of these questions lead into the 2nd grade unit—*Moving & Morphing: Animal and Plant Adaptations*. For example, students learn that plants convert the sun’s energy into food. Until last year plants were considered the only producers, but last year scientists found benthic organisms that use chemosynthesis to convert chemicals to food.

The secret of the success of *Hard Science* is that we treat children as scientists and respect their intellect. Teachers give students accurate and complete definitions of the world around them and then provide opportunities to work with, apply, and extend their understanding. A walk around the neighborhood or school yard can peak this natural curiosity of children and encourage them to learn difficult scientific concepts, take notes, and conduct amazing research.

By introducing scientists from the community to students, *Hard Science* shows gifted children that many people turn initial interests into careers. Scientists often lead field experiences in nearby nature parks and nature preserves. Sharing the work of scientists is inspiring to the children, and the experts are impressed with the youngsters’ sincerity to learn.

According to one authority, “Children enter school as question marks and leave as periods.” This quote may have been penned as an indictment of public education, but it is really a statement of promise; curiosity and interest of young children is something we should work to preserve and nurture.
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Personality Preferences in Students Identified as Gifted

Carol Bjercke

School achievement and even intelligence have been linked to personality styles (Sak, 2004). Extroversion (the desire to be surrounded by people) and introversion (the desire to be alone in a quiet area) are two of these styles. More students and teachers tend to be extroverted, so this style is more prominent in schools. Extroverts and introverts have almost dichotomous preferences for learning and assessment styles.

For gifted students, where reported rates of introversion are higher than normal, this issue becomes especially important (Sak, 2004; Burruss & Kaenzig, 1999). Allowing introverted students to choose activities that match their personality preferences can encourage them to take more risks and increase their motivation to do well in school.

Extroversion and introversion were first identified and described by Jung (1953). He believed that one could understand the seemingly random behaviors of individuals based on their personality types. Jung used the terms extroversion and introversion to define the different ways people view and interact with the world. Extroverts deal with life through a screen of facts and tend to be objective. Introverts are usually subjective, viewing the world through personal, internal reflections on people and objects and how they relate to themselves. These basic differences affect a host of behavior preferences, such as whether one would rather work with a small group of friends or a large group of classmates (Sword, 2002).

Differences in Personality Traits
The different characteristics in introverts and extroverts are usually noticeable but often subtle (See Figure 1.). Usually, people have traits of both personality types, but one type is predominant. Using a particular personality type can be situational, too. In unique or stressful situations, a child’s introverted tendencies may be more prominent. It becomes important for students, particularly introverts, to learn behaviors that allow them to access their extroverted tendencies, enabling them to feel comfortable participating, not just observing. Sword (2002) cautions that when introverts are the minority in the classroom, their ideas can be stifled by the demands of too much togetherness. Introverts in such a situation will draw away from other students instead of participating in class activities. When this happens, there is the chance that introverts’ achievements may also be decreased because of their discomfort with being part of the group.

Classroom Differentiation
Variations in learning preferences between extroverts and introverts can be addressed through differentiation if teachers are aware that the personality types exist. Extroverts are not afraid of being in front of a group and often like to present or perform for their class. They
enjoy being able to discuss issues with their teachers and classmates. Hands-on activities, which require movement and interaction, are pleasant for extroverts. Introverts, however, tend to be uncomfortable performing or presenting in front of large groups. They prefer to watch and rehearse activities in their heads before attempting them with an audience, however small that audience may be. Introverts also like to work alone, quietly at their desks. They need time to reflect on what they are learning in order to internalize the information (Burruss & Kaenzig, 1999).

If teachers and parents try to make the introvert into an extrovert, the child may learn not to trust those adults and actually withdraw more into himself.

Classroom modifications for introverts include allowing more time for students to think before being required to answer questions and giving advance warning before calling on students in class. Using activities that are quickly paced and do not last long can sometimes overwhelm introverts. These children should be allowed to work at one activity for extended periods of time since they tend to concentrate well and get more accomplished this way. Use of lecture and expository methods of instruction as opposed to discussion and discovery styles are preferred by extroverts.

Gifted learners differ from one another in their preferred methods of learning. Teachers should be open to using various methods and styles. The best teachers may be those who are able to modify the methods of teaching and learning to include all personality types and academic abilities.

Coping Strategies
Students, regardless of personality types, frequently do not feel like they fit in with their age peers. This can lead gifted students to behaviors which are counterproductive to learning, such as denying their giftedness, focusing on others to deflect attention, avoiding academic programs for gifted students, isolating themselves, and purposely doing poorly in school to hide their talents. Extroverts cope by trying to fit in and are fairly good at it because they tend to make friends easily. When the gifted student is introverted, making

<table>
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<th>Figure 1. Basic Differences between Introverts and Extroverts</th>
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<td><strong>Introverts</strong></td>
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<tr>
<td>• Prefer to think before speaking; think internally</td>
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<td>• Get energy from being alone; feel drained by other people</td>
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<td>• Fear humiliation; prefer to practice in private before performing in front of others</td>
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<tr>
<td>• Like to work individually or in small groups</td>
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<tr>
<td>• Need time to process information before responding to questions</td>
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<td>• See the world as an internal reflection of thoughts and ideas</td>
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<td>• Like privacy and only show private self to a few close friends and family</td>
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<td>• Capable of intense concentration</td>
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<td>• Observe the world first in order to learn; have to understand life before living it</td>
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<td><strong>Extroverts</strong></td>
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<td>• Prefer to think while speaking; think out loud</td>
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<tr>
<td>• Get energy from being with other people; feel drained by being alone</td>
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<tr>
<td>• Willing to try new things in front of others</td>
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<tr>
<td>• Like to work with others, even in large groups</td>
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<td>• Respond to questions quickly; enjoy fast-paced activities</td>
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<tr>
<td>• See the world as an external representation of physical and tangible objects</td>
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<tr>
<td>• Do not mind sharing personal thoughts with others in both public and private situations</td>
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<td>• Usually become distracted easily</td>
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<tr>
<td>• Learn by acting and interacting with world; understand life by living it</td>
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friends and participating in class can be difficult. A coping method for introverts is to get others to accept their introversion. If teachers and parents try to make the introvert into an extrovert, the child may learn not to trust those adults and actually withdraw more into himself.

Teaching the introverted student coping strategies can help her advocate for herself as well as learn to deal with difficult situations when they arise. These strategies can be as simple as asking for an alternate way to present a project or requesting to work alone instead of with other students. It is, however, important that children who tend toward introversion also learn how to interact with their peers in class and be active members of the classroom (Gross, 1994). They should not be allowed to choose to work alone all the time or to always avoid presenting in front of the class. These interactive skills should be developed gradually, over time, not forced upon students before they are ready. Teachers and parents should help introverts to be more comfortable with the extroverted world and to learn to get along in it, instead of allowing them to shut down out of fear or discomfort. Introverts need to know how to find their place in an extroverted world, especially as they mature and plan careers.

When introverts feel that they are in a safe environment, they will be more willing to take risks and more likely to grow intellectually. Forcing students into situations where they are uncomfortable does not help. What does help is guiding them so that they become comfortable in previously uncomfortable situations.

References


It’s important that your young person use the summer break to relax and have a good time. It’s equally important to expose him to areas that are not “school-related” topics—perhaps an enriching experience he might not have time for during the school year. Programs run the gamut, from water sports to international travel to college courses designed for bright high school students. When I was a teen I camped across the United States with a group of 21 teenagers and four chaperones, experiencing everything from mountain climbing...
school to canoeing to horseback travel to participating as a crew member on a schooner that sailed from Washington to Victoria, British Columbia. The trip made a huge difference in my self-confidence. I learned that I could do many things that previously seemed impossible, and I learned what it takes to be a fully participating member of a group. I suspect that the trip influenced me in many other ways, including my passion for travel as an adult. There is so much to be gained from summer programs.

Explore New Interests
Summer programs have proliferated during the past decade. While campus-based academic courses are no longer limited to the four talent search programs—Johns Hopkins Center for Talented Youth (CTY), Duke University’s Talent Identification Program (TIP), University of Denver’s Rocky Mountain Talent Search (RMTS), and Northwestern University’s Center for Talent Development (CTD)—many campus-based programs still require that students establish eligibility through talent search testing. Students who reach a criterion score become eligible for a host of other programs as well.

Talent Search Websites
CTY Talent Search
Grades 2-8
www.jhu.edu/cty/ts/

TIP Talent Search
Grades 4-7
www.tip.duke.edu/talent_searches/

CTD Talent Search
PreK-Grade 8+
www.ctd.northwestern.edu/

RMTS Talent Search
Grades 6-10
www.du.edu/education/ces/si/sicourses.html

Acquire a Broader Perspective
Many children excel in school and do not meet age-mate intellectual peers until college. At that point it can be quite a shock. If your child engages in a summer activity where she can meet others with similar interests who are equally bright, her perspective of people will broaden. This is especially important for the student who has no intellectual age-mates. When we get to know other people, we learn something about ourselves and our ability to communicate.

Reduce Isolation
If your child is not enrolled in a gifted program, and if there are no others who share his interests and talents, he may be quite lonely. Meeting others who are similar can be both validating and liberating. Program participants often form life-long friendships based on common interests with youngsters from other parts of the country. If you homeschool, the benefits multiply. Children who are schooled at home may be intellectually self-confident but may have doubts when placed in a large group, even if the group members are intellectual peers. Early exposure can lessen some of these doubts and provide continuing friendships based on interests.

Practice Teamwork
Research indicates that many gifted youngsters do not like teamwork because the brighter kids often wind up doing most of the work. Teamwork is an essential element in every type of summer program, from scientific inquiry to theater arts. Summer activities, because of their structure, lend themselves to group work based on interests, so some of the grading pressure and competition is off. Learning to communicate and contribute in a new group is a skill that your child may not develop in school, but these skills are highly valued once your child leaves formal schooling.

Experience Excitement of Learning
Kids often say, “I learned more in a month in this program than in a year in school.” Summer programs have the luxury of an ideal educational environment but are free from many of the limitations faced by school programs in traditional settings. The participants are self-selected. When a child chooses a program herself, she has a sense of commitment that leads to engagement.

Some summer programs have more resources than traditional schools. Mentors may be available who develop relationships with students. Programs that do not issue formal grades encourage students to take intellectual risks and pursue new
Gain Personal Satisfaction
Many older students find ways to volunteer or help others during summer. Teenagers in volunteer or service learning programs benefit when they realize they are useful and can make a difference in the lives of other people.

The first place to look for summer programs is in your own community or school district. My school district offers all types of enrichment during the summer—everything from sports to languages to special science and math enrichment. Most parents are concerned about costs, and school-sponsored programs are often the most cost-effective. However, most districts won’t transport children to and from enrichment programs. So if transportation is a factor, there are other options. One group of parents used a reliable commercial taxi service to transport a group of four children to and from a program. The cost was split four ways by the families, and the end result was a bargain when compared with individual family transportation and time off from work.

The Internet offers many timesaving lists of camps and programs. Before you start searching, go to the website of your state gifted advocacy group. Many of these associations provide directories or lists of programs. While groups may not endorse the programs, you could contact them and ask if anyone has had direct experience with a program that interests you. If you are looking for programs for young people in middle school or high school, your next stop should be colleges in your state. Use the university’s search engine to look for summer programs on campus. Major search engines like Google and Yahoo also have directories of summer programs.

Other resources for summer programs include
- Allen’s Guide to Summer Camps and Travel Programs
  www.allensguide.com/
- Imagine, a magazine sponsored by CTY
  www.cty.jhu.edu/imagine/linkA.htm
- KidsCamps.com
  www.kidscamps.com/
- NAGC
  www.nagc.org/index.aspx?id=1103
- Peterson’s
  www.petersons.com/highschool/landing.asp?id=872&path=hs.fas.summer

Accelerate in a Specific Academic Area
Students who plan to earn school credit must choose an accredited program and then arrange with the base school to accept these credits. Don’t be surprised if your school won’t give credit for summer courses taken outside the school district. Districts are guided by state plans and syllabuses and may not see the similarity between a humanities course taken at a university and the course for which their home school provides credit. You may need to find the similarities between the two courses and bring them to the attention of the district. Even so, your school may accept only mathematics, probably because the outside math course with the same name as your school math course is likely to be somewhat similar. So do some careful research, and then decide if credit is just as important as exposure to the course content. The same is true of students who take courses to place out of college courses. Do the research, and ask for written confirmation when someone says credit or placement is automatic.

Test Skills in a Supportive Environment
Gifted students often give the appearance of supreme confidence, so it’s little wonder that parents might not notice when children have difficulty learning new skills. Summer enrichment activities are the ideal place for students to test their skills in a supportive environment with the help and support of an adult who is trained to work with gifted kids and provide the right type of encouragement. Most gifted young people dislike the “cheerleader” attitude they get from adults, the “You can do it because you’re gifted!” mantra. When an adult expects a gifted student to be able to learn new skills quickly, both the adult and the child lose.

Surfing continued

interests. Gifted students who are perfectionists may get the individualized help and support that enable them to break free of perfectionism. When a youngster experiences a taste of success, and feels less anxious with a new activity or interest, she feels more confident when approaching other new areas. This leads to exploring even more new interests.

Understanding Our Gifted, Fall 2006
Sandra Berger is an educational consultant in Virginia. She is the author of *College Planning for Gifted Students*.

**The Affective Side**

*Using the Internet as a Counseling Tool for Gifted Students*

**Jean Strop**

G/T Kid: Hi, Dr. S. Got a minute?
Dr. S: Sure, what’s up?
G/T Kid: I’m on the wait list for Stanford, and I just got a scholarship from National Merit. Should I write to them and let them know?
Dr. S: It’s a good thing to write a letter to let the admissions people know that you are still interested in being considered an active applicant, as well as keeping them apprised of any other helpful information you’d like them to add to your application folder.
G/T Kid: I thought so. Thanks. TTYL.

This is a typical interchange on evenings when I sign on to Instant Messenger (IM). Many students spend hours online, surfing the net, chatting with friends, building personal websites, and downloading music. Since the Internet has become a vital part of the lives of most adolescents, it seems only right that support services for students should be offered online. Currently there are innumerable online academic courses, lists of Internet sites on topics of interest, self-assessment tools, lists of resources for teaching and counseling the gifted, and even some tutoring/academic sites and chat rooms appropriate for gifted students. However, there are few, if any, opportunities for gifted students to receive individual academic, personal, or postgraduate counseling online. I have found the Internet to be a great “after hours” counseling vehicle over the last six years, and it’s virtually an untapped tool for providing counseling services. The students most likely to benefit are those who feel comfortable with computers and enjoy talking with others on the Internet, those who are extremely busy (scheduled during the school day with classes and before/after school with extracurricular commitments), those with very taxing academic schedules (with little free time), and shy students who feel more comfortable talking online rather than seeking counseling advice face-to-face. Of course, the counselor needs a working knowledge of “who the student is,” based on face-to-face interactions before providing meaningful and personalized online counseling services.

**Academic Counseling**

The Internet is a most efficient way to field quick questions and to give general academic advice. When a counselor is available online, it is not unusual for students to send a quick IM or email to ask about the advantages of taking one course over another. At my school students self-schedule, so they often pose questions such as, “Is it better to take this class with teacher A, or the other class to have the opportunity to work with teacher B?” This type of question leads to discussions about teacher match, learning styles, the need to work with a variety of teacher styles to learn style flex, the need for challenge, etc. The Internet provides a perfect opportunity to review school procedures about issues such as changing schedules, applying for independent study, graduating early, or enrolling in college courses. Often students resist scheduling an appointment to see a counselor about these simpler questions, but they are likely to make an online query before making final decisions. Suggestions about course choices, information about course differences, and advice about course loads are easily given online, keeping counselor appointment times during the school day.
Affective Side  continued

open for crisis and intense counseling topics.

Personal Counseling
The Internet is also a good vehicle for providing personal counseling when a student needs to talk NOW. Access to a counselor online provides the opportunity for a student in distress to discuss immediately a short-term strategy for handling a situation. It also provides the consolation of knowing that a counselor will make a space to talk the next day, and just knowing this can ease the immediate feelings of distress. In duty-to-warn situations (where a student plans to harm self or another), necessary parent/guardian contacts can be made immediately, rather than having students wait until the next day to talk with an adult.

It is not unusual for students concerned about others to email copies of messages or IM conversations for suggestions or to have a trained adult take the necessary action immediately. Having a copy of the conversations eliminates the situation where the student of concern says, “I didn’t say that; they must have misunderstood.”

Another advantage of students knowing how to contact a counselor online is that relationships are maintained even when a student moves on to another school or to college. Students who have gone to college frequently communicate with good news about scholarships, awards, and special experiences. Some will just chat to connect with an adult friend; some will talk their way through the typical feelings of homesickness when first adjusting to college; and some will ask for recommendations when applying for internships, special programs, or transferring to different schools/programs. This type of conversation also provides good informal feedback and follow-up on the effectiveness of the high school experience.

Postgraduate Counseling
Many high schools use the Internet to access databases of test scores and grade point averages of students who are accepted at given colleges. Online lists of college and postgraduate resources are available, along with online test preparation programs and programs that assist counselors during individual student conferences.

Postgraduate counseling is easily provided over the Internet. Students share their interests and parameters for college choices and can be assisted in developing lists of possibilities. Students who email resumes, college essays, and letters of appeal to counselors and teachers receive timely feedback about necessary revisions.

Vehicles to Consider
Though there are many ways to use the Internet as a direct counseling tool, some counselors don’t feel comfortable with the process. Concerns arise about the logistics of providing such services in a safe and professional manner, as well as keeping boundaries around the contracted school day. However, serious consideration of the following options could assuage most of these concerns:
1. Assign one or two counselors who are comfortable interacting with students and parents online with flex hours, so the online hours they spend are considered part of their usual daily schedule. Utilize the guidelines the district uses for other online academic courses to determine how to deal with concerns: handling confidentiality issues, dealing with duty-to-warn situations, case-load management, monitoring student progress, initiating face-to-face contacts with students and parents, etc.
2. Provide an online college counseling class for credit. Students enroll in the class and have an opportunity to spend some “in class” time with the counselor (before the online portion of the class begins) for the following purposes:
   a. get to know each other
   b. discuss procedures and policies
   c. develop personal goals for the class.
   The rest of the class time is spent primarily online, unless a crisis arises.
3. Schedule chat room discussions of postgraduate and interpersonal issues. Instruct all gifted students about the timing and procedures for using prearranged chat rooms. Post the topics, times, and procedures on the school website, and give students a hard copy.
4. Allow students to make appointments for individualized online counseling via an online schedule posted on the counselor’s website; have an open access time when counselors on duty receive
IMs from students who are online.
5. Offer opportunities for students to have online video conferences with counselors. Workshop information can be provided via online video conferences, as well. Some possible topics are
   a. winning merit scholarships
   b. creating yearly postgraduate “To Do” lists
   c. making a list of strategies for building self-esteem, managing stress, perfectionism, etc.
6. Post the hours when a counselor will be available online, so students know the guidelines about when and how to access this resource.

It makes good sense to use the Internet as a secondary means for providing direct counseling services. We all know that problems, issues, and questions arise not only during the scheduled school day, but after school hours as well. Counselors can use the Internet as one more way to educate and to develop the whole child. In many cases, using the typical mode of adolescent communication—computer technology—is the best way to accomplish this.

Jean Strop, a 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

William Shakespeare
Jerry Flack

Prologue: Why Shakespeare?
William Shakespeare is arguably the greatest writer ever known. He elevated the English language and gave to the world sonnets and other poems of striking beauty. Shakespeare’s greatest fame is tied to the nearly 40 dramas he created in a period of 25 years. They are performed every day all over the world. Shakespeare overshadows kings and queens, dictators and villains, generals and presidents. He is quite likely the most famous secular individual who ever lived. As his friend and fellow dramatist Ben Jonson wrote, “He was not of an age, but for all time.” Any gifted youth who grows up without a thorough knowledge of Shakespeare does indeed have an “incomplete education.”

Act I: The Man and His World
Peter Chrisp’s Eyewitness Shakespeare (DK Publishing, 2004) features both sound scholarship and stimulating writing that is organized chronologically. Thirty-two double-page spreads feature topics as diverse as a typical schoolboy’s life in 16th century England; Shakespeare’s marriage, fatherhood, travels to London, life as both an actor and playwright; Elizabethan clothing, music, dance; and the dreaded plagues.

Today’s youth will find great sport in discovering how innovative stage managers made theatrical beheadings appear convincing and enthralling. Eyewitness Shakespeare is a fine research tool. The volume is also a visual feast. The stage weapons used by actors portraying Hamlet and other heroes and villains in Shakespeare’s tragedies are excellently displayed in full color.

Michael Rosen’s William Shakespeare: His Work & His World (Candlewick Press, 2001) offers a particularly vivid narrative. Readers are immediately plunged into high adventure. Rosen begins his
biography in the middle of the night during the Christmas season of 1598 in London where actors are secretly dismantling the Curtain (a theatre where many of Shakespeare’s great dramas debuted), board by board, timber by timber. They are moving the theatre across the London Bridge where it will be rebuilt and become known as Shakespeare’s famed Globe Theatre. Rosen’s narrative pulsates with hints of a heady mixture of danger, excitement, and intensity.

Rosen’s text exhibits his unabashed love for Shakespeare’s dramas. He chooses four representative plays and one scene from a fifth play to demonstrate the elements of all the great works of the Bard of Avon. He also provides a complete and instructive timeline (1557-1623).

The perilous times in which Shakespeare lived are also revealed in Michael Wood’s four-part public television series on DVD, *In Search of Shakespeare* (BBC, 2004). Wood faced a shared problem among Shakespeare’s biographers. The Bard left little historical data behind, and the publication of what is believed to be the complete collection of his dramas was not even printed during his lifetime. Wood’s search for the true facts of Shakespeare’s life causes his biography to read much like a thrilling mystery novel. The DVD is filled with maps, photographs of English scenery, a biography of Shakespeare’s life, and a thorough history of the very dangerous yet grand times in which he lived.

**Act II: Shakespeare and the English Language**

English serves the world today as the foremost language of commerce, diplomacy, and literature. But, it has not always been so. Prior to Shakespeare, French and Latin were primarily spoken and written by European scholars, the clergy, and cultured persons—even in England. English as a vernacular language was a poor country cousin to the Latin of the powerful Catholic Church and the French of the Norman conquerors of England in 1066.

Shakespeare changed all that with his newly coined words and phrases. The schoolboy from Stratford introduced the world to a rich vocabulary that includes the following words people today take for granted:

- assassination
- auspicious
- bedroom
- cold-hearted
- dauntless
- full-grown
- ill-tempered
- love letter
- malignancy
- pious
- remorseless
- sanctimonious
- tranquil
- unquestionable
- worn out
- zany

Shakespeare is also recognized as a great poet. Three fine introductions to his poetry are Gina Pollinger’s *Shakespeare’s Verse* (Kingfisher, 2005); *William Shakespeare: To Sleep, Perchance to Dream: A Child’s Book of Rhymes* (Scholastic, 2001), complete with handsome illustrations by James Mayhew; and *Poetry for Young People: William Shakespeare* (Sterling, 2000), edited by David Scott Kastan and Marina Kastan.

**Act III: The Collected Stories**

Shakespeare may be introduced to readers in varied ways, including storytelling. Several noteworthy anthologies are available.

Marcia Williams’s *Tales from Shakespeare* (Candlewick, 2004) and its sequel, *More Tales from Shakespeare* (2005) are intended for young audiences, but her robust cartoon style, sense of humor, and eye for meticulous detail are bound to win over audiences of all ages.

Older audiences will find the great dramas of Shakespeare in prose collections such as Tina Packer’s *Tales from Shakespeare* (Scholastic, 2004). Packer has turned 10 of the playwright’s dramas, including *Othello, The Tempest,* and *Macbeth,* into finely crafted short stories.

Anna Claybourne provides fine prose accounts of Shakespeare’s greatest dramas in *Usborne Stories from Shakespeare* (2005), including *The Taming of*
Book Bag  continued

the Shrew, The Merchant of Venice, and Twelfth Night.

Storyteller master Patrick Ryan’s Shakespeare’s Storybook: Folktales That Inspired the Bard (Barefoot Books, 2001) is a collection of stories from which Shakespeare almost certainly borrowed. He examines seven of Shakespeare’s most famous dramas, sleuthing to locate the origins of the grand stories that lay behind them. Once the roots of the Shakespearean dramas are established, Ryan proceeds to tell the stories, comparing the originals with Shakespeare’s interpretations. The most captivating connection may well be the ancient Cinderella tale “Cap-O-Rushes” as the source for King Lear.

Act IV: Individual Tales
Lois Burdett has been teaching Shakespeare to 2nd and 3rd grade students at the appropriately named Hamlet Elementary School in Stratford, Ontario, for 20 years. Burdett recognizes that even children of 7 and 8 love exciting stories and that Shakespeare was one of the greatest storytellers ever. She also acknowledges that Shakespeare’s dramas are poetic and intended to be performed, not read. Indeed, the vast majority of Shakespeare’s audiences were illiterate!

Burdett’s solution has been to rewrite the texts of the dramas in rhyming couplets, thus retaining the musical quality of Shakespeare’s beautiful language at a level even the very young can understand. For example, she introduces Much Ado about Nothing to young audiences thusly.

I have a story, with an all-star cast,
Set in Sicily, in times long past.
Beatrice and Benedick, the heroes of my play,
Battle with words and wit every day.

Better still, Burdett couplets serve as the script for youthful performances of Shakespeare’s plays. Every volume in her series Shakespeare Can Be Fun! (Firefly Books) is enhanced with colorful illustrations and running commentaries by Burdett’s 2nd and 3rd grade students. Exceptional titles from the series include Macbeth for Kids (1997), A Midsummer Night’s Dream for Kids (2000), and Much Ado about Nothing for Kids (2002).

Bruce Coville has created a series of volumes that introduces students to the same stories. He acknowledges that the barrier to youthful comprehension of Shakespeare is language and not ideas. Coville makes Shakespeare’s great themes, such as intrigue, betrayal, lies, indecision, madness, and murder, accessible to youth. His Shakespeare volumes (Dial Books) include A Midsummer Night’s Dream (1996), Macbeth (1997), Romeo and Juliet (1999), Twelfth Night (2003), and Hamlet (2004).

A worthy rival to Coville’s retellings of Shakespeare is found in the Young Reader’s Shakespeare series that skillfully blends the language of the Bard with contemporary English. It provides valuable background information about such plays as Macbeth (Sterling, 2004) and Othello (2005), both retold by Adam McKeon. All of the entries in the series are handsomely illustrated.

His works may be considered a map of life.

Samuel Johnson

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.
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