These four issues of "Gifted Education Quarterly" include the following articles: (1) "Using Test Results To Support Clinical Judgment" (Linda Kreger Silverman), which discusses some of the difficulties in obtaining accurate indications of a child’s level of giftedness and the importance of using professional judgment in determining whether tests have been optimally used in the assessment process; (2) "Inclusion: A Wrong Turn for the Gifted in the 21st Century!" (Bruce Gurcsik); (3) "Motivating Gifted Learners through Problem-Based Learning" (Linda Lucas); (4) "The Search for Giftedness" (Linda Kreger Silverman), which discusses reasons for studying gifted children and offers a philosophy of giftedness; (5) "The Return of Gifted Children Monthly [as Gifted-Children.Com]" (James Alvino); (6) "Homeschooling Your Gifted Child: An Effective Alternative for Differentiated Learning" (Vicki Caruana); (7) "Finding and Serving the Young Gifted Child: A Crucial Need in the Schools" (Joan Franklin Smutny and others); (8) "Mozart and the Evolution of Western Music: An Important Study for the Gifted Student" (Andrew Flaxman); (9) "Cinderella Meets a Prince: Howard Gardner" (Jerry D. Flack), which describes connections that can be established between studies of Cinderella stories and gifted students' understanding of multiple intelligences and provides multiple intelligences activities; (10) "Chapter One: The Context for Using Technology" (Adrienne O'Neill and Mary Ann Coe), a chapter taken from "Technology Resource Guide: Transporting Gifted and Advanced Learners to the 21st Century." All issues include book news and reviews on publications related to gifted education and a profile of a famous gifted person. (CR)
New Year Greetings to all of our loyal readers and supporters! I am happy to announce that all previous eleven volumes of GEPQ will be placed on the ERIC system going back to our first issue in April 1987. This will make the excellent articles written by our authors during the last ten years available to a wider range of educators, parents, graduate students and professors across the nation, and in a certain sense — timeless. We are especially grateful to Sandra Berger and her colleagues at the Council for Exceptional Children for placing these GEPQ issues on ERIC.

As a leading authority on assessing highly gifted children and adults, Linda Silverman (Director, Gifted Development Center in Denver, Colorado) has written many articles on the pitfalls of identifying these individuals. In this issue, she discusses some of the difficulties of obtaining accurate indications of a child's level of giftedness, and the importance of using professional judgment in determining whether tests such as the Stanford Binet or WISC have been optimally used in the assessment process. Her knowledge of the characteristics of gifted children demonstrates that test results must be carefully used in conjunction with this type of knowledge to obtain the best assessments of giftedness. Silverman's work also shows the importance of conducting in-depth clinical studies of giftedness. The best education for these children obviously depends upon obtaining accurate clinical and psychometric assessments of their abilities, motivation and social development.

Linda Silverman has recently been selected by Riverside Publishers to apply her extensive knowledge of gifted children in helping to revise the Stanford-Binet Test of Intelligence. As a proponent of the rigorous assessment of gifted children, she follows in the tradition of the originator of this test, Lewis M. Terman. She will discuss her philosophy of identifying and educating the gifted in the Spring 1998 issue of GEPQ.

Bruce Gurcsik, Coordinator of Gifted Programs in the Arin IU 28, Pennsylvania, has written an insightful article about the problems of using inclusion with gifted children. He has published many articles in GEPQ. The last one discussed Outcomes-Based Education in the Volume Nine (1995), No. 1 issue. The article by Linda Lucas discusses the problem-solving approach she has used to spark gifted students' interest in learning. She has previously taught at the middle school level in the Richmond, Virginia Public Schools and is now teaching mathematics in an elementary school in Lake County, Florida. This issue also includes a special book review from Gifted Education NEWS-PAGE that summarizes some of the best publications in the gifted and related fields. Michael Walters concludes with an essay on the English Victorian writer, Wilkie Collins.

Maurice D. Fisher, Publisher
Clinical judgment is the basis for diagnosis in medicine. Test results are useful within the context of other information obtained, such as presenting symptoms, medical history, family history, and patient interview. The test results themselves are of limited value unless they are interpreted by a skilled clinician who has had experience with the presenting problem. Yet, in diagnosing giftedness, too often the test results are expected to be able to do the job alone. Clinical judgment, if used at all, is subservient to the numbers. As in medicine, accurate assessment of giftedness is dependent upon the skill and experience of the examiner in interpreting protocols of gifted children within the context of all the other information obtained.

The Gifted Development Center in Denver, Colorado originated on the campus of the University of Denver in June of 1979 and serves as a field placement training facility for students in the Professional Psychology program at the University of Denver and the Counseling Psychology program at the University of Colorado. In addition, we have provided postdoctoral training in assessment to leaders in the field of gifted education from the US, Australia and the Philippines. We have assessed nearly 2,500 children. Throughout the last 18 years of training and supervising, it has become increasingly clear to me that a thorough understanding of gifted development must be a prerequisite to training in assessment; otherwise, boilerplate interpretations are likely to ensue in which numbers take precedence over clinical judgment. Such interpretations are often inaccurate.

The best evaluators of gifted children that I have ever encountered can estimate a child's level of intelligence through clinical observation, a brief discussion with the child, an interview with the parents, developmental milestones, family history, or some combination of these sources of information. Test results are interpreted within this broader framework and judged to be valid only if they conform to the clinical picture that has emerged from a more comprehensive appraisal of the child. If the test results fail to support the examiner's clinical judgment, then further evaluation is sought to determine the cause of the discrepancy. The more experience an examiner has with gifted children, the more effective his or her clinical judgment will be. Obviously, this type of assessment is more time consuming, and, therefore, more costly than typical school evaluations.

Traditional test interpretation involves averaging of verbal subtest scores and nonverbal (performance) subtest scores and then combining the averages in order to obtain composite Full Scale IQ scores. Relative strengths and relative weaknesses are determined by the degree of discrepancy between specific subtest scores and the subject's verbal mean and performance mean. The child's scores are compared to the norm to determine if they are above or below the average for their age group (Kaufman, 1994).

While traditional interpretation may be suitable for school-based assessments with 95% of the population, it often leads to severe underestimates of the abilities of gifted children because there are unique issues in assessing the gifted that are not common knowledge in the profession.

First and foremost, variations in scores from one instrument to another are much greater among the gifted than among any other group (Silverman, 1995a). Some of the most popular tests suffer from ceiling effects that only diminish the scores in the gifted range. What may appear as a "relative strength" on one test may turn out to be an astronomical strength on a test with a higher ceiling. The talent search model serves as a clear example of this principle. Two 7th graders who score at the 97th percentile in mathematics on a 7th grade achievement test may attain radically different scores when they take the Mathematics section of the SAT as an above-level test in one of the talent searches: one may score 300 and the other 700 (VanTassel-Bask, 1984). The grade-based assessment indicates that the two students are in the top 3 percent of students their age and probably qualifies them for a gifted mathematics program. But the SAT results reveal that one of the two students needs considerably more advanced work than the other. The same situation often occurs with intelligence testing with gifted students. Highly gifted students' scores frequently vary more than 2 standard deviations on various instruments (Silverman, 1995a). For example, a Canadian child achieved a Verbal IQ of 153, a Performance IQ of 116, and a Full Scale IQ of 138 on the WISC-III. I retested him on the Stanford-Binet (Form L-M) and discovered that he had a formula IQ score of 223+. We recommend that when children obtain two or more subtest scores at or above the 99th percentile on any test that they be retested on an instrument with a higher ceiling, such as the Stanford-Binet (Form L-M) (Rimm & Lovance, 1992; Silverman, 1995a; Silverman & Kearney, 1989, 1992a, 1992b).

Second, discrepancies among subtest scores are much greater among the gifted than among any other group. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)
Performance tests are more dependent on the child's physical abilities, and performance IQ scores are often better measures of mental age (cognitive ability) and tend to underestimate the abilities of gifted students rather than the entire WISC-III, since most of the variance in Giftedness and Learning disabled children is not related to general intelligence and tends to diminish IQ scores in the gifted range.

Environmental factors during assessment can have a stronger impact on the scores of gifted children than of other groups, because the actual knowledge a child has may be considerably more than the amount revealed during the testing. Among the factors that can prevent gifted children from demonstrating all of their abilities are: (1) choosing to hide their abilities out of fear of being labeled gifted (e.g., being removed from a current placement and being placed in a new environment; greater expectations of parents; losing friends; etc.); (2) unwillingness to guess for fear of making a mistake and appearing foolish; (3) anxiety at being evaluated; (4) feeling uncomfortable with the examiner; (5) feeling uncomfortable with aspects of the physical surroundings. While these variables can affect all children, where the actual ability is very high, the discrepancy between ability and performance can be enormous. For example, one child refused to answer most of the questions on the IQ test with one examiner, obtaining scores of 0-3 on most subtests, while he obtained a score of 151, in the highly gifted range, with another examiner at another agency. His mother reported that he was uncomfortable in the first setting. We recommend that enough time be spent developing rapport with the child before assessment to assure cooperation. Children can be asked to bring a favorite toy or a photograph album to share with the examiner (Meckstroth, 1989). Some of our examiners have resorted to having the child's toy answer the examiners' questions.

A different problem occurs when discrepancies which are typical in the gifted population are interpreted as signs of abnormal behavior. Gifted children typically have higher Verbal (V) scores than Performance (P) scores because the verbal tests are better measures of mental age (cognitive ability) and performance tests are more dependent on the child's physical coordination and speed. The increased emphasis on bonus points for speed in modern tests depresses IQ scores for reflective children with slow processing speed or poor motor coordination (Kaufman, 1992). It is the gifted whose scores suffer the most because they have more competence while they may not have more speed (Reams, Chamrad & Robinson, 1990). On the WISC-III and the WPPSI-R, the bonus points for speed have increased sufficiently that large discrepancies between Verbal and Performance IQ are quite common in the gifted. However, numerous gifted children are currently being misdiagnosed as having a "right hemispheric disorder" (a very serious malady) based on these discrepancies. We recommend that children be allowed to continue after the time limits, and that both timed and untimed performance be reported. If the child is able to complete the items correctly if given sufficient time, then the possibility of right hemispheric disorders is eliminated. We also routinely send children with large V-P discrepancies to a behavioral optometrist to see if slight visual perceptual weaknesses may be responsible for the disparity in scores. We have found that 6 months of vision training, faithfully practiced every day, has increased Performance scores one or two standard deviations in a number of gifted children.

Many gifted children have dual exceptionalities. They are both gifted and learning disabled. Hidden learning disabilities can be covered up by children whose extraordinary abstract reasoning enables them to find other ways to solve problems. This ability to compensate may prevent true disabilities from being diagnosed. In addition, disabilities can depress IQ scores so that a truly gifted child does not score in the gifted range. A history of chronic ear infections, for example, has a much greater impact on IQ scores in the gifted range than in the average range (Silverman, 1995b). It takes a good detective to be able to ferret out disabilities in gifted children and recognize giftedness in disabled children. We recommend that family histories be taken routinely to determine the degree of giftedness in the family and the presence of disabilities in the family, since both have a strong hereditary component. In addition, we collect very detailed information on otitis media (ear infections) in all children assessed. All of this information is vital in interpreting test results of twice exceptional children—the group most likely to be misdiagnosed (Silverman, 1989).

Certain subtests are more relevant for the assessment of giftedness than others, and certain combinations of subtests indicate mathematical or visual-spatial talent. These strengths need to be given more weight in the determination of giftedness than composite scores. We recommend that when time and money are limited (or when assessing children from different ethnic backgrounds), Vocabulary, Similarities, Comprehension, Information and Block Design—the five subtests in which more than 50% of the variance is linked to general intelligence (Kaufman, 1975)—should be administered and used to select gifted students rather than the entire WISC-III, since most of the other subtests are only weakly correlated with general intelligence and tend to diminish IQ scores in the gifted range.

This advice appears in the DSM-IV under the section on mental retardation. We recommend that the same caveat be used with the gifted. When discrepancies among subtest scores exceed 9 points, or when Verbal IQ and Performance IQ scores vary 15 points, or when Verbal IQ and Performance IQ scores vary 15 points, or when when subtest scores of twice exceptional children—those with the highest discrepancies to a behavioral optometrist to see if slight visual perceptual weaknesses may be responsible for the disparity in scores. We have found that 6 months of vision training, faithfully practiced every day, has increased Performance scores one or two standard deviations in a number of gifted children.

Many gifted children have dual exceptionalities. They are both gifted and learning disabled. Hidden learning disabilities can be covered up by children whose extraordinary abstract reasoning enables them to find other ways to solve problems. This ability to compensate may prevent true disabilities from being diagnosed. In addition, disabilities can depress IQ scores so that a truly gifted child does not score in the gifted range. A history of chronic ear infections, for example, has a much greater impact on IQ scores in the gifted range than in the average range (Silverman, 1995b). It takes a good detective to be able to ferret out disabilities in gifted children and recognize giftedness in disabled children. We recommend that family histories be taken routinely to determine the degree of giftedness in the family and the presence of disabilities in the family, since both have a strong hereditary component. In addition, we collect very detailed information on otitis media (ear infections) in all children assessed. All of this information is vital in interpreting test results of twice exceptional children—the group most likely to be misdiagnosed (Silverman, 1989).

Certain subtests are more relevant for the assessment of giftedness than others, and certain combinations of subtests indicate mathematical or visual-spatial talent. These strengths need to be given more weight in the determination of giftedness than composite scores. We recommend that when time and money are limited (or when assessing children from different ethnic backgrounds), Vocabulary, Similarities, Comprehension, Information and Block Design—the five subtests in which more than 50% of the variance is linked to general intelligence (Kaufman, 1975)—should be administered and used to select gifted students rather than the entire WISC-III, since most of the other subtests are only weakly correlated with general intelligence and tend to diminish IQ scores in the gifted range.

Environmental factors during assessment can have a stronger impact on the scores of gifted children than of other groups, because the actual knowledge a child has may be considerably more than the amount revealed during the testing. Among the factors that can prevent gifted children from demonstrating all of their abilities are: (1) choosing to hide their abilities out of fear of the consequences of being labeled gifted (e.g., being removed from a current placement and being placed in a new environment; greater expectations of parents; losing friends; etc.); (2) unwillingness to guess for fear of making a mistake and appearing foolish; (3) anxiety at being evaluated; (4) feeling uncomfortable with the examiner; (5) feeling uncomfortable with aspects of the physical surroundings. While these variables can affect all children, where the actual ability is very high, the discrepancy between ability and performance can be enormous. For example, one child refused to answer most of the questions on the IQ test with one examiner, obtaining scores of 0-3 on most subtests, while he obtained a score of 151, in the highly gifted range, with another examiner at another agency. His mother reported that he was uncomfortable in the first setting. We recommend that enough time be spent developing rapport with the child before assessment to assure cooperation. Children can be asked to bring a favorite toy or a photograph album to share with the examiner (Meckstroth, 1989). Some of our examiners have resorted to having the child's toy answer the examiners' questions.
questions or a hand puppet if the child becomes afraid of making mistakes. The room should be carefully checked for comfort level, lighting (no flickering bulbs), noise, etc. The child should be allowed frequent breaks as needed and know how to find the bathroom and his or her parent. If anxiety causes a child to freeze up, the examiner should move to a different section of the test and return to the anxiety-producing items when the child is more at ease or postpone the rest of the exam for another day.

Some highly gifted children refuse to respond if a test question is too easy. They think it is a “trick question” and read many deeper meanings into the question than are helpful (Lovecky, 1994). They may get depressed IQ scores because of knowing too much about a subject rather than too little. For example, Melody Wood, who assesses highly gifted children in Maine, asked one child, “Who discovered America?” The child thought a long time and then said she didn’t know. When the test was over, Melody asked her the question again and she replied, “I know it wasn’t Christopher Columbus. That theory was disproven, but I just can’t remember who it was.” We recommend that examiners explain to children that some of the questions were designed for much younger children and will be very, very easy, while others were designed for much older children and may be too hard, but that it is good to guess. Sometimes practicing simple guessing games like “Guess what I ate for breakfast?” helps a child relax enough to guess at more difficult questions, and these “guesses” can often be right.

How the examiner feels about the child can have a dramatic effect on test scores. Some gifted children are extremely intuitive and pick up on facial expressions, body language, and other signals that the examiner is unaware that he or she is emitting. If the examiner is hungry and is annoyed that the child is answering so many items correctly that the test is taking longer than expected, the child is likely to oblige by missing sufficient items so that the examiner can go to lunch. On the other hand, if the examiner thoroughly enjoys the workings of a gifted child’s mind and delights in every correct answer, the child is more likely to “overachieve”. (This is why the term “overachiever” is an oxymoron.) Therefore, we recommend that the highest indicator of a child’s abilities at any age should be seen as the best estimate of the child’s giftedness. When other measures fall short of this indicator, the examiner needs to search carefully to determine possible causes of the underestimate.

The measured IQ of parents or siblings, early achievement of developmental milestones, profound curiosity, deep moral concern, remarkable associations or generalizations, perfectionism, keen attention to detail, unusual empathy, vivid imagination, superb memory, early reading or fascination with Legos, school achievement, reading interests, and parental anecdotes of unusually advanced reasoning should all be taken very seriously in determining the abilities of a child. With sufficient experience with gifted children, an examiner can create a composite picture of the level of the child’s abilities, and IQ test results are nested into this schema to add further information. In the end, diagnosis of the degree of a child’s advancement must be based upon clinical judgment, not just on psychometric data.

REFERENCES


INCLUSION: A WRONG TURN FOR THE GIFTED IN THE 21ST CENTURY!

BY BRUCE GURCSIK  GIFTED PROGRAM COORDINATOR

ARIN INTERMEDIATE UNIT, PENNSYLVANIA

Gifted child education has always been an area within the profession that has received its share of support and perhaps, more than its share of criticism. Some educators have offered strong encouragement for a broad range of instructional options including wide ranging enrichment or content area acceleration. While significantly different in focus each approach has its proponents and advantages. Many successful programs offer a mixture of options as educators seek to meet the needs of the gifted. However, there are those who are adamant in their feelings that the gifted learner will be successful in spite of the obstacles, thus requiring little or no program intervention. Furthermore they maintain that such programs are elitist and should be generalized to the entire school population.

Today as our schools seek to remake themselves a new philosophy resulting from efforts to normalize education for children with disabilities has emerged. This philosophy is called inclusion. Inclusion cannot be described as a program, strategy or an even a technique, since it is being developed broadly as a principle, fundamental to a school’s operation, rather than as an individual component within a system. The National Association of School Boards of Education (NASBE) has a broad vision when it comes to inclusion. Their inclusive approach to education strives to produce better outcomes for all students through the creation of a system that is based upon the needs of the whole student (NASBE, 1992). This approach includes a broad view of the role of education which includes emphasis on several areas including academics, social and emotional development, personal and collective responsibility and citizenship. The ultimate application of this concept is the creation of the inclusive school which will have undergone a reform or
restructuring process that results in a complete redesign based on heterogeneity. Unlike its grouped or tracked predecessor in its ideal state the inclusive school is flexible, barrier-free and takes a holistic approach to preparing students for the future. Thus, inclusion may go way beyond the placement of special needs students in the regular classroom with an informal but convoluted connection to the gifted. It may reshape the entire structure, philosophy and operation of a school or district.

Clearly this is a complex issue that requires careful analysis. A brief history of special education for disabled students will help provide a perspective on an evolutionary process that has resulted in the extension of inclusion as a valid approach toward meeting the needs of the gifted in the regular classroom.

Prior to the 1970's most children with disabilities were educated in segregated facilities. These learners were separated from their peers and existed in a parallel system of education. Not only has the nature of special education changed, but even the designations of the participants have morphed from "retarded" to "handicapped" to today's designation of "children with disabilities". Throughout this period these students have moved from regional institutions to local centers; from centers to full and part time assignments in special classrooms with mainstreaming; and finally placement with support in regular classroom. Conventional wisdom and research support inclusion as the preferred educational approach for disabled learners and clearly it is long overdue.

Now we are seeing application of the philosophy of inclusion to programs for the gifted. Increasingly inclusion is offered as an alternative to pullout programs for this exceptionality. In order to analyze its validity we need to return to the fundamental reasons that inclusion exists for special needs students (to develop the academic, and social components of their education) and compare them with the needs and abilities of the gifted.

BACKGROUND

Gifted learners have significant academic needs: that must be met if these learners are to flourish. By definition they are "exceptional" in their needs and require a learning environment with instruction that is tailored to these needs. My own research and experiences suggest that we would have no difficulty reaching consensus on the importance of the following basic requirements for effective support for the gifted:

- an environment that emphasizes the highest levels of achievement
- in-depth learning activities that focus upon higher levels of thinking
- opportunities to learn at an appropriate, fast-paced rate in an accelerated cadre
- excellent preparation in subjects that lead to future high level academic studies
- opportunities for stimulating interaction with their intellectual peers

All of these suggest that the learning environment must be not only stimulating but responsive to the uniqueness of the gifted learner. Since the regular classroom typically does not provide for these needs, the provision of a special class has been a standard option in enhancing educational offerings for this group. In some cases the class is based on an accelerated curriculum or may stress enrichment of age and need-appropriate themes. Thus we have been assigning the gifted to special classrooms that focus instruction toward challenging them in an environment that differs from the regular classroom in content and structure. While some call this a pullout program, a better description would be "pull in", since we are pulling students toward educational opportunities that are more consistent with and responsive to their needs. By doing so we have been able to better address the needs of the gifted. Now some educators suggest that the gifted can be retained (included) in the regular classroom environment for all of their studies thus eliminating the need for special classes.

With this in mind an analysis of inclusion is important in understanding its potential in meeting the needs of the gifted. By examining the two major areas of focus for inclusion programs (social and academic) we can see how they measure up to meeting the needs of the gifted.

SOCIAL

In order to develop a comprehensive perspective on inclusion we need to look at one important priority – the development of opportunities for socialization that it affords students with disabilities. Through inclusion they can:

- experience full citizenship in school and community;
- form a wide circle of friends;
- learn to rely more on friends than teachers;
- take new risks

For excluded learners who require significant support in order to reach their potential these are exciting and extremely appropriate opportunities. These socialization experiences meet the requirement for a normalization of their educational programming. Thus, rather than being excluded and placed in an unnatural environment (the special education program) the development of their social domain will be well served in the regular classroom. Through regular association with the students of all abilities they will have multiple opportunities for social growth.

No such needs exist for the gifted. Typically they do not require an escape from a segregated environment that limits their potential. Unless a specific gifted child demonstrates extraordinary characteristics entry into the public school system is facilitated in ways that are typical for all learners. Their placement in the regular classroom and involvement in a variety of community athletic and social activities insures access to a typical environment in which to grow. Thus, provision for normalizing experiences is not necessary.
The gifted do not require any intervention to guarantee their access to a normal learning environment. It is automatically present.

ACADEMIC

Academic development is a major concern for students who are disabled. Opportunities to share in the wide ranging learning experiences found in the typical school are essential for this group. Isolated instruction through a separate system places limits upon their achievement. Furthermore, special education teachers can directly observe the richness of the regular education curriculum. This leads to the development of the following academic needs for disabled children:

- mastering activities not offered in special education classes
- experiencing academic challenges
- enjoying the satisfaction of achievements

As with the opportunities for social development a disabled student's involvement in an environment that is based upon inclusion is designed to improve his or her achievement. The atmosphere of the regular classroom and its curriculum are richer than those in special education and thus facilitate achievement. Regular education students serve as role models by illustrating the academic aspect of education. The school experience will have a positive effect upon the newly included learner.

As with the social domain no such academic needs are typically displayed by the gifted. Often they find the regular classroom unchallenging, stifling, and generally inappropriate to their needs. Gifted students commonly come to primary school with broad if not full mastery of most reading objectives. They grasp new concepts easily and do not require many repetitions for success. If anything they find the pace too slow and uninspiring. Thus, assignment to the regular classroom as a source of academic challenge is not consistent with the needs of this exceptionality. Inclusion in an inappropriate assignment with the wrong objectives is never desirable.

One other aspect of the academic area that should be addressed is the need for gifted students to participate in classroom instruction that has a strong cooperative learning orientation. Cooperative learning strategies are being suggested as solutions for a missing ability among American workers to work together successfully. The theory suggests that by experiencing academics in a cooperative environment the "skill" will be developed. While this may be so there is a wholly undesirable aspect to cooperative learning structures that are inappropriate for the gifted. They are inappropriate because they provide training in cooperation at the expense of an emphasis on higher order thinking skills and challenging content. Below I have excerpted a chart from "The Structural Approach to Cooperative Learning" by Kagan (December/January, 1990). The chart lists the structure and the functions that it serves. I have added a column labeled Appropriateness for the Gifted in order to relate the structure and functions to the gifted. Of interest to the reader will be the levels and types of thinking that are involved.

---

<table>
<thead>
<tr>
<th>Structure</th>
<th>Functions (academic and social)</th>
<th>Appropriateness for the Gifted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think-Pair-Share</td>
<td>concept development: initiation, active listening, increased involvement</td>
<td>little or none</td>
</tr>
<tr>
<td>Formulate-Share-Listen-Create</td>
<td>concept development: initiation, active listening, increased involvement consensus building, perspective taking</td>
<td>minimally effective</td>
</tr>
<tr>
<td>Numbered Heads Together</td>
<td>mastery: review checking for knowledge tutoring, consensus building</td>
<td>little or no benefit</td>
</tr>
<tr>
<td>Say and Switch</td>
<td>Multi functional: assessing prior knowledge, recalling information, active listening, elaboration</td>
<td>inconsistent with the needs of most gifted learners</td>
</tr>
<tr>
<td>Roundtable/Round robin</td>
<td>Multi functional: practicing skills, recalling skills, team building, turn-taking</td>
<td>never a priority for the gifted</td>
</tr>
</tbody>
</table>

---

GIFTED EDUCATION PRESS QUARTERLY  VOL. 12, NO. 1  WINTER 1998
Clearly, many of the structures that are practiced in the inclusive classroom are inappropriate to the needs of the gifted. They are designed to accommodate learners and enjoin them with the regular program to which the gifted already belong. They tend to serve purposes other than challenging our high ability learners to do their best work. Frankly, these cooperative learning components do not meet the needs of the gifted.

CONCLUSION

Most educators would agree that providing a quality education for all students is our primary goal. The restructuring that we see in schools in every community is strong evidence that we are committed to improvement. Inclusion for disabled learners is one strategy that will help us accomplish this goal. However, the extension of this strategy or concept that is inconsistent with the needs of the gifted and does not further our progress toward the goal. The needs of the gifted and those of the disabled are too dissimilar to be satisfied by the same approach. Well intentioned reformers must look beyond broad generalizations and examine their thinking thoroughly. “What’s good for the goose is good for the gander” thinking just does not make it today. We know too much about the needs of the gifted to accept this approach as another global cure. Frankly, inclusion for the gifted is a wrong turn that we shouldn’t make!

BIBLIOGRAPHY


Copyright ©1996 Bruce Gurcsik, Ph.D.

MOTIVATING GIFTED LEARNERS THROUGH PROBLEM-BASED LEARNING

BY LINDA LUCAS  CLERMONT, FLORIDA

As a teacher of gifted students in a middle school, I am constantly challenged to teach these lively adolescents in ways they find relevant, interesting, and challenging. Although I have developed my own units for some time, I began to become frustrated with much of what I encountered in my search for materials and resources. I wanted to find something I felt my students could sink their collective teeth into. To begin my search, I turned to my most valuable resource, the students themselves.

I was interested in finding out how my middle school gifted students felt about their education and schooling. In most cases, we, as adults and as educators, tell our students what they need to know, when we think they need to know it, and why they should want to learn it. In few instances do we ever ask them their opinions. I made appointments with some of my gifted students to spend their lunch time with me in an informal conversation about school. I wanted to know what they were learning in school and what they were learning that they felt would be of value to them later in life.

My students had very strong opinions about what they are asked to learn and the rate at which they have to learn it. The most common complaint with the system was the review and repetition they endure year after year, and the resultant daily boredom. The students reinforced the studies that indicate most of them show mastery of 35 to 50 percent of the curriculum before they begin the class. They voiced frustration with spending their time in school going over the same information year after year. As they described their school year: the first semester they review what they learned last year, and...
the second semester they add a little bit of information to what they already know. This, coupled with the expectations by their teachers to memorize increasingly useless information, has lead many of the brightest students to lose any interest or excitement in the hours they spend in the classroom. When asked directly what they were learning in school, the answer was most often “nothing I don’t already know.”

That so many of our students work below their potential has grave implications for the nation. The scholarship, inventiveness, and expertise that created the foundation for America’s high standard of living and quality of life are eroding. Most top students in the United States are offered a less rigorous curriculum, read fewer demanding books, complete less homework, and enter the workforce or postsecondary education less well prepared than top students in many other industrialized countries. (Ross, 1993)

These bright students want to learn. They are serious about their education. In their interviews with me they said over and over again that they wished they could apply the knowledge they possess to real world situations. They want to find out what is in the world for them to do, because they know there is more out there than the traditional expectations. They want to discuss important issues, real issues; they want to know what is ahead of them as future workers, future citizens. In their comments these student voiced frustration with most of what they were required to do in school.

I told them about what the predictions were for their future: technological developments at increasingly rapid rates; of a global economy; of the need for rapid problem solving and identification of problems; of the flexibility to change jobs frequently as demand for certain skills disappears and new skills are needed. Their reaction was understandably one of puzzlement. If this is what is predicted, then why aren’t they learning these skills in school? Preparation for future citizens. In their interviews with me they said over and over again that they wished they could apply the knowledge they possess to real world situations. The problem that mirrors real-world problems (Finlde & Torp, 1995).

One way to integrate the content of their classwork with their desire to apply their knowledge to real world situations is through the use of Problem-based Learning units. Problem-based Learning (PBL) is a curriculum development and instructional system which simultaneously develops both problem-solving strategies and disciplinary knowledge bases and skills by placing students in the active role of problem-solvers confronted with an ill-structured problem that mirrors real-world problems (Finkle & Torp, 1995).

This problem is presented in the form of a scenario. The problem must be one that engages the students, is changed by the addition of new information, is not easily solved, and has no “right” answer. The students assume the role of problem-solvers, while the teacher is a tutor and a coach. In seeking a solution to a problem, the student applies and learns research and communication skills, develops strategies, and tests and rejects hypotheses. The student also uses interpersonal skills while working as a member of a group.

Last spring I wrote a PBL unit for use in a class in which my students were studying the history of Richmond. Although this area of Virginia is steeped in history and studded with historical markers, shrines, and registered sites, my students knew little about it. Through videos, books, field trips, and research, as well as direct instruction, the students became aware of Richmond’s place in the development of the state and the nation.

After this more traditional approach to the content material, I presented them with the problem scenario. The problem placed them in the position of a council member representing a historic area of the city, an area that was also experiencing the proposed expansion of a convention center. Thus, the stage was set for a confrontation between historic preservation and the future economic growth of the city and surrounding areas.

To understand the problem better, we went to the Jackson Ward area of downtown Richmond and saw firsthand the site in question. The students studied this area, once known as the “Black Wall Street” of the country, and learned about the famous citizens who lived and worked there. We pored over blueprints of the proposed expansion and photographed some of the historic buildings and houses that were threatened. The students contacted officials at city hall, studied testimonials from area businesses in support of the plans, and calculated how much it cost to move buildings.

Finally, they were ready to come to a decision. The students met in small groups and drew up plans for their resolution to the problem. Representatives from each group met, presented their group’s plan, and struggled to come up with a compromise. These representatives returned to their groups, reworked the resolution, and met again with the other representatives to hammer out a final solution. This opportunity to participate in a “representative democracy” was an important part in helping the students understand their roles as future citizens. How often in school do students get to experience this most important privilege we have as citizens?

The students wrote a final resolution to city council outlining their proposal for the solution of the problem and invited council members, business people, the director of the convention center, parents, and school officials to their presentation. Not only did they plan the presentation of their resolution, but they were responsible for every detail involved in the big event. Teams of students located chairs, tables, video equipment, wrote welcoming addresses, sent out invitations, measured the number of drinks in a two liter bottle, ordered a cake, and arranged for a clean up crew. In short, they did it all.

Did all the students agree with the resolution? No. Did all the students remain constantly engaged in the learning process? No, nor did they all learn the same things from the experience. Each of them approached the problem and the problem-solving in a way unique to the individual. Some of the students were more interested in the cost of moving houses, while others were more concerned with the people whose houses would be moved or torn down. They all,
I felt that PBL helped us all do better in class. We worked together and got to know each other better. We learned and had fun, and I think that's what makes it an almost perfect class."

"This unit has shown me what complicated problems society has to face every day. I realize what an extremely hard job it must be to have to constantly find solutions to some of society's huge problems."

What was this experience like for a teacher? It was one of the most exciting and exhilarating units in which I have been involved. (Part of my reaction might have been accredited to relief, as writing a PBL unit often involves a lot of telephone calls, meetings with resource people in the community, and locating materials for the students, which can be a time-consuming process.) As coach and facilitator, part of my responsibility was to keep an eye on the clock, as the students were so involved in the classwork they lost track of time. I enjoyed watching students turn into competent problem-seekers and problem-solvers. Every day, when the last students had gathered their bookbags and left, I stood basking in the energy that was still electrifying the room. This was a way to challenge my students. I had found a framework to offer my students their desire for real-world experiences.

PBL can be challenging for a teacher. The preparation, as mentioned before, can be time-consuming. Learning to ask questions instead of giving answers is a role reversal for most teachers, and often an uncomfortable one. Careful observation of student group interactions can yield clues about their progress through the problem, as well as their success in handling interpersonal issues. Listening and anticipating where the students are headed in their investigations is an essential teaching skill to learn, as once in a while they need to be "nudged" back on track. Problem-based Learning is rewarding.

If we expect our children to become lifelong learners, then we must give them a reason to want to learn. Many students hold the belief that no one wants to listen to them, to their ideas, to their solutions to problems. Someday these same students will be our leaders, our workers, our scientists and inventors. When and where are they supposed to acquire the skills they will need as adults? Does sitting behind a desk listening to a teacher drone on about past events help our children learn to be citizens in the twenty-first century? With courses centered around problem-solving, students have the opportunity to learn and apply skills they will need in the future. They will learn how to find information they need when they need it, they will learn to ask questions, to weigh decisions and predict possible outcomes. They will learn to construct their own meanings from the data they collect. They will learn to evaluate other's solutions to problems. In some cases they will come up with real solutions to real problems and find out that people will listen to them.

These are the sources cited in the article:


The following are sources/resources for further information and teaching materials.
For Problem-based Learning units designed for elementary and middle school students, especially in science, mathematics, and language arts.

The Center for Gifted Education
The College of William and Mary in Virginia
POB 8795
232 Jamestown Road
Williamsburg, Virginia 23187-8795
e-mail: cehugh@mail.wm.edu

For information on William and Mary's e-mail discussion groups contact Linda Boyce:
lnboyce@facstaff.wm.edu

For information on the Problem Log newsletter, an Internet users group and other PBL topics:
Linda T. Torp, Ed.S.
Strategic Coordinator for PBL Initiatives
Center for Problem-Based Learning
Illinois Mathematics and Science Academy
1500 W. Sullivan Road
Aurora, IL 60506
Phone: (630) 907-5956 or 5957
FAX: (630) 907-5946 or 5062
PBL WEB SITE http://www.imsa.edu/teamm/cpbl/
"Time flies." With this issue we present a summing-up of the best books reviewed in GIFTED EDUCATION NEWS-PAGE over the last six years. This list should help those readers who seek highlights of past issues. Here are outstanding books published since 1989 that we recommend for everyone concerned with the development and education of gifted children. They are listed primarily in the order in which they were reviewed.

The Unschooled Mind: How Children Think and How Schools Should Teach by Howard Gardner. Basic Books, 1991. The author discusses how research on thinking and cognitive development can help those with the highest abilities, but have difficulties learning mathematics, the sciences and the humanities because of their immature ways of reasoning acquired during the early years from five to seven. This is an important book which all educators concerned with developing a stimulating curriculum for the gifted should read.

Multiple Intelligences: The Theory in Practice by Howard Gardner. Basic Books, 1993. A comprehensive summary of the applications of the theory of multiple intelligences. Gardner's original work on this topic, Frames of Mind, was published in 1983. We have always been impressed with his engaging style of writing about multiple intelligences because he writes from the perspective of a humanist psychologist and scholar of the arts and humanities than as a narrowly focused psychometric theorist.


Many parents are effective advocates for gifted children but they do not usually read enough in the field. These three books by Joan Smutney (Director - Center for the Gifted; National-Louis University; Evanston, IL) and her colleagues should be used as a set for providing parents with information they need about the gifted field. All three volumes are written with enthusiasm and considerable knowledge concerning what it takes to raise and educate the gifted.

Recommended Practices in Gifted Education: A Critical Analysis by Bruce M. Shore, Dewey G. Cornell, Ann Robinson and Virgil S. Ward. Teachers College Press, 1991. Every educator of the gifted should read and use this book. The authors have done a superb job of organizing and discussing numerous concepts of identification and differentiated instruction, and of relating these concepts to current research and accepted practices.

Terman's Kids: The Groundbreaking Study of How the Gifted Grow Up by Joel N. Shurkin. Little, Brown, 1992. An excellent resource for those individuals who would like to learn more about the gifted, and to read a concise description of Terman's research. Shurkin has provided readers with a complete description of the technical details of Terman's longitudinal study of about 2,000 intellectually gifted individuals.

Creating Minds: An Anatomy of Creativity Seen Through the Lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi by Howard Gardner. Basic Books, 1993. An engaging and inspiring book for many reasons. It contains beautifully written biographies of profoundly creative/gifted individuals. One can read these biographies solely for their literary merit and content without being too concerned about the usefulness of Gardner's creativity model. However, we believe this model represents the most serious effort in the last twenty years to understand highly creative people.


Gifted Children: Myths and Realities by Ellen Winner. Basic Books, 1996. A unique and essential work in a field that has an abundance of textbooks on identifying and educating gifted children. Winner's book is similar in quality to a few exceptional works in the gifted field such as Gifted Children: Their Nature and Nurture (1926) by Leta S. Hollingworth and Differential Education for the Gifted (1980) by Virgil S. Ward.
Some Of My Best Friends Are Books: Guiding Gifted Readers from Pre-School to High School by Judith Wynn Halsted. Ohio Psychology Press: Dayton, OH, 1994. A comprehensive guide on the importance of books in the lives and education of gifted and intellectually curious students. Besides providing extensive information on how books can be used to foster their emotional and intellectual development, Halsted gives the reader useful background information on the history of current issues in gifted education.

Leading Minds: An Anatomy of Leadership by Howard Gardner. Basic Books, 1995. Although this study of leadership has wide applications to education and society, Gardner’s book is of special interest to educators of the gifted because it provides many insights into the leadership characteristics of highly able individuals in science, social change, politics and business. Gardner argues that leaders exert their primary influence through the stories they tell and the embodiment of these stories in various traits.

Emotional Intelligence: Why it Can Matter More than IQ by Daniel Goleman. Bantam, 1995. Provides information that teachers can use to design emotional training in differentiated programs. Of equal importance, it can help gifted children to understand the neurological foundations of emotional responses, particularly the short circuiting that occurs when sensory stimuli bypass the cognitive areas of the brain and directly impact on the emotional areas (amygdala).


WILKIE COLLINS (1824-89): A VICTORIAN WRITER SPEAKS TO THE GIFTED ADOLESCENT OF TODAY
BY MICHAEL E. WALTERS CENTER FOR THE STUDY OF THE HUMANITIES IN THE SCHOOLS

"The light thus produced was deliciously soft, mysterious, and subdued; it fell equally upon all the objects in the room; it helped to intensify the deep silence, and the air of profound seclusion that possessed the place..." From The Woman in White (p. 31) by Wilkie Collins. Bantam.

During the fall of 1997, two shows based on Wilkie Collins’ books will be presented on PBS: The Woman in White (1860) on Mystery! and The Moonstone (1868) on Masterpiece Theatre. Therefore, here are two good opportunities for teachers of the gifted to help their students connect the television and print media. These novels are especially poignant for teenage gifted students because Wilkie Collins was a popular fiction writer as well as an excellent literary artist.

Collins is representative of the quality that sensibility plays in the personality and creativity of an artist. Both his grandfather and father were painters. He originally studied for the law but never practiced. However, this legal training gave him analytical and deductive skills. The art background from his father, who was one of the most famous landscape painters of the 19th century, enabled him to see narratives in visual images. As a youth, he traveled and lived in Italy for several years. During his writing career, he was part of a circle of gifted and talented writers such as Charles Dickens, Charles Reade and William Thackeray. He was Charles Dickens’ personal friend and colleague. They traveled to Europe together, and performed plays on the London stage, each taking different parts. His major novels were serialized in periodicals that Dickens edited. Collins suffered from painful gout and eye conditions – yet he forced himself to continue his writing activities. In a preface to a revised edition of The Moonstone (1871), he tells his readers how his sense of duty to them inspired him to finish this novel.

His writing style has been described as “sensate fiction” which means the reader encounters elements of horror, pity and terror. In addition, he enlarged the Gothic novel to also include elements of social manners. The experience of reading Collins is very appropriate for gifted students. They can examine all aspects of his novels – the visual beauty, the psychological insights, the analytical solutions to mysteries, the emotional ingredients of suspense, the locales (India and England) and how he used them. All of these elements can produce good exercises for stimulating the sensibility of gifted students. Most of all, his novels have emotional tones that appeal to the gifted adolescent – for example, a suicide in a quicksand swamp, portentous dreams, mysterious letters, cunning disguises, addictive drugs, and romantic obsession. Collins also described in The Moonstone how circumstances influence character. His female characters are among the most sensitive and sympathetic in English literature since he told this story from a woman’s point of view.

The PBS stations have video tapes of both productions, so teachers of the gifted can easily obtain copies for their classes. This interaction of electronic and print media will be a joyful, instructive and insightful experience for the gifted teenage student. Collins speaks to our times as well as his own.
A debate is currently raging among researchers and academics over the relative importance of giftedness as a developmental trait versus the enhancement of human abilities through talent development programs. Academics have divided into two opposing camps, arming themselves with supporting research studies. From our perspective, we are reminded of previous social science and educational debates (e.g., heredity versus environment, acceleration versus enrichment) that have produced reams of journal pages, books and convention papers with little resolution of the original problem. Is the current argument over giftedness versus talent development worth the time and effort? Is there some validity to each side of the debate that renders the sharp dichotomy between the disputants meaningless? Is this split in the academic ranks caused by a pseudo-problem rather than a valid issue that will determine the future of the gifted in the United States? What are some important problems that educators of the gifted should be concerned with studying and debating? We welcome your responses to these questions for publication in GEPQ.

Dr. Linda Silverman of the Gifted Development Center (Denver, Colorado) discusses her reasons for studying gifted children and her philosophy of giftedness. Her statements on these matters are inspiring for everyone in the gifted field, but particularly for those individuals who must engage in constant battles to defend their gifted programs. In the previous issue of GEPQ, Dr. Silverman explained her procedures for assessing gifted children, which are based upon extensive clinical observation and rigorous testing with such instruments as the Stanford-Binet Intelligence Scale (Form L-M).

We are happy to present Dr. James Alvino’s article concerning his new web site (www.gifted-children.com). We respect his editorship of the Gifted Children Monthly during the 1980s, and highly recommend this Internet site as a model of how the World Wide Web can be used to increase teachers’ and parents’ understanding of gifted children. Gifted-children.com includes all of the excellent articles that were originally published in GCM and other extensive interactive resources in the gifted field. We wish Dr. Alvino much success in his new venture!

Ms. Vicki Caruana is a teacher of the gifted and parent concerned with designing effective differentiated homeschooling programs. Her article includes basic information and questions that parents should address before deciding to homeschool their children. Ms. Caruana is working on a book (Gifted Education Press) concerned with homeschooling gifted children. Dr. Michael Walters completes this issue with a stirring essay on the great English poet of gifted sensibility, John Keats.

Maurice D. Fisher, Publisher
THE SEARCH FOR GIFTEDNESS

LINDA KREGER SILVERMAN, PH.D.
GIFTED DEVELOPMENT CENTER
DENVER, COLORADO

I am a lifer in this field; it is my calling. From the time I was in high school, I have had an abiding passion to understand giftedness and to help the gifted be better understood. Four decades of examining every aspect of this phenomenon—developmental, educational, psychological, even spiritual—has resulted in a set of beliefs and principles that guide my writing and psychological practice. The two leaders with whom I am most philosophically attuned are Leta Hollingworth and Annemarie Roeper. Although she passed on two years before I was born, Leta Hollingworth has been a spiritual mentor to me; her deep understanding of gifted children, her child-centered approach to teaching and counseling, her extensive research, as well as her poetic essays, have had a powerful impact on my philosophy. And I have been blessed by the opportunity to work closely with Annemarie Roeper, the quintessential philosopher in our field. She has given me greater awareness of the importance of the Self, the child’s perspective of the world, and the interdependence of all life on earth. I have tried to incorporate Leta’s and Annemarie’s wisdom and exquisite insights into my practice. Another strong influence on my beliefs has been Kazimierz Dabrowski’s theory of positive disintegration, with its five levels of development and overexcitabilities—the wiring for intensity that comes with the territory of giftedness. I never had the opportunity to meet Dabrowski, but my life has been deeply enriched by his theory and by the quarrels, questions and collaborations with my dear friend, Michael Piechowski, who introduced Dabrowski’s theory to gifted education.

I see giftedness holistically, rather than compartmentalizing it into various types of abilities. The manifestations of giftedness emerge in early childhood. There is a different level of awareness and responsiveness, a palpable sensitivity and intensity in gifted infants, regardless of whether they will grow up to be artists or musicians or politicians or inventors or teachers or homemakers. When we look at all the different paths that adults may take in their lives and try to categorize the paths and rank order the degree of recognition an individual receives within a domain, I believe we lose sight of the deeper significance of giftedness. To me, giftedness is not about achievement or about the potential for recognition in society. Nor is it about straight A’s and honors in school. Rejecting these more accepted perspectives has put me somewhat at odds with most contemporary theorists and school-based positions.

I believe gifted children come equipped with more complex, more sensitive nervous systems [complete with overexcitabilities] that complicate their functioning in the world. They tend to ask more profound questions, like “How do we know that we aren’t part of someone else’s dream?” They see patterns and relationships their agemates don’t see. They have greater awareness of the implications of events, and can have empathy for someone else’s plight, even when they are not in danger themselves. They often are deeply affected by the violence in children’s cartoons, movies, commercials, the Bible, news reports, and in real life. This is not mere precocity—getting “there” faster; it is a qualitatively different way of experiencing life. These inherent differences make them vulnerable in a society that prizes sameness. For these reasons, rather than setting them on the right path academically or vocationally, I believe that gifted children need to be identified early, supported by parents and teachers, and counseled by individuals who understand the internal facets of giftedness, not just the external manifestations or potentials of the child.

Giftedness, in my view, is lifelong. The intensity, sensitivity, awareness, abstract reasoning abilities, complex thought processes, and all the other gifted traits that appear in early childhood remain with the individual throughout the lifespan. (The only exception I have found is short-term memory!) These characteristics create a different life experience for the gifted: A life that may be consumed with the search for truth, the search for meaning, the search for an understanding of the Universe, striving to fully comprehend a single idea, striving toward moral perfection, striving to fulfill a sense of one’s mission, or striving for self-actualization. These differences in cognitive and personality traits, perspectives, values, goals, and life experiences often make the gifted child or adult feel like an outsider in society. In adult life, sometimes it is necessary to be an outsider, to shed consensus reality, in order to observe with greater clarity. But it is painful in childhood to be shut out of the group, and it can be heartbreaking to watch one’s child eating alone in the school cafeteria or not invited to birthday parties.

As I have a background in special education, I see giftedness in many ways as the mirror image of retardation. The degree to which an individual veers from the norm in either direction affects rate of learning, social adaptability, and general functioning. The greater the developmental advancement or the developmental delay, the greater the necessity for modifications at home and at school in order for children with special needs to function optimally. A child with the mental development of a 15-year-old and the physical development of a child their age, but who has a life that may be consumed with the search for truth, the search for meaning, the search for an understanding of the Universe, striving to fully comprehend a single idea, striving toward moral perfection, striving to fulfill a sense of one’s mission, or striving for self-actualization. These differences in cognitive and personality traits, perspectives, values, goals, and life experiences often make the gifted child or adult feel like an outsider in society. In adult life, sometimes it is necessary to be an outsider, to shed consensus reality, in order to observe with greater clarity. But it is painful in childhood to be shut out of the group, and it can be heartbreaking to watch one’s child eating alone in the school cafeteria or not invited to birthday parties.
year old and the physical development of a 8 year old has as great a challenge as the child with the body of a 15 year old and the mind of an 8 year old. This “asynchronous” development means being out-of-sync internally as well as with one’s age peers.

Giftedness is complex. It cannot be reduced to an IQ score or a grade point average or a place in history. A much more complex way of looking at the phenomenon is needed to truly understand the needs of gifted children, the concerns of their parents, the existential angst of gifted adolescents, and the particular issues that face gifted adults. First and foremost, giftedness must be seen as central, rather than peripheral, to the individual’s identity. Like retardation, giftedness is a different ground of experience; therefore, it is necessary to look at the individual through the lens of giftedness in order to get a complete picture. That is what we attempt to do at the Gifted Development Center in assessment and counseling with this population.

Probably for budgetary reasons, school systems tend to begin with the assumption that a child is not gifted unless there is objective proof of exceptionality. My colleagues and I at the Gifted Development Center begin with a different assumption. First, few parents have the courage to call an agency with a name like ours unless they have a strong suspicion that their child is gifted. Second, we are not subsidized; families must absorb the full costs of services. Therefore, the expense entailed in determining if one’s child is gifted is also a deterrent to gifted-wannabees. Third, we have developed a lengthy phone intake procedure in which parents are asked to indicate the degree to which their child exhibits 25 cognitive and personality characteristics of giftedness, and to give us examples. Through analysis of 1,000 cases, we have found that if a child demonstrates ¾ of these characteristics, there is an 84% chance that he or she will test in at least the superior range of intelligence (above 120 IQ).

These characteristics in Table 1 are an effective screener, increasing the likelihood that our clients are gifted. Our job is to search for how the giftedness expresses itself, discover its degree and pinpoint relative strengths and weaknesses.

With this information as a starting point, we consciously look for signs of giftedness. If a child fits most of the characteristics, but scores significantly below expectations on the IQ test, I want to know why. Was the child fully cooperative with the examiner? Is there a hidden learning disability? Did the child demonstrate text anxiety? Was fluctuating attention, distractibility or high activity a problem? Were there any clues in the child’s behavior, such as reluctance to guess, withholding information, teasing the examiner, possible illness?

I also look for confirmation of the child’s giftedness in the 7-page developmental questionnaire the parents complete, such as ages at which certain developmental milestones were mastered, moral sensitivity, unusual curiosity, advanced interests, and notable anecdotes. In the intake procedure and developmental questionnaire, we ask about evidence of giftedness (and learning disabilities) in other family members. Both giftedness and learning disabilities have a strong hereditary component. In one study we conducted with 148 sets of siblings, we found that over a third were within 5 IQ points of each other, more than 60% were within 10 IQ points of each other, and 73% were within 13 IQ points of each other. Whenever we find one gifted child in a family, we recommend testing for all the other children, regardless of how “normal” the child may appear to the parents or the school. This advice has revealed an amazing number of hidden gifted children who failed to be recognized because they were not achievement oriented.

I have profound respect for and trust of parents of gifted children. Who has had more experience with a child than his or her parents? My view of gifted children is similar to the perspective of their parents. I look at the child as an individual with a unique purpose in the scheme of things—a child who, by virtue of his or her exceptionality, needs a modified program in order to fulfill that purpose. As I take idiosyncrasies as a given

**Table 1**

**Characteristics of Giftedness in Children**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Morally Sensitive</th>
<th>Has Strong Curiosity</th>
<th>Perseverant in Interests</th>
<th>Has High Degree of Energy</th>
<th>Prefers Older Companions or Adults</th>
<th>Has a Wide Range of Interests</th>
<th>Has a Great Sense of Humor</th>
<th>Early or Avid Reader</th>
<th>Concerned with Justice, Fairness</th>
<th>Judgment Mature for Age at Times</th>
<th>Is a Keen Observer</th>
<th>Has a Vivid Imagination</th>
<th>Is Highly Creative</th>
<th>Tends of Question Authority</th>
<th>Has Facility with Numbers</th>
<th>Good with Jigsaw Puzzles</th>
</tr>
</thead>
</table>

GIFTED EDUCATION PRESS QUARTERLY VOL. 12, NO. 2 SPRING 1998
at both extremes of intelligence, I place less emphasis on the child conforming to the norm of his or her age mates. Of course gifted children need to learn what is socially appropriate, but their differences must be respected in the bargain.

I feel that gifted children need to find others like themselves—true peers—in order to develop social competence. Therefore, I am a strong proponent of self-contained classes in public schools and private schools for the gifted. As full-day programs for the gifted are rare, and private schools are costly, I also support homeschooling as viable option, as well as interactive computer instruction, radical acceleration, mentorships, and college-based enrichment programs. Many options and enormous flexibility are needed in order to respond to the wide range of needs, abilities, and degrees of advancement in different areas presented by gifted children. At our Center, we explore with the young person and his or her parents a variety of options to see which ones appeal to student and the family.

The staff at the Gifted Development Center is child-centered. We believe that children should be given a voice in their education; they should have input in the selection of a school, in grade placement, in teacher selection, and in curricular adaptations. Children often have a better sense of their own needs than the adults who make decisions for them. We try to increase communication and respect in families by recommending family meetings in which conflicts are aired and children learn negotiation skills.

Another area of focus is on the visual-spatial learning style. In 1982, I wrote a paper entitled “The Visual-Spatial Learner” which described a learning style I had observed in a considerable number of gifted children. Visual-spatial learners think in images rather than words, learn most readily through visual means and visualization, are holistic rather than detail-oriented, have a better understanding of space than of time, focus on ideas rather than format, tend to be divergent thinkers, and may have problems with sequential skills. The majority of underachieving students I have encountered are visual-spatial learners who perform significantly better on visual-spatial tasks than on auditory-sequential tasks. Creative students, certain minority groups, children with attentional deficits, and many highly gifted children tend to have much stronger spatial than sequential abilities. These children thrive in classrooms that use visual and conceptual approaches, and they bomb in classes that rely on lecture, rote memorization, timed tests, and in-class writing assignments. Five years ago, we gathered a multidisciplinary team to develop a Visual-Spatial Learner Identification Instrument, and we are currently conducting validation studies of the instrument. We are also continuously developing strategies to assist visual-spatial learners in the classroom.

Personality assessment is yet another area of interest. I discovered that visual-spatial learners tend to be introverted and that more gifted children are introverted than extraverted. I developed the Introversion/Extraversion Continuum, Characteristics of Introversion in Children Scale, Characteristics of Introversion in Adults Scale, and, with Karen Rogers, a Personality Characteristics Scale. We administer the Myers-Briggs Type Inventory to all families of underachievers who come to the Center for counseling, and have found it quite useful in reframing much of the conflict that occurs around performance.

The Gifted Development Center is a training center for the Stanford-Binet Intelligence Scale (Form L-M), the only instrument with a high enough ceiling to assess profoundly gifted children. For this reason, Riverside Publishing Company has given written permission to use the Binet L-M for gifted assessment until the 5th edition of the Binet Scale is available (in approximately 3 years). The fifth edition will return to the developmental age-scale format of the L-M. I have been invited to serve on the panel that will guide the development of this edition.

At the Gifted Development Center, we specialize in comprehensive assessment, including individual IQ scales; achievement tests; Harter self-concept inventories; projective tests, such as the Plenk Storytelling Test; Characteristics of Giftedness Scale; the Developmental Questionnaire, and the Introversion/Extraversion Continuum, in order to gain a full picture of the whole child. Patterns of subtest scores contain a wealth of information about the child’s learning style, and often reveal hidden disabilities as well as higher than suspected reasoning abilities. My Ph.D. in Special Education from USC has sharpened my skills as a detective of hidden learning disabilities. In addition to cognitive and personality assessments, we counsel children, families and adults using Dabrowski’s theory, Psychosynthesis, Neurolinguistic Programming, and other humanistic approaches. We also offer parent advocacy; phone consultations; the publication of Advanced Development: A Journal on Adult Giftedness, which helps parents understand their own giftedness; publication of various articles (many of which can be found on our website); consultations to school districts; post-doctoral and pre-doctoral internships; courses and presentations. We sponsor a support group for parents of children above 160 IQ and we have created a consortium of schools for the gifted. The Center is involved in ongoing research on the visual-spatial learner, profoundly gifted children, and comparisons between assessment instruments.

I truly love my work and the gifted children and their families I have had the good fortune to meet over the years. They need advocates in a world that is not always responsive to those who march to a different drummer. ☀ ☀ ☀ ☀ ☀ ☀ ☀ ☀ ☀

Note: I usually overload articles with citations, and I purposely refrained from using any in this article. If you need references, please visit our website at http://www.gifteddevelopment.com or contact the Gifted Development Center at (303) 837-8378.

Linda Kreger Silverman, Ph.D., is a licensed psychologist
who directs the Gifted Development Center, a subsidiary of the nonprofit Institute for the Study of Advanced Development. Her books include Counseling the Gifted and Talented and Advanced Development: A Collection of Works on Gifted-

cess in Adults. She consults and teaches courses in Australia and the United States and she has contributed nearly 200 articles, books and chapters. She has a passion for the gifted.

THE RETURN OF GIFTED CHILDREN MONTHLY [AS GIFTED-CHILDREN.COM]

BY JAMES ALVINO, PH.D. HUNTINGTON BEACH, CALIFORNIA

Logging On

Many years ago, when Arthur Lipper first recognized the need for, financed, and launched Gifted Children Monthly (GCM as it came to be known), he had a dream that it would become the communications vehicle of choice for parents of our country's estimated 2.5 million gifted children. GCM won many accolades and enjoyed a circulation in the high tens of thousands, but neither he nor I at the time could envision the impact of technology or the Internet as a medium for delivering our message.

Back in 1981, when I became Editor-in-Chief of GCM, my daughter Jaimi was 5-years-old. In a way, she and GCM grew up together. She was 13 when we ceased publication as Arthur, after 10 years of supporting the publication, could no longer provide the necessary subsidy of more than $150,000 per year. Many of my editorials chronicled the trials and tribulations of raising a gifted child for our 50,000+ subscribers. Gifted education has been my career in one form or another for .21 years. It is with this enduring professional commitment and the passion of a father that I have become involved in [GCM again via] Gifted-Children.com as its Executive Editor.

Gifted-Children.com uses state-of-the-art technology to bring extensive user-friendly resources, original content, access to databases, forums, and networks to help parents identify, encourage, and develop their children's gifts and talents. In this article, I will discuss meeting the needs of gifted children within the context of the advent of the “New Technology,” by which I mean Internet access, interactive communications, and website development.

McLuhan Was Right

The world is, indeed, a global village. This insight -- born more than 30 years ago when the world was still rather "primitive" by today's standards of modernization -- is especially evident with the interconnectedness of world financial markets and communications. Recent events in Hong Kong, Japan, South Korea, for example, demonstrate the “village” nature of the globe. U.S. markets are feeling the impact of crises in the markets of our Asian “neighbors.” Near speed-of-light communications brings the news “home” with powerful immediacy. Reaction is nearly instantaneous.

The globe is “wired,” which means that the buffers inherent in a more natural or slower sequence and pace of events in a world divided by oceans and continents have been removed in favor of electronic utilities. Time itself has been denuded of its past-present-future reality, and in its place is an ever-present “now” of simultaneity. Moreover, our awareness of this interconnectedness and simultaneity has increased; our consciousness has integrated our technological facility into our behaviors and expectations. (My own impatience when having to use a computer with a slower processor or modem than I am used to is a simple example of this.)

And we are cultivating this awareness in students. Not only are they more adept than ever at using hardware and software, they are living and experiencing a wired world and discussing this in their classrooms. For example, in the United States Academic Decathlon, an academic competition for high school students that I direct, this year's “Super Quiz” theme is The Global Economy. Students are learning about world markets, corporate downsizing due to technological advances, and how multinational companies are customizing their goods and services to reflect local tastes and customs.

Such is the milieu in which Gifted-Children.com has emerged. GCM shut its doors in 1989. Gifted-Children.com was not possible then. Now it is not only possible; it is necessary. The
new website, taking full advantage of the $150+ million prior effort, is the proverbial phoenix born from the ashes of its predecessor.

The Internet as Medium and Message

Since 1989, the year GCM ceased publishing in what was still, relatively speaking, a non-electronically-networked world, personal connectivity has increased geometrically. Once the arcane domain of researchers, scientists, and military strategists, the Internet has become THE medium and message of the New Technology. Everyone and everything is on-line -- the desirable and the undesirable, gold as well as fools gold. E-mail, chat rooms, usergroups, and bulletin boards provide an endless opportunity for sharing and exchanging information, for barter or just plain banter.

These are among the major benefits of being "personally connected" -- a vast network of diverse resources at one's fingertips, the capacity for immediate communication, access to every nook and cranny of today's universe as we know it. The information overload that we began to experience in the 80s was nothing compared to the rate that knowledge is increasing and the rate at which its transmission is now taking place. Of course, there is the exacerbated problem of monitoring for quality and appropriateness, but this has always been necessary, albeit to a lesser degree perhaps.

Over the last several years, as both sophistication and infatuation with the Internet have increased, thousands of commercial and personal websites have sprung up overnight. These are multi-dimensional and serve many purposes: marketing, conveying information, providing actual goods and services, networking. Within the metaphor of the global village, websites may be regarded (from general to specific) as virtual communities, neighborhoods, homes -- all varying in size, scope, and influence, but all accessible with domain name and URL.

The generic Website -- the 24-hour communications (and shopping) center of virtual reality -- is the epitome of the McLuhanesque vision in which medium and message are one: "here I am... this is who I am... this is what I do... welcome...."

The Needs of Parents of Gifted Children

The more things change, the more they remain the same. It is a radically different world from what it was 10 or 20 years ago, yet this generation of parents of gifted children share similar needs with previous generations.

There are five major needs that can be identified: 1) networking and interacting with other parents who are also concerned and struggling with doing the best they can to develop their children's abilities and talents to the fullest; 2) advocating for appropriate gifted education programs as well as legislation that insures provisions are offered in the schools; 3) interacting with their children in ways most conducive to identification and development of giftedness; 4) problem solving both immediate and longer-term issues as they come up with their gifted children; and 5) gaining access to high quality resources to assist them in their parenting roles.

With GCM, the medium was a hard-copy newsletter published monthly. The message was conveyed through various departments designed to meet the five major needs: Special Reports, Ask the Experts, Home and School Briefs, Idea Place, Teacher's Bulletin Board, Reading for Children, Buyer's Guide, and Spin-Off (our "spun-off" pullout section for children).

Despite the success of both medium and message at the time, the down-side of a monthly newsletter (the medium) is now obvious relative to today's high-tech capacity to deliver information. The negatives include: inordinate delay in getting one's questions answered; lack of real-time interaction with the source of knowledge or expertise as well as with others who share similar needs; lag time in updating critical information; missed opportunities for providers of resources and consumers alike; inability to compete, in a two-dimensional plane, with what can be experienced "virtually."

Just as some segments of the newspaper industry have been suffering significant losses in readership, due in large part to TV and other video- or graphically-oriented information and entertainment, over the next generation we may see a sharp decline in special interest publications (the hard-copy versions at least) as more and more of the population becomes wired to the Internet (most likely through cable) and accessibility becomes even more user-friendly.

While GCM as a paper, ink, print, and mail-delivered medium has been surpassed, its content (the message) in meeting the five major needs of parents of gifted children has not. I see this firsthand from the kinds of questions parents are now asking online and how the "timeless" material of GCM offers time-tested guidance and direction for this new generation of parents.

Gifted-Children.com: A Website Whose Time Has Come

All things being equal, then, a hard-copy, and therefore one-dimensional, newsletter or magazine cannot compete with a multi-dimensional website. Round-the-clock access, the potential for immediacy (interactivity and knowledge on demand), and information "refreshed" at varying intervals are superior benefits for consumers. Gifted-Children.com, designed, developed, and administered by Arthur Rosenfield, creator of the useful and successful Access Business Online and BizWiz, is a state-of-the-art medium for meeting the five major needs of parents of gifted children. Basic membership is just $10 per year compared to $24 per year for the original, and less effective and responsive, GCM.

What Goes Around Comes Around

The majority of material offered at Gifted-Children.com, at least
initially, is the award-winning content of GCM edited and updated as needed for currency. The 10 year’s worth of archives is being used in several ways: 1) as the basis of each monthly edition, reconfigured for balance of content given the five major needs of parents of gifted children, the multiple categories of the federal definition of giftedness, and members’ stated concerns when they sign up for the service; 2) as a fully-indexed “library” of several thousand articles that members can retrieve at will; and 3) as the impetus and opportunity for sharing and exchanging information and for submitting new contributions under 39 different topic areas.

Topic areas include advocacy, behavior, creativity, development, family, gifted education/programs, guidance, handicapped, home schooling, identification, leadership, learning/thinking, legislation, parenting, preschool, self-image, stress, teachers, underachievement, and many more.

The “Front Page” of Gifted-Children.com highlights and summarizes the key articles of each edition. Typically these include one or two Special Reports, an Ask the Experts’ answer to a common question about raising or educating a gifted child, and eight to ten other articles that provide information or advice to parents and teachers. The “summary” feature – a brief article description hyperlinked to the complete text – is an enhancement over the original GCM format and gives members an opportunity to scan and select with optimal efficiency and conservation of time.

“Chat and BBS Forums” are organized according to potential users and/or audiences, although there is nothing preventing anyone from entering any of the Chat areas. Chat areas include a General Lobby, Educators’ Connection, Parents’ Connection, Professionals’ Connection, and Universities’ Connection. BBS Forums are organized by the same five designations.

The capacity for Chat is an innovation of the New Technology and combines several features of an online medium: simultaneity, interactivity, spontaneity, and immediacy or real-time communication. None of this was possible in the days of GCM or even today with traditional print or “off-line” media. Most teleconferencing cannot even come close to achieving the above features to the extent possible with basic Chat.

Chat and E-mail have become the mass communications of choice in the global village, interaction among countless numbers of individuals bound by interest and connected electronically. (Witness the popularity of Chat on services such as America Online, for example.) Just as E-mail has supplanted in many ways snail-mail among the wired of the universe, Chat and E-mail have supplanted use of the telephone for many purposes.

In the future, video conferencing via the Internet -- the technology already exists -- may become as extensive as Chat. In the meantime, monitored Chat at Gifted-Children.com is scheduled two mornings per week; I make myself available in an open forum for members’ concerns or questions. As the website expands, we will be conducting scheduled Chat on selected topics advertised to members in advance. Others who have expertise in special areas of gifted education will assist me with this function.

I’d Like an Answer, and I’d Like It Now

When a parent of a gifted child has a question or problem, he or she wants help sooner than later. Our “Ask the Expert” Page allows members to E-mail questions informally, which I answer... informally. This has an advantage over conventional forms of response that often require extensive research and preparation for publication and tend to be “static” in nature. E-mail responses are “dynamic,” customized, and idiosyncratic -- reflecting the question. Tone is conversational. Opportunity for continuing dialog and feedback exists as parents experiment with the solutions to their problems.

Of course, there are trade-offs, too. E-mail responses may be quick fixes but cannot take the place of longer-term counseling that some children may require. But this goes for any advice that a parent may receive regardless of its length or medium in which it is delivered. At least with E-mail parents do not have to wait up to several months for a response, and the relatively immediate help may significantly ease the intensity of stress and frustration -- for both parent and child -- caused by the problem.

Following are several questions received at Gifted-Children.com to illustrate their uniqueness and their need for customized responses:

1) Baby Talk – “Our daughter is 4-years-old and exhibits many signs of being gifted. We are concerned about social/emotional issues -- primarily her regressive behavior in some social situations. How can we best guide her? She will act and speak baby-like when uncomfortable. She has a very heightened sense of awareness and will feel awkward/self-conscious when not fully engaged with someone. What can we do?”

2) Disorganized – “My son is very bright and creative, but he is an underachiever. He is disorganized and he tends to daydream quite a bit. He loves computer games involving battle strategy. His attention is excellent; when he is interested in something he is totally absorbed. Eric has great difficulty writing his ideas down; he doesn't seem to understand how to tackle the concepts. Eric is in grade 7 and he has a lot of trouble getting his work handed in. He forgets to do it, or loses work that has been done. Sometimes he just plain doesn't want to do it. Eric also loses a lot of his personal possessions. What can we do to help him?”

3) Won’t Do the Work – “I am afraid that I have not been very active with my son’s education in gifted/middle school. Specifically, he does not, will not, do the work assigned. The work that he does do is A/B. However, due to numerous missing assignments he is going to fail four classes this marking period. I have concern regarding the level of schoolwork but I don't
know where/how to start finding out the problems. I would like to have my son reevaluated but I don't even know how or what to ask for. What tests would you recommend? Any other input would be appreciated. Thank you."

4) Siblings -- "I have two children, the older one being gifted. My concern is for the younger child, and how to make his transition to school easier when he has to follow in his sibling's footsteps. Any ideas?"

5) Compulsive Behavior -- "Hello! I have a 5-year-old son who is currently in a private preschool. We didn't start him in kindergarten because he was only 4 when school began. Anyway, I think he has always been "high stress." When he was very little, he slowly shredded his baby blanket. He would just sit and pick 'fuzzies' off of it until there was nothing left but a scrap. Later he developed a habit of licking his lips until they were so chapped and bleeding that I had to put a band-aid on his upper lip. He finally stopped that, but now he bites his hands and fingernails, and sucks on his knuckles.

"I wouldn't worry about it so much, except that sometimes he raises blisters and has open sores on his fingers. I try not to make too big of a deal, and we have tried having him wear gloves, but he hates it, and isn't able to do much with gloves on his hands. At night he will allow me to put socks on his hands, and he realizes it is to protect his hands.

"Do you have any suggestions how we can help him to stop this habit and ways to help him alleviate stress in other ways? As far as I know, we are not putting any pressure on him to give him stress, I just think it is internal stress. And when I think of my own childhood, I was the same way. He enjoys preschool and has lots of friends. I observe him biting his fingers and fingernails even when he is playing with friends or just watching TV. Thank you so much for your help! If you need more information, please contact me."

In each case my response focused on the specifics of the question without having to worry about generalizing it for the print medium. In two cases I requested more information for purposes of clarity before responding. As Gifted-Children.com grows, we will make members' questions and the responses to them available to all members so all may benefit from knowing they are not alone in experiencing challenges with their gifted children, and so they may also experiment with solutions offered to others.

The Community Connection

"Directory of Members" and "General Directory" at Gifted-Children.com are a registry of members and organizations and associations respectively. In a wired world, these directories can serve as the focal point for immediately mobilizing state or national advocacy campaigns, for supporting or opposing proposed state or federal legislation, for fund raising for gifted programs, for mass communication of urgency or opportunity --

the potential is wide open. Members may communicate with each other easily and at will.

When GCM was at its peak -- averaging a solid 50,000+ monthly subscriber base -- we created Gifted Children Advocacy Association, a de facto advocacy arm that administered 5 percent of GCM's gross revenues in grants to schools and individuals in support of gifted programs (even though we never reached the point of being cash-flow positive). As Gifted-Children.com grows, GCAA, or a similar not-for-profit entity -- perhaps this time with a broader base of support than just the owners of the publication -- may again be activated to support innovations in identifying, encouraging, and developing the gifts and talents of young people. This time around, all submissions, administration, and awards will be handled electronically.

Yes, A Store Front, Too

Several years ago, when I was first introduced to the possibility of doing business over the Internet, it seems everyone shared two concerns: getting up a "store front" to market one's goods or services to millions of potential buyers and figuring out a secure way (from the consumer's point of view) to collect for goods or services sold. In just a few short years the latter challenge has been virtually solved (pun intended), and a great deal more realism and sophistication exists as to what constitutes a viable electronic store front.

Through a variety of channels -- "Bookstore," "Catalog," "Classified Marketplace," and "Buyer's Guide" -- Gifted-Children.com offers members the latest resources for raising and educating gifted children. The static, two-dimensional ad in many cases will give way to a dynamic, three-dimensional "videomercial" in which consumer may play-test a product on the spot before purchasing it directly via secure server. In some cases the product purchased may be downloaded. This kind of confluence of marketing and distribution channels is made possible only by the New Technology.

Logging Off

Back in the 80s, Apple Computer gave away a lot of hardware that sat in the schools unused. Few teachers knew how to use it, and probably even fewer were convinced that "computer assisted instruction" was anything more than an educational fad. We know differently today. We know that online capacity opens a portal to dimensions of knowledge and experience heretofore only imagined at best. And we know that just like a gifted child who has yet to blossom into his or her full potential, the full power of the Internet to deliver information, products, and services has barely been unleashed.

Gifted-Children.com is at the cutting edge of this "brave new world" for parents of gifted children, "for the parents of children with great promise." We invite you to visit our website (http://www.Gifted-Children.com) and to join this exciting journey into the new frontiers of parenting gifted children.»»
HOMESCHOOLING YOUR GIFTED CHILD: AN EFFECTIVE ALTERNATIVE FOR DIFFERENTIATED LEARNING

BY VICKI CARUANA  SAFETY HARBOR, FLORIDA

Ask any teen who has been identified as ‘gifted’ what kind of education fits the way their mind works, and they will give you incredible insight into the needs of gifted children. Here are some of the common responses gifted teens give:

- learn at your own speed, not someone else’s speed
- skip over work you already know and understand
- study things of interest beyond basic schoolwork
- work with abstract concepts that require more than simple thinking - creative, reflective, analytical ideas


How many of our children’s classrooms take the time necessary to meet these stated needs? These needs don’t magically appear in the teenage years. They begin right from the start. Teens are just better at articulating them. Not all gifted children’s needs will be met in the regular classroom. When the statistics show that 20% of high school dropouts are students with higher than average I.Q.’s, it means that one out of five gifted students are not being challenged in America’s classrooms. If your child is one of them, what can you do?

Homeschooling is an option whose time has come. It’s in a revival of sorts – especially since everyone was homeschooled at one point in our country’s history. This is not a new trend, just an option whose wisdom is being revisited. Is homeschooling right for your child? A number of indicators may point you in that direction.

Have you noticed that your child is becoming more and more complacent in his or her studies? Does your son habitually wait to do his reports until the night before they are due? Is your daughter starting to shy away from going “above and beyond” and just doing the bare minimum required? This can happen as late as fifth grade, but as early as first grade. It’s called “learned complacency,” and it jeopardizes our children’s futures. Our children have learned, quickly as usual, that they can easily squeak by and still get an “A.” Since our schools are product oriented, the almighty “A” is a treasured commodity; one that most gifted students can attain with little to no effort.

One teacher proudly boasted about her advanced reading group, and how they always got “A”s on their vocabulary tests. After considering the situation more seriously, she conducted an experiment. Without warning, she tested her advanced class on their new vocabulary words the day she assigned them. Again they all obtained “A”s. She wasn’t teaching them anything. They weren’t learning anything. She was testing them on things they already knew! So the children figure out right away that they don’t need to study in order to achieve.

How is Homeschooling an advantage? As a parent educator, you have the opportunity to realistically assess what your child does and doesn’t already know. Very little time is wasted. Teaching can be targeted to the actual skill needed. Your child has the chance to learn how to work hard for what they value. If it is an “A” they value, then when they obtain that “A” with you, both you and your child will know that it means he has mastered the material presented.

Does Your Child Have a Learning Difficulty in Addition to His Giftedness? Both underachievers and gifted students with
diagnosed learning disabilities would benefit tremendously from homeschooling. Not only would their disability or difficulty go unnoticed by their peers, but they would have the chance to work on a task until it was mastered. No one would work ahead of them. If repeated re-teaching is necessary, then the child will be given the time needed. Working at your own pace is crucial to any student with a learning problem, but it’s also one of those indicators that our gifted teens cited as important to them. Some parents may feel inadequate to deal with their child’s learning problem(s). That is only because the schools have made parents feel that way. Remember, you were your child’s first teacher. Homeschooling advocates will maintain that you are also their best.

Is Your Child Becoming a Behavior Problem Due to Boredom in the Classroom? Over achievers and gifted students respond to boredom in the classroom in two distinct styles. Some children (like my own son) choose to engage in non-productive off task behaviors. They might talk, doodle, or disrupt their classmates. Even reading a novel is considered non-productive. If it is not related to the task at hand, then it is non-productive. However, other children who are bored will ask the teacher for additional work, read a book that is about the current topic, or re-read their material to ensure they did it completely and correctly. Both have chosen coping strategies. Teachers and parents will only notice those exhibiting non-productive strategies. However, the children who do extra credit work or read ahead in the textbook discover over time that this strategy makes no difference to their teacher or the outcome of their grade in that class. Even they will begin to shut down and possibly act out.

Homeschooling eliminates the reason for engaging in any of these strategies. When you finish your work, you are done. You don’t have to wait around for the rest of the class to catch up. Behavior problems don’t arise from boredom because boredom doesn’t have to occur, especially if the material you use is both challenging, interactive, and high interest. (More on the curriculum later in this article.)

Different families homeschool for different reasons. If you are satisfied with your child’s current educational setting and his or her unique needs are being met, then don’t mess with a good thing. But not all of us are in a school that is “gifted friendly.” In fact, sometimes quite the opposite can be true. The learning patterns and strategies in conjunction with children’s temperaments and personalities that are set in the elementary years dictate success in future school years. I don’t want my sons to learn that doing the bare minimum is valued and rewarded. I don’t want future leaders who shy away from challenge and aren’t risk takers. I want children who grow up to be independent workers, effective communicators, and strong leaders!

Advantages and Disadvantages of Homeschooling

Experts in gifted education have cited the following as appropriate components to the educational experiences of gifted children:

- acceleration - skipping levels or grades
- enrichment - an extension of the regular curriculum allowing the student to use higher level skills
- mentor ships - pairing gifted students with an adult or students who are experts in a particular study or profession
- independent study - allows students to work at their own pace and explore in-depth topics of particular interest
- advanced placement - working at college-level courses while in high school or dual enrollment in college

While traditional schools are struggling to provide even one of the above options, usually not without a fight, homeschooling is defined by all five! That’s the beauty of it. So instead of trying to change the status quo by fighting with the powers that be, give your children what they need when they need it.

Gifted homeschoolers are also very likely to spend time with peers. Co-ops are a popular way to bring students together with similar needs and interests, and be taught together. It takes care of the social issue for some, and provides a needed break for parents once a week. This leads me to the disadvantages of homeschooling.

Homeschooling is a great undertaking, one that requires careful planning and a special kind of courage. It does not require a teaching certificate, but it does require an attitude that expresses “I am my child’s best teacher!” It is a lifestyle choice; one filled with sacrifices. The first year of homeschooling is especially difficult, fraught with inexperience, low confidence levels, and fatigue. It takes time to both plan well and execute successfully. There is also a certain amount of fear involved. Fear that as the teacher, you won’t do a good job. Fear that you won’t be supported in your decision to homeschool. Fear of the unknown. But keep in mind that these are all concerns common to all homeschoolers. You are not alone. Finding support needs to be your first priority, even before choosing a curriculum. For your sake and your child’s sake.

Choosing Your Curriculum

Admittedly, this seems like a daunting task for beginning homeschoolers. There is so much to choose from. The first step is to determine the “why” behind your choice to homeschool. If you are doing it for religious reasons, then some sort of prescribed Christian curriculum might be your first choice. If you are looking for something similar to what he or she was doing in his regular school, then investigate what those teachers were doing and adjust it accordingly to your child’s needs. Because of the unique needs of gifted learners, you need to be flexible in your own thinking when it comes to curriculum. Go ahead and accelerate their reading or math levels, but provide them with an opportunity to conduct an in-depth study of the topic of their choice. That leads us to the unit study approach. This approach has been and continues to be a popular choice.
ADDITIONAL INFORMATION ON HOMESCHOOLING

How Children Fail (1964), takes a radical but romantic view of homeschool. Holt, in his books Teach Your Own (1982) and of nurturing believed that since there no longer was a "good" society capable nor is it outdated. afford a private school. But homeschooling is not uncivilized, children were taught at home since only the upper class could before there was public education available to all, most that before there was public education available to all, most students were taught at home since only the upper class could afford a private school. But homeschooling is not uncivilized, nor is it outdated.

Know that as long as you keep your child's unique needs in mind when planning, your homeschooling experience will be successful. There are area support groups, conventions, books, periodicals, and Internet sites all out there willing to help make sure you succeed. Remember, that you are at such a great vantage point teaching your own child. You can watch him or her reach for the stars and actually catch them! As exciting as it may be to be the guiding force behind your child's achievement, don't force yourself into your teacher role all the time. You are also a parent, and your child will want you to play that part as well. By the same token, don't force your child into the gifted role all the time. There are times when he or she will simply want to be a child.

Recommended Materials:

- Big Book of Homeschooling (Vols. 1, 2, 3, 4) by Mary Pride - these volumes give in-depth resources, curriculum reviews and homeschooling strategies.
- Unit Studies available from various gifted education publishers (Free Spirit, Open Space Communications, Gifted Education Press, etc.)
- Junior Great Books from The Great Books Foundation
- Homeschooling Today magazine
- The Teaching Home magazine
- Home Education Magazine
- Growing Without Schooling magazine

ADDITIONAL INFORMATION ON HOMESCHOOLING

Teaching your children at home is not a new idea. It is obvious that before there was public education available to all, most children were taught at home since only the upper class could afford a private school. But homeschooling is not uncivilized, nor is it outdated.

John Holt, loosely considered the father of homeschooling, believed that since there no longer was a "good" society capable of nurturing its members, the only alternative was to homeschool. Holt, in his books Teach Your Own (1982) and How Children Fail (1964), takes a radical but romantic view of a child as a flower unfolding as it blooms. He stressed that a teacher should just let the child know roughly what is available and where he or she can look for it. Personal autonomy is the goal. Holt states that the home "is the only human institution that can be genuinely concerned with the individual's welfare." He classified those who homeschool as the "moral elite" and that it is a hopeful path for education.

Although the above statements define Holt's views, they by no means define homeschooling. But it does explain the radical fringes (which exist in any corner of society) and the reason homeschooling is generally scoffed at by the schooling authorities.

Approximately 1 in 44 children are homeschooled (Ballmann 1987). That statistic can only be an estimate because many students are not registered through the nationally established organizations or state/district home instruction departments. These numbers are unsettling to public educators. Obviously, the recent flight from public schools has not just been to private schools.

Who Homeschools?

Parents who homeschool their children can generally be separated into two camps. One group does it for purely ideological reasons to include their strong religious beliefs. The other for reasons stemming from disillusionment with the present schooling system. The one attitude both groups have in common is the strong sense of responsibility for their child's education. Neither group believes they can just drop their child off in the morning and pick them up in the afternoon secure in the knowledge that they were receiving a quality education.

Even as a teacher of the gifted in the public schools, I was and continue to be very skeptical of if and how the school can meet the unique needs of our children. In my own attempt to determine the best placement for our children, I studied area private schools. I was quickly disappointed. Just because you pay tuition does not guarantee you a quality education. Too often the private schools were even more geared toward teaching the "average" child than to teach to the extremes. Gifted students were too often bored and sometime penalized for their curiosity. Creativity was not encouraged.

Differences in philosophy among homeschooling parents tend to determine how they conduct school in their homes. Those who are motivated by religion, believing they are fulfilling God's will, may follow a prescriptive curriculum and organize their day similar to that of a regular school. The only danger in that is the tendency to work through the scripted program too quickly without providing enriching experiences to expand it horizontally. For a gifted child, this is just as frustrating as a regular classroom! Happily, there are many who only use their catalog-ordered curriculum in the beginning to gain confidence. They can then use it as a foundation and build it into opportunities for in-depth study and creative expression.
Then there are those who choose to homeschool because they are
disgusted with public education and believe today's schools are
inert (Van Galen, et al., 1991). This group strives to be
distinctively different in both its educational environment and
approach. The leaders of this group scoff at opposition. They
tend to be more liberal in their thinking and run a school that is
more child centered. Their school day tends to be more loosely
organized and less structured, time-wise. They too, choose
their own curriculum, but many times it is not one they
purchase, but one they design themselves. The parent is seen as
a facilitator and guide (Williamson, 1989).

Which type are you? The beauty of homeschooling is its
diversity. Each family makes decisions about curriculum and
schedules based on the needs of their members.

REFERENCES

Pitman, Mary Anne. Homeschooling: Political, Historical, and
Pedagogical Perspectives. Ablex Publishing Corp., 1991; (3)
Williamson, Kerr Bennett. Home Schooling: Answering

ESSAY ON THE ENGLISH POET OF GIFTED SENSIBILITY AND IMAGINATION: JOHN KEATS (1795-1821)
BY MICHAEL E. WALTERS CENTER FOR THE STUDY OF THE HUMANITIES IN THE SCHOOLS

"It was in fact Keats's choice of subjects for the odes that originally perplexed me: why did he write on a quality (indolence), then to a goddess
(Psyché), then to a nightingale, then on an urn, then on an emotion (melancholy), then to a season (autumn)?" Helen Vendler, The Odes of John

These questions that perplexed Helen Vendler, Professor of Poetry at Harvard University, are really quests into the sensibility of the
gifted. The poetry of the 19th century British Romantic poet, John Keats, is an example of the dynamics of sensibility involved in
giftedness. John Keats' life serves as an exemplar for gifted students. Without any controversy, he is considered one of the major writers of
the English language. Yet he lived for only 26 years, and his major poetic works were completed in a few short years time before he
died. Although Keats obtained a license to practice medicine, he never treated patients because he was dedicated to being a poet. He died
at an early age of tuberculosis -- which took the lives of many of the great artists of the 19th century.

His letters are considered to be literary and philosophical masterpieces. In one letter, he described a cognitive and affective response called
"negative capability" that he considered necessary for poetic creativity. This is the idea that the human personality can explore the many
possibilities of a subject but cannot obtain any single defining answer. It is the intensity of a human experience that should be one's
concern rather than perfect understanding. The concept of "negative capability" is an important product of the gifted sensibility.

One of the most troubling psychological problems for the gifted individual is that of the transient quality of human experience. Keats' poetry
was a search for what the American psychologist, Abraham Maslow, called the peak experience (Motivation and Personality, 1954). How do we assimilate these moments of deep emotions such as joy, love and grief in a way that allows us to grow both
intellectually and psychologically? John Keats felt that it was his mission in life to give his readers the means to integrate the peak
experiences of life into a holistic personality. What is so amazing about Keats' poetry is that one feels as if you are experiencing the same
emotions as Keats himself.

It is important to realize the types of experiences that caused Keats to feel so intensely and deeply. The experiences were from both inert
objects and living sources. The experience of observing an ancient Greek urn caused an incredible outpouring of emotion. He felt a unity
for the ritual that was depicted on the urn; it was almost as if he was being called to be a co-participant. Keats understood that the aesthetic
experience was a religious sensation for the ancient Greeks (Ode on a Grecian Urn, 1819). He sought to make a fleeting moment in
human history into an eternal one that has relevancy for all generations of humanity. For gifted individuals, it is this sensibility of being
able to feel the eternal in a historical moment that enables them build upon the great art of the past. Keats saw in the nightingale more
than a noisy bird, but a creature that represented art in its truest element. The nightingale sings for the sake of expressing itself; it doesn't
need any critical support. He saw the same trait in the sensibility of the artist (Ode to a Nightingale, 1819). In his odes to melancholy
and the season of autumn, Keats saw beauty in two unsatisfying experiences -- being depressed, and the end of summer. He was able to
perceive that the entire range of human experience has elements to inspire and enrich us as human beings: "His Soul shall taste the sadness
of her might, /And be among her cloudy trophies hung." Ode on Melancholy (1819). "Where are Songs of spring? Ay, where are they?
/Think not of them, thou hast thy music too, --" To Autumn (1819).

The language of Keats' poetry is a wonderful device for diagnosing and developing the sensibility of gifted students. For example, the
following phrase -- one of the most famous and intriguing in English poetry -- can be used to ask them stimulating questions about the
nature of beauty and truth. It is from Ode on a Grecian Urn: "When old age shall this generation waste, /Thou shalt remain, in midst
of other woe/ Than ours, a friend to man, to whom thou say'st,/ 'Beauty is truth, truth beauty,' -- that is all /Ye know on earth, and all ye
need to know."
To her family, friends and colleagues in Ohio and elsewhere, I would like to give my condolences regarding the passing of Sharon Buzzard. As a member of our advisory panel, she provided information about recent developments in Ohio gifted programs. As an educator of the gifted, she had an interest in different countries such as South Korea, Indonesia and Australia that reflected in her high school social studies program. Her international travels, sponsored by various foundations, to these and other countries helped to vitalize her teaching and concern with educating gifted children. Sharon was active in the Ohio Association for Gifted Children (OAGC) and a former President of this organization. She will be missed because of her advocacy efforts and lifelong dedication to these children.

In this issue, Joan Smutny, Sally Walker and Elizabeth Meckstroth (all from the Chicago area) have written an excellent article on educating young gifted children from the preschool through primary levels. Teachers and parents should use the information in this article to plan differentiated early education programs. I recommend that the book by these authors, Teaching Young Gifted Children in the Regular Classroom (Free Spirit Publishing, 1997), should also be used as a resource for planning such programs. To receive a review of this book, please write to GEP here in Manassas. It should be noted that a new book by Joan Smutny (Editor) on educating young gifted children has recently been published by Hampton Press of Cresskill, New Jersey. The title is: The Young Gifted Child: Potential and Promise, an Anthology. It contains 41 articles by different authors, and is one of the few comprehensive works currently available on the development and education of young gifted children.

Andrew Flaxman’s essay is concerned with the importance of Amadeus Mozart’s music in Western music. He also discusses why gifted individuals need to study and listen to Mozart’s music. In the light of current research and speculation on the impact of classical music on brain development, I believe that Flaxman’s essay contains relevant arguments for including the study of Mozart (1756-91) and other great composers in the gifted curriculum. Michael Walters discusses the great Mexican leader, Benito Juárez, and his relevance for studying leadership in gifted students.

Please see the description of our latest book, Technology Resource Guide by Adrienne O’Neill and Mary Ann Coe, on the GEP Web Site. In addition, many of you will be interested in the numerous books included in our “Bookstore” by such authors as Howard Gardner, Ellen Winner, Joan Smutny, Bruce Shore, and Michael Walters. This link is connected directly to the Amazon.com ordering service through a working agreement with this excellent Internet book distributor.

Maurice D. Fisher, Publisher
Mya talked, played, dreamed about school for the year before she entered the schoolhouse doors. She could hardly wait for the day when she would actually go to school. Mya had been reading since age three, creating her own stories, complete with illustrations, for several years. Her imagination knew no bounds. Her questions were endless. School for her was a place where she expected to learn even more, read bigger books and do number problems. Is the school ready for Mya? Will her teacher value her and have the resources to meet her special needs?

Children like Mya stand out from the crowd. They pore over books, ask probing questions, and wave their hands in the air to offer ready answers to problems posed by the teacher. For teachers who are trying to reach more students in a mixed ability class, a young gifted child like Mya can be a challenge. Easier to handle are the gifted children who live behind a curtain of silence, too shy or intimidated to stand out or make demands. Yet they, like Mya, have as much of a right to grow and learn as all the other children in the class.

There is a great need today for early identification and intervention. Gifted children quickly develop negative thought patterns as they succumb to a routine that offers little stimulation or challenge. Unwittingly, adults may be reinforcing destructive behavior by pressuring the gifted to move at a pace far too slow for them. Schools need to recognize them for who they are and respond to their educational needs as they do the rest of the student population. Teachers should review some of their troublemakers. Are they being disruptive just to get some attention or because they are bored with activities too easy for them? What about some of the quiet students who obediently turn in their assignments and do as they are told? Are they really stimulated and challenged by the curriculum or are they hiding behind a pretense in order to gain approval?

Finding Young Gifted Children

The first question is: How can we find young students who need more than the regular curriculum? Giftedness is a diverse and complex phenomenon. Because formal programs to identify giftedness in young children rarely exist in schools, teachers need to hone their awareness and interest in recognizing children’s exceptional abilities.

Gifted is an ardent emotional issue. To many people, the “label” implies that one child is intrinsically better than another. However, finding children’s unique abilities is a way of identifying their learning needs. Teachers who identify exceptional intelligence and ability in the lowest grades are pioneers. Giftedness is fragile. If these young children do not receive appropriate recognition and response during this sensitive developmental period, potential skills may decline or vanish. By 4th grade, some of the most intelligent children are resentful of waiting for the other children to catch up; they find little meaning in a school day; they have learned easy success without struggle and persistence; and fall into a pattern of low achievement. Maybe they think they’re “the best” by doing general class work that may be far below their ability levels. Or their resentment of waiting and waiting is acted out in behavior problems.

Gifted Behaviors. The most current, comprehensive, compendium for finding young gifted students is in the anthology, The Young Gifted Child: Potential and Promise, an Anthology (Smutny, 1998). The Identification cluster in Teaching Young Gifted Children in the Regular Classroom (Smutny, Walker & Meckstroth, 1997) is also a succinct and practical guide with reproducibles to help you find gifted behaviors.

Essentially, you are looking for asynchronous development—a type and degree of exceptional ability. What this means is that in some areas, gifted children are out of sync for what is developmentally normal behavior for their age. To find these children, you need to look beyond “normal” and into the child’s esoteric, idiosyncratic qualities that make them extraordinary. The label does not apply to all parts since social, physical, emotional and intellectual abilities develop at incongruent levels.

Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. The asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally (The Columbus Group, 1991 in Tolan, 1998, p. 172).

Please read this paragraph again and think about how much it refers to immeasurable, emotional qualities. We need to
adjust our expectations for their mental and chronological ages.

For young children, physical, social, and cognitive development is rapid and variable. Cognitive and motor skills come suddenly. One moment the skill is not observable; then it miraculously appears! This is just one reason that any assessment you make regarding a child’s development needs to be considered as estimation. We don’t know how far this trait will be developed.

How do you discover exceptional ability in children? You have to get to know them!

One of the best ways we can learn how to motivate a child to exhibit optimum performance is to ask the child. Child interviews help you learn insights about the child’s abilities and interests that might not appear in the classroom. You will need to create time for short interview sessions with each student. Some questions that you might ask are:

1. What are some things that you do best?
2. What are some of the things that you like to do?
3. What are some things that are kind of hard for you?
4. What do you like best in school? Why?
5. What don’t you like in school? Why?
6. What are some things that might make school better for you?
7. What are some of the things you would like to be and do when you are grown?
8. If you had three wishes that could come true, what would they be?

Parents as Colleagues. Enlisting the aid of parents who have years of authentic observation experience can help you find these children. They tend to be realistic predictors of their children’s abilities and needs. Since about 80% of the parent population can identify their children’s giftedness by ages five or six, a short cut to finding these students is to consult with parents.

The valuable Checklist of My Child’s Strengths is reproduced for you to use with your students’ parents:

---

Checklist of My Child’s Strengths

Child’s Name

Please check any items that usually or often apply to your child.

- Is very aware of physical surroundings.
- Has acute awareness of physical and emotional surroundings.
- Asks questions about abstract ideas like love, feelings, relationships or justice.
- Needs less sleep than other children of same age.
- Moves around a lot. Is very active -- sometimes seems hyperactive.
- Talked early.
- Has long attention span for activities that interest her/him.
- Is extremely concerned, curious about the meaning of life and death.
- Reacts intensely to noise, light, taste, smells, or touch.
- Craves stimulation and activity. Is rarely content to sit idle.
- Is very emotional -- cries, angers, excites easily.
- Has an excellent memory.
- Insists that people be “fair.” Complains when things are “unfair.”
- Becomes so involved that he/she is not aware of anything else -- “lost in own world.”

---

Explains ideas in complex, unusual ways.
Is very interested in cause-effect relationships.
Reasons well. Thinks of creative ways to solve problems.
Is very interested in calendars, clocks, maps, structures.
Has vivid imagination and may have trouble separating the real from unreal.
Is extremely creative -- uses materials in unusual ways; makes up elaborate stories, excuses; sees many possible answers/solutions; spends free time drawing, painting, writing, sculpting, or singing.
Has spontaneous and/or advanced sense of humor.
Likes to play with words. Uses advanced sentence structure and vocabulary.
Is often singing, moving rhythmically; may tell stories or communicate by singing.
Memorizes songs.
Prefers playing with older children or being with adults.
Creates complicated play and games.
Gives complex answers to questions.
Becomes extremely frustrated when body can't do what mind wants it to.
Has strong sense of self control; wants to know reasons for rules.
Is eager to try new things.
Can concentrate on two or three activities at one time.

Observe Sensibility as Well as Sense. An excellent aid to finding young children is the Fisher Comprehensive Assessment of Giftedness Scale: What to Look for When Identifying Gifted Students (Fisher, 1994, 1998). With this guide, you can examine children’s actual classroom and out-of-school behaviors in response to their environment. It ranks children's sensibility which is their keen consciousness, enthusiasm, interest, in-depth focus, and serious concern. This essence of giftedness is compared with children's classmates, not national norms. The Scale also assesses areas of precocious development, applied motivation and creative output, aesthetic perceptions, and much more. This broad view deepens the scope for finding gifted children beyond static test scores.

Find the Evidence. One of the clearest ways to identify young children, especially minority and economically disadvantaged students, is to collect and examine a wide range of their work, as well as observations and anecdotes describing behavior. This information could then take the form of an ongoing portfolio and record of achievement. The process of gathering evidence should reach beyond the confines of a classroom and integrate what the child is capable of at home and elsewhere. Portfolios provide authentic assessment! Such evidence is valuable in determining instructional plans, especially for children kindergarten to third grade.

Some important advantages of portfolio assessment are:

- validates your observations and hunches about a child.
- enables you to speak more informatively with parents and support staff about your plans.
- builds a concrete bridge between you and parents so you can both see what the other is talking about.
- helps you evaluate the child's progress.
- guides you to a more child-centered response curriculum.
- broadens your ideas and choices to offer your children.
- justifies what to look for in identifying other students and becomes a learning tool for you.
- creates a source of pride and accomplishment for the child.

A portfolio is a strength model, not a deficit model. One rule: Nothing negative goes into the portfolio! A portfolio is a collection of products and observations about children at home, school, and in their community. Because expressions of giftedness vary in children and cultures, you will be looking for evidence that corresponds with some of the described indicators of giftedness in young children. It is a repository of what a child can do.

Look for Learning Potential. Eventual abilities can be found with dynamic assessment. Here's how:
1. Test -- Establish competency level.
2. Train -- Teach just beyond that level.
This is nothing new, really, but the process can help you find children with exceptional abilities.

Through continual observation, gathering evidence through a variety of channels, and providing children with ample opportunities to demonstrate their strengths and interests, you will begin to find those with exceptional talents. As you discover them, you will begin to realize how little the regular school curriculum can do to develop and extend their abilities. You may even wonder what will happen to these abilities if they continue to go unattended and denied.

Programming for the Young Gifted Child

The purpose of planning services for intellectually advanced and/or creative young children is to provide the kind of programming they need to reach their potential and grow normally. The type of services a school offers high ability young students will determine the identification plan. Therefore, before a school designs an identification system, it must determine the needs of their gifted student population and how a program can best respond to these needs.

An initial step in designing a program is to form a committee -- a cross-section of people with the expertise and resources to implement special programming for the gifted (e.g., administrator, gifted/talented program coordinator, school board members, principal, teacher, psychologist, librarian, resource teacher, parents). Subgroups of this committee can form from this pool who would be responsible for researching the necessary program components. The entire committee should share information and participate in the decision making process as they develop plans for the program and corresponding services.

Student Needs. Before the planning committee designs a gifted program in a school district, they should first identify the needs of young students who may be gifted or who demonstrate exceptional learning opportunities at the appropriate level (higher) and pace (faster).

Some planning groups may have definite ideas of students' needs which they wish to address through special programming. Others may find decision making easier if they are asked to prioritize a list of "typical" needs of gifted youngsters. These priorities will be specific to the school community designing the program. The needs then become the basis for determining the goals and objectives of the program.

Conducting a Program Needs Assessment. The question then becomes: Does the school have any services or resources that currently meet the needs identified by the committee and in what ways? To avoid duplicating efforts and to make full use of resources the school district already has, it is important to do a thorough needs assessment and to include different perspectives. The following questions could be investigated.

- What programs/services does your school currently provide that may meet the needs of these students? The school may already have programs which effectively challenge children who are reading in kindergarten. Perhaps the school has an enrichment program in music for first graders that allows those who excel to participate in third grade instrumental music. A school may have already determined that an individual plan is necessary for second graders who have developed multiplication/division skills on their own. Another school may allow a five-year-old to attend a half-day kindergarten and a half-day first grade as a program option to meet the child's needs.

- How do these educational alternatives meet the needs of young high ability children? Schools need to determine how well the students' needs are being met by the current programs and services. Questions to consider are: How comprehensive is the program? Does it allow for in-depth learning? Are the students allowed to learn basic skills at a rate appropriate to their ability level?

- Is the process of selecting children for these programs appropriate? Research studies have shown that teachers of young children with little or no training in gifted education often do not identify highly intelligent children. Parents appear to be better judges of their child's intellectual level than teachers who have known them for only a short time (Ciha et al., 1974; Jacobs, 1971). Consider the following questions: Is information being solicited from parents? Are only teachers determining who participates in current special programming? Are any standardized measurement instruments being used? Are these instruments being used appropriately?

- Is the school skillfully providing for different levels of giftedness? A school may have a very effective program of enrichment activities for all children for whom it is appropriate. However, it is important to ask if there are enough opportunities for exceptional children to expand beyond these experiences to learn and develop skills at their own rate of learning (faster pace)? Has your school...
established flexible program options for meeting the individual needs of the highly gifted child?

- **Where are the gaps in programs/services?** Do students have an opportunity to work independently but under the guidance of a teacher? Is sufficient time allowed for high ability students to work together? Classroom observations and parent interviews of a sample of high ability students are extremely helpful at this stage to help compare what students are currently experiencing and what they are capable of doing. Parents of gifted students in an upper elementary program may provide valuable information and insight into the services they wish had been available for their child at a young age. Students themselves are also valuable resources.

To review, here are guiding questions for a needs assessment:

What programs/services does your school currently provide that may help to meet the needs of these students?

How do those programs/services meet the needs of young high ability children? Is the method of selecting children for these programs defensible?

Is the school accommodating appropriately for different levels of giftedness? Where are the gaps in programs/services?

**Planning Program Options.** The committee will need to engage in further inquiry and discussion before establishing definite plans for serving young gifted students. Important matters to consider include the following:

What are the general characteristics of your school population and how does this affect programming for young students with high ability?

Has your school chosen to address the needs of kindergartners who are already reading?

Is it a high priority?

How many students are likely to need differentiated services?

Does diversity in socio-economic backgrounds influence the type of programming needed?

What is the level of competence in science inquiry or problem solving skills in the first grade population?

Some schools may not be able to answer these questions if they do not solicit information from parents and do not test children in the primary grades. Schools rarely conduct kindergarten readiness assessments to determine which children are advanced in intellectual abilities or skills. Therefore, a general screening of the entire population of primary students (through formalized testing and/or alternative information gathering methods) will give the committee a direction in terms of the kinds of services the student population needs and the degree to which the current system can provide for them.

What resources are currently available to assist in providing programming/services for young gifted students? What additional resources may be available in the future? (The planning committee needs to brainstorm all the ways to provide services to these children.)

Some services can be provided for little additional cost, while others may demand substantial funding. Placing students in appropriate reading groups at their ability level may require more flexible scheduling, but supplemental materials may be the only additional cost. A program design that requires a resource teacher will add salary as well as additional materials to the operating cost of the program. Magnet schools or special classes may not require additional staff, but may require significant additional expenditures for transportation, specialized materials and/or teacher training. So the committee needs to consider the issue of expenses, especially since funding for the gifted has shrunk considerably in recent years.

**Curriculum for Young Gifted Children in the Regular Classroom**

Because of shrinking funds at the federal and state levels, a program option more schools are choosing today is to help regular classroom teachers provide educational alternatives for young gifted children within the existing curriculum. There are a number of techniques teachers can adopt that will make all the difference for young gifted students. They are practical, uncomplicated methods that will benefit all students and keep highly motivated children from becoming bored and inactive.

**The Learning Environment.** The first thing to do is review the learning environment. Is it a child friendly classroom? How are the seats arranged? Are there flexible seating arrangements that allow for both full-class activities and smaller groups? Does the room have learning centers? How are materials displayed? Do you have a wide range of books reflecting different reading levels? Do you have colorful posters that incorporate the themes the class is exploring? Are there plenty of hands-on materials so that children who like to manipulate things can do so? What is the atmosphere of the classroom? Do you have times when music is playing? Do children have any opportunity for creative movement, mime, dance, singing?

Howard Gardner's research (1993) on multiple intelligences has radically altered the way educators understand children's
learning styles. Think about this as you review your classroom. Do the learning centers incorporate different kinds of intelligences? For example, linguistic learners may thrive on books, magazines, crossword puzzles, and spelling materials, but visual-spatial learners may prefer paints, clay, markers, crayons, photographs, pictures and posters. Many children combine learning styles and would benefit from centers that focus on particular themes and incorporate materials and sources reflecting several intelligences. Another option would be to organize centers according to intelligences and let the students go to the places where they feel drawn to explore their abilities and interests. These centers will become useful to you when children complete an assignment or seem bored. You can easily guide gifted students to activities that will immerse them in projects that stimulate their interests and talents. Gifted children love time to explore without the constraint of an assignment hanging over their heads.

**Extending the Curriculum.** There are ways to extend the curriculum for young gifted children that will not draw you away from the rest of the class. One option is *compacting* -- a simple process of compressing the essentials and not demanding that gifted children repeat and belabor material they have already mastered. This means that they can skip the practice and drill work in areas where they are strong and move to alternative, more challenging activities. Develop a method of testing and observation to determine if a child is ready to move to a more challenging assignment. Also, make it clear to the whole class that anyone who has mastered the required material can do this (i.e., keep your system open to all children and in this way you avoid labeling certain students). For your own record keeping and also as a way of monitoring the students, you might want to develop a form that clearly outlines the activities chosen by the child, the level and kind of thinking involved, and the results.

The question then arises: What do I do with a child who is ready to compact? How do I know what activity will extend the child’s learning rather than simply reaffirm what he/she has already mastered? There are a couple of options. One is to allow gifted children to choose activities -- unrelated to the material covered in class -- that interests them. Take a little time while the rest of the class is doing seat work to discuss what each one would like to explore. Help them find resources, both in the learning centers and library. We know a number of gifted children with strong interests, and it seems that most of them have to research these interests outside of school. These children have a natural hunger for research -- enjoy exploring the behavior of a certain obscure reptile, or the customs of other peoples, or the geological formations of the American southwest. There should be an opportunity for this in school! As the teacher, you will find you do not have to monitor each step in the process. All you need to do is help them identify what they want to discover, help them acquire the resources to do this, and then agree on an outcome to their project. This could be a report to the class, an art piece, an example of historical fiction, etc. You can also allow them to work in small groups if it happens that several children have a similar interest. Try to find a special place in the room for children’s special projects, so they can continue working on them when they have the time.

Another way of extending the curriculum -- and this will affect all the children in your classroom -- is to incorporate more creative thinking into daily lessons. An effective way to do this with young children is to use the process of “make believe” to deepen their understanding of a subject or theme. For example, if you are teaching about the rainforest, a little girl might choose a particular kind of lizard in that forest and pretend to be that lizard. Then, she would have to explore: What are my food needs? What kind of temperatures do I require to stay alive? What color am I? What designs do I have on my body? Can I change colors? What do I do in the day? In the night? Who am I afraid of? What does it feel like to have one eye looking at one thing and another eye looking at something else? What are my feet like? How fast can I move? Motivated by the desire to write about herself as a lizard, this child would enjoy poring over books and magazines, perhaps drawing some sketches, or watching a video about rain forests. She could write a short story about her life in the forest and maybe even create a short mimed piece that demonstrates the kinds of movements she does.

Getting children to use their imaginations and especially to put themselves in the subject they are studying is an exciting process for both teacher and students. It prompts students to consider questions and problems they would not think of ordinarily. You can ask them questions to test how well they understand their new identity and environment. If they are imaginary residents of Plymouth Plantation, you can explore daily life from a personal perspective: What foods do you eat? What does your village look like? Can you draw a map? Where do you live? The more the children imagine themselves in another’s skin -- whether it be the skin of an animal, the trunk of a tree, or a person in another time or place -- the more research they will find they need to do. And this is something that enables the whole class to learn, while also allowing gifted children to advance significantly beyond the limits of the regular curriculum. It is enormously educational and will stay with children long after they have moved to a new subject.

Other processes that develop children's creative thinking are activities where they can brainstorm ideas. This works when the class is struggling with a problem or when the students are...
thinking about all the different things they could do in a particular area of study. We once saw a class become very motivated as the children volunteered all kinds of assignments they could do in the study of South America. So many ideas emerged -- from mapmaking to biographies, dramatic re-enactments, naturalist studies of animal life, political events, native Indian populations, etc. The children became quite excited about their new unit because the teacher gave them opportunities to diverge from and improvise with the materials she had assembled.

Willingness to integrate different media -- history with poetry, music, ecology, etc. -- enables your gifted population to capitalize on their strengths and creates built-in opportunities for them to develop alternative research projects, while still mastering the required curriculum. This integration also reaches children with diverse learning styles and enables more students to discover what activities interest and inspire them.

**Working in Groups.** Teachers can also extend the curriculum through learning groups. While a mixed ability, cooperative learning arrangement does not often work well with gifted children, there are flexible alternatives. *Cluster grouping* -- a method whereby you group four or five gifted students who can extend their learning in ways that isolated children and work cooperatively on a project of their choosing. This enables all students to advance at their own level without the detrimental effect of "labeling." Each group works on its own unique assignment without competing or comparing, allowing gifted young children to experience the joy and challenge of working at a higher pace -- *their pace.*

Groups can form along a variety of lines. *Tiered Groups* allow teachers to create different assignments for the groups in a classroom, varying them in complexity and challenge. This enables all students to advance at their own level without the detrimental effect of "labeling." Each group works on its own unique assignment without competing or comparing. Another possibility is to organize groups according to interests or learning styles. This would enable some variety in ability level, but create strong, motivated groups where, for example, artistically inclined students can gather around a love for particular media or where science buffs can explore a theme from the perspective of ecology or biology. As long as you are flexible in the way you organize groups, you can maximize the learning of all your students. You can also create a system whereby small groups of gifted students who finish their regular work can go off to a corner by themselves and work cooperatively on a project of their choosing. Sharing ideas and learning is very important for gifted students and can extend their learning in ways that isolated work does not. In addition, group opportunities can be enormously reassuring for children who feel like oddballs who do not fit socially with many of their classmates.

**Final Note**

Young gifted children are among the most underserved of gifted populations. Too young to be officially identified, many of them wallow in various states of boredom and frustration. By the time they are identified, some of these children have already developed negative attitudes about school and potentially destructive behaviors. Using a wide range of indicators, teachers and administrators need to find these children before they slip through the cracks. Schools can respond to the special needs of these students by developing special programs and individual teachers can also create learning options within the existing curriculum that will develop their gifts and talents. Taking action to intervene on behalf of young gifted children can turn back the tide for them -- giving them fresh air and the space to move and expand in ways they never thought possible before. This response will keep the joy of learning alive and help these children become more resilient, more able to take an active part in their own education and development.

**RESOURCES**


MOZART AND THE EVOLUTION OF WESTERN MUSIC: AN IMPORTANT STUDY FOR THE GIFTED STUDENT

BY ANDREW FLAXMAN

Mankind's evolution of individual self-awareness can be observed in the changes in musical taste and form over the last four centuries. Through the appreciation of Mozart's music, gifted students can better understand this transition and enhance their own understanding of their own personal development and maturation process.

The roots of musical change go back at least to the twelfth century. Musical evolution parallels the change which was taking place in painting. The invention of perspective created by the convergence of all seemingly horizontal lines on one point resembles that note on which melody seems to begin and end most naturally. This vanishing point in painting and the keynote or tonic in music both reflect a self-centeredness developing in man. The older form of melody can leave us suspended in the air, but the newer form always puts our feet firmly on the ground. This change reflects a profound difference between ancient and modern man. We are more closely bound to the earth and further from what was regarded as heaven.

While songs written in the seventeenth century seem quaint and old-fashioned, we can understand their musical structure and can even start whistling the tune after we have gotten used to it. Music written before 1600 sounds very different. When it consists of a whole group of singers, each is singing a different melody or else the same melody at different times. In this music, known as polyphony, no one in particular is supplying the harmony. It arises out of what the whole group is singing as a byproduct of concerted melody. Further back in time, accompanying a song usually meant playing just the melody of the song on an instrument, with no harmony at all. The melody often ends on a note that we today perceive as wrong; melody itself seems to have been based on different perceptions about the relationship of musical tones.

The composers of the sixteenth and seventeenth centuries who brought in the new melodic and harmonic style felt that polyphony was too strict and complex and that it conveyed emotions only in a generalized way. The new style they created brought about an unprecedented directness of communication. At that time the relationships of the notes of the scale became more or less what they are today for most of the music that we know. This is why the phrases and cadences of seventeenth century music make sense to us. These changes did not, of course, take place overnight. They reached their fruition at different times in different parts of Europe and many composers continued with the old polyphonic style in places where the new had already become the norm.

During the first thousand years of our era, the sophisticated and sensuous melody of music such as Gregorian chant expressed spiritual longings, and it seems highly probable that a similar style was used in secular music without any feeling of impropriety. In later years church authorities often found it necessary to reprove the musicians for writing in a style which seemed inappropriate or distracting. Composers were continually reminded that their music should be simple and the words clear. Melody and rhythm should not arouse the wrong kind of emotions in members of the congregation. Heavenly aspirations were to be separated from earthly preoccupations.

Yet composers took very little notice of the official position. Renaissance composers from Ockeghem to Victoria set the liturgy to an enormously sophisticated and powerful music. Bach used the same music for church and secular cantatas. Haydn's settings of the mass were symphonic, Mozart's operatic. Although there were always some persons who used their position to keep spirit from matter, like an eminent Victorian musician who struck out Beethoven's accompaniment to the Benedictus because it was too jaunty and dance like, the greatest composers strove always to unify life's contradictions. Music works directly on our feelings where our experience of the physical world can be brought together with our intuitions of that which is beyond it.

A hundred years ago it was quite fashionable to devote time and energy to explanations of what a piece of music meant. Today there are many people who do not believe that music means anything at all, while others state that the feelings aroused by music are too precise to be expressed verbally. At the time when Mozart was born, there was a general belief that music could and should express feelings in a definite, recognizable way. This belief was well expressed by the highly influential composer and theorist of the period, J.S. Bach's second son, Carl Philip Emanuel. Although his compositions are unknown to most of today's concert goers, he is responsible for a great deal of what we know about eighteenth century attitudes and techniques. C.P.E. Bach's fundamental artistic code was what the artist of the renaissance had realized long before: "All art should contain a spiritual message and must breathe it forth with an emotion.
so powerful that the listener, seeing it or hearing it, must perforce grasp its real significance." In spite of this dictum, in the earlier years of the eighteenth century, the means of expressing emotion had become conventionalized; this rendered the feelings in a piece somewhat superficial and greatly dependent upon the whims of the performer.

A new style of musical composition expressing deep emotion while maintaining an evolving spiritual consciousness, was developed by Haydn and Mozart. The basic principle of this new style, now termed "classical," was that every element and aspect of music should arise out of the idea of the whole work. Any musical event which at first seems arbitrary or capricious will turn out to be an essential part of the whole structure. This does not mean that the work is predetermined or predictable, but that it proceeds organically, with plenty of room for the free play of the imagination at every point. This sense of the whole was expressed by William Blake who saw "the world in a grain of sand" and by the French paleontologist, Curier, who could reconstruct the whole skeleton of an unknown creature from a single bone. In the classical style, the central idea is latent in every musical phrase and the expression of feeling is taken right into the texture of the music, rather than being superimposed on it. With the emotional content so interwoven in the composition, the listener has to work to grasp the "real significance" referred to by C.P.E. Bach.

Although in our materialistic age, art has lost this spiritual connection by becoming over concerned with the obvious reality of life between birth and death, the Far East has always known that the roots of music lie in the spiritual world. Western culture with Pythagoras and Plato started with a similar outlook. But as Western thinking became more and more man centered, nature has taken the place of God in much of man's devotional and artistic efforts. Deism, pantheism and Unitarianism are a few of the religious outlooks which reflect this change in consciousness. Art began to be considered as an imitation of nature. Its purpose often became the arousing of sensuous knowledge. During the past two hundred years, this materialistic attitude grew and took hold. Most people were now so absorbed in themselves and their surroundings, that they saw art as merely a matter of pleasure, rather than as having any spiritual relationship.

Yet the view of art as spirit-born never lost exponents. Goethe, Hegel and Schopenhauer all speak of art in relationship to divine wisdom and to the Ideal. Schopenhauer, along with many other great thinkers felt that music occupies a special position among the arts. He thought music to be the direct expression of the divine in nature, whereas painting was a reconstruction of the secret intentions of nature's great creative dream. Music cannot be explained as the recreating of what the composer hears in nature. To be truly understood and appreciated it has to be seen as related to the unique perception of man which does not arise out of any sense impression or external stimulus -- this is man's awareness of himself expressed by his perception of "I AM."

Mozart's current popularity can be better understood when we realize that the only previous time in which his music was truly appreciated was at the very beginning of the 19th century. The early romantics, whose artistic concerns went far beyond their obvious physical surroundings, enthusiastically adopted Mozart. The great German romantic author and composer, E.T.A. Hoffman (1776-1822) wrote that Mozart speaks "the mysterious language of a distant spiritual kingdom, whose marvelous accents echo in our inner being and arouse a higher intensive life." In the later nineteenth century, where commitment was to a mechanistic world view and a popularized and superficial notion of evolution, Mozart was either ignored or treated with condescension. The steady increase in the size of orchestras and choirs, in the power and brilliance of instruments and the length (but not complexity) of compositions all belong to this era of confidence in the "forward march of progress." From the vantage point of the 1990's we see how sadly misplaced this confidence was. It was thought that science would explain everything and help us to eliminate poverty, sickness, famine and war, but these things have not come about. In that relatively small area of the world where affluence is the rule, we have begun to realize that the real affections have to do with our souls and spirits. There are few people today who are likely to believe that music can be improved by having bigger, better and louder orchestras or even by inventing new harmonies. There are more and more people who can once again appreciate music that speaks to our inner life.

Mozart calms, disturbs, deeply moves, exhilarates us; our response, harmonious or otherwise, goes on long after the music has ended. When he chose to, Mozart could play on his audience as if it were a musical instrument. In a letter of Sept. 11, 1778 to his father, in which he speaks derisively of Parisian musical conventions and expectations, he describes the reception accorded the first performance of his D Major Symphony, K. 297, usually known as "The Paris." He then goes on to say, "In the middle of the first allegro was a passage which I knew could not fail to please. All the audience was charmed by it and there was a great applause, but as I knew when I wrote it what an effect it would make, I brought it round an extra time at the end of the movement, with the same result, and so got my applause 'da capo.'" He got his applause repeated as in the "da capo" sonata form. This anecdote illustrates how the musical form is reproduced in the emotions of the listener, although the process is
generally much more subtle and, for the listener, less conscious.

Through the music of Mozart we find reconciliation of beauty and pain. Peace, joy and strength are shown to be possible in the face of the most enormous emotional conflicts. The more intimately we come to know this music, the more it gives to us. It speaks directly into our hearts, meaning our "souls," so that we know that our true home is not merely an earthly consciousness but something deeper -- a "spiritual kingdom."

Even if this feeling is not brought into the clear consciousness of our thought life, the sensitive listener experiences intimations of this spiritual relationship. Mozart's music is marvelously adapted to the needs of humanity in the late twentieth century because it so beautifully accomplishes this unification of the physical with our emotional life and our spiritual thoughts.

The emotions expressed in Mozart's music come directly from the composer's tremendous flow of impulsive feelings. He was an "open channel" for all feelings from the physical obsession with bodily functions to the most divine musical harmonies, and expressed them equally without restraint. This indeed was one of the secrets of his prodigious creatively -- this instantaneous grasp of the idea of the whole from which the parts flowed in a seemingly effortless manner. In his music he spiritualizes the physical without losing its passionate aliveness. In the temporal he shows the eternal, and behind the coarse, trivial or commonplace he reveals the pure gold.

One of the aspects of the 19th century absorption and interest in the physical, natural world was the use of nature, in images and sounds, as the basis for music and musical ideas. This is not the case with Mozart. His works run the whole gamut of human feeling, but what he has to say is expressed by purely musical means. What is beyond nature and the material world is related to imaginative thought and the creative spirit. In the music of Mozart, one can experience the genius of creation out of man himself. Attentiveness and patience with Mozart's music will help lead you to a sense of the spirit-in-yourself.

Mozart himself always felt a deep spiritual connection. He was born and raised a devout Catholic but in 1784, at the age of 28, he joined a Freemason lodge. He probably felt the need for the companionship and the philosophical stimulation that this organization provided. Masonry was a nonsectarian secret society (still in existence), devoted to the brotherhood of mankind. Many outstanding people in the arts, sciences and politics were members all over Europe and America at this time. In the place of rigid doctrine and dogma, Masonry provided initiation rites which attempted to replicate the experience of ancient mystery religions. It is through self-knowledge and inner development that increasing levels of divine wisdom are to be achieved.

Mozart wrote some music especially for the brotherhood. It is with his opera, "The Magic Flute," that his Masonic experiences have been most beautifully transmitted to us. The opera is filled with Masonic symbols and includes scenes of initiation trials of silence, fire and water. The chief priest in the opera is named Sarastro, reminding us of the great Persian initiate, Zarathustra or Zoroaster. Still one of the most popular of all operas today, it was composed and performed in 1791, the last year of Mozart's brief 35 years of life.

To experience death without dying is one of the most significant initiation events. It prepares the initiate not only for death but to live life more fully without the fear of death. Although it is not easy to die, especially at a young age with a wife and young children to care for, Mozart seems to have prepared himself well, accepting his fate. In one of the arias in "The Magic Flute," Sarastro sings, "Love for their fellow men is the guiding rule of the initiated." Mozart was a musical initiate of the highest order. He was certain of his great legacy to his fellow Human Beings and can be counted among the greatest lovers of Mankind.

There is a passage toward the end of Tolkien's The Lord of the Rings (1954-55), where "all the host laughed and wept" and the minstrel sang to them until their "hearts, wounded with sweet words, overflowed, and their joy was like swords, and they passed in thought out to regions where pain and delight flow together and tears are the very wine of blessedness." Tolkien, who liked to listen to music, but was himself no musician, thus described most vividly the effect that Mozart's music has on a sensitive listener. In Mozart's music the smile is often a smile through tears. Tears can be tears of joy. Beauty can be so intense as to be painful.

From Mozart's life and music we can learn that it is through adversity that we grow and develop into more mature and joyful individuals. The Human Being, unlike an animal, can transform pain into wisdom and joy. Marcia Davenport in her biography, Mozart (1979), points out the contrasting moods of his compositions. She notes that he composed music of radiant vivacity, sparkle and wit at times when he personally was crushed by the discouragement of living his whole life insufficiently compensated and unrecognized. The juxtaposition of moods in his music is one of the significant qualities of his genius. Mozart was able to transcend "all the concerns and burdens, the passing pleasures too, of a pitifully
harried existence, to soar into that realm which can only be called divine, where man assumes the robe of immorality."

The gifted student can learn to receive the gifts of the genius of Mozart, enjoy it, learn from it and use it to contact his or her own indwelling creative force.

Some Thoughts and Questions for Contemplation:

1. Can you appreciate the interweaving of minor and major in Mozart's music? What different effect does the music have when the main key is minor rather than major?

TWO SUGGESTED MASTERPIECES OF MOZART WHICH CAN BE USED FOR CONTEMPLATION ARE:
A MAJOR PIANO CONCERTO (K 488) + G MINOR QUINTET (K 516B)

2. Can music give you more than merely arousing sensuality in yourself? How and in what ways?
3. Can you relate melody, harmony and rhythm to your thinking, feeling and willing?

4. Can you follow the evolution of man's consciousness through the development of musical taste? What music now popular do you think will not last? Why?
5. Can you find a relationship to the development of the vanishing point in art, the keynote in music and your own ego-centeredness?
6. Do you subscribe to C.P.E. Bach's statement that "all art should contain a spiritual message"? Why or why not?
7. What is your attitude concerning music with words in contrast to music without words? In what way are you helped or hurt by verbal guides to your musical appreciation?

List some of your own questions and thoughts.

*****
This article (copyright ©1998 by Andrew Flaxman) is an excerpt from one of the guides to EDUCATE YOURSELF FOR TOMORROW, a self-study program in the Humanities. This program was created by Andrew Flaxman and a faculty who believe in the power of Liberal Arts to help transform each individual and the World.

GIFTED EDUCATION PRESS QUARTERLY VOL. 12, NO. 3 SUMMER 1998
I wish each of you a successful and productive 1998-99 school year. While reflecting upon my discussions with educators and parents during the last several months, I reviewed some perennial needs in the gifted field which are seriously unfulfilled. The following needs/problems require that all of us search for new insights and ideas:

1. Parent concerns about identifying and educating their children. The Internet is replete with parent complaints regarding the low levels of education received by the children. This is particularly the case on the gifted Listservs. Relentlessly, one can read e-mail about the frustrating experiences parents report in their dealings with public schools. What can educators do to effectively enlist parents in the identification and instruction of gifted children? In the current situation, the public schools have lost the support of many potentially helpful parents, apparently because of inflexibility in working with them and their gifted children.

2. The idea of a differentiated curriculum should be more rigorously addressed by educators in the gifted field. What subjects should this curriculum emphasize? -- e.g., rigorous humanities content, high level principles of science and mathematics, advanced computer technology applications. How should they be organized? -- e.g., guided discovery, museum exploration approach, independent learning.

3. The identification of gifted children is still locked into the single “g” factor of intelligence. Even after 20 years of articles and debate in the gifted field concerning the need for a broader conception of giftedness than revealed by the Stanford-Binet and Wechsler tests, most school districts still adhere to using these or similar tests as their primary instruments for identifying gifted children. Identification procedures must be expanded to include children with different types of abilities in differentiated programs, thereby increasing the eligible talent pool beyond those with high IQ test results.

Jerry Flack, Professor of Education at the University of Colorado, has written an excellent article demonstrating how the Cinderella fairy tale can be used to teach children about Howard Gardner’s Multiple Intelligences theory. Flack has written a wonderful book on fairy tales: From the Land of Enchantment (1997, Teacher Ideas Press). This issue also contains the first chapter of Technology Resource Guide (1998, Gifted Education Press) by Adrienne O’Neill and Mary Ann Coe of Johnson and Wales and Midwestern State universities respectively. Their book demonstrates how computers and software can be used in a manner to stimulate high-level problem solving and creative thinking. Michael Walters discusses the life of Louisa May Alcott (1832-88), which provides important lessons for educating gifted girls. Maurice Fisher, Publisher
CINDERELLA MEETS A PRINCE: HOWARD GARDNER
BY JERRY D. FLACK  UNIVERSITY OF COLORADO AT COLORADO SPRINGS

The past five to ten years have witnessed a resurgent interest in fairy tales, most especially the story of "Cinderella," with multicultural versions of the famous tale newly appearing in bookstores and libraries on at least a monthly basis. The past decade has also seen a rapidly growing awareness and popularity of Howard Gardner's princely theory of multiple intelligences (MI). In this article, I would like to play matchmaker and introduce Cinderella to Howard Gardner. That is, I want to describe useful connections that can be established between studies of Cinderella stories and gifted students' understanding of multiple intelligences.

There is at least one interesting parallel between Cinderella stories and MI theory. The world's most famous folk tale is the story of the child of ashes who rises to greatness because of her basic goodness and sweetness; it is found in cultures on every continent (even Antarctica if one considers Janet Perlman's delightful Cinderella Penguin, or, The Little Glass Flipper). The incredible diversity of Cinderella stories underscores one of the basic tenets of MI theory. Differences are to be celebrated. "Cinderella" (French) and "Turkey Girl" (Zuni) and "Yeh-Shen" (Chinese) are equally wonderful folk tales. One is not superior. They simply exist as equally valid stories of wonder from different cultures. Just so verbal intelligence is not superior to musical intelligence. All intelligences are to be valued.

In Frames of Mind (Gardner, 1983), Howard Gardner establishes and explains the theory of multiple intelligences (MI). In this seminal work, he postulates that traditional definitions of intelligence are too narrow. The most significant tenet of MI theory is Gardner's pluralization of the concept of intelligence. Intelligence is not a single entity. Gardner identifies seven discrete intelligences in Frames of Mind: Linguistic, Musical, Logical-Mathematical, Visual-Spatial, Bodily-Kinesthetic, Interpersonal, and Intrapersonal. More recently, he identifies an eighth intelligence, Naturalist (Gardner, 1997).

I have discovered that one of the most effective ways to help students concretize their understanding of the MI theory is through examination of the kinds of intelligences utilized by remarkably accomplished people. Gardner uses this case study approach in much of his writing. He uses figures such as Yehudi Menuhin (musical intelligence); Babe Ruth (bodily-kinesthetic intelligence); Nobel prize-winner Barbara McClintock (logical-mathematical intelligence); and Anne Sullivan (interpersonal intelligence) to exemplify the various intelligences. (Gardner 1983, 1993b) Examining the events in the lives of remarkable children and adults allows students to note how different intelligences surface and flower in individual lives; everyone has a different multiple intelligences profile. The classic bar graph or histogram is one way to visualize this phenomenon. Students can create a bar graph profile to illustrate the particular strengths of famous youth such as Sacajawea who used her spatial intelligence to help find the pathway to the west for Lewis and Clark, and her exceptional medicinal skill as an interpreter, speaking English and Shoshone languages. Obviously, she had to be able to get along with a diverse group of people, mostly men, so she no doubt also had strong interpersonal skills. Her knowledge of plants for medicinal and nutritional purposes was surely of great value to the expedition as well. Hence, a histogram for Sacajawea would show superiority in at least four intelligences: spatial, linguistic, naturalist and interpersonal. Any famous person's life, from Shakespeare to Whitney Houston, can be examined in a similar fashion. What intelligences does the person have in abundance? What intelligences has the same person perhaps not fully explored or utilized? Next, I encourage students to create their own multiple intelligences profiles. I urge students to examine the definitions and the kinds of activities associated with each of different intelligences found in numerous books about multiple intelligences (Gardner, 1993; Lazear, 1994; Marks-Tarlow, 1996). Which intelligences have they had the opportunity to develop most fully? Do they have intelligences in which they do not exhibit strengths? This activity helps students understand themselves better as well as make the important point that there is not just one way to succeed, but many equally valid paths to excellence.

It is not much of a jump then to examine Cinderella's MI profile. Ask students to consider a multiple intelligences profile of Cinderella, Figure 1 (p. 3).

Of course, students are pretending since Cinderella is a fictional character, and a largely two-dimensional one at that. Nevertheless, certain qualities and characteristics come forth through a consideration of several different Cinderella portrayals. Children and their parents and teachers are typically most familiar with the French "Cinderella," first published in 1797 by Charles Perrault and made especially popular through the 1953 Disney animation film Cinderella. The Perrault-Disney Cinderella has great musical talent as evidenced by her lovely singing voice. She is graceful and moves with elegance on the ballroom dance floor. Hence, another strong plus for Cinderella is bodily-kinesthetic intelligence. She is kind, loyal and generous, so her endowment of interpersonal intelligence is similarly high. One student, referring to the Disney Cinderella, suggested that anyone who...
could inspire birds and mice to sew a ball gown for her obviously had superhuman reserves of the naturalist intelligence. Interesting discussions may arise as students finish their own multiple intelligences bar graphs for Cinderella (or, alternatively, Rough-Face Girl, Yeh-Shen, or even the Irish Cinderlad). For example, some students may believe Cinderella has not had any real opportunities to develop her mathematical talent and thus score her "low" in that area, while giving her very high marks for verbal intelligence. After all, she should receive credit for telling her story and helping it become such a famous part of world folk literature.

One of the most important lessons I have learned in more than thirty years of teaching is to separate process (the how of learning) from content (the what of learning) when teaching new skills. I have learned to use the familiar to teach the unfamiliar. Because of their reasonably universal familiarity, fairy tales work especially well as the content base for introducing something new to students such as the theory of multiple intelligences. The tale of Cinderella is particularly fertile ground for helping students come to understand the theory of multiple intelligences and how it may be generalized to their school work and transferred to and activated elsewhere in their lives.

Once my students have constructed MI profiles of Cinderella, I next ask them to pretend to be teachers. Based upon their knowledge of Cinderella stories, I ask students to prescribe some exciting projects and activities they would like to do, the completion of which would activate and capitalize on her many intelligences. The activities highlighted in Figure 2 (p. 5) represent just a sampling of such pursuits. Of course, a logical next step is for the students to go forward, investigate and complete many of the creative activities they have conceived.

There is amazing depth and breadth of Cinderella studies gifted students can pursue. Of course, students can engage in both historical and comparative literature studies of the world-wide Cinderella character. The story of Cinderella is believed to be the most popular folk tale in the world and storytellers have found elements of the classic story in the writings of the far distant past. Shirley Climo, author of The Egyptian Cinderella notes references to the story of Rhodopis by the Roman historian Strabo in the first century B.C. Ai-Ling Louie traces the tale of Yeh-Shen, the heroine of Yeh-Shen: A Cinderella Story from China, to Chinese manuscripts dating from the T'ang dynasty (618-907 A.D.). Myriad titles of "Cinderella" can be found in bookstores and libraries. One of the best sources of multicultural Cinderella stories is The Oryx Multicultural Folktale Series: Cinderella (Sierra, 1992). Judy Sierra retells 24 variants of the classic story from such diverse parts of the world as Russia, India, Africa, Iraq and the Philippines. Penny Pollock retells a Southwest Native American tale in The Turkey Girl: A Zuni Cinderella Story.

Gifted students can also access Cinderella electronically. Yes, Cinderella has come of age. Students can surf the net in search of Cinderella variant stories, locate copies of “Cinderella” books that are 200 years old, and find information about Cinderella themes published by on-line bookstore catalogs. By using the World Wide Web browser Netscape Navigator 2.0 combined with the search engine “Yahoo!” and by doing a word search of "Cinderella," a number of worthwhile options surface. One of the best sites is The Cinderella Project: http://www-dept.usm.edu/~engdept/cinderella/cinderella.html. Here students arrive at the University of Southern Mississippi De Grammond Children’s Literature Collection of Cinderella stories. Instantaneously, students can access facsimile copies of Cinderella stories that children in London read in 1809. Nearly 20 different European Cinderella texts from the past 200 years are available at the Cinderella Project site. Dozens of
multicultural Cinderella books are described and may be ordered from Shen’s Books at their “In Search of Cinderella” site on the Internet at http://www.shen’s.com. Recent additions to their collection include Angkat: The Cambodian Cinderella and Jouanah: A Hmong Cinderella, both authored by Jewell Reinhart Coburn.

Cinderella studies are not just for girls, either. Shirley Climo, who has written The Egyptian Cinderella and The Korean Cinderella, continues her around-the-world retelling of Cinderella stories with The Irish Cinderlad. The Irish lad, Becan, is banished to the hills and fields by his stepmother and stepsisters, but with the help of a magical bull, he slays a dragon, rescues a princess, and becomes a prince.

Gifted students may also pursue biographical studies. Charles Perrault (1628-1703) was a Paris intellectual with connections to the French royal court. He can truly be acclaimed as the father of fairy tales. He would have been a prime candidate for gifted programs. He learned to read early and was expected to do his lessons in both French and Latin. He studied law among many intellectual pursuits over the course of his lifetime. Perrault was a lawyer by training and was an influential member of the French Academy, serving as its director for a time. He wrote poetry and was at the center of an intellectual debate over the relative merits of classical literature and the French writings of his time. He truly found his greatness in life, however, in setting to paper the tales he had long told his own four children. He first published a collection of folk tales, Tales of Times Past in 1697. The book which is perhaps better known by its subtitle, Tales of Mother Goose, contained eight stories including “Cinderella: or, The Little Glass Slipper,” “Sleeping Beauty,” “The Master Cat, or Puss in Boots” and “Little Red Riding Hood.” Although most of the tales had been told since at least the middle ages, Perrault did much more than just preserve them. He transformed these simple stories into tales of wonder and magic for children. The basic Cinderella story can be traced to the folklore of antiquity, but he embellished the story with three significant details. The fairy godmother, the pumpkin coach, and the glass slipper were all the inventions of Charles Perrault.

One of the notable characteristics of gifted children is a sense of humor (Silverman, 1993; Davis & Rimm, 1997), and there is a veritable treasure chest of Cinderella parodies in print to delight readers and serve as models for their witty spoofs. The latest entry in the Cinderella laughter sweepstakes is Helen Ketteman’s delightful Bubba The Cowboy Prince: A Fractured Texas Tale. Bubba is a strapping young cowboy who lives on a ranch with his wicked step daddy and his worthless stepbrothers Dwayne and Milton. Although he has to do the work of all the others, Bubba loves ranching and never complains about his fate. Predictably, the prettiest and wealthiest gal in the territory is Miz Lurleen. She has a huge ranch, but lacks the companionship of a good man. She has a ball to see if she can find the man of her dreams. Dwayne, Milton, and their wicked daddy conspire to keep Bubba from the ball, but his fairy godcow, a heavenly Longhorn, comes to his aid. He captures Miz Lurleen’s heart but tarries too long and in a rush to leave, drops one of his dirty cowboy boots. Of course, Miz Lurleen finds her hero, the boot fits perfectly, and she and Bubby ride off into the sunset. Other Cinderella laugh-out-louds include Ugh!, Arthur Yorinks dinosaur-age tale of a Cinder boy, Babette Cole’s Prince Cinders, set in a Beatles-era Great Britain, and the funny football adventure, Sidney Rella and the Glass Sneaker by Bernice Myers. Inspired by such twisted tales of humor, gifted young wits can manufacture their own hilarious versions of the Cinderella saga.

Cinderella can also be the springboard to a wealth of other creative activities such as planning a mall or inventing on Cinderella’s behalf.

Cinderella City Mall

Children love both shopping malls and fairy tales, so why not combine the two to produce creative group work for young learners? Ask cooperative learning groups to work together as problem solving teams to conceive, design (draw a blueprint-type map), and build a scale model of the nation’s first all-children’s mall, Cinderella City. All the stores and activities and food venues should focus on the needs and likes of children, and the mall’s theme should be based upon fairy tale titles, characters and events. Teachers may suggest some possible stores to serve as catalysts for student thinking. Sample businesses may include: Rapunzel’s Hair Care, Prince Charming’s Formal Wear, Little Red Riding Hood’s Candy Basket, and Cinderella’s Glass Slipper (a children’s shoe store). Once students have brain stormed about all the stores they want to have in their children’s mall, they can proceed to build a scale model of the mall and even plan a grand opening celebration. For example, might there be a “Midnight Madness” sale at Cinderella’s Glass Slipper as part of a grand opening?

Invent a Solution

Imagine that Cinderella’s fairy godmother is at home, sick with the flu. She just cannot get out of bed and come to the Cinderella’s rescue. How might Cinderella combine the following items into an invention that will transport her to the ball? Students can add other items that might reasonably be at Cinderella’s disposal:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 large dog</td>
<td></td>
</tr>
<tr>
<td>6 feet of clothesline rope</td>
<td>5 gerbils</td>
</tr>
<tr>
<td>1 blue satin pillow</td>
<td>1 rusty wheelbarrow</td>
</tr>
<tr>
<td>1 red scarf</td>
<td>1 magazine (Sports Illustrated)</td>
</tr>
</tbody>
</table>

Howard Gardner has made all of us more conscious of the fact that children have many different kinds of gifts and talents. In this article, I have suggested ways that teachers of students of
various ages can make their learners develop an awareness of multiple intelligences and come to appreciate their own intelligences, especially as they examine the worldwide known and appreciated folk tale best recognized in our culture as “Cinderella.” I have also suggested ways that Cinderella studies can introduce children to comparative literature and multicultural studies. Finally, I have shared favorite activities I have used to engage inventive young minds in projects that tantalize their curiosity and provoke creative projects and responses.

Figure 2

MULTIPLE INTELLIGENCES CINDERELLA ACTIVITIES

Linguistic Intelligence:

Read different versions of the Cinderella story, choose a favorite, and provide reasons for the choice. Conduct an imaginary interview with Cinderella before or after the ball. Keep a journal or diary Cinderella or Rhodopis or Cinderlad (or one of the Cinderella story characters such as Prince Charming) might have kept. Create a unique version of Cinderella (e.g., a futuristic, Mars-based Cinderella who cannot attend an Intergalactic Ball). Practice retelling a version of Cinderella and share it with younger students. Write a new “magic spell” for Cinderella’s fairy godmother to recite. Summarize in one or two sentences the moral of Charles Perrault’s Cinderella. Transpose a prose passage describing any scene from a Cinderella story to verse form.

Logical-Mathematical Intelligence:

Create a Venn diagram illustrating two different version of the Cinderella story such as Shirley Climo’s The Egyptian Cinderella and Rafe Martin’s The Rough-Face Girl, an Algonquin Indian folk tale. Describe a logical plan for how Cinderella might go to the ball without using the magic of a fairy godmother. Create a board game, complete with rules and regulations, based upon story characters and elements found in “Cinderella.” Add some measurements (e.g., miles to the castle, shoe sizes), and then write a mathematical story problem based upon some aspect of the “Cinderella.”

Spatial Intelligence:

Draw a scene from any Cinderella story. Create a map which notes the central characters in “Cinderella” and reveals connections and relationships between the characters. Use LEGO, K’NEX, Robotix or other modular building materials to build a castle, carriage, or other artifacts from various Cinderella stories. Draw a sketch a stage setting for a theatrical version of “Cinderella.” Blindfolded, use molding clay to sculpt a magic slipper or a statue of any character from any Cinderella story. Create blueprints for a new castle for Cinderella and Prince Charming.

Musical Intelligence:

Create a Cinderella rap, perhaps voicing Cinderella’s view of her stepsisters. Choose background music and use rhythm instruments to accompany a telling of any Cinderella story. Compose a musical theme for the character Cinderella. Listen to music from the countries of origin for various Cinderella stories such as Egypt’s Rhodopis and China’s Yeh-Shen. Listen to music from Sergei Prokofiev’s ballet Cinderella, or Gioacchino Rossini’s opera La Cenerentola. With crayons and markers, draw pictures the selected music passages suggest.

Bodily-Kinesthetic Intelligence:

In small groups, choreograph a dance Cinderella and Prince Charming might perform. Teach the dance to the class. Demonstrate how to perform a dance such as a square dance, two-step dance, etc. Pantomime scenes from any “Cinderella” story. Improvise a humorous scene from any of the many parodies of “Cinderella” such as Babette Cole’s Prince Cinders or Bernice Myers’ Sidney Rella.

Interpersonal Intelligence:

Create a list of personality self-improvement tips for Cinderella’s stepsisters. Negotiate a truce between Cinderella and her tormentors. Exchange notes and positive critiques of student performances in recreating scenes from Cinderella stories with other classmates. Analyze and discuss the lessons that can be learned from reading or listening to Cinderella stories (e.g., Envy and cruelty are punished; selflessness and goodness are rewarded). Be sure to read The Good Stepmother by Marguerita Rudolph. Write an advice column for a newspaper about ballroom dancing etiquette or step-sibling rivalry.

Intrapersonal Intelligence:

Students should ask themselves, “If you could be a fairy god person, how would you help people improve their lives?” Imagine portraying either Yeh-Shen, Rhodopis, Prince Charming, Cinderlad, or Cinderella. “What do you like or dislike about your role?” Have you ever felt like Cinderella or Sydney Rella? In the absence of a fairy godmother (or godfather), how did you overcome the feeling of being mistreated or not appreciated?
Naturalist Intelligence:

Research the geographical and climatic setting of a particular Cinderella story such as the Irish Cinderlad. Determine appropriate flora and fauna and include these in borders or main illustrations of scenes you draw of the story. Pose as an expert and help Cinderella landscape the palace grounds. Chart the living, nonhuman creatures found in Cinderella variants around the world. Note special roles played in Cinderella stories by fish, mice, and falcons.

REFERENCES


CINDERELLA REFERENCES


Additional Information from Jerry Flack:

MULTIPLE INTELLIGENCE THEORY DEFINITIONS

Linguistic Intelligence refers to the knowledge, skills, and use of language in oral and written communications. Facility with language or linguistic intelligence involves phonology, syntax, and semantics; understanding and using the sound, order, and the meaning of words.

Logical-Mathematical Intelligence is the ability to problem solve and “figure things out.” Activities include mathematical operations utilizing numbers in problem solving, but can just as readily include scientific problem solving or invention wherein a person makes a startling analogy or intuitive leap and suddenly solves a problem or offers an explanation of natural phenomena previously unknown. The core intelligence is not necessarily verbal. History is replete with examples of mathematicians and other problem solvers who discovered or understood solutions to problems before they were able to eventually articulate their conclusions.

Spatial Intelligence involves the capacity to orient one’s self to spaces and to inhabit and navigate those spaces whether they be
small spaces such as a classroom or the oceans of the world. Spatial intelligence involves more than visual perception as evidenced by the fact that blind persons can learn very well to navigate their world. There are first-rate blind sculptors. Artists and navigators are among people who use space, distance, and perception with particular skill.

**Musical Intelligence** refers to the ability a person has to compose, perform, and appreciate music. The principle components of musical intelligence are pitch, rhythm, and timbre.

**Bodily-Kinesthetic Intelligence** allows people to utilize bodily movement to physically solve problems, create new products and perform with or without the use of tools. A fine surgeon exhibits bodily-kinesthetic skill as does a mime and a baseball pitcher. Tailors and construction workers also rely heavily on their bodily-kinesthetic intelligence.

**Interpersonal Intelligence** is the first of two personal intelligences Gardner cites. Interpersonal intelligence involves the ability of people to successfully interact with other human beings. Some individuals exhibit remarkable skill in their ability to read other person's needs, wishes, and intentions. Teachers, religious leaders and politicians are among the professionals who widely utilize interpersonal intelligence.

**Intrapersonal Intelligence** refers to the internal knowledge people possess about themselves. This intelligence involves introspection and an understanding of one's feelings, behavior patterns, and reactions to the world and being able to use such self-knowledge to positive effect. People who recognize their tendency to procrastinate and thus create action plans to make sure they fulfill responsibilities are persons who effectively employ intrapersonal intelligence.

**Naturalist Intelligence** allows people to survive in the natural world. Societies have always depended on those who can cultivate the land and make food grow, and those whose sensibilities allow them to use natural phenomenon to cure and heal. After survival, there are also those who find inspiration in nature such as the photographer Ansel Adams and the philosopher Henry David Thoreau. There are also scientists such as Rachel Carson who protect and preserve nature.

**MULTIPLE INTELLIGENCES ACTIVITIES**

Activities and performances commonly associated with each of the multiple intelligences are listed as follows:

**Linguistic Intelligence Activities:** reading, writing poetry and prose, editing, formal speaking, journal keeping, storytelling, giving directions, learning foreign languages, appreciating verbal humor (e.g., puns)

**Logical-Mathematical Intelligence Activities:** outlining and conducting science experiments, predicting outcomes, estimating, math calculating and problem solving, reasoning and debating, understanding analogies and abstractions, detecting and solving mysteries, deciphering or creating codes, solving brain teasers, playing chess

**Spatial Intelligence Activities:** painting, drawing, imaging, composing photographs, orienteering, building models, inventing, designing and building, inventing, mapping, creating diagrams, working with mazes and jigsaw puzzles

**Musical Intelligence Activities:** singing, playing, improvising, composing, keeping time, humming, using percussion instruments, making rhythmic patterns, responding to music

**Bodily-kinesthetic Intelligence Activities:** dancing, acting, skating, sculpting, sewing, crafting, playing sports, physically illustrating, pantomiming, practicing martial arts, tinkering with machines

**Interpersonal Intelligence Activities:** leading people, cooperating, mediating and solving disputes, teaching others, organizing, negotiating, empathizing, counseling, sharing, interviewing, collaborating, understanding others, brainstorming, volunteering, peer coaching and tutoring

**Intrapersonal Intelligence Activities:** silently reflecting, keeping a diary or journal, daydreaming, understanding one’s self, imagining future roles and opportunities, analyzing self behaviors, motives, and performances, goal setting, clarifying values, making personal choices, designing, implementing, and evaluating daily, weekly, monthly and life plans

**Naturalist Intelligence Activities:** observing nature, labeling and mounting specimens, collecting data, keeping logs, studying changes in the environment, gardening, farming, caring for animals, classifying natural objects, protecting wildlife
CHAPTER ONE: THE CONTEXT FOR USING TECHNOLOGY

The Continuing Debate

The debate about what constitutes a good education has been raging since the beginning of recorded time. None of the criticism that we hear today is new. As long as there have been published books, newspapers or magazines, criticisms of education have been stated. Finding critics of today's educational programs is very easy. Newspapers, popular magazine articles, and books have been written to "scare" the public into believing that education is in crisis.

Is education in a crisis situation? Are the future citizens and leaders of our world learning to solve problems, make decisions (both individually and collectively), and becoming self-efficient learners? If the answers to these questions are no, then we had better look at what the problems are and work together to find a way to make sure that the problems are solved, and the sooner, the better.

Much of the criticism of today's educational system is focused on the curriculum of the schools and the instruction in the classroom, and technology was to be integrated into the curriculum.

The curriculum was to be upgraded, teaching methods varied, the needs of individual students accommodated in the classroom, and technology was to be integrated into the curriculum.

There have been other reform movements in the history of education in the United States, but this was the first time that the federal and state governments led the movement. However, the state reforms that followed from the reports were more rhetoric than substance, more piecemeal than systemic. While the graduation requirements for students in the fifty states have increased, teacher certification standards are higher than before, and some school districts have adopted site-based management, the curriculum in the local schools and the instruction in the specific classrooms have changed very little. Most classrooms still primarily address the learning style of the linguistic, logical-mathematical learner, the curriculum is stagnant, students pursue the same or similar content material each year, and learning is still a passive activity in most learning environments. Very little substantive change has occurred in most school districts.

The Reform Movement (1983-Present)

Since 1983 a school reform movement has characterized education in the United States. The movement began with a flurry of national reports following the publication of A Nation at Risk by the National Commission on Excellence in Education (1983). Teachers and school districts were exhorted to make a plethora of changes. Schools were to be restructured to change the learning experiences for students to a more active learning environment in the classroom. Parents and community members were to be included in the educational decision making process.

Given the loud and ever constant criticism of schools and educators, change may be thought of as too much of a risk. Educators query: What if the changes I make are not the right changes? What if the change makes things even worse? What if I (the educator) need to take risks, am I ready for the problems that I may encounter? If research has proven that active learning is a powerful way to learn, how do I know how active learning takes place in the learning environment, what models are there for me to follow?

But, it is also too risky not to change. The world has changed greatly in the past two decades. No longer do businesses need people who simply perform repetitious tasks day after day. Life requires people to have problem solving, creative and critical thinking, and interpersonal skills, as well as technological skills. Education of today's students must prepare them for tomorrow's world, not for what has been, but for what will be.
Perkins (1992) suggests that we can have “Smart Schools” where students are engaged in a learning process that moves beyond the ritualistic and fragile acquisition of knowledge to a genuine understanding of the disciplines of knowledge through thinking. In these schools, teachers would use modeling and questioning to stimulate student thinking and understanding instead of focusing on basic skills and their development. Learning would be assessed through various forms of authentic assessment including portfolios or extensive public presentations rather than through multiple choice and true or false tests. Students would become active participants in their own education.

For education to make these changes, we must look at the entire picture. We have ample proof that piecemeal change is not enough. Chris Dede (1997) calls these piecemeal changes “islands of innovation.” Good things are happening on these small “islands” of classrooms and schools, but wholesale innovation and change is not occurring.

Perhaps a reason why schools are not significantly different despite the exhortations of the experts, is that the process of synthesizing all of the recommendations into one holistic learning environment is often beyond the scope or control of the classroom educator working alone. Dede points out that:

Systemic improvements can take place only within the larger context of systemic reform—sustained, large-scale, simultaneous innovation in curriculum, pedagogy, assessment, professional development, administration, incentives, and partnerships for learning among schools, businesses, homes, and community settings. (1997, p 13-14).

Systemic change takes time, time well spent if “Smart Schools” are the end result.

What to Teach?

What teachers teach is not randomly selected. Curriculum content is usually selected for the educator by the school district. Some classroom educators may be invited to join the district curriculum committee to help select that content. But, their selection of content is usually limited by the standards generated by the national and state organizations for each subject area, for example the National Council of Teachers of Mathematics (NCTM). State curriculum standards are now adopted in thirty-seven states, thus, limiting the individual decisions of the local educators. Most of the current national curriculum standards place an emphasis on the use of technology as a tool.

Along with the standards, some school districts use the contents of textbooks adopted by the school district (or state Texas, California), as the means of deciding on content for each curriculum area. The textbook series generally includes a listing of the scope and sequence for the knowledge and skills that are covered in the series.

Content or Skills?

Presently, there is some argument that the disciplines of knowledge should be presented as discrete entities and should be mastered by all students. Others argue that the disciplines of knowledge should be integrated around themes and that the well-educated student is able to use the knowledge of the disciplines to solve problems and/or think critically. Howard Gardner (1991) suggests a middle ground and advocates that the disciplines of knowledge be presented in a variety of ways, using a variety of materials, and incorporating a variety of assessment procedures.

Regardless of the intellectual arguments presented, it would seem that the pendulum of curriculum thinking is in the midst of swinging once again. Rather than teaching a curriculum emphasizing the disciplines of knowledge as discrete entities, educators are asked to do two things—integrate the curriculum to reflect the relatedness of the disciplines (as reflected in real-life situations) and integrate technology into the curriculum. The goal of the integrated curriculum is to produce learners who have the skills to make a difference in today’s (and tomorrow’s) complex, technological world.

Instructional Methods Addressed to the Differences in Learning Styles

Instructional planning is a complex process that requires knowledgeable and well-trained teachers. Once a decision about what is to be learned has been made, and the teacher has studied the curriculum, the teacher must make a series of instructional decisions:

- How should the learner be motivated and involved?
- How should the lesson be sequenced?
- How should the learner be involved in the lesson?
- How should feedback be given to the learner?
- How should the learner’s achievement be assessed?

These decisions are usually incorporated into daily and/or weekly instructional plans.

Teachers then must decide on the type of learning environment that might best be used to present the curriculum. They need to adapt their instructional environment using whole class instruction, small cooperative groups or an individual approach where the teacher is the facilitator, coach, or tutor. Varying the type of instructional environment helps meet the needs of the different learning styles of the students and allows the student to be an active participant in the learning process.

Educators also need to accommodate for the multiple intelligences (linguistic, logical-mathematical, intrapersonal, spatial, musical, bodily-kinesthetic, interpersonal, naturalistic, and ethical) of their students (Gardner, 1983, 1997). Additionally, instructional methods must vary: for students who
learn at different rates; for all learners labeled as disabled into the classroom; for those students labeled as gifted learners who need to be further challenged; and to involve the family and community in the learning process.

These tasks are not easy but technology can play a major role in making these things happen.

**Integrating Technology into Curriculum**

One way to manage the complexity of the curriculum and planning instruction for each child is through the integration of the use of technology. Today's technologies, including the use of computers, telecommunications, laserdisc and CD-ROM players and appropriate software as tools for learning, have great potential for stimulating the individual child, for establishing cooperative programs in the schools, for collaboration with schools around the world via distance learning, and/or partnerships with the home and the school to challenge students.

Today's computers are compact, efficient and relatively inexpensive to purchase. For as little as one thousand dollars you can purchase a computer, monitor, CD-ROM player, and modem (or other on-line capabilities) with sufficient memory and disk space to run and use many programs. A laser printer is very helpful and for a reasonable amount of money can be added. Purchasing and using many currently available software programs can give students the ability to learn and grow. Best of all, the child can be an active learner. Many of today's software programs are interactive, thus the learner is no longer a passive participant but is actively engaged in the learning process.

The traditional notion of having more able students do more work or use computers to do more work faster or giving the slower child more remedial practice whether on xeroxed sheets or through practice provided by a computer program, can now be replaced with something different for every child. However, progressing beyond the basic skills to the utilization of those skills requires knowledge, practice and good models.

Imagine, an individually planned curriculum for each child without the record keeping nightmare that characterized the individualized instruction movement of the 1970's. With one or more computer(s) in the classroom the teacher can set up individual activities for particular children can use a common topic for all students and allow cooperative groups of students to work together to accomplish the report writing or data analysis in the fashion they choose to design, or can set up learning centers which allow choices of software programs appropriate to the child's interests, learning style, and/or ability level. Or, future education may look as follows:

**No More Class Periods**

James and Delores are 11th grade students at Anytown High in 2002. Schedules located in the office show that they are taking five courses: Intermediate Algebra, Chemistry, American History, English 11, and Psychology. No student in Anytown High School is required to attend school on an everyday schedule that characterized their parents schooling experiences. Students at Anytown take all of their courses through the World Wide Web. Busses run through the town four times during the day at 7:30 a.m., 12:30, 3:00 and 6:00 and pick up and deliver whoever is waiting to go to or return from the school. The busses also run on Saturdays at 7:30 and 12:30 because the school is open until 3:00.

James's family has a home computer with access to the school's server, so he usually goes to school to attend football, basketball, and baseball practice at 3:00 everyday. Sometimes he arrives early to meet with a tutor if he has a question that hasn't been answered well enough by the tutors at the e-mail help desk.

Delores goes to school every afternoon because her family does not have a home computer and she has a job at a local supermarket in the mornings. At school she works at networked learning stations connected to the World Wide Web and receives instruction in a variety of formats, completes her assignments, and dialogues through e-mail with the teacher she has never met at Somewhere High School, and through Listserves with the rest of the class located at high schools throughout the state.

Each student in High School has a Zip Disk supplied by the school and a package of materials for each course that contains textbooks and lab materials. All assignments are sent using e-mail, but many students use the printers to make copies of Web searches until they have finished writing their papers for various courses.

Where are the teachers? They are in school, working with small groups and meeting with individual students. They are supervising tutors and they are developing new curricula. Often they are responding to student questions via e-mail and they are grading the papers or presentations that they view or download and print from each student's e-mail. Sometimes they will send e-mail to a group of students and ask them to attend school for a short class. Those invitations usually happen when the student work shows a deficiency.

*Adapted from: Business Week, The Future of Technology in Education: Transforming the Way We Learn, Special Advertising Section (November 15, 1993).*
The present Internet has been evolving since 1969. Originally the Internet was funded and run by the federal government, but in April 1995 the federal government exited and the Internet infrastructure is now commercially operated (Baran, 1995). While the full potential of the Internet has not yet been realized, the current Internet is a rich source of information and exciting communications opportunities for adults and children.

As the number of users grows and the commercial vendors increase, it is expected that the services on the Internet will expand. For example, video-conferencing is already possible and as new software for the individual user is developed, use of this feature will become more widespread.

Characteristics of Good Educational Software*

- Supports and enhances curriculum objectives
- Contains helpful documentation for the educator and the user
- Has options for the educator and the user
- Allows the student to anchor his/her learning to past experience and knowledge
- Can be completed individually, in pairs, in small groups, or by whole class
- Is a valuable learning experience for the user

*Adapted from Coe and O'Neill, 1995

To use the Internet you need a computer, a modem and telephone line (or another type of connection), and telecommunications software. Many schools started using the Internet using one computer and a modem, but many have now switched to fiber-optic cabling which allows faster access to online services. In the home, one way to access the Internet is through a local area network (LAN). Before you buy software or join an on-line consumer service, check with your school district and your local library. They may have LAN connections to the Internet and you may be able to obtain information and access from them. If you can’t connect your own computer to the Internet using access from their system, you may be able to use their connection on their computers. Look in your local newspaper for Internet providers listed in your area. The usual cost is less than twenty dollars per month, or you may be fortunate enough to live in a community with an Internet: FreeNet FREE-NET (a name for a LAN) which will provide you with access and again, the local library can help you get started.

Several states have developed Internet services for K-12 educators. If you must make your own connection, it is probably wise to begin by reading one of the books mentioned in the References or to visit your local book store or library for other options. Most of the books about the Internet contain explanations of the simple computer commands you will need to know and listings of sites of information together with file search capabilities.

Computer magazines are also helpful to the novice Internet user. For about four dollars you can buy the magazine and often you will receive a free disk to try one of the on-line services. Trying out the consumer services on a free basis may help you decide which one you like, if any.

The major on-line dial-in services are constantly expanding their services and making access to the Internet and the World Wide Web easier. The most frequently used services are: America On-line, World Net Services (AT&T) and Microsoft Network.

Organization of This Book

This book is about using technology to help develop a well-educated graduate of a K-12 educational program (whether it be in a traditional school system or in the home), who has mastered the beginning levels of the content knowledge of the disciplines and is a Critical Thinker, a Creative Thinker, a Problem Solver, a Researcher, and/or a Writer. We have carefully chosen the “er” outcomes because we think that these are the outcomes that allow students to be and/or become successful. We believe that each of the “er” words needs to be modeled, developed, and practiced during the K-12 school experience because we do not think that the processes underlying these outcomes are intuitive.
or emerge automatically from the non-differentiated, non-active, and non-technological classrooms typical in so many school districts today.

The “er” outcomes are not designed to be taught in isolation, but as part of the total instructional process. Thus, when the learner is ready to explore a science topic, a selection of software and websites that are appropriate to the content can be selected and utilized to support the development of the “ers.” Each chapter begins with a brief description of why we think the particular proficiency is important for the learner and identifies what the learner will be able to do when proficiency has been achieved. The recommended software is listed and categorized by traditional grade levels, discipline(s) or subject area, thinking skills required to be used (Marzano et al., 1988), and the intelligence(s) (Gardner, 1983) that are tapped. A compilation of World Wide Web Sites is listed and described, and sample activities to use the software and/or the World Wide Web sites are designated. Space is provided for the reader to make notes, and/or add software and additional resources.

All of the software and World Wide Web examples mentioned in the chapters are annotated in a summary alphabetical listing at the back of the book. Definitions of many terms used in the text are contained in the glossary.

---

**A WRITER AND MODEL FOR GIFTED GIRLS: LOUISA MAY ALCOTT BY MICHAEL E. WALTERS**

Louisa May Alcott (1832-88) is perceived by many today as primarily a writer of novels for adolescents. What is lacking in this perception is why her books were so popular in her lifetime, and her continuous popularity in the present age. (Two of her books were recently made into movies – *Little Women* and *Little Men*. ) The reason for her popularity is that young people believe she is speaking from their point of view. She was able to describe everyday living, and the family was the model for good living.

Louisa May Alcott and her family liked to engage in discussions of ideas and concepts. During her teenage period (1840's), the Boston-Concord area – where she and her family resided – was the intellectual center of the United States. It was here that the most important educational institutions and book publishers were located, e.g., Harvard University, Houghton-Mifflin, the Atlantic Monthly, and Little-Brown and Company. Louisa’s childhood was constantly stimulated by intellectual and moral concerns. She was encouraged to think, speak her opinions, and to be taken seriously for her ideas. The ideological current during her childhood was the transcendental philosophy of her father, Ralph Waldo Emerson and Henry David Thoreau. Transcendentalism emphasized that ideas and social progress are entwined with one’s religion.

Louisa’s father, Amos Bronson Alcott, was a very unique individual who had a great influence on his daughter. Although he lacked a formal education, he became superintendent of the Concord Public Schools. At the time he held that post, Concord was an important cultural center in the United States. It is noteworthy that despite his lack of formal education, the professors and graduates of Harvard (e.g., Emerson, Thoreau and Longfellow) took his ideas seriously.

Her siblings (three sisters) were also an important part of her intellectual development. They wrote constantly in their journals and described their writings and feelings to each other. As teenagers they organized the Pickwick Club, and performed plays in the barn attached to their house. What is so significant about the novel *Little Women* (1868) to educators of the gifted is that it is account of a family of gifted daughters, each seeking to find her intellectual destiny.

Louisa May Alcott’s environment was a paradigm of enrichment for gifted girls. In her childhood and teenage periods, both Emerson and Thoreau were her personal mentors and friends. Emerson permitted Louisa to explore his entire library, which was one of the most important at that time. She discovered and cherished the German poet and philosopher, Goethe. While visiting Emerson’s home, Matthew Arnold (the famous British poet and educator) encouraged her to become a writer.

During the Civil War, Louisa spent several months as a nurse for the wounded in Washington, D.C. Conditions were very bleak and medical organization was almost nonexistent – yet she was able to carry out her responsibilities. She wrote a book about these experiences called *Hospital Sketches* (1863). It was well-received; she was considered a heroine by the public. After the war, she wrote *Little Women* at the request of the publisher, Thomas Niles.

Louisa wrote *Little Men* (1872) as a sequel to *Little Women*. This later book is a neglected masterpiece of educational thought. Bloomfield, the school in *Little Men*, was based on her father’s educational ideas. The mission of the school was multicultural – to educate the neglected children of the affluent, and the troubled children of the Boston-Irish slums. The goals of the school were to develop each child’s unique sensibility and creative personality. The school was holistic since it emphasized both individual development and social responsibility. The life and works of Louisa May Alcott need to be reexamined, especially as they relate to gifted education.
# REPRODUCTION RELEASE

I. DOCUMENT IDENTIFICATION:

<table>
<thead>
<tr>
<th>Title:</th>
<th>GIFTED EDUCATION PRESS QUARTERLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s):</td>
<td>MAURICE D. FISHER, PUBLISHER</td>
</tr>
<tr>
<td>Corporate Source:</td>
<td>GIFTED EDUCATION PRESS</td>
</tr>
<tr>
<td>Publication Date:</td>
<td>Vol. 12, #1-4</td>
</tr>
</tbody>
</table>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

| Level 1 | Permission to reproduce and disseminate this material in microfiche and in electronic media, and in paper copy, has been granted by the Educational Resources Information Center (ERIC). |
| Level 2A | Permission to reproduce and disseminate this material in microfiche, and in electronic media for ERIC Collection Subscribers only, has been granted by the Educational Resources Information Center (ERIC). |
| Level 2B | Permission to reproduce and disseminate this material in microfiche only has been granted by the Educational Resources Information Center (ERIC). |

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: MAURICE D. FISHER, PUBLISHER
Organization/Address: GIFTED ED. PRESS
Telephone: 703-969-5247
E-Mail: MDFISHER@MANASSAS. VA 20109 CALIS.COM
Date: 9/8/98

(over)