reflective conversation with Dorothy Sisk

Dr Dorothy Sisk is currently an endowed professor in Education at Lamar University in Beaumont, Texas where she holds the Conn Chair, directs the Gifted Children Center, the Center for Creativity, Innovation and Leadership, and co-ordinates teacher training in gifted Education.

Dr Sisk served as Director of the U.S. Office of Gifted and Talented, playing an instrumental role in increasing the cadre of professionally trained consultants for the gifted, thereby expanding opportunities for gifted students. She served as President, Vice-President and Executive Administrator of the World Council for Gifted and Talented Children (WCGTC), and President of The Association for Gifted (TAG) and the American Creativity Association (ACA). She has also served as editor of the Gifted International journal. Dr Sisk is the author of Creative Teaching of Gifted Students.

She is co-author, with Doris Shallcross, of The Growing Person; Leadership: Making Things Happen and Intuition: An Inner Way of Knowing and co-author, with Paul Torrance, of Gifted and Talented Children in the Regular Classroom and Spiritual Intelligence: Developing Higher Consciousness; she has authored and co-authored numerous articles and papers.

1. What is the current "state of the art" of gifted education as you see it?

Paul Torrance predicts that the future of the field of gifted education is positive because it has attracted some of the most creative, intelligent, courageous, daring and hard-working people, and I certainly agree with that statement. My professional life has been enriched by involvement with such colleagues in the World Council for Gifted and Talented, the National Association for Gifted, The Association for Gifted and many state associations. As a field, we know how to identify gifted and talented students, how to meet their needs in educational programs, and how to assess those programs. What we don’t know, is how to advocate the need for gifted programs and capture the attention of legislators who control the funds. Sadly 9/11 offers several clues, we now know that we need gifted and talented individuals to help create a world that will be free and safe for everyone. We need the leadership and

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‘humanitas’ of the gifted if we are going to survive.

A mother of a gifted student said she was concerned about the pressure her daughter would experience in being held to this high standard. On reflection, I cannot recall a single gifted child or youth who didn’t want to make a difference. Gifted students have a deep sense of service and caring that I refer to as their ‘humanitas.’ They respond to causes with sensitivity and eagerness, building homes with Habitat for America, visiting elder hostels to read to residents, making and distributing sandwiches for the homeless, and volunteering at Head Start programs. President Bush is urging Americans to volunteer an equivalent amount of hours up to 2 years to make a difference. As active volunteers, what phenomenal role models we can be. The state of Florida recently added a service component to the gifted program criteria for excellence to assist gifted and talented students in developing their strengths, and to position them to make the contributions they are capable of making.

To build advocacy we need to "spotlight" gifted children and adults who are making a difference, and to sensitize state and federal legislators and the general public to the price that is paid for the loss of talent from gifted children and adults, with no opportunity to develop their talents.

Ann Corn of Peabody College proposed that gifted educators borrow an idea used by educators of visually disabled children in which educators from all states would be invited in a national effort similar to the early N/S/L/T/I meetings, to identify goals with the highest impact on building a case for adequate funding for gifted programs. From this meeting of leaders a "national snapshot" of education for gifted and talented students could be prepared to use as data to build advocacy. This effort could be funded through private organizations, nonprofit organizations, or through individual gifted and talented educators coming on their own, or securing private funding.

2. What are the current trends in teacher education and are they meeting the needs of gifted students?

Several current trends in education in the United States are reflected in teacher education including standards-based education, differentiated education, inclusion, and cooperative education. Standards-based education and mandated state competencies that teachers must demonstrate on exit tests at the conclusion of their teacher training are impacting teacher education, since teacher training is accountable for teacher success on exit tests. The K-12 standards are minimum standards, and there is no assurance that gifted students in classes where teachers engage all students in "building competence in the standards" are challenged, or learning to their capacity. To address this problem, some states have developed exemplary learning expectations to monitor the progress of gifted students. In states requiring an endorsement or certification for teachers of the gifted, teacher competencies include psychology of the gifted, teaching strategies for the gifted, guidance and counseling needs of gifted, creativity and its development, identification and assessment of gifted, and the planning, development and implementation of educational programs for gifted.

Many local school districts actively implement differentiated education as a strategy to meet the needs of all students, including gifted students. In these districts,
the educational needs of gifted students are being met by teachers with little or no formal course work in gifted education, since many districts rely on in-service training. Pre-service teachers may receive one course in exceptional children's education with one lecture on gifted education, as most courses in gifted education are offered at the graduate level.

**Inclusion** of all ability levels in the classroom with regular classroom teachers receiving extra help and resources represents an attempt to meet the needs of all children, including at-risk children with exceptional learning needs. In this learning situation, gifted students are probably the most at-risk of receiving appropriate education to meet their needs. In many regular classes, gifted students have mastered a great deal of the regular classroom work and considerable time is spent reviewing the material they have mastered.

**Cooperative learning** with gifted students working in small groups of all abilities on group tasks can evolve into learning situations in which gifted students assist other students to master the work, and this impacts their pace of learning. In some groups, all students are assigned grades to reflect the group work, and gifted students freely share their feelings about this practice. They are adamant in not wanting to carry the entire group load.

As a teacher educator, it is impossible to argue against the use of cooperative learning, inclusion or standards based education with gifted students. The rhetoric in favor of these trends include statements such as "Teachers have a responsibility to challenge students to their fullest potential" and I would agree; or "Public schools have a responsibility to promote educational equity". In this case, I would remind educational planners that education for gifted students is not "more of the same" or "meeting the minimum standards." An often-heard argument for cooperative learning is "Students learn to appreciate that each individual student should and can make a meaningful contribution to a common goal." In truth, gifted students are impatient with the slow pace of learning in a heterogeneous group, and they aren't the best models for a struggling student. A better student model would be an average student with less of a learning gap between their performance and skills.

These trends in education and in teacher education yield teachers with little or no understanding of the needs of gifted students, and gifted students who "learn" to underachieve, do as little as possible to get by, or become behavior problems. Studies of how well teachers are doing in differentiating education for all students have found that fewer than half the teachers make provisions for a wide range of student abilities. There are solutions to these problems, and one administrative solution is **cluster grouping**, with a class including 1/3 gifted students, 1/3 above average, and 1/3 average; with a mirror class including 1/3 above average students, 1/3 average and 1/3 below average. **Cluster grouping** for gifted students was used in the early 60's in California, and with flexible movement of above average students between the two classes, learning for all students can be maximized as teachers differentiate the content, process, and product, without running the gauntlet of ability and achievement. Ten gifted students in a classroom represent a sufficient number to ensure that their needs are not overlooked, and they will motivate one another.

The National/State/Leadership Training Institute (N/S/L/T/I) identified principles
for differentiation of education for the gifted in the 70’s in the United States. Currently differentiated education is being planned and implemented as a strategy for mixed-ability classrooms through considerable support of the Association for Supervision and Curriculum Development (ASCD) and the work of Carol Tomlinson (The differentiated classroom: Responding to the needs of all children, 1999). Cooperative learning can be effective in the cluster group model with a more narrow ability level and appropriate pace of learning. In this administrative model, Roger Taylor’s I SEARCH ideas for independent projects with students writing contracts and creating products is most effective. Taylor has categorized a substantial list of projects using Howard Gardner’s Multiple Intelligences model to guide gifted students in making “choices” of products (www.rogertaylor.com).

3. Identification — where do we need to be going and in what areas are we lacking?

Giftedness is defined as multidimensional including academic aptitude, creativity, leadership, and visual performing arts, as reflected in the 1993 national definition. To identify gifted and talented children and youth, comprehensive assessment of these talents including achievement, ability, interest, creativity and learning style inventories and tests is needed. With this information, student profiles can be assembled and used to plan appropriate individual programs. When schools employ a wide definition of giftedness, students gifted in creativity and the performing arts can be identified with demonstrated performance, interest and creative products, and by creativity assessment instruments. Students gifted in leadership can be identified with leadership inventories, demonstrated leadership, interest and commitment in planning and implementing service projects in their schools and communities. Students gifted in a specific academic aptitude, such as science or mathematics can be identified with ability and achievement tests, high achievement reflected in grades, and interest and motivation to go beyond regular classroom work to engage in research projects and advanced curriculum.

Many gifted students are not identified through outstanding performance, and they need to be found through the use of self-surveys, and teacher or mentor recommendations. These gifted students may demonstrate giftedness in one area and be average or below average in other areas; however, there are some gifted students who demonstrate giftedness in several areas. George Fichter, a Ohio state consultant for gifted education reported that students from the Visual and Performing Arts School in Cincinnati won the district basketball championship, and they were second in academic rank, second to the Walnut School for academically gifted students. There is a motivational factor when students work in one area of giftedness in which they experience success. Mary Hunter Wolf demonstrated this phenomenon in New Haven, Connecticut with economically disadvantaged students gifted in the performing arts. Wolf’s students made considerable gains in achievement in their regular schoolwork as they experienced positive recognition for giftedness in the arts.

A major identification need that continues is the identification of culturally diverse gifted students. June Maker, Roberta Daniels and I collaborated on a Javits research and teacher-training project to identify high potential African American, Native American and Hispanic economically
disadvantaged students in the states of Arizona, Arkansas, Florida and Texas. Identified high potential students were provided with a transitional curriculum to help ensure their success in the classroom, focusing on higher-level thinking, creative thinking, and communication skills including computer skills. Teachers learned to “multi-task” in the classroom, and to develop responsive learning environments. Alternative tests were used including the Structure of Intellect (SOI), the Raven Progressive Matrices, a problem-solving inventory and test instrument developed by June Maker based on the Howard Gardner MI model, and the spatial sub-test of the Developmental Cognitive Abilities Test (DCAT). At the end of the three-year project period, 50% of the original group of 243 children were identified as gifted students. This represents phenomenal success for the students, as the majority of them would never have been considered gifted at the beginning of the project. Many were achieving below 50% on traditional achievement tests. Each student was enrolled in a class of 18 high potential students, and their teachers received teacher training throughout the academic year with June Maker, Roberta Daniels, Bob Seney and Charles Whaley serving as an instructional team. The “team” demonstrated multi-task teaching and provided “hands-on” teacher training using the skills of coaching, facilitating, empowering and transforming.

Several Step-Up (Systematic Training of Educational Programs for Underserved Pupils) sites are still in operation, and three new sites were implemented in Volusia County school district in Florida and in Beaumont, Texas in 2001. The Step-Up project uses a diagnostic and prescriptive approach with individual student progress monitored on the Structure of the Intellect (SOI), the problem-solving inventory and pre-post-tests in ability and achievement.

One impediment to identifying gifted students is the belief that the gifted program is a reward for success in the regular classroom. Many gifted students are not challenged by regular classroom work, repeating material they have mastered, and they may become discipline problems. In this case, the students have two strikes against them, achievement and behavior, and their classroom teachers will not recommend them for the gifted program. We miss many atypical gifted students including learning disabled, emotionally disturbed or behavior disordered, and bilingual students. Learning-disabled gifted students are overlooked in gifted programs that emphasize achievement and ability, as these students do not perform well on traditional tests or complete assignments in the regular classroom. In Tampa, Florida, approximately 20% of the identified learning-disabled students were academically gifted students; yet, these students received services as learning disabled students, but not as gifted. Bilingual students are missed because of language deficits; however, in the Project Step-Up site in Houston Texas, bilingual Hispanic students were tested on equivalent Spanish tests, and after one year, over 50% of them were identified as gifted students.

When assessment of students is employed to gather information and data for educational planning and development of individual programs for students, their talents can be strengthened and many hidden gifted students can be identified. A stumbling block is the assumption that gifted students have high ability, high achievement, high creativity and high leadership. School districts that plan a “one size program that fits all” rather than using assessment to match the individual needs of students to program development are missing many gifted students. Is there a viable reason to require high achievement or
high ability for a performing arts gifted program? Or to require high creativity as part of the criteria for the academic program? Many intellectually gifted students and adults are not necessarily creative, and most intelligence tests do not include items that measure divergent thinking; consequently, these tests are locating intellectually gifted students.

A possible solution is to re-visit the notion of fluid and crystallized abilities. Fluid abilities refer to general reasoning, association, and memory skills, while crystallized abilities refer to a particular set of aptitudes that may develop from the base of fluid abilities. Crystallized abilities include musical aptitude, creative writing, mechanical aptitude or mathematical aptitude. The work of Julian Stanley in the Mathematically Precocious Youth (SMPY) program represents an example of crystallized ability, with students identified through a talent search program using the Scholastic Aptitude Test, (SAT) that contains mathematics aptitude subtests.

One final concern that I have with identification of gifted students is the efficiency of teachers in identifying gifted students. Teachers overlook large numbers of intellectually gifted students and identify students as gifted who don’t demonstrate intellectual superiority. Teachers respond to the responsive, obedient, compliant student, the “teacher pleaser.” Teacher efficiency in locating gifted children can be improved with teacher training, particularly when teachers read case studies of gifted children and adults. They quickly recognize the individual differences of gifted student personality, motivation and performance. Joe Renzulli and his associates developed scales for rating behavioral characteristics of gifted students, and these scales or variations of them, are widely used as screening devices, or as a component in multi-step identification processes. These scales known as the “Renzulli Scales” include motivational, creativity, leadership and visual and performing arts characteristics. We need to emphasize that gifted children possess many characteristics that all children possess, but it is the “unique blend” of these characteristics demonstrated at an early age that signals parents or educators to a child’s giftedness.

4. How can we best mentor, nurture and encourage gifted girls?

One way to encourage gifted girls is to provide them with appropriate role models and mentors. First grade girls were asked to draw a picture of a scientist, and without exception; each child drew a picture of a male figure with glasses, the traditional image of a male “brain.” Girls need to see examples of female scientists, and they need toys that involve spatial and mechanical concepts, construction toys and science experiment sets, and bowling and basketball games. We need to encourage gifted girls to take full advantage of the range of opportunities in school, sports and future careers; and at the same time, acknowledge what is unique and feminine about them. We need to create a non-sexist environment for girls at school and at home, and to foster the growth of their independence and need for achievement.

If a gifted girl persists in math study through at least 4 years of high school, a world of career opportunities are open to her. The failure to pursue advanced math in high school and college severely limits career opportunities in areas of employment that offer some of the highest and least sex discriminatory salaries. Without 4 years of high school math, gifted girls are not eligible for college calculus, a prerequisite for almost
every major in the sciences, math, or economics.

The latest statistics from the U.S. Department of Education indicate that on average, females complete slightly less than 3 years of high school math. Factors that keep females out of advanced math courses include sex stereotyping of math as masculine, and an attitude that math will not be used in future careers, and math anxiety. The Handbook for Achieving Sex Equity reports studies that indicate girls do well in elementary math because they use rote techniques they have memorized, and boys do somewhat better at solving problems where no exact methodology has been taught. We need to place more emphasis on teaching Math to boys and girls using open-ended problems where suppositions are needed to solve problems, and employ lots of manipulatives. Lamar University hosts an annual Talent Identification Program (TIP) recognition ceremony for young scholars from southeast Texas to receive awards for achieving at 95% in Math and Verbal skills as measured by SAT scores. In the first few years, there were so few gifted girls that I made a special effort to welcome them to the ceremony. Over the years I have seen the ratio go from 1:20 to 1:10, but my aspiration is 1:1.

Girls Incorporated, a nationwide organization located in New York runs Operation SMART through local affiliates and community based organizations to stimulate girl’s interest in Math and Science. They offer after-school programs with hands-on experimentation and exploration using computers, tools, and building projects. Career development is part of the program, even for younger girls. Girls Incorporated can be reached at (212-689-3700).

In a study of elementary and middle school students in Texas, students were asked to rate their ability in Math. We found girls tend to underrate their abilities in Math while boys overrate them. When parents were asked to respond, the parents also tended to rate their sons’ abilities in math higher than their daughters. At the middle school level, girls doing poorly in math generally had lower self-esteem and tended to sit quietly, relying on the teacher for direction. When these girls were not successful in Math, their low self-esteem was reinforced, and they became even more passive in class. One female middle school teacher began working with her underachieving girls in a “no failure” mode in which students retake tests and receive extra practice in small groups. The girls would quickly eat lunch to work with the teacher during their lunch break. Enthusiasm and determination were evident, and grades in Math improved as the girls experienced success, and felt better about themselves and Math.

Single sex instruction can be a positive factor for encouraging success in girls. Female teachers have considerable success with underachieving girls; and in all-girl schools, the girls report a feeling of being free to be more interested in math, computers and sports because these areas are not occupied by boys. Available evidence from girls’ schools suggests that girls emerge from these schools slightly better educated and more self-confident. Perhaps we need special classes for girls in co-ed schools and female role-models to accomplish similar results. Lynn Fox, formerly with John Hopkins University suggests that girls be grouped together for math, where they could enjoy and succeed without the “burden” of competing with competent boys who were used to succeeding in math.
5. What are your views about on-line education in terms of training teachers to work with gifted?

I observed a group of teachers who had completed a course on-line in gifted education, and were meeting for the first time. There was quick face-recognition from images on screen and rapport developed quickly among the students. In reviewing their chat room interactions, full readings and activities on-line in the course, my concern is the lack of in-depth interaction between the students and the instructor. Course formats of weekly meetings, full Saturday, weekend courses, and intensive summer institutes provide opportunities for instructors to model behavior they want to nurture and develop in teachers. Teacher training involves face-to-face interaction. Background reading can be accomplished on-line, but intensive interactive sessions are needed. At the University of South Florida teachers of the gifted participated in three practicum experiences with gifted children in a lab setting on Saturday morning. Teachers participated as observers, co-teachers and teachers, and each practicum was integrated with a content course: Psychology of the Gifted, Educational Strategies, Creativity Development, Group Dynamics, and Guidance and Counseling of the Gifted. As the teachers became familiar with the knowledge and content, they were able to apply the knowledge in interactions with gifted children and their parents. Learning was active with hands-on applications of the readings and discussions. I am not convinced that on-line can provide the same quality of teacher training. They may know it’s a cat on line, but until they’ve held it, heard it purr, chuckled at its antics and received a scratch or two — they don’t truly “know” a cat. We are educating gifted children who want to make a difference in shaping lives, guiding career choices, not merely imparting information. A secondary teacher recently said, “I teach chemistry, I don’t know who is developmentally delayed in my class or who is gifted — I just teach Chemistry.” I responded, “I’m pleased to hear the passion you have for your subject, but I am nonplussed on how to respond to part of your statement; teaching is an interpersonal act, teachers interact with students as people, individual people with unique needs that need to be met for them to experience learning at its best.” If we view gifted students as future leaders, we must interact with them to help shape our collective future. On-line is fine for knowledge and “head stuff”, but a great deal of learning is “heart stuff.”

6. What are the support services or networks available for beginning teachers?

Support services vary from district to district, and state to state in the United States. In the worse case scenario, beginning teachers flounder, learn through trial and error and feel odd-man-out as veteran teachers eagerly interact in meetings and at school. In the most desirable scenario, entry-level teachers are paired with veteran teachers who coach them and serve as facilitators. In a recent Eisenhower Professional Development Teacher Grant Project SUCCESS EXPRESS, ten veteran Pre K-6 teachers were paired with ten entry-level Pre K-6 teachers of Math. Four substitute days were provided for each teacher to spend time with their mentor teacher to strengthen content, and to learn appropriate teaching strategies. A three-week summer institute introduced exemplary curriculum and appropriate strategies that were reinforced in monthly meetings during the academic year. Funds were available for the teachers to attend a statewide meeting to hear national experts in Mathematics, and
$300 was allotted for each teacher to select and purchase hands-on manipulatives to use with their students. SUCCESS EXPRESS was patterned after the “little engine that could” with the objective of teachers increasing their content knowledge, learning and using appropriate teaching strategies, with the end-result of increased student achievement in Math.

7. How can teachers best get families involved in the education of their children?

According to Webster, involve means ‘to draw in a participant’ ‘to oblige to become associated’ ‘to occupy absorbingly’ — so having families “involved” is more than parent conferences or parent meetings. Involvement is in-depth, being associated, participating, occupied absorbingly and being a part of the education of their children. Gifted education can learn much from the education of at-risk children. At-risk parents are receiving home visits, parenting education and opportunities to assist in the classroom, and parents of gifted children will profit from all of these ideas. A school in West Palm Beach has implemented Wonderful Friday, in which all children experience enrichment, with parents teaching classes in gourmet cooking, foreign language, drama, poetry, watercolor, puzzles and games, gymnastics, soccer and chess. The classes change twice a year and parents teach, co-teach, and help organize materials and equipment.

Another effective way of involving parents is to provide a website for posting student assignments and classroom activities. Special culminating activities can be announced so parents can plan to attend and volunteer to assist. A class of twenty gifted second graders observed manatees and spent the day in their habitat. They shared their plans on the web and invited their parents to attend. Twenty-two parents attended including one parent who was the guide at the park. The parent enthusiasm for the trip was contagious, and the trip was an opportunity for the teachers to model many positive interaction skills necessary in working with gifted students, such as listening closely, building on someone’s ideas, accepting ideas that are different from yours and cooperative group skills. Many parents said they had no experience learning with their children, and the manatee experience helped them understand their child better, particularly after seeing how they interacted with other children and adults.

Another equally effective method for family involvement are community centers with after school programs for gifted children and their parents, as well as all children and their parents. Parents come to these centers and take classes with their children, and with other adults. Some parents teach classes, and recently I volunteered to offer a series of ten group counseling sessions on parenting skills, culminating with each parent bringing their gifted child to the final session. In another community center, the principal teaches Art to students and parents, while his pet dachshund freely roams about the room. Parents and students select and attend two classes from 7-9:00 p.m. on Tuesday and Thursday evenings, and Computer labs are open for parents and children, as well as the library for storytelling, research and browsing. The principal reports that parents serve as resource teachers in areas of expertise, and help in monitoring tests, in the lunchroom and with office tasks during the day. A special room has been made available for the parents with a phone, rocking chairs, fax machine, copy machine and TV video monitors for them to use as contributing
partners of the school team. This community center holds dinners and dances on special holidays such as Valentines and Christmas, and you have to arrive early to get a seat. It is truly a community center in which parents and students “occupy absorbingly.”

8. Mothers and fathers play decidedly different roles in the rearing of their children. What has your research shown in this regard?

For over twenty years the University of South Florida assessed children and youth for giftedness, using intelligence tests and creativity instruments. During that time we counseled parents, and on Saturday, parenting classes were offered. The majority of the parents were eager and willing to learn about different ways of helping to nurture and develop their gifted child’s talents and abilities. Many parents had considerable knowledge about gifted children prior to requesting an assessment; however, many held misconceptions about giftedness, such as giftedness is across the board in all areas, or negative behaviors of demanding attention, interrupting adults, resisting household rules or helping with chores, being critical and outspoken are gifted characteristics to be accepted and tolerated. Parents were grateful to find that these negative behaviors were unacceptable for any child, and not characteristics of giftedness.

Some parents were concerned that their children might not maintain their giftedness, and they wanted to know what a good program for gifted entailed. As a result of our involvement with the parents, a parent component was added to the Guidance and Counseling Course for Gifted, and the parents were eager to participate in group counseling sessions. This class was one of the most helpful courses for teachers of the gifted in building an understanding of the family dynamics that affect gifted children.

We noted that fathers are usually the parents who stimulate the problem-solving of their gifted children, and many fathers embraced the idea of “risk taking.” Fathers need to be reminded to give sufficient direction and information to their sons and daughters before assigning a project to them. This was re-emphasized when one gifted adolescent shared, “My dad was always critical of how I did something, but never spelled out what he wanted.” There is a fine line between guidance in the “how to” and encouraging autonomy.

Sylvia Rimm has written numerous helpful articles to assist parents in gifted child rearing practices, and she has addressed a problem that we are experiencing in the United States, that of gifted children being identified as attention deficit disorder children. Rimm says many gifted children are “powerful” and “attention addicted,” particularly in families where they are the only child, but that doesn’t equate with ADD. Rimm says:

- you cannot love your child too much
- you should empower your child
- praise and positive reinforcement are important for teaching and learning
- encourage children’s creativity and praise their creative products to enhance creativity in later life
- encourage children’s many interests
- advocate for your child’s education

Several truisms emerged in parenting sessions: Doing for gifted children what they are capable of doing themselves diminishes them; Parents are in control of giving love and there is no control over getting it; Gifted children need an opportunity to experience the consequences of choices; Gifted children believe what they see more reliably than
what you tell them; and, Solving a gifted child’s problems for them does not teach them to be their own problem-solvers. We used a wonderful book written by Jane Bluestein and Lyne Collins called *Parents in a Pressure Cooker*, that is available from ISS publications in Albuquerque, New Mexico.

Parents learn and recognize their own parenting style, and Don Fleming and Linda Balahoutis’ categories of the overtalker, the overlistener, the under talker, the complainer, the helpless parent, the reactor, the diverter, and the threatened, help parents recognize themselves, and humorous role-playing helps to ensure understanding. In sessions in which gifted children and their parents are included, there are wonderful insights, particularly when gifted children engage in role-playing with someone else’s parent. Civilize gifted children, but don’t rob them of their imagination, self-esteem or sense of being an individual. Fleming and Balahoutis’ insightful book called *How to Stop the Battle with Your Child* is published by Prentice Hall.

We find that mothers and fathers agree that they should encourage their gifted children to excel.

9. Social emotional needs of the gifted are many. Has this been over-emphasized or should it be down played? How important is it in the big scheme of things?

The social emotional needs of the gifted are equally as important as the intellectual needs, primarily because they represent the emotional component of the learning process that ensures that learning is meaningful and remembered. When thoughts and ideas are “screened” through positive emotions and values, actions are more apt to be positive.

Gifted students are often so goal directed that they place tremendous pressure on themselves to succeed. Donald McKinnon identified the “need for achievement” as a motivating factor in successful adults, and gifted “want it all,” and when this doesn’t happen, gifted students and adults can experience anxiety and depression. Gifted students look toward their parents or older siblings as models to establish their expectations, and parents sometimes program their gifted children toward professions, such as judge, lawyer, professor, and doctor. When gifted children strive to meet a number of criteria for success, high SAT scores, being in the top 10% of their class, A’s and B’s in classes, this can produce academic stress. A graduate student shared that in Korea, parents sit outside the door during exams to provide encouragement and support, and many people may recall the Japanese college student who jumped overboard from the ship returning him to his homeland, because he had disgraced his parents with his lack of academic success. Excessive pressure is detrimental, but the opposite is also detrimental not providing high expectations. The ideal situation for parents is to provide their gifted children opportunities and support to enable them to make their own decisions.

Schools and parents need to encourage gifted children to develop talents such as art, music, and athletics to serve as positive outlets. Although athletics, music and art can become highly stressful if gifted students become too involved in competitive situations, and “perfectionism” in those areas can become a problem. Some degree of perfectionism is healthy; it is extreme perfectionism that leads to depression, suicide, mood swings, stress related illnesses, and school phobia. Perfectionism is defined as the practice of holding on to standards that are beyond reason and
attainment. Perfectionists experience loss in self-esteem and performance anxiety can manifest in writers' block, test anxiety, obsessive compulsive illnesses, lack of self-control, poor interpersonal relationships and impaired health. A highly gifted third grade student had an ulcerated stomach, and she was so intense that she would stand at her desk, rather than sit. Her tiny frame would lean in to work on assignments, and she would burst into tears when the work was confusing or difficult. She was a child of two physicians, with two brothers at Ivy League schools. Needless to say this eight year old had internalized all of these expectations into her personal aspirations.

Gifted students are highly sensitive to injustice and cruelty. Why? is their response to ethical dilemmas, and gifted programs can address this need with the inclusion of ethics study. Ethics studies motivate gifted students to analyze current social issues and values in a structured and disciplined manner, rather than personally ruminating over the issues. Gifted students need to read and reflect upon the writings of great ethical thinkers to build an understanding of the human, historical, economical and social factors that underlie moral reasoning. Building ethical understanding in gifted students will translate into behavior and values that can help shape society into a positive place, as gifted students realize that we have the power to destroy humanity, and the wisdom to protect and even perfect it.

Gifted students have a personality structure that aims towards a lifetime plan of self-actualization according to the Maslow hierarchy of needs. As gifted adults they attempt to transcend personal satisfaction and live in an emotional context of enlightened self-interest that includes service. This represents the core values of what E. Paul Torrance and I are calling spiritual intelligence.

10. What do you see as the needs of racially, ethnically, culturally, economically gifted students who may not have been identified as gifted?

As the United States becomes more culturally diverse, the problem of meeting the needs of racially, ethnically, culturally and economically gifted students increases. Asian American students excel in competitive national and state programs, and if academic excellence is the only criteria, Asian American students will dominate in many programs. In the Office of Gifted and Talented, the criteria for the Presidential Scholars program were modified to include performing arts and academic excellence to provide broader representation. A similar phenomenon was found in the Texas Governor’s Honors program.

Many school districts across the nation are attempting to bridge the achievement gap between culturally diverse economically disadvantaged students and advantaged students, and many districts have had considerable success. In Beaumont, Texas there was a gap of 20 to 30 points on the state test for academic achievement; however, in 2001 this gap was narrowed to 10 points, which represents a remarkable accomplishment. This success was due to increased parental involvement, an emphasis on thinking skills and moving the students at their own pace of skill development in Math and Reading.

One important point that Harry Passow reiterated was that while there is considerable overlap between minority students and disadvantaged conditions, the two are not synonymous. Traditionally according to the Office of Civil Rights in the
United States, minority groups, blacks, Hispanics and Native Americans have been under-represented in gifted programs and over-represented in special education programs. One major problem is the emphasis on standardized tests, but another problem is the low expectation for academics held by teachers, parents and even the children themselves. Schools need to focus on the culture of the diverse groups and infuse the curriculum with representative music, literature, and significant role models, people from their culture who have helped shape history. We also need more teachers of the gifted from the African American, Hispanic and Native American populations.

One puzzling outcome of the increase in the number of culturally diverse students in schools is that instead of encouraging more individualization for students, often there has been less. The 1993 definition of gifted stresses the concept of potential and defines giftedness as "by virtue of outstanding abilities are capable of high performance," and states that the areas of giftedness are "either potential or manifest." This concept is being overlooked by many states. Florida is implementing rules for gifted that rely on "demonstrated achievement" and showing "need" for the program. If students are not doing well in the classroom, they will not be demonstrating a need for the program, and it may be that these students are demonstrating that the regular classroom is not meeting their needs. Ernie Bernal has championed the notion that giftedness results from an interplay among culture, language, worldview, conceptual style, values and personality, and that every cultural group has exceptional individuals who have contributed to society that can serve as role models. Not all role models need to be actual living individuals, culturally diverse students can also study and emulate role models through reading about their contributions. Education needs to champion the notion that giftedness is individual and culturally unique and specific, and leaders are needed to serve as role models from all ethnic and cultural groups.

11. Vocational occupational awareness for gifted students — are we doing an adequate job?

In the 70s, there was an Office of Career Education in Washington D. C. and as director of the Office of Gifted and Talented, I worked with the director to put aside funds for collaborative projects between gifted education and career education. Vocation is defined as having a calling or strong inclination to a particular course or state of action, or being trained in a skill or trade to be pursued as a career, and gifted students are often gifted in a number of areas which makes career decisions difficult. In counseling gifted adolescents, we need to emphasize that they take as much mathematics as possible to keep the doors open to multiple careers, and to think of a lifetime of multiple careers.

12. The gifted-label: what do you see as the main concern?

The term gifted is not the concern, there is a much deeper concern, and it is reflected in the variety of euphemisms that are used for gifted. If the students are called advanced, that connotes they are high achievers to be identified with high achievement test scores and grades; if we call them high ability, they can be identified with high ability or aptitude tests scores; if we call them above average ability, creative and task committed, they can be identified with above average scores in ability. creativity test scores or demonstrated creative ability, and demonstrated task
commitment in creative production. To further complicate the reaching of a consensus, some educators are concerned with the notion of “some are and “some aren’t,” and there is another group that holds to the notion that “everyone is gifted.”

Education is rift with labels “star athlete” “first chair in music” “gifted artist” and “spelling champion.” Richard Olenchak poses the question of whether society views athletic giftedness and talents as having greater excellence, rarity, productivity, value and demonstrability than other types of giftedness and talent, and he suggests examining the reward structures with professional athletes and [I would add movie stars and rock stars] who earn millions of dollars in direct contrast to physicians who save lives, and our national leaders in Congress and the White House who affect lives and livelihoods. Olenchak asks if we are using gifted as a noun or an adjective—do gifted students demonstrate their giftedness and the answer is “yes.” As adults they demonstrate their giftedness, and we can examine their lives and note indications of their adult giftedness, as did Ann Roe, Galton, Catherine Cox and others who studied eminence.

Jim Gallagher and I have had a philosophical disagreement for years relating to the label and meaning of gifted: Do you identify gifted students and build a program to meet their needs? or Do you develop a program and locate students that match the program? Joe Renzulli and Sally Reis speak of services and locating students who demonstrate productivity which falls into the latter category. One problem is that many students never step forward and demonstrate their “potential to achieve” unless they are first identified as gifted. The label can enhance learning, enable funding, provide differentiation, improve curriculum and positively affect children. All parents don’t think their children are gifted; many parents of gifted children doubt that their children are gifted, until they are told they have gifted children when they are labeled.

We use categories in special education including physically impaired, mentally handicapped, learning disabled, hearing impaired, visually impaired, and programs for the gifted usually enjoy greater acceptance in the area of exceptional child education, with their culture of understanding differences and meeting unique needs. A cursory examination of funding in states in which gifted programs are included under the exceptional children administrative umbrella indicates that their gifted programs are more adequately funded.

Risk factors for lost potential need to be identified—we need a poster child for lost potential. We need to revisit Langston Hughes “raisin dried in the sun,” identify the misconceptions and myths and aggressively deal with these in the media. We need to build strong leadership in the political arena, and to build a case for the need for giftedness, that giftedness is a positive asset.

There is a fear among some educators that gifted programs promote elitism, but gifted programs in which students have to diligently work on academically challenging courses do not promote elitism. If anything these programs preclude elitism. High Tech Highs in Fairfax county, Virginia are a fine example of this type of programming.

13. Where do you see gifted education going in the next 25 years?

As director of the Office of Gifted and Talented, I sat in a large auditorium as
Commissioner of Education, Dr. Ernest Boyer, rank-ordered all 144 existing programs in the education section of HEW (Health, Education and Welfare). He identified the top 7 and worked closely with these programs to maximize their efforts. Gifted education was among the top 7, and Commissioner Boyer viewed the role of the Office of Gifted and Talented as integrative, working closely with all programs. In response to this vision, the directors of the 144 programs were invited to small group meetings to discuss program goals and objectives, and to identify ways to integrate program efforts and support one another. We met regularly with the Commissioner to share current activities, and he reinforced the idea of the Office of Gifted Education as an office where new ideas were to be initiated through stimulus grants, and disseminated to impact education for all students. He wanted giftedness equated with innovation and educational issues that needed to be identified and addressed. We identified the need to impact the education of economically disadvantaged and hosted a national conference with the Assistant Secretary of Education Mary Berry and Representative Shirley Chisholm, gifted African American women as speakers, and E. Paul Torrance who emphasized the role of creativity in working with economically disadvantaged, and he shared the success of Future Problem Solving with at-risk students. At the conference the importance of state leadership was reinforced and funding for each state was implemented to allow the states to secure a state consultant for the gifted, or use the $50,000 state allocation for materials or training.

The role of gifted education at the local, state and national level needs to be redefined as an Office of Innovation and Excellence to work closely with the Secretary of Education to identify issues in curriculum development that need to be addressed, and to identify programs for the gifted at the local and state level for implementation. The office could field test these new innovative ideas, much in the manner of the former Title III program. Innovations could be shared at major professional education organizations as exemplary “best practices,” and funds could be made available to educators who want to test ideas, and to schools that want to implement them.

A major problem in gifted education is that programs for the gifted are viewed as serving and benefiting a small number of students. Even with “throwing a broad net” we serve no more than 20% of the student population. The image of gifted education needs to be shifted toward identifying and implementing innovative teaching techniques and strategies to benefit all students, with gifted students serving as “most willing” recipients of these new innovations to be “field tested.” Commissioner Boyer championed this strategy and several innovative projects such as BSCS in Biology, PSCS in Physics, SMSG in Math and the EBF program in Math were all field-tested with gifted students, prior to being introduced in school districts.

As a local district coordinator of gifted programs in California, I worked with a district Superintendent who viewed the coordinator as one who knows the latest curriculum development and functions as a vital part of the dissemination process with principals in a K-12 system. To implement this role in school districts, the group that needs to “buy in” to this strategy are the principals and the local Superintendents. In addition, highly competent educators of the gifted are needed to work with local and state gifted programs on a full-time basis. Currently, many coordinators and state consultants of gifted wear several hats, with
their time split among different responsibilities that limits their effectiveness.

In the future OERI (Office of Education Research and Innovation) will be renamed the Office of Gifted and Talented Education and Innovation. Gifted education at the K-12 level will become more closely integrated with higher education. Currently, pre-service and graduate programs are tied to state standards that teachers address with K-12 students; consequently, universities and colleges need to address innovation in all fields to meet these needs. The original purpose of a university was to provide facilities for teaching and research and to grant academic degrees. In the future, universities will work more closely with K-12, be involved with teachers and students within schools and provide intensive ongoing training and support to education, as well as engaging in research on community problems. Houston, Texas has a learning center TLC2 at the University of Houston that functions in this capacity in collaboration with NASA.

I see the Department of Education becoming one of the more important departments in the federal system working with the most valuable and precious natural resource, the children and youth who represent not only the present, but the future.

14. Underachievement — What do you see as the issue and what are the concerns?

The majority of my research has focused on underachieving students with high potential, students who have not been identified as gifted for a number of reasons including limited English proficiency (LEP), family instability, low self-concept and self-image, low expectations of teachers, parents and students, ill-fitting curriculum, either too abstract or a mismatch for their skill level, all factors negatively impacting the students’ classroom performance and achievement.

Another group of underachievers that we have worked with in several research projects are students identified as gifted with aptitude tests, who are underachieving in the regular classroom as reflected in daily work, grades and achievement tests. These students manifest many of the same characteristics, including family instability, low self-concept and self-image, a lack of success with curriculum because of lack of interest or wanting to learn in their preferred fashion. These gifted students often “act out” in frustration in the regular classroom, or they become non-assertive and withdrawn. When they are assigned to “cluster centers” at schools with special classes for gifted students from several schools, their behavior becomes focused on the curriculum and their achievement greatly improves. In comparing the achievement of gifted students in the regular classrooms with gifted students in special classes, with appropriate curriculum and teaching strategies, there is significant difference between the achievement levels of gifted students in the special classes and gifted in regular classes.

Lewis Terman studied underachievers in his long range study of gifted children through adulthood and found four factors that differentiated them from effective achievers: a lack of self-confidence, feelings of inferiority, ill defined goals and lack of perseverance. These characteristics were noted by their teachers throughout their schooling and by their families.

These four characteristics of underachievement are demonstrated by underachieving gifted and high ability, low performing students who are culturally
diverse, economically disadvantaged and twice exceptional students who are gifted and learning disabled or gifted and emotionally disturbed. The twice-exceptional student may know the material, but be unable to complete written assignments. In a research study collaborative between the University of South Florida and Hillsborough County School District in Tampa, Florida, 22 learning disabled gifted 2nd and 3rd grade students were identified and two co-teachers, one in gifted education and one in learning disabilities worked with the students. Some students demonstrated a well developed sense of humor that they used to distract the teachers from their non-performance, and other students were disruptive, constantly moving and interrupting.

The behavior that was the most challenging for the gifted teacher was their ability to get her off task from classroom discussions. She knew the students had the knowledge, but they avoided written work and lessons that contained any aspect of rote and drill. The learning disabilities teacher had difficulty appreciating the fact that some of the students could read above or at grade level, yet struggled with learning basic math facts and handwriting skills. To challenge both teachers even more, several students had advanced math concepts and struggled to read. None were identified as emotionally disturbed, but several children had a general pervasive mood of unhappiness or depression and an inability to build or maintain satisfactory interpersonal relationships with peers and teachers, two of the five identifying characteristics used by the Florida Department of Education to identify serious emotional disturbances.

The project focused on providing an integrated approach to educating children with strengths in their giftedness including well-developed vocabularies, a wide fund of information, verbal skills and creative imagination; and worked to modify their characteristics as learning disabled students, difficulty focusing on written tasks, easily distracted and their difficulty with written expression, poor reading comprehension, listening comprehension, math calculation and math reasoning.

The University of South Florida (USF) provided classroom space and the Hillsborough County school district funded the salary of the learning disabilities teacher, and the Department of Gifted Education at USF funded the salary of the teacher of the gifted. The teachers learned to work together using their combined skills to meet the learning and socio-emotional needs of the twice-exceptional students. Much disruptive behavior was no longer apparent as the students experienced classroom activities based on their strengths. The learning disabilities teacher became more aware of the students’ strengths and used techniques and materials to emphasize and nurture their strong cognitive abilities. They developed independent projects focusing on critical thinking and problem-solving, and the teachers used an interdisciplinary approach with themes to blend social studies and language arts. Science and math were taught with a “hands-on” approach, supplemented by technology. The parents of the students reinforced many of the strategies and assisted with school activities. Many of the parents had become frustrated with the “schooling” offered their children, and, as they became more positive about what was being provided for them, they communicated that attitude to their children.

In the full-time class, the students had opportunities to have both exceptionalities addressed, whereas in a regular classroom,
they were pulled out for services, and it became problematic for them to keep up with regular classroom work. Westchester Board of Cooperative Educational Services (BOCES) in New York has a similar program, and several districts in Florida have implemented such programs. The teachers were given opportunities to share their insights in working with the twice-exceptional children at state conferences and in district in-service meetings with teachers of gifted and learning disabled students.

15. How can we really best assess the growth and development of gifted children. What is really necessary for the development of the “whole child?”

As a coordinator of a local gifted program, I needed and wanted as much information as possible concerning the gifted students enrolled in the district. Access to computerized data on achievement was available to provide information on student performance on the standard curriculum, and individual intelligence tests were administered to the gifted students, usually the Wechsler Intelligence Scale for Children-Revised (WISC-R). A full-time psychologist was assigned to the gifted program, and as she assessed the gifted children, she became a valuable source of “hands-on” information concerning student strengths and weaknesses. Information was available on student creativity on the Torrance Test of Creative Thinking (TTCT), and teachers used a checklist of characteristics of gifted students based on May Seagoe’s list of needs and characteristics.

Working closely with the district coordinator of the program for exceptional students, I observed how the staff calculated discrepancy between ability and achievement to identify learning disabled students, and incorporated this practice into the growth and development assessment of the gifted students, so we would know who was achieving at grade level, and who was not advancing in their work.

We used parent and teacher questionnaires to secure perceptions on how students were doing. These questionnaires addressed behavioral/social areas including attendance and punctuality, listening, attention, effort, participation, appropriate school behavior and preparation for class, and this information was maintained in an individual folder for the gifted students.

The federal definition of gifted includes specific aptitudes that represent crystallized abilities or a particular set of aptitudes. Musical, mathematical, mechanical aptitude and creative writing are included in crystallized abilities. The use of the Scholastic Aptitude Test (SAT) can identify gifted students proficient in math and language, and in school districts where students take the SAT in the middle school, this may be the first real indication that districts have outstanding math students. Lamar University hosts an annual Talent Identification Program (TIP) awards ceremony for students performing at the 95% level in math and/or language. The students receive awards from Duke University and a tuition-free course from Lamar and other universities in southeast Texas.

School districts need information about the fluid abilities (general reasoning, association and memory skills) as measured by ability tests; information about crystallizing abilities in particular areas such as musical aptitude (Seashore Musical Test) and math and/or language (SAT). Overall achievement can be measured by achievement tests; creativity on test scores of the (TTCT) or the Structure of the Intellect (SOI); and teacher checklists and parent checklists can yield
behavioral/social information. This data will assist in assessing the growth and development of the "whole child."

16. What ideas of recreation and play are really needed for gifted children? What is really necessary for the development of the "whole child"?

Gifted students often view intellectual play as recreation. Stephanie Pace Marshall, the director of the Illinois Math and Science program, shared an incident that illustrates this: A student's room-mate was drinking soda from a glass cup, and for some reason all the foam stayed at the top so that while the liquid went down in the glass, the foam remained up, so that there were gases in between. The room-mate shouted, "Hey, look!" and several students rushed over to stare at her soda for a few minutes. Then they tried to figure out why it did that, and one grabbed a camera to take a picture for their photography class. The student reporting the incident said, "It was really an interesting occurrence, I love this place!"

When gifted students are provided opportunities to select recreation activities, they may choose an academic activity for the sheer fun of challenging themselves, such as chess, Academic Decathlons, Photography groups, etc. I am always amazed at secondary gifted students who attend the summer residential program (Texas Governor’s Honors Program, now known as the Texas Honors Leadership Program) at Lamar University, when they are asked to bring musical instruments, approximately 3/4 of them do bring instruments. They tell us that their love of music brings a calming and enriching aspect to their lives.

Other gifted students prefer individual sports such as tennis, swimming, gymnastics, and skiing, but many also enjoy group sports such as soccer, football, and basketball. One activity that parents may want to introduce to their gifted children is drama, particularly Community Theater. Working with a group of mixed age actors and actresses to create a fine tuned performance is exhilarating. I recall a conversation with Kathryn Hepburn, who had the lead in The Rainmaker, a production in Canal Fulton, Ohio. [I was distributing flyers, selling tickets and doing walk-on parts in a summer internship]. While we were sitting on the steps with the actors during a break, Hepburn said, "Acting is a venture into the extraordinary, it opens you up to see the world around you as the new and unforgettable place it is." I'll never forget that moment and her marvelous "throaty voice" sharing a little of herself. Gifted students can greatly profit from such chance encounters with unforgettable people in theater.

Gifted students can also benefit from experiences with a variety of crafts such as pot making, weaving and watercolor. When these activities are provided in local art museums and centers, parents can take these classes with their children and experience the camaraderie of shared interests and activities. Becoming involved in service projects, helping out in the community, and assisting in political campaigns represent another source of positive recreation, and inspiration for gifted students.

17. What kinds of training do counselors really need to work with both gifted boys and girls?

All counselors need a course in exceptional children. At the University of South Florida the counselors-in-training enrolled in the Guidance and Counseling of Exceptional Children course using the Child Study or PSST technique. They learned group
counseling techniques, then led small groups of gifted children and their parents who were participants in class sessions. In the United States, counselors are seldom able to provide the services to gifted students that they would like to provide, the services that gifted students need, since much of their time is spent in paperwork. It would be helpful if counselors could teach relaxation skills to help relieve the high anxiety that many gifted students feel before musical, drama or athletic performances or group test situations. Other skills that counselors could introduce would be goal setting, self-motivation techniques and problem-solving.

Counselors need to have information about available summer programs in collegiate settings such as the William and Mary summer program, the University of Southern Mississippi, Lamar University, the University of South Florida program and numerous others. These programs offer challenging core curriculum delivered by caring professionals who know and understand the special problems and needs of gifted children. Summer programs can help unleash the potential intellectual energy that gifted students possess, and help them identify paths to pursue in their areas of aptitude and interest.

Guiding gifted students in selecting appropriate universities or colleges is a key role for counselors, and the counselors need a wealth of information about scholarships, the application process, and general information about a variety of institutions. Many culturally diverse gifted students are reluctant to pursue higher education because they don't know about the "process." These students are caught between two cultures and they need to express their talents, but they must also adhere to family patterns and values. Counselors of culturally diverse gifted students need to become familiar with the cultural background and values of these students, and school districts need to employ counselors from diverse backgrounds who can function as role models. Helping culturally diverse students deal with problems of alienation from their cultural background is an important task for counselors, because as gifted students recognize possibilities of upward mobility, they also recognize the price of leaving the life style and values of their families and friends. This can be devastating for gifted students. One African American girl from a migrant worker family said, "Every time I come to the University of South Florida and see how much there is that can be done and to know, I feel like I’m getting free, then I go home and my friends and family pull on me; I feel like I’m in a crab barrel, and they are pulling me down." Her anguish and turmoil were obvious. We contacted her counselor who made a home visit, talked with her parents about their daughter’s gifts, and her need for support. She continued her studies, graduated from high school, received a full scholarship to the University of Tennessee, and graduated with a degree in communication. She is a programmer for a local television station, and she serves as a mentor to other young girls who experience similar challenges. Most counselors and educators have grown up in upper middle class families with little understanding of the pressures that culturally diverse students experience in an ever-increasing diverse school population. Visits to colleges and universities represent a great opportunity for counselors to open doors to alternative paths and potential occupations for gifted students, and these trips can be incentives for students to make full use of their ability, and opportunities for the counselor to learn more about their gifted students' background.
18. In large families, where you have gifted and non-gifted siblings, how can parents best cope, particularly when there are diametrically opposite viewpoints on child rearing?

Parents need to agree on some basic non-negotiables concerning child rearing and ensure that decisions affecting the children are made as a team, or the children will “play” one parent off the other. Parents need to treat each child as an individual and forget the concept of equity, because one or more of the children may have exceptional needs, such as a delicate child who may need extra medical care, or a gifted child with a talent in gymnastics or music who may need funds for private lessons and trips to competitions.

It is important that parents refrain from comparisons of their children and guide them toward individual interests and strengths. Parents of large families need to make time for their children. A friend describes how her mother took each one of the five children into New York from their suburban home via the train for a special day with her, including lunch, museums and the theater.

Parents need to construct reasons to spend time with their children such as family picnics, and emulate a good politician, and “work the crowd” of their children, spending quality time with each one. Gifted children are sensitive to adults who give “lip service” to listening, and then show by their actions that their mind is elsewhere. If parents must spend extra time with one child with special needs, the gifted child can be reasoned with concerning this special need.

Parents need to focus on the special joys of a large family, particularly the close relationships that brothers and sisters often develop and maintain throughout life. Parents need to show pleasure and belief in all of their children, and provide them “space” to develop bonds with one another through designated tasks and time. Sylvia Rimm uses the word “enjoy” many times when she discusses parenting gifted, and I agree. If the family has what Sylvia calls an “attention addicted” gifted child, parents need to set limits with their time and gently curb this characteristic, but firmly remind the gifted child they are a family member. Parents also need to carry out “negotiation about child rearing” outside the earshot of the children, in order to present a united front. Parents don’t always make the best decision or do the “right thing,” and it is important for parents to explain to the children what happened and to admit that they have made a mistake. Such lessons of honesty go a long way in developing character, and strengthening the respect that gifted children hold for their parent or parents.

19. Have our public schools failed our gifted kids? I am thinking of the rise of home schooling, private schools, charter schools and classes on the web?

Jim Delisle says inclusionary practices for gifted students and upgraded curriculum for all students have actually caused a decline in the rigor of academic options for able learners. I would add that the emphasis on standards testing and the amount of drill gifted students receive as teachers prepare entire classes to reach the “minimum” standards has a negative effect on gifted education. However, not all school districts serve gifted children in an inclusionary model; many offer special classes, and middle and high schools serve the needs of gifted in the visual and performing arts, in specific aptitude areas such as “pre-med.”
high schools, in International Baccalaureate High Schools, in residential high schools such as the Illinois Math and Science Academy, the Texas Academy for Math and Science, the Texas Academy for Leadership in the Humanities and the North Carolina School for the Performing Arts and many others that meet the needs of intellectually gifted students. Gifted students need to challenge one another and many parents are seeking out alternative settings in private education, in charter schools, in home schooling and on the web. These parents are concerned that their gifted child's educational needs are not being met, and their fear of violence is driving them toward alternative education. Gifted students need freedom to think, to question, to reflect and to interact with ideas, objects and others to construct personal meaning. For this to happen, gifted students need other gifted students. Not all parents can afford private school, and if public education is not responsive to middle and upper middle class parents who can afford private school, 'flight' from the public schools will be a real problem, and public school will become the workingman's school.

Many charter schools are offering very good education with an administration and faculty committed to focusing on student learning and keeping the curriculum conceptual. The narrowing of curriculum in many public schools to fit the needs of state assessment results in an overemphasis on rote memorization of discrete bits of information and big ideas, intellectual exploring and curiosity, are pushed aside.

We need to engage in serious talks with administrators, school boards, parents, teachers and students about the school district's mission, state assessments and the responsibility of education to teach in a manner that identifies gifts and talents, and develops and nurtures these gifts and talents to preserve quality education for gifted students in the public school setting.

20. Have you found gifted children to be more highly developed in the various sense modalities?

The Dabrowski questionnaire has been used in ongoing research with secondary students from the Texas Academy for Leadership in the Humanities who complete their last two years of high school, and their first two years of college as undergraduate students enrolled at Lamar University and with students in the summer The Texas Honors Leadership Program. We have examined over 1,000 questionnaires and 85% of the students demonstrate (Oes) in Intellectual, Emotional, and Imaginational areas. Psychomotor (Oes) were identified in 50% of the students, and 75% demonstrated Sensual (Oes). The 75% who demonstrated Sensual Oes were students enrolled in Drama, Broadway Musicals, and British Poetry, and loved pizza outings, and a special weekend designed as a "girls night out" for doing facials, nails, eating chocolate and indulging. The gifted young men bombarded the staff with requests to be included, and they relished the facials and the sensual treatment. My experience with gifted students indicates that the majority of them are highly tuned into their senses, particularly the free play of their imagination with vivid visualizations, intensity of feelings and intensified activity of the mind. Some of their responses are:

**Imaginational Oe (Female, age 16)**

"Sometimes when I am imagining something, I can be composing a short musical piece and my mind usually is filled with music that I have heard or performed, but it is in the moments of internal quiet that I hear new things."
Emotional Oe (Female, age 17)
“Last summer, I became involved with the Summer Special Olympics for children with disabilities. We worked hard for weeks and weeks and finally the big day came. I was able to see our hard work pay off. To see this excellence in these special little children’s eyes flooded my soul with happiness. I don’t think I’ve ever had a rush quite like that.”

Sensual Oe (Male, age 16)
“All the time I am always trying to create scenes from my surroundings, the sounds, the colors, the smells, even the tastes. Sometimes I imagine people that I would like to talk to and, don’t laugh, talk to them. Much as they did in the movie “Tap.” I listen to the sounds around me and hear music in it, I see color and I feel happy.”

Intellectual Oe (Female, age 16)
“I would first find a pattern and follow it. What goes on in my head would be, how can I solve the problem? Second, I would tell myself that I’m not confused. I’d say, think why do we have to understand this idea? Last, I would find the pattern and then look for the whole picture.”

Psychomotor Oe (Male, age 16)
“I feel tons of energy after I do really well in a race. If I win or improve my track times, I get lots of energy. With all of this new-found energy, I usually annoy people. It comes out in the form of hyperness, and excitement and I talk a mile a minute.”

21. What are the greatest challenges facing gifted students in this age of expediency?

The greatest challenges that gifted students face in this age of expediency are similar to the challenges that gifted students have faced throughout history, of finding their place in the world. In Cuba the gifted program is referred to as “calling schools”: gifted students demonstrate a calling and the educational system nurtures and develops that calling. Gifted students have an inherent need to find purpose in life, and to embrace that purpose to make a difference in people’s lives as a teacher, physician, scientist, artist or whatever field that calls to them, but the “purpose” for most gifted students is to make a contribution. In the Texas Honors Leadership Program, a summer residential program for gifted students, Carol Adrienne’s book The Purpose of Your Life is used to encourage students to examine the four vocational archetypes she identified from many cultures. They include the Pioneer/expander (architects, city planners, progressive political activists, future-oriented consultants, theoretical scientists); the Remembered/maintainer (educators, environmentalists, natural scientists, conservative political activists and historically oriented writers); Actualizer/Builder (performing artists, professional athletes, construction contractors and workers, developers and military officers); and the Nurturer (therapists, doctors, nurses, religious teachers and leaders and professional coaches).

Purpose is a deep dimension within gifted children, youth and adults in which the central core or essence abides; where there is a profound sense of who they are, where they came from and where they are going. Purpose is the quality that gifted people choose to use to shape their lives around, and purpose can provide an inexhaustible source of energy and direction. This is the biggest challenge for gifted students today — to find their purpose and lead an authentic life.
22. In terms of futuristic education, what will we need to prepare them for?

Futures education is an ongoing educational passion, and futures is integrated into most of my activities as an educator and as a consultant. Charles Whaley and I co-authored the *Futures Primer for Classroom Teachers*, and co-chaired a division in the National Association for Gifted Children (NAGC), along with Hilda Rosselli and Gil Caudil. At the annual NAGC conference the division presented sessions and engaged in numerous discussions to explore ways of integrating futures into curriculum for gifted students. Educators need to prepare gifted students to recognize the forces that shape the future, to understand the effects of change, to understand forecasting techniques, to discover ways of dealing with change, to develop short and long-term goals, and to generate alternative futures. Gifted students need to clarify their personal values, embrace change as inevitable and use foresight to become part of the change process.

Whaley defines foresight as being essential for gifted students to make decisions about their individual and our mutual futures. The four characteristics of foresight are the need to be talented observers, sensitive to change in the environment; capable problem-solvers who can piece together seemingly unrelated events/situations and recognize complex patterns; data collectors familiar with many types of information bases and their delivery systems; and flexible and caring individuals who understand the nature of change and can develop sophisticated and positive ways of thinking about, coping with and contributing to the future.

23. How actively should we prepare gifted students for leadership roles?

Leadership skills are taught to gifted students primarily during adolescence, and many leadership development programs are designed as summer programs, including those at the University of South Florida and at Lamar University. This limited offering of leadership training is unfortunate since leadership is one of the five types of giftedness in the federal definition of gifted, and even though summer leadership programs for adolescents are beneficial, and the participants become more conscientious problem-solvers and leaders in their schools and community; the development of leadership needs to begin in elementary school and continue throughout school.

There is considerable overlap between the intellectual and personality characteristics of gifted and leadership characteristics, that suggests that the development of leadership can strengthen gifted students' inherent needs and characteristics. Intellectual characteristics of gifted students (*keen sense of justice and early moral concern*) are components of leadership; and intellectual characteristics (*power of concentration*) and the personality characteristic (*intensity*) are manifested in the leadership characteristic, a sense of urgency. Leaders develop warm person-to-person relationships and this behavior correlates with the personality characteristics (*sensitivity and empathy*) of gifted students, as well as their (*need for understanding and insightfulness*). Leaders are decisive which relates to the intellectual characteristics of gifted students (*analytic thinking, complex thought processes and exceptional reasoning ability*). Decision-making requires leaders to be rapid learners and the intellectual gifted characteristic
(facility for abstraction) facilitates a leader’s need to handle enormous amounts of information. Leaders display courage and this behavior relates directly to the personality characteristics of gifted (nonconforming and questioning of rule authority). Leaders insist on excellence, which relates to the gifted personality characteristic (perfectionism). Leaders are intellectually curious, as are gifted, and leaders have a passion for leading, since they are a vital part of the change process, as are many gifted students. One characteristic Linda Silverman lists as a gifted personality characteristic, (a tendency toward introversion) does not fit well with characteristics of a leader, since leaders cannot hide in the crowd, they are responsible and accountable for the results of their followers. It is important that teachers not overlook potential leadership in introverted gifted students.

With this natural “fit” of the needs and characteristics of gifted students and the behaviors of leaders, it is crucial that we focus on leadership in programs for gifted students. With the enormous need for leadership at all levels, we need the compassionate wisdom of gifted students and adults to help create a world responsive to the needs of everyone. Jim Gallagher has repeatedly stated that the gifted are individuals who can be the creators, the thinkers, the leaders of the next generation. Gifted children and youth enjoy pursuing real life problems and working to create solutions and these activities contribute to building their knowledge of how to solve problems. It is also important to place equally strong emphasis on building on the gifted student’s sense of caring and compassion.

Leadership can be integrated with most disciplines as gifted students study “power” as a theme. They can analyze presidential power and presidential character. Gifted students can profit from conducting extensive studies of leaders including many of the leaders. E. Paul Torrance and I included in Spiritb Intelligence. Developing Higher Consciousness: Martin Luther King Jr., Nicholas Tesla, Helen Keller, Albert Einstein, Emily Dickinson, Mother Teresa, Desmond Tutu, Nelson Mandela, Mohandas Gandhi and Franklin Delano Roosevelt. Students can role-play the individuals they research and hold “across era” round tables to discuss current issues from the point of view of their leaders. I observed a group of gifted secondary students role-playing this type of interchange, and it was exhilarating.

Gifted students view the future with considerable concern and studies of great leaders can help them to understand how individuals learn to cope with problems, and project these insights toward the future.

24. Funding — Why do we consistently shortchange gifted education in favor of sports and special education?

Sports represent an archetype that has been with us throughout history. In every culture sports represent a diversion, a recreation or physical activity that people engage in for pleasure. That says it all. My graduate training in Educational Psychology from UCLA had three specialization areas: Special Education, Guidance and Counseling and Curriculum and Instruction. This graduate training greatly impacted my philosophy concerning education of gifted students. Gifted students are exceptional students with needs and characteristics which need to be addressed, and gifted students, as any exceptional student, have a right to appropriate education. In states in which gifted education is administratively managed in Exceptional Child Education,
these programs are more adequately funded than those housed in Curriculum and Instruction. As director of the Office of Gifted and Talented, I was one of five directors in the Bureau of the Handicapped, in Health, Education and Welfare (HEW). Special educators understand exceptional children's needs and have no problem understanding that the needs of gifted students need modification, as do all exceptional children. Educators modify education of exceptional children and our collective fear is that they will not be able to develop their potential to become sufficiently independent and self-reliant. In gifted education, we make the argument that we need the talent of gifted children and adults as a national resource and we "soft pedal" the gifted student's right to appropriate education. This is probably one of our biggest errors in seeking adequate funding for gifted students. We need "poster gifted children and adults," people who did not reach their potential, and the consequential price we pay for this loss. Teachers of the students who fatally shot their fellow high school students in Columbine, Colorado approached me at a conference and said, "They were gifted students and we tried to alert our administrators, but no one listened." These teachers knew the needs of these gifted students weren't being met, and the students were seriously out-of-step, but nothing was done. We need to make a case for the horrific price that we pay for Talent Lost and Talent Denied. Jim Gallagher's slogan, from the 60's needs to be "brushed off" and presented again. No doubt Osama Bin Laden was a gifted child, for how else could he be so driven, so determined with the tenacious capacity to carry out such well thought out plans, manipulating and directing others to carry out his vision, however evil and diabolical.

Gifted students will not make it on their own, and in the midst of public discussions focused on the reduction or elimination of gifted programs, we need to focus on the current need that we have for enlightened leaders and to rebuild a national and world commitment to develop and provide for the unique talents of all gifted students.

25. What question have we failed to ask?

E. Paul Torrance and Dorothy Sisk are posing a 10th intelligence, that of Spiritual Intelligence. How does this 10th intelligence relate to Gardener's 8th and Goleman's 9th?

Spiritual Intelligence (SQ) integrates all of the other intelligences to tap the individual's inner knowledge to solve problems of a global nature. The core capacities of SQ include concern with cosmic/existential issues and skills such as meditating, intuition and visualization. The core values of SQ are connectedness, oneness, compassion, a sense of balance, responsibility and service. The core experiences of SQ include awareness of ultimate values and their meaning, peak experiences, feelings of transcendence and heightened awareness. The key virtues of SQ are truth, justice, compassion and caring, and the symbolic system of SQ includes poetry, music, metaphor and stories. SQ is product oriented and people who manifest spiritual intelligence can become great leaders and problem-solvers who attain a level of connectedness with the world and a de-emphasis on self. They achieve a state of being that creates a magnitude of change.