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ABSTRACT

This issue of the Illinois Association for Gifted Children (IAGC) Journal focuses on teaching gifted children in the regular education classroom. Featured articles include: (1) "Educating All Gifted Children for the 21st Century: Proposal for Training Regular Classroom Teachers" (Maurice D. Fisher and Michael E. Walters); (2) "Gifted Children in Your Classroom" (Dorothy Funk-Werblo); (3) "Making Gifted in the Regular Classroom Work" (Sally Y. Walker); (4) "The Gifted Child in the Regular Classroom" (Jolene Smyth); (5) "Parent Expectations: Serving Gifted Children in the Regular Classroom" (Sandra Warren); (6) "The Gifted Reader in the Regular Classroom: Strategies for Success" (Jerry Flack); (7) "Climbing the Slippery Pyramid--Gifted Children and the Social Studies" (Ronald Levitsky); (8) "Learning Is Serious Business, Not Entertainment" (John F. Feldhusen); (9) "Gifted Students and the Need for Humor in the Classroom" (Dan G. Holt); (10) "Imagining Trees: A Sample Unit for Young Gifted Children" (Joan Franklin Smutny); (11) "Maximizing the Potential of Minority Economically Disadvantaged Students" (Dorothy A. Sisk); (12) "The Effects of Transitory Disabilities on the Highly Gifted: A Descriptive Case Study" (Mary Christensen); (13) "Creative Ways To Identify and Serve Talent in Your K-3 Classroom" (Joan Franklin Smutny); and (14) "A Kaleidoscope of Life with Young Creative Children" (Karen Meador). (Some articles include references.) (CR)

IAGC

Illinois Association for Gifted Children

A Not-For-Profit Organization

JOURNAL 2000

IAGC JOURNAL FOCUS: TEACHING GIFTED CHILDREN IN THE REGULAR CLASSROOM

I OVERALL PERSPECTIVES

II CURRICULUM AND INSTRUCTION

III TARGET POPULATIONS

FROM THE EDITOR'S DESK

Joan Franklin Smutny

The need to educate gifted children in the regular classroom is an urgent one. Federal and state funding for special programs and services may vary, leaving the education of gifted children inconsistent and uncertain. Parents become concerned when they see their children bored and unchallenged. They should be. Confined to the narrow limits of a curriculum they have already mastered and lacking any outlet for their talents, these promising students may drop out mentally.

Schools that care about the fate of high-ability students have sought to solve this problem with their own resources. Since many districts cannot afford to hire specialists in gifted education, the solution to underserved gifted students often lies with the regular classroom teacher. This is a particular challenge today when teachers already face increased demands from other special-needs children mainstreamed into their classrooms. Designing a curriculum that accommodates students from a wide range of abilities and learning styles can be an overwhelming project.

Yet, strategies exist that can help teachers adapt their curricula to the needs of gifted students. Susan Winebrenner's book, *Gifted Kids in the Regular Classroom* (1992), and *Young Gifted Children in the Regular Classroom* (1997) by Sally Walker, Betty Meckstroth, and myself include many practical teaching strategies that adapt activities or units for average students into more challenging ones for the gifted. The multiple intelligence research by Howard Gardner (1993) has also opened the regular curriculum up to more diverse possibilities.

This issue of the *IAGC Journal* explores gifted children in the regular classroom from a variety of perspectives. It addresses such questions as: How should we prepare teachers for this challenge? How have gifted children performed in the regular classroom since this new intervention began? What strategies need to be in place for them to grow and develop as they should? Where has this kind of intervention succeeded and where has it fallen short of our expectations? What concerns on the part of parents, teachers, administrators, and the children themselves do we need to address? These are some of the issues explored here.

Beginning the issue is a section on overall perspectives on teaching gifted students in the regular classroom. Based on their research as well as experience teaching regular classroom educators, Maurice Fisher's and Michael Walter's article ("Educating All Gifted Children for the 21st Century: Proposal for Training Regular Classroom Teachers") offers a clear guide for enabling teachers to discover and educate exceptional students. The authors explore the sensibility levels of gifted children, the applicability of Gardner's multiple intelligences, and the importance of understanding the social-emotional behaviors as well as unique developmental patterns often found in gifted populations. They also examine how to use this knowledge to design a differentiated curriculum, which would be a challenging education for both gifted and average students.

Dorothy Funk-Werblo in "Gifted Children in Your sroom" effectively demonstrates a number of useful procedures for reaching high-ability students that teachers can adapt for their own classrooms. The author describes each one and often shares lively anecdotes that clarify how the procedure works in actual teaching situations. She emphasizes valuing individual differences, creativity, and flexibility, but also provides strong, practical advice on how to keep each child progressing in a tangible way—how to provide structure for open-ended, creative learning environments.

Sally Y. Walker ("Making Gifted in the Regular Classroom Work") offers useful guidelines for designing a success inclusion model for educating gifted children. Many students do not experience the full benefits from such a model because their school implemented a system that was incomplete. This article demonstrates the critical elements that need to be in place in order for this model to work effectively, such as adequate inservice training, and thematic curriculum and content complexity.

Jolene Smyth ("The Gifted Child in the Regular Classroom") emphasizes the importance of student learning styles and classroom environment for their development and success. Gifted children need to feel that there is a place in the classroom for their strengths and abilities. The author explores several curricular activities in depth to show how teachers can serve students at different levels simultaneously.

Sandra Warren ("Parent Expectations: Serving Gifted Children in the Regular Classroom") examines how teaching gifted students in the regular classroom has worked out in practice. The lack of teacher training on the subject of gifted (most universities do not require any coursework on the subject) and the parent's lack of knowledge about the nature of giftedness combine to create frustration and misunderstanding about what these children need, whether or not their needs are being met in the regular classroom, and what course of action to take. Warren points out that many educators do not know how to differentiate the curriculum, and schools can be rigid about placing students in higher-grade levels for subjects where they excel. Ensuring the success of this model is a complex project, and many parents have yet to see significant benefits for their gifted children.

The second section of this journal focuses more specifically on curriculum and instruction issues. The first article by Jerry Flack ("The Gifted Reader in the Regular Classroom: Strategies for Success") affords a splendid journey into the world of books. The author shares innovative strategies for stimulating gifted students' interests and developing critical and creative thinking at a higher level. Flack presents a wide range of strategies for different learning situations—from research activities to biography studies, to the exploration of languages, to the study of trials, to the creative exploration of literature. This article has a wealth of ideas that enable gifted students to take hold of their own reading in a more independent and versatile way.

In "Climbing the Slippery Pyramid—Gifted Children and the Social Studies," Ronald Levitsky shares his own experiences with gifted children and outlines some basic principles for developing appropriate activities for high-ability students. He

emphasizes creativity, differentiation, and flexibility as fundamental to the process of designing curricular modifications in social studies appropriate for gifted children. Most helpful for teachers are examples of units he has implemented in his own classroom and stories about the kinds of projects his gifted students did—and some of the surprising results.

John Feldhusen ("Learning Is Serious Business, Not Entertainment") is a sober critique of the contemporary trend to make learning accessible and fun at all times. The attempt to foster greater self-esteem and interest in learning by making instruction entertaining does not work in the long run. What this trend misses and what Feldhusen's article demonstrates, is that self-esteem does not come from amusement, but from competence. Feldhusen argues that education should foster "intrinsic motivation" in children, gifted or not. Extrinsic motivation, which depends on external rewards and recognition, can negatively affect gifted students' study habits and approach to learning. They need to be able to tolerate periods of hard work, even drudgery, to gain mastery in some areas and they need the opportunity to engage actively in the learning process as something that has, for them, deep and lasting intrinsic rewards.

Dan Holt's article, "Gifted Students and the Need for Humor in the Classroom" may seem to take the opposite view as Feldhusen, but in fact, it does not. Holt deftly explores humor as a common characteristic of gifted children. It is the flexible viewpoint, the ability to leap on an ironic situation or moment and spin a joke or tale, take off on a commercial or political speech in a context that looks absurd or that confers a double meaning. The author provides some thoughtful examples of how humor—appropriately used as a critical and creative style of thinking—can be healthy, constructive, and beneficial for people generally, and for gifted kids particularly.

"Imagining Trees: A Sample Unit for Young Gifted Students" by Joan F. Smutny integrates art, science, and language arts around the theme of trees. It shows how teachers can take a basic topic in their curriculum and design a unit creatively—allowing children with different talents and levels of ability to study a subject in a way most productive to them. The article emphasizes the need for flexibility in modifying the curriculum for young gifted students and providing materials that will enable them to explore their ideas more deeply.

The third and last section of this journal examines the needs and and special challenges of target populations. It begins with the groundbreaking work of Dorothy Sisk ("Maximizing the Potential of Minority Economically Disadvantaged Students"). Her article addresses the underrepresentation of economically disadvantaged and culturally different children in gifted programs. Through a close examination of project STEP UP—created by Sisk and two other colleagues—the author explains the need for alternative criteria and methods for identifying non-mainstream gifted students and shows how project staff designed these alternatives. The article also demonstrates new approaches to teacher training and curriculum development and emphasizes the importance of community mentors (as role models and instructors) and parental involvement. Project STEP UP provides tangible examples of the main features required for this population of gifted and clear guidelines on how readers could duplicate the process in their own district.

Mary Christensen's article ("The Effects of Transitory Disabilities on the Highly Gifted: A Descriptive Case Study") brings unique insight to a sparsely researched subject in the field—the highly gifted child with transitory disability. The author ably uses the experience of a precocious 11 year old to illustrate the particular challenges faced by children who have to negotiate both the complexities of giftedness and a new disability. Temporarily crippled by an auto accident, this child found his giftedness an asset in some areas and a liability in others. There is a serious need for heightened sensitivity to the difficulties high-ability children experience when they suddenly have to cope with a disabling condition, particularly if they are already troubled by problems related to their giftedness.

In "Creative Ways to Identify and Serve Talent in Your K-3 Classroom," Joan F. Smutny addresses the special problems identifying young gifted students. Uneven development in the early years, differences in learning styles, language or cultural background can make talented children invisible to the untrained eye. The author demonstrates a number of alternate methods for identifying talent in the K-3 classroom and shows how students who appear average in ordinary settings may prove to be gifted when appropriately challenged. She also stresses the importance of including creative activities in the curriculum so that children with different kinds of talents have opportunities in class to express them.

Karen Meador's "A Kaleidoscope of Life with Young Creative Children" illustrates the variety of creative behavior that can occur in young children through examples of original and imaginative responses from children she has either seen or heard about from parents. Primarily addressing parents, the author explains what kinds of behaviors may appear in their children on a daily basis and what they can do to encourage creative thinking and problem solving in the home.

This issue may not answer all the questions and concerns about meeting the needs of gifted students in the regular classroom, but it explores the issues in a way that will enable educators, parents, administrators, and scholars to pursue new lines of inquiry. In reading the articles, I was struck by the practical concerns repeatedly raised by the authors about the challenges gifted students continue to face in the regular classroom. In this issue, we have endeavored to bring some focus to those areas where more steps need to be taken to ensure progress for gifted students. These perceptive articles offer some honest and very sober reflections on where this approach will take us and what we need to think about in order to make it one that will genuinely meet the needs of our gifted children.

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EDUCATING ALL GIFTED CHILDREN FOR THE 21ST CENTURY: PROPOSAL FOR TRAINING REGULAR CLASSROOM TEACHERS

Maurice D. Fisher and Michael E. Walters

"The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards; and curiosity itself can be vivid and wholesome only in proportion as the mind is contented and happy." Anatole France

"It is the supreme art of the teacher to awaken joy in creative expression and knowledge." Albert Einstein

For 10 years we taught courses on the gifted to regular education teachers at the University of Virginia Continuing Education Division. The teachers were eager to learn about how to identify and provide stimulating educational programs for the gifted students in their classrooms. These students were either enrolled in gifted pullout programs for a few hours per week or were a few points below the gifted selection criterion (based on a combination of standardized test scores and teacher ratings).

The teachers were working on masters degrees in education and were from several different school districts in a northern Virginia suburb near Washington, D.C. One district was among the 10 largest school districts in the nation, while the others were considerably smaller. We found the teachers to be bright and highly motivated to provide the best possible education to all students. Based on our work with them, we will discuss the type of information which we believe is most helpful for regular education teachers to learn through course work and inservice training—information that will help them to be knowledgeable in effectively educating gifted children. The topics we will discuss are by no means exhaustive; instead they represent a few of the most important concepts for educating regular classroom teachers to teach the gifted.

Assessment of Children's Sensibility Levels

Since Fisher has previously discussed this topic in the Journal for the *Illinois Council for the Gifted* (1992), and in Joan Smutny's book, *The Young Gifted Child: Potential and Promise, an Anthology* (1998), we will not present a detailed explanation of the rationale for studying gifted children's sensibility levels. However, it should be noted that we have been writing extensively about sensibility for the last 15 years in two Gifted Education Press publications: *Gifted Education Press Quarterly* and *Gifted Education News-Page*.

The major ideas underlying our emphasis on sensibility are as follows: (1) gifted children develop higher levels of awareness of their environment (including other people, objects and ideas) than average children; (2) because of their higher levels of awareness, they perceive the environment in qualitatively different and more insightful ways than average children; (3) these higher levels of awareness also result in gifted children showing more creative and unique solutions to problems; and (4) the measurement of heightened awareness through rating scales (e.g., Fisher Assessment of Giftedness Scale, 1994) is a useful method for teachers to use in determining whether a child is gifted. Because of numerous factors related to children's awareness of their environment and their resulting responses, we have used an "umbrella" term, Sensibility Levels, to capture the meaning of this important dimension of giftedness.

Through Walters' articles and books, he has explored the influence of different environmental factors (e.g., family, teachers, mentors, books, libraries, museums, art, music, theater, and movies) on the early development of highly gifted individuals who, as adults, produced major works in literature, history, politics, music, the arts, philosophy, and education. Some of the individuals discussed in Walters' essays are Jonathan Swift, Willa Cather, Johannes Brahms, Benito Juarez, Thomas Jefferson, Abraham Lincoln, Mary Shelley, George Eliot, Marcus Aurelius, Langston Hughes, Henry David Thoreau, Ellen Glasgow, Charles Dickens, Aldous Huxley, John Hersey, Barbara Tuchman, James Thurber, and James Michener.

An important lesson runs through all of Walters' essays that has a major bearing on the education of gifted children in the regular classroom: *teachers and mentors have played a significant part in identifying and nurturing the sensibility of great minds in all fields of human endeavor.* This lesson must be thoroughly learned and applied by regular classroom teachers through studying the lives of highly gifted persons and constantly trying different techniques for stimulating their gifted children's sensibility levels.

To be effective teachers of the gifted, they must also learn to validly assess children's sensibility levels by using appropriate instruments, and nurture these levels so that gifted children can reach their maximum potential. One important caveat is necessary: We are not ruling out standardized intelligence and achievement tests or other factors such as grades in identifying gifted children. However, these traditional assessment methods and approaches should be balanced with techniques for measuring children's sensibility levels.

By focusing upon the sensibility concept, teachers will judge children more by their activities, interests and concerns, and by the questions they ask. For example, a student in Walter's classroom who was classified as a low-level learner, was drawing very detailed pictures of animals one day. Teachers eventually identified him as highly gifted in the arts. Another time Walters read Goethe's *Faust* during the "Golden Reading Hour" in his school. The third-grade children asked numerous questions about this famous play, and many demonstrated an interest in studying great literature. Another example of peaking children's interests had to do with the James Clavell novel *Shogun*, which was later made into a TV series. Walters showed this TV series to his students. Their viewing of this story about Japan motivated many of them to write haiku poetry, draw Japanese style calligraphy, and become interested in Japanese food. One last example of using the humanities and arts to stimulate children's sensibility in the regular classroom involved a Shakespeare festival organized by the school (it happened to be located on Shakespeare Avenue!) that used children in different scenes from his plays, such as the interactions between men and women in *The Taming of the Shrew*. These performances brought out the sensibilities of many children

to acting and directing.

All of these situations were used to draw out children's interests in subjects they normally would not study. The major point here is that the class as a whole benefited from these experiences, and the gifted children with particularly strong sensibilities were stimulated and identified as showing interests and abilities in particular subjects.

There are several other factors that regular classroom teachers should study and apply to identifying and educating gifted children; all of these interact with their sensibility levels to produce the best classroom environment for educating them: Multiple Intelligences Philosophy and Assessment, Awareness and Encouragement of Gifted Children's Social-Emotional Development, and the Use of a Differentiated Humanities Curriculum for Stimulating Learning and Knowledge Development that is Based on Multimedia Computer Technology.

Multiple Intelligences Philosophy and Assessment

Although Howard Gardner's work (1983) is having a great impact on the regular education classroom, it has not had as much of an effect on the gifted field because: (1) this field is still locked into the unitary or "g" factor approach for measuring intelligence and human abilities; and (2) there are few resources available that explain how to use Multiple Intelligences (MI) theory to identify and teach the gifted. One exception is *Applying Multiple Intelligences to Gifted Education: I'm Not Just an IQ Score!* (Willard-Holt and Holt, 1998).

Regular education teachers need to carefully study and apply Gardner's work to their classrooms in order to break the traditional mold of perceiving children as below average, average, or above average in IQ. MI theory has replaced this narrow, single "g" concept of assessing human abilities by emphasizing eight different types of intelligence: Verbal-Linguistic, Logical-Mathematical, Visual-Spatial, Bodily-Kinesthetic, Musical-Rhythmic, Interpersonal, Intrapersonal, and Naturalist.

Think of the opportunities that can be opened for all children's cognitive and social development by assessing them with this theory rather than with a narrow perspective of only one or two IQ scores! To illustrate this broader perspective for determining children's abilities, we have included some examples of items from a self-rating scale designed by Colleen Willard-Holt and Dan Holt (1998). The following items are used to identify children's strengths in each of the eight MI areas:

ASSESSING MY OWN MULTIPLE INTELLIGENCES

Name_____

Verbal-Linguistic Intelligence:

_____I can write neat stories or poems.
_____I like to tell jokes or stories.
_____I have a good memory.
_____I enjoy word games.
_____I like to read.
_____I am a good speller.

Logical-Mathematical Intelligence:

_____I am curious about how things work.
_____I can do arithmetic problems in my head.
_____I like math class.
_____Math computer games are interesting.
_____I like to play chess, checkers, or other strategy games.
_____I like to do logic puzzles or brainteasers.
_____I like to make up and do science experiments.
_____I like thinking about complicated things.

Visual-Spatial Intelligence:

_____I can see neat pictures in my mind.
_____I am good at reading maps and charts.
_____I like to daydream.
_____I like to do art activities.
_____I can draw well.
_____I like to watch movies or slides.
_____When I read, pictures tell me more than words.

Bodily-Kinesthetic Intelligence:

_____I am good at one or more sports.
_____It is hard for me to sit still for a long time.
_____I am good at mimicking people's actions.
_____I love to take things apart and put them back together.
_____I like to touch things that I am seeing for the first time.
_____I am good at doing things with my hands.
_____I am a good actor.
_____I like to work with clay or finger-paint.

Musical-Rhythmic Intelligence:

_____I can tell when music is off-key.
_____I can remember a lot of songs.
_____I am a good singer.
_____I can play a musical instrument.
_____I speak or move with rhythm.
_____I often catch myself humming.
_____I tap on the desk while I am working.

Interpersonal Intelligence:

_____I like being with others my age.
_____I like being in charge of a group.
_____Other kids often look to me to decide what to do.
_____I give advice to my friends.
_____I belong to clubs.
_____I like to teach other kids.
_____I like playing games with other kids.

Intrapersonal Intelligence:

_____I am very independent.
_____I know what I am good at and not so good at.
_____I like playing by myself sometimes.
_____I have my own unique way of doing or looking at things.
_____I have a hobby that I do just for me.
_____I know what I have to do and then I make sure that I do it.
_____I like working by myself rather than in groups.

Naturalist Intelligence:

_____I like being outside.
_____Observing animals is fun.
_____It would be neat to make medicines from plants.
_____I can tell which animals are related to each other.
_____I can recognize poisonous plants.
_____I like to collect rocks, shells, leaves, or insects.
_____I like to take pictures of plants and animals.
_____I would like to have lots of pets.
_____I am concerned about the environment.
_____I like to grow plants.

What implications does MI theory have for training regular education teachers to effectively teach gifted children? First, by learning about the eight types of intelligence identified by Gardner (1983, 1997), they will acquire a foundation for noticing behaviors and sensibility levels that indicate different types of giftedness not usually measured by standardized IQ tests.

Billy might show advanced Verbal-Linguistic abilities through his sensibility levels (e.g., environmental awareness, preferences for learning specific materials, speed of learning, knowledge of a subject) to different stimuli, and demonstrated performance on lessons that emphasize these abilities. On the other hand, Sarah might be more inclined to work on problems in the Mathematical-Logical area as demonstrated by her sensibility to and knowledge of advanced mathematics. Regular classroom teachers must become aware of the differences between Billy and Sarah in order to give them the best possible education. This problem of identifying children with different types of intelligence will stretch teachers' skills and knowledge to the limit in such areas as using proper assessment instruments/approaches for determining sensibility and ability levels, and selecting an appropriate curriculum for specific types of ability (as related to the eight multiple intelligences).

In order for gifted children located in the regular classroom to receive the best possible education, their teachers must make an existential choice to base their instruction on the concept of Multiple Intelligences. These teachers might not have all of the available resources for helping them to identify and educate gifted children who have one or more of the eight intelligences. But some classroom learning opportunities in different MI areas are better than none at all. What can regular education teachers do to prepare themselves for identifying and working with gifted children who exhibit high levels of these different intelligences? Here are a few suggested activities:

1. Teachers must constantly seek academic improvement as part of their developmental education. This education should concentrate on developing their sensibility in the humanities, and how the various disciplines interrelate. For example, by studying architecture, they can learn about the advantages and disadvantages of different building designs and materials, the cultural diversity of various types of architecture such as the influence of Zen Buddhism on Japanese buildings, or the effect of Taoism on Chinese houses, or the influence of Medieval Christian philosophy on the design of Gothic cathedrals. Other areas of developmental education for teachers who want to improve their understanding of gifted children's sensibility are: studying philosophy, logical analysis, sculpture, dance, poetry, drama, and ethics. In addition, they need to learn to apply the ideas of great thinkers to discussing and analyzing contemporary issues. All of these studies should lead to improved critical-logical thinking that teachers can apply to analyzing current issues in our society, and to identifying and teaching the gifted.

2. Read the biographies of gifted individuals to learn about their early development and education. There are many excellent biographies of individuals gifted in language, mathematics, science, art, music, architecture, and other areas related to Multiple Intelligences. Some excellent ones include Jack London, Madam Curie, Albert Einstein, Charles Dickens, Wolfgang Amadeus Mozart, Richard Feynman, Ellen Glasgow, Mark Twain, Frank Lloyd Wright, and Hyman Rickover. By studying biographies of great geniuses, teachers can acquire ideas on how to teach gifted children who show potential in specific domains of knowledge.

3. Involve experts in working with gifted children who may show specialized abilities far beyond those usually encountered in the regular classroom. University professors, graduate students, and retired professionals can be enlisted to provide advice to teachers and instruction to gifted students. Such voluntary efforts are usually successful in providing the type of stimulation and learning experiences that gifted children desperately need to expand their skills and knowledge.

4. Study the major resources available on teaching gifted children in the regular classroom. These include:

A. *Teaching Young Gifted Children in the Regular Classroom: Identifying, Nurturing, and Challenging Ages 4-9* by Joan Franklin Smutny, Sally Y. Walker, and Elizabeth Meckstroth (1997). Discusses extensive resources and techniques for providing stimulating learning environments for the young gifted child such as Centers for Multiple Intelligences and Curriculum Compacting. In addition, the authors demonstrate specific methods and approaches in social studies, language arts, mathematics, and science. Instruction in these areas is based upon first stimulating children's creative thinking and imagination, followed by critical thinking and discovery-learning activities. The authors describe the process this way:

> *"The creative imagination is a powerful source for exploring the properties of an object, a living thing, a concept, or even a symbol....we've seen the value of having students identify themselves imaginatively with someone (or something) they are studying. Pretending is a very natural activity for young children—one that expands conceptual thinking. When you empower your students to draw on their creative resources, you can deepen what they've already learned and help them explore their knowledge in new ways... As students begin to understand scientific and mathematical properties, you can encourage them (especially those who don't yet write much) to use a variety of media for their work—visual arts, short skits, mimes, or dictated stories and poems. Your goal is to allow students to step into the world of a math or science topic and explore its properties and attributes through the arts." (Chapter 6, p. 102).*

The authors also address such important issues as assessing gifted children, cluster grouping, working productively with parents, understanding the social and emotional needs of young gifted children, and teaching gifted children from diverse populations.

B. *Teaching Gifted Kids in the Regular Classroom: Strategies and Techniques Every Teacher Can Use to Meet the Academic Needs of the Gifted and Talented* by Susan Winebrenner (1992).

Includes comprehensive descriptions of many useful methods and approaches for working with gifted students in the regular classroom. There are detailed and useful discussions of compacting the curriculum in different subject areas, learning contracts, creating more challenging activities for the gifted, providing stimulating reading instruction, evaluating performance, cooperative learning, and cluster grouping. An

interesting and helpful feature of this book is that all topics are related to particular gifted children and classroom applications. This feature makes the examples that Winebrenner discusses realistic for all teachers.

C. *The Young Gifted Child: Potential and Promise, an Anthology*, Joan Franklin Smutny, Editor (1998). The book contains articles by 48 authors and covers such topics as optimizing early learning, a sensibility approach to identifying gifted children, working with special populations, the importance of early identification, parenting young gifted children, meeting their social and emotional needs, and creating effective educational experiences. This is an up-to-date source of research, applications, and theories concerned with identifying and educating preschool through primary grade gifted children. Regular education teachers will find it particularly helpful in integrating research and theory on early childhood education with information about the cognitive, social and emotional development of young gifted children.

D. *Gifted Children: Myths and Realities* by Ellen Winner (1996). An excellent resource for learning about the characteristics of gifted children—particularly those highly gifted in the artistic and musical areas. Teachers should use this book as a reference work for developing identification procedures and in designing a stimulating differentiated curriculum. Winner has studied and written about giftedness from a psychological and developmental perspective. Her brilliant analysis of extraordinarily gifted children, based upon actual case histories of those who are artistically, musically, verbally, and mathematically advanced, provides educators with many insights into their cognitive development. Her discussion of artistically gifted children is particularly fascinating because of the numerous children's drawings used to demonstrate their development.

Examine the Social-Emotional Behaviors and Development of Gifted Children

Jim Delisle should be credited with awakening national interest in this aspect of gifted children through his books and his organization, Supporting the Emotional Needs of the Gifted (SENG). He emphasizes that teachers and parents must attend as closely to gifted children's emotional responses and social behavior as they do their academic performance. Daniel Goleman's work (1995) on Emotional Intelligence is also relevant to this area of gifted children's development. Both authors argue that our society pays too much attention to children's cognitive and academic development to the detriment of their affective and social development.

If regular classroom teachers study children's social and emotional responses in combination with their cognitive and academic performance, they will have a broader perspective for identifying and serving giftedness. The implications of such a perspective for educating gifted children are enormous. Instead of relying only on standardized test performance to assess their abilities, teachers will also consider emotional sensitivities and interactions with peers as indicators of giftedness. Furthermore, the most successful classroom instruction for these children will depend upon the sensitivity of teachers to these social and emotional characteristics. A teacher with little empathy for and understanding of these responses will have little success in educating them. In contrast, a teacher who takes these factors into account when dealing with gifted children will help their overall development, particularly in the areas of Interpersonal and Intrapersonal intelligence.

Another important factor related to the social and emotional development of gifted children is the discrimination they receive from teachers and peers. Unfortunately, schools in the U.S. have been undergoing leveling and dumbing-down processes for the last 20 years that have caused negative attitudes toward giftedness. These processes have also led to the false notion that *all* children are equal in ability, and *all* children should learn the same curriculum. Such beliefs are based more on sentiment than hard research evidence—and their impact has been very detrimental to the learning and social development of gifted children.

Stephen Schroeder-Davis (1993) has called this leveling process in the public schools, *coercive egalitarianism* — "forced equalization through neglect and/or compulsion; forced regression toward the mean." This idea, when applied to education, assumes that all children should be taught the same lessons at the same rate. Obviously, gifted children will not be appreciated in such an environment, and they will most likely be labeled as troublemakers, smart alecks and non-conformists by teachers and peers alike. The negative attitudes and social ostracism often result in gifted children disliking both school and their peers. As a result, their academic performance will probably suffer, leading to the classic underachievement syndrome observed in many gifted children.

Schroeder-Davis (1993) has provided numerous recommendations and resources for eliminating coercive egalitarianism and the resulting discrimination against gifted children, such as having all teachers and students study stories and novels that address the issue of discrimination against the gifted. His book is a rich source of information that regular classroom teachers can use to examine this problem to help make the classroom climate more comfortable for children of different ability levels. Discrimination against gifted children must be eliminated in our schools just as such discrimination should not be tolerated against the handicapped and minorities. The regular classroom teacher should be on the front line in the fight against this negative force that reduces learning and social development in all children.

The gifted education field needs considerably more research on how social and emotional factors affect the expression of children's giftedness and how such factors interact with their sensibility levels. But for now, regular education teachers must act under the assumption that the healthy and creative expression of social and emotional behaviors should be encouraged in the regular classroom as a vital component of the gifted education curriculum.

Differentiated Curriculum in the Regular Classroom

The above topics are related to designing a differentiated curriculum for the regular education classroom—assessing children's sensibility levels, using a Multiple Intelligences perspective to identify and teach the gifted, and studying their social and emotional development. It is unlikely that a successful differentiated curriculum can be designed without the interplay of these factors. Such a curriculum emphasizes the

study of the humanities (Fisher, 1989; Fisher, Walters and LoGiudice, 1987; Walters, 1984, 1990, 1996) in grades K-12 through the use of highly challenging and comprehensive lessons (Ward, 1980). This curriculum would also make good use of multimedia computer technology and the World Wide Web. Beginning at an early age, the regular education teacher should motivate gifted children to achieve higher levels of learning in literature, poetry, history, the arts, theater and drama, music, English, foreign languages, mathematics and logic, and the sciences. But the broad emphasis in all of these subjects should involve learning about the historical development of these fields during the last 2,000 years of Western civilization. Every subject is interrelated to every other subject in such a curriculum, and numerous opportunities are provided for the independent study of the interrelations beginning in the primary grades.

Interdisciplinary studies must be an integral part of gifted students' work in the regular classroom because they have a strong need to combine knowledge and information from different fields into unified concepts and generalizations. Therefore, teachers must learn how to organize their classroom and curriculum to encourage these types of studies.

As an example, gifted students can be stimulated by their regular classroom teachers to study ancient Greek civilization and culture (900-200 BC) through examining the works of Homer—the *Iliad* and *Odyssey* composed nearly 3,000 years ago (Griffin, 1998; Thomas, 1998); outstanding sculptures from the Parthenon as shown in the Elgin Marbles (Rothenberg, 1998); the lives and philosophies of Plato, Aristotle, and other Greek philosophers; the mathematics and science of Pythagoras and Democritus; dramatic works by Euripides (tragedy) and Aristophanes (comedy); and Greek history as written by Thucydides and Herodotus.

By engaging in the study of these disciplines, gifted students will learn to identify the following common threads that are a part of ancient Greek culture: the logical analysis of problems, the study of beauty and form, the search for freedom and reality, and the expression of ideas and emotions through discourse, art, and drama. They will also learn that the foundations of Western civilization go back through time for more than 2,000 years to a civilization that spawned universal concepts related to democracy, liberty, choice, comparisons between the ideal and real worlds, Platonic dialogue, logic, mathematical analysis, and the scientific study of nature. Gifted students' increased appreciation of the historical and cultural roots of our modern society will be one of the greatest benefits they can derive from this and similar types of interdisciplinary studies.

As a high-powered educational resource, the multimedia computer and World Wide Web can provide gifted students with stimulating and extensive information for mastering a differentiated humanities curriculum in the regular classroom. Such technology encourages the development of all of the concepts and activities which are part of an excellent differentiated curriculum: independent learning, learning-to-learn, studying the major concepts and principles that underlie different fields of study, and engaging in interdisciplinary studies. As illustrated in an article on computers previously ...shed in this journal (Fisher, 1997), there are numerous high quality CD ROMs and World Wide Web sites that offer challenging presentations in such areas as art, music, history, literature, drama, science, space exploration, and museum programs. This article concluded with the following statement:

"Bill Gates has said the major function of information technology is to '....amplify the intellect rather than the muscle of their users.' The amplification of the gifted student's intellect will only occur as a result of educated and sensitive guidance received from knowledgeable teachers. They must understand both multimedia computing and the differentiated curriculum as related to the humanities and sciences in order to fully prepare gifted students for learning in the 21st Century. Teachers will play an important role in giving students direction and structure in using the massive amount of information available from the world of multimedia computing."

The recent work of O'Neill and Coe (1998) offers a detailed description of how computer software and World Wide Web sites can provide gifted students with instruction in all areas of the humanities, mathematics, and science. Their book also relates this information to Multiple Intelligences theory so that teachers can select particular software and web sites that concentrate on specific types of MI abilities. Information is included for using electronic media to develop critical thinking, problem solving, research and writing skills. The regular classroom can use this resource to offer a highly stimulating computer-based curriculum for both gifted and non-gifted students.

Conclusion

We thank Joan Smutny for the opportunity to present our ideas for training regular classroom teachers to educate gifted children. Clearly, this is not an easy task, and the differentiated teaching agenda proposed in this essay is difficult to accomplish. We expect that the challenges and issues discussed here will motivate teachers to move far beyond the enrichment concept toward a more comprehensive perspective for transforming their gifted children into brilliant learners in the 21st century. By applying the differentiated education ideas discussed in this article, regular classroom teachers can provide high-quality education to all children, while at the same identifying and focusing on the gifted.

During the 1960's and 1970's, there was an important movement in American education concerned with developing a theory of instruction and rigorous curriculum for all students. It was led by outstanding psychologist and educator Jerome Bruner (1964, 1965, 1966). This movement also had a positive impact on pioneering educators of the gifted such as Harry Passow and Virgil Ward. It emphasized such approaches as applying child development research (e.g., research on the development of reasoning abilities as exemplified by the works of Bruner and Piaget) to teaching and learning, using discovery learning in the classroom, and teaching the structure of a particular subject area. The following statement by Bruner helped to advance these approaches based upon integrating research and theory from psychology and education:

"We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development. It is a bold hypothesis and an essential one in thinking about the nature of a

curriculum. No evidence exists to contradict it; considerable evidence is being amassed that supports it." (1965, p. 33).

Today, as we enter the new millennium, educators must reawaken the enthusiasm generated by Bruner and his colleagues over 30 years ago by designing a rigorous theory of instruction and challenging curriculum for the gifted that are derived from research in psychological development (both cognitive and social) and educational practice. Such information can be used to train classroom teachers to provide the most stimulating and intellectually challenging educational programs for both gifted students and their non-gifted peers.

To assure continuity and progress in our public schools, it is important that Bruner's lessons regarding curriculum and instruction be used in today's regular education classroom to achieve this goal. The concepts discussed in this paper related to sensibility, multiple intelligences, the social and emotional development of gifted children, and the design of a differentiated curriculum represent a promising beginning which points in that direction.

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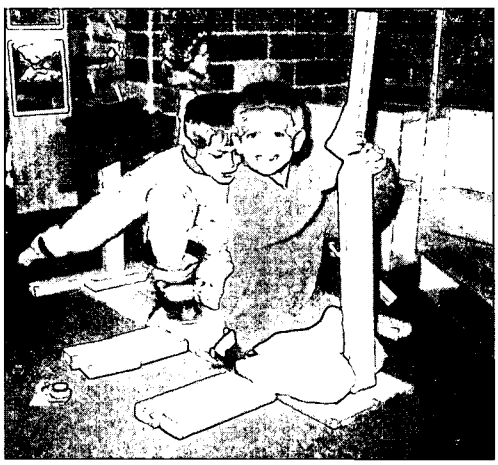

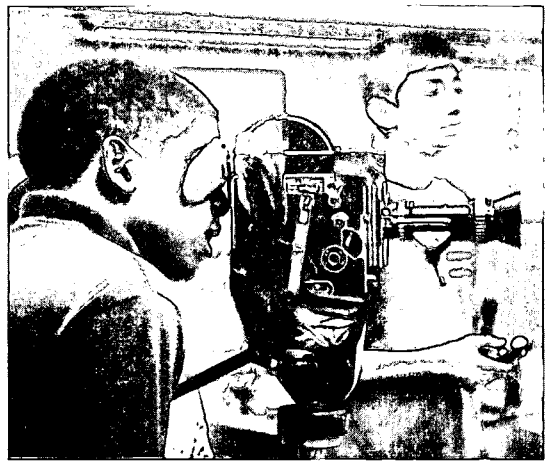

GIFTED CHILDREN IN YOUR CLASSROOM

Dorothy Funk-Werblo

Until Utopia...

It may seem overwhelming, but knowing about the many diverse characteristics of gifted children can make your task easier. You will have the artistic, the punster, the hyperactive, the scapegoat, the class clown, the walking encyclopedia, the organizer, the messy, the creative, the conforming and the nonconforming ones, the tiny, the tall and the bored. There will be visual, auditory, or kinesthetic learners. There will be average, above-average, handicapped, and below-average children. Each child deserves an appropriate education.

Reach Each to Teach Each

One way to provide for the gifted children in your classroom is to reach each child at their own level. Dr. Roger Williams stressed the importance of teaching children about their individuality, using their likes and dislikes as a tool for understanding.

"Unicornucopia," the guidebook for the Kyrene School District in Tempe, Arizona, includes in its Philosophy of Education this statement, "The very foundations of our nation are rooted in the basic principal of respect for human dignity. The intrinsic worth and dignity of each individual in the school system must be recognized and must be kept in mind in the planning, implementation, and evaluation of the individual's progress and the overall effectiveness of the school system."

Simple techniques can make your day and the day of all the children in your classroom wonderful. Each child is unique and has special talents. Dr. J. P. Guilford found over 100 ways to be intelligent. When I first read about his theory, I misinterpreted it. I began looking at my 36 students to find their special ways of being intelligent. There was the born salesperson, the negotiator, the social star, the sports star, the academic star, the politician and other types.

In order for teachers to provide for varied abilities and personalities, it is advisable that they develop techniques that embrace the learning styles and abilities of each child. The educator's focus should be on teaching children rather than teaching subjects. Children's records can provide a baseline as a starting point. Contrary to popular belief, it is much easier for the teacher to teach individuals than to attempt to force all to concentrate on the same page. Bright children who are bored

can devise many ways to disrupt the class. Slow learners who cannot grasp the concepts will become frustrated and react in non-productive ways. Just think—meet their needs and you have eliminated the source of many classroom problems.

Pretesting in each subject area is a must if one wishes to individualize assignments. Pretesting gives both child and teacher important information. The teacher learns the child's strengths and weaknesses. A youngster who can multiply by four numbers should not be assigned multiplication flash cards. That seems too obvious to mention. However, in October 1998, I gave the WISC-III to a third grader. This child, who had an IQ of 136, said he felt sick every week when teacher gave the class the 100 Addition Facts. When a child "tunes out" because of boredom and repetition, he also "tunes out" when something new is presented. Practice does NOT make perfect. Children are learning many things each instant. As a child, I did not learn to spell the words which I wrote 50 times; I learned to resent writing them; I learned to doubt the teacher's ability to see the futility of the "punishment."

What Worked

Evaluation of skills in each content area gives the teacher a baseline for each child. The child will be motivated as well when his improvement is documented. In this article I will attempt to illustrate some procedures that have worked in regular classrooms with 23 to 55 children in attendance.

Honoring diversity can start with the usually mundane roll call. Who among us has not heard a child say, "Present," when all others respond with, "Here"? Ask each child to reply with his/her favorite subject when you call his/her name. Thus you will immediately have information about them. When the children reply, record their responses on a class roll chart. Write the information on the chalkboard as well.

ARITHMETIC READING SPELLING MUSIC

Boy

Girl

Using a format similar to the one above, let the first child who mentions a subject be the scribe for that subject and make a check mark to identify the child choosing it. If a child says, "Recess," your appropriate comment is "We are telling about subjects. Perhaps we will tell about recess later." Have a scribe record "recess" and then the favorite subject.

After roll call you can discuss individual differences. It will be obvious that not all children like the same subjects. A follow-up math lesson would teach graphing of the data on the board. A simple bar graph would suffice. The assignment could be individualized by suggesting some of the other methods of showing differences. Three types of children will opt for the bar graph: the conforming, the average, the fearful. By having the assignment open-ended, the creative child may use plus signs for math, letters of the alphabet for reading, or stick figures or smiling faces and the like. Next, ask for a short, written paragraph of why that subject appeals to the student.

As to the value of the roll call of favorite subjects, one incident stands out. Walter had been a battered baby. His father had repeatedly bashed his head against the wall. Teachers were informed about his scrambled brain and were told he could not. His achievement continued at the first grade level though he had been moved up each year.

Walter's favorite subject was dinosaurs. I got picture books and storybooks at many grade levels from the library. I suggested he study them while the other children were doing group work. Soon he was bringing books to me and asking me to say the names of the animals. Suddenly, everything changed. Walter came to me and said, "Is this word Brontosaurus?" I replied, "Yes, Walter, you read that word correctly." "Was I really reading?" he asked. The floodgates opened. Walter drew Brontosaurus and labeled his picture. Then he said he would like to make a larger picture. I got paint and offered to let him create a floor-sized Bronto. Soon that medium was too small; he wanted to paint a life-sized Bronto. The playground was just the right size. All classes utilized his drawing: How many kids could fit in Bronto?

This child with "scrambled brains" had drawn an almost perfectly proportioned brontosaurus. He asked for and received a regular reader and began to work with one of the reading groups. He passed the reading and math tests. After 8 years in limbo, Walter emerged as a gifted artist. He caught up with most subjects. He graduated from high school. Was he gifted? I could not draw a life-size Brontosaurus.

A second roll call might ask for the least-favorite subjects, and charts and graphs made of these responses. Each roll call can elicit different ideas. By beginning the semester with emphasis on the individual, you are honoring all children with tasks they can do and yet not stifling any creative endeavors.

Getting to know the names of the children is very important to them and you. Having children make nametags for their desks, "just like the business executives," gives the teacher another opportunity to see the individual differences in students. The nametags will reveal many personality traits. Dr. E. Paul Torrance of the University of Georgia often took pictures of the students the first class day and mounted them for display.

Being allowed to write on the board is a big treat for some children. Have five children come to the board and write their names. When they have finished, let them give the chalk to five more and so on. You will, of course, be observing the social interaction. The size of the name, the placement of the name, and the child's manner of walking to the board all contribute to the teacher's store of information.

Every child has had opportunities to recite. Several have been given special tasks. The activities have been based on individual ability and all replies given consideration; thus, *esprit de corps* has been established.

Belonging

Because there is a wide range of ability in the class, it is important to validate a group spirit. A nun used alliteration to develop a slogan for her class. I copied her idea and made a banner which proclaimed: WERBLO'S WILLING WORKERS WORK WONDERS. We discussed the meaning, parts of speech, and importance of each of the words. The reading lesson was to use the dictionary to make a personal slogan (ex. "Charlie's Classmates Can Create" or "Sally's Sensitive Students Study").

Children never learn just one thing at a time. Each of the preceding activities, while ostensibly a roll call, math lesson, or

an English lesson, was also building self-esteem and valuing the individual. There is a flow that makes it easy to include each child at his/her own level.

Valuing Differences

I collect owls and designed a bulletin board with dozens of them. The title was, "How Different Artists Draw the Owl." This can be a powerful lesson. One class made a book: Our Wonderful Legends. The book included each child's owl and a story about it. They printed copies, got an official copyright, and sold the books. (Twenty years later, four of my former students each sent me a signed picture of differently colored owls.) The discussion about individual differences included the information that each of the artists had been paid for his or her works. One follow-up would be having the children draw owls and having a companion bulletin board with the same titles.

An art teacher had children draw or paint a still life. Once again individual differences were obvious. Bob's tiny picture and Betty's 12"x18" picture each received respect on the bulletin board, which read, "How Different Artists View a Still Life." Looking at the original still life and at the drawings created an appreciation of the difference in interpreting what is seen. Discussions about differences in art can help children make the transfer to understanding two versions of the same incident. Art lessons are a natural for teaching diversity.

Contrast this approach with that of the teacher who gave each child a green rectangle, two small black circles, and two yellow squares. The children were to paste the shapes together to make a car. When they finished they could go to one of the math centers. Tom walked over to the math center. The teacher called him back to put the other yellow square on his car. He turned the car over and said he put the window on the other side so you could see through. She raised her eyebrows, shrugged and said, "OK, but yours won't look like the others." Tom's car was not a part of the display. Tom hated school. He talked of suicide. He read the Gifted Child's Survival Guide (Galbraith, 1984) and found validation. It changed his life. Not every child finds a book that is meaningful.

Art As Inspiration

My early memories of my classrooms were of the pictures on the wall. Large prints of famous pictures—The Gleaners, The Song of the Lark, George Washington, etc.—were displayed in each room. I followed the tradition, mixing modern art with traditional. I had the children discuss the pictures and artists. Today, prints are easy to obtain. Some libraries loan prints. Calendars and postcard books are available through wonderful sources; various companies sell inexpensive copies.

A Chance To Recite

Teachers can devise techniques to give each child an opportunity to be heard at least twice a day. It is important to convey that, "I don't know," or "Pass," are acceptable as answers. Children soon "know" and welcome the chance to talk. One method of making sure that each child is called on is to begin at the end of the alphabet and call upon each child in turn. In the afternoon the teacher may choose to begin at the letter M. Soon the children will suggest ways of ensuring that all get chances to recite.

Do It Right the First Time

slogan that serves to help children is, "Do it right the first time." Rather than assign a whole page of math, assign all children the first problem in each column. "Less is more" when setting standards for accurate work. It is easy for the teacher to grade the few problems as the children finish. It is essential to emphasize that PRACTICE DOES NOT MAKE PERFECT!

By quick feedback from the teacher, the children who need help are not practicing an incorrect method. Because the children will be working at different rates, the teacher can allow the children to bring their papers to her for grading. Immediate feedback enables the child to correct errors and return to his desk to do the horizontal row of the problem missed. The slower learner who makes many mistakes may not know the 100 Addition, Subtraction or Multiplication Facts or the 90 Division Facts. Lack of knowledge of these facts can handicap the child when learning new processes. One child missed five problems on a standardized test only because she did not know the one combination, 7 X 6.

Perfect columns earn children the right to use the remainder of the class period doing activities of their choice. The teacher's task is to provide supplementary materials that will enhance the education of the individual, and to guide children in making choices. With computers, there is a plethora of choices. The local library is also a wonderful resource for books to challenge the bright child.

Learning Styles

Want to know who your visual learners are? Flash a transparency on the wall showing 10 items. After 15 seconds turn it off and have the children list the items they remember. This is for your personal fun and to teach how interest influences learning. One transparency can have pictures of sports; one can have various toys, another different fruits. A graph of the responses will probably show differences. The teacher may then discuss techniques of remembering, such as grouping or practicing visualization. After the discussion, repeat the exercises and note whether the techniques helped.

Test for auditory learners by asking the children to listen while you say four numbers. Have them write them down. Try five, six, seven, and eight numbers. When you grade the papers you will have a clue as to the auditory range. Then try the exercise using words instead of numbers.

Children's Questions

Teachers should take advantage of questions children ask. When Joan inquired, "What does ignorance mean?" one teacher suggested looking the word up in the dictionary. The subsequent discussion centered about kinds of ignorance. The brighter children mentioned prejudice. All answers were recorded on the board. A new bulletin board was designed with the title, "Drop a Bomb on Ignorance." The open-ended assignment of expressing the meaning of the word allowed each child to express himself in the method of his choice.

William Throws Down the Gauntlet

"Teaching for the test" is a real concern for some. William wanted out. His parents requested a conference. The teacher, the principal, the gifted coordinator, and the curriculum director met with William, his parents, and me. The teacher said William must read the science book because the end-of-the-year tests are based on it. William looked up from the college text he was reading on entomology and announced, "If I have to read that

baby stuff in the fourth grade book, I will deliberately answer all the questions wrong." William suggested that he could expand on the topics in the text and teach the class about what he had learned. William was promoted to middle school at the end of the year. He was still a gifted child in the regular classroom. However, he had a broader horizon. He was elected class president, played in the band, and took part in other activities.

Not all bright children are as assertive as William. Teachers can become aware of the longing for challenge that motivates many children. By building on the desire for more information, the teacher can differentiate the assignments to allow the child to go beyond the text. William is now a sophomore in high school. His mother called me recently and said she was getting college catalogs. When questioned, William said he had decided to go to college next year. He has the ability to pull it off.

Even Dolphins Die of Boredom

Boredom is a real threat to the well-being of humans. An article in *Psychology Today (April 1961)* quotes research showing that dolphins die of boredom. Bored chimps sat in a corner and pulled out their hair. Bored polar bears banged on their doors. Dr. Ramey says the human brain reacts to boredom by either atrophying or groping for diversion. He adds that the brain turns inward, cannibalizing itself. According to Blaine Harden of the *Washington Post Magazine*, even worms would rather die than repeat a trip through a tube to get food.

Passing the test is not as relevant to the child as it is to the system. The teacher who can develop a rationale for each of the skills taught will be taking a step to relieving boredom. Teach geometry through string art. (One former student paid for his honeymoon by making 4' x 10' string art designs for businesses.) Explain how geometry is the basis of parking a car.

Raise the Roof

Raise the roof—the sky is not the limit. Newspapers and magazines are aids for differential teaching. Just the facts may be all that is required of some. Other children may analyze the situation and point out what is fact and what is opinion. Some may locate events on a map.

Changing the Criteria Changes the Star

Dr. Calvin Taylor states that when the criteria for giftedness changes, different leaders emerge.

Discuss Real Problems Rather Than Ignore or Punish

Grading multiple-choice or true-false questions is simple but not nearly as fascinating as getting 23 different interpretations of a topic. After a playground fight a teacher read a short book, *Laugh and Cry*, about physical body changes when someone is emotional. An abstract interpretation of the text was as acceptable as that of the child who wrote that the pupils of your eyes get bigger when you are angry.

Never Underestimate the Power of Motivation

Teddy was a special education student assigned to a regular classroom for Science each day. The first lesson in September was a study of crystals. In two weeks the regular class had completed the study and went on to the next topic. Teddy did not. The principal complained because Teddy was not doing the same things as the other children. The teacher replied, "When did he ever do as the others did?" The teacher allowed Teddy to continue to get library books and other materials on crystals. His parents bought him a kit to make a crystal radio. The other pupils "covered" several units while Teddy explored uses of crystals. For the spring science fair, Teddy designed an exhibit on crystals. The businessmen judging the science fair were impressed and awarded Teddy a first prize. Teddy's interest was a significant motivation to help him rise above his low-average classification. Science fair projects are wonderful ways to encourage children to explore their interests and to present them to the class.

A Bill of Rights for Gifted Children

A Bill of Rights for Gifted Children should include the right to learn at their level. They have the right to spend their time in advancing their knowledge and to learn at an accelerated pace. Teachers can encourage the use of advanced materials. Many schools have computers and programs to help the slower learner. These same programs can be used by the bright child. While the slow learner is using a program two grade levels below his grade, the bright child can utilize a program two to five grade levels above his grade.

I am adamantly opposed to using the bright child as a tutor. If teachers need a college degree and certification, is it fair to ask a child to do a teacher's job? There is also a hidden message in having a bright child serve his peers. As an unpaid tutor, the child is sacrificing his learning time.

Dangers (from my files)

There are many sources of danger when the gifted child is in the regular classroom. All of the following incidents of danger are taken from my files and are far too real.

Tales of Principals

The principal is the most influential person in the school. A teacher can have high ideals and great plans. Depending on the principal, however, the teacher can succeed or fail in helping all her students.

Teachers and parents can cooperate to prepare bright children for double promotion. One school system had a "non-graded" elementary school. Several fifth grade children had completed three grades in their fifth year. According to the "plan," those children were to be placed in their appropriate grades. The principal refused to double-promote Hans because he "dressed funny." Mary had not started her periods so she was held back. Tommy was too short. For one year only, the teacher and pupils had hope and aimed for a promised goal.

All children in another city were placed in regular classes. Two 6-year-old boys were tested at a local university. Each scored 142 on the WISC-III. One principal, who informed the parents that he was getting a degree in gifted education, told them that their son would do the same work as the other children. The other principal began the conference by saying, "We have many gifted children in our K-12 school. I took your son to the library and gave him a high school science text. He not only read the page I suggested, but found an error. I have told the teacher I would try to spend 15 minutes a day with him." Can you guess which child is a successful businessman today?

Teachers Can Be Dangerous

Some teachers feel threatened when they have bright children in their class. Jon had been sent to the office because he told the teacher that Chicago was not the capital of Illinois. He received three days detention for disrespect. Respect for the child and his correct information could have defused the

situation. Had the teacher said, "Thank you," she would have earned the respect of those children who knew Jon was right. Another solution to a stressful situation is humor.

Classmates Can Be Dangerous: Jeers From Peers

By recognizing, supporting and encouraging respect for individual differences the teacher can minimize scapegoating and name-calling. "Dateline," an NBC program, featured the story of four bright boys who were not accepted by their classmates and sought each other for friendship. They were angry, frustrated and bored. Their answer to the jeers was crime. Three are serving life sentences and the leader has been given the death penalty. One mentioned being called a "geek" and a "nerd." The old adage, "Sticks and stones may break your bones but names will never hurt you," is not true.

Broaden Horizons

Many libraries loan fine art prints. By displaying various works of art, the teacher can broaden the horizons of students. Although my teachers never discussed the prints on the classroom walls, I attribute my love of art to those pictures and to my mother's choice of art. Klee's painting of the red fish has inspired many poems, paragraphs, and discussions.

Mary Protests: "This Is Great But Teachers Have Too Much to Do"

I asked a teacher named Mary to read this article. She loved the suggestions and said it was great, but teachers had so many forms to fill out and rules to obey that teaching this way was impossible. There is a plethora of evidence that *not* teaching this way is ineffectual. Tom Baxter of the Texas Prison system told me, "We get those the schools don't reach." Each day the news is replete with stories of bright and not-so-bright adults who commit crimes. Parents of gifted children with whom I work tell me how school demoralized them. I could add my stories to theirs.

I have conducted workshops in different cities. Teachers have voiced opinions similar to Mary's at the beginning. Follow-up letters from participants revealed that many teachers who applied these ideas in the classroom were promoted. One teacher said she had hated teaching until she tried the things she learned. It does work.

Flexibility Overcomes Conformity

I taught for years in a state where teachers were required to post their schedules on the door and stick to it. In October a child asked, "What is a scarecrow?" To answer the question we used our dictionaries. The discussion of the definition, "Something that frightens without cause," was the basis of compositions on, "My Scarecrow Won't Scare Me Any More." The gifted child read books to find out about his scarecrow—spiders. The average child's five sentences were also accepted as equally valid. The principal protested that I was not using the workbook for reading at the allotted time. She pointed out that insubordination is cause for dismissal. I pointed out that the children were using dictionaries and encyclopedias, and writing paragraphs, before she accepted the lesson as "language arts" as listed on the door. There are many ways to justify the spontaneous lessons that are inspired by a child's questions.

In one large city I taught a workshop on creative teaching to educators who were required to have each pupil at a certain page in workbook at a specified date. The supervisor visited each classroom and checked each book. The principal endorsed my methods, the teachers applauded them, and the school system accepted them to the point of changing the workbook requirement.

Teachers are the product of an educational system that stresses conformity above flexibility. We can overcome this. I found doctoral students locked into following directions. At the end of the first session one of my Purdue University students asked, "How many pages should we read for tomorrow?" I suggested she use the syllabus and her own judgment. She reported me to the dean who said, "Thank Goodness." Teaching about diversity will free you and your pupils and encourage respect for self-reliance.

Important Additional Sources

This article is only the tip of the iceberg. I have based it upon my years as a teacher and educational diagnostician. For excellent research and ideas I strongly urge you to read *Gifted and Talented Children in the Regular Classroom* by Dr. E. Paul Torrance and Dr. Dorothy A Sisk, copyright 1997, Creative Education Foundation Press, Buffalo, NY 14224.

An unusually helpful book is *Teaching Young Gifted Children in the Regular Classroom* by Joan Franklin Smutny, Sally Yahnke Walker and Elizabeth A. Meckstroth, copyright 1997, Free Spirit Publishing Inc., Minneapolis MN 55401 <help4kids@freespirit.com>. This helpful book not only contains wonderful and practical suggestions; it also provides pages that you may copy.

An Invitation

I sincerely invite you to share your experiences and comments. You may write me at: P.O. Box 434, Hempstead, Texas, 77445. My email address is drdot@hal-pc.

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MAKING GIFTED IN THE REGULAR CLASSROOM WORK

Sally Y. Walker

Clearly the most popular method of educating gifted children has been to incorporate an inclusion model of gifted in the regular classroom. Multiple reasons are given for this program arrangement. Some of the most common that I have heard are:

* Cost

* Other children learn more with a gifted child who models complex learning

* It works for special education students, therefore it will work for gifted students

* Gifted students need to be with others of mixed ability, for that is what they will encounter in the real world

Gifted in the regular classroom can work, but in order to do so certain requirements must be met and maintained. Few schools that I have encountered have been able to successfully implement a program with all of the components in place and fully functioning.

* First, the classroom teacher, who already has a full plate, in many instances is expected to take on more. "How can you expect me to do one more thing?" she asks with a sigh. With larger and larger classrooms housing children who come from a variety of backgrounds and situations, discipline and social work needs are more immediate and of more concern than academics. Smaller numbers of children in the classroom would be welcome. This would allow for a more individualized approach or knowledge of individual students and their level of needs and abilities.

* Inservice and preservice training on how to deal with children at all ability levels is essential. Too often gifted is sorely neglected, assuming that these children are easy to teach or will make it on their own. Myths and misconceptions still abound. Recognizing the characteristics of gifted children and the resulting needs that they have, should be a basic requirement for all teachers. Too often an inservice of "Gifted in the Regular Classroom" is offered with little support and no follow-up. Without continued support, reinforcement, supplies and materials, little change is likely to occur.

* Thematic curriculum and content complexity should be a given. Too often classrooms are restricted to the state standards, because they are what is deemed important as evidenced by the state test. Little thought is given to what happens to the child who has mastered the information years before or can learn it the first time through. Knowledge and skill in compacting curriculum is necessary. Teachers must know how to assess if students already know the information and how to adjust curriculum so that learning occurs for all. Questions to ask might include: What must students know and be able to do as a result of this course/class? How can that be demonstrated? If they know the information, what extensions are available? What is done to bridge connections between disciplines? What abstract thought promoted and fostered? What challenges in content depth and complexity are imbedded within the curriculum to assure rigor? What do the professionals who work within the content area think like?

* Teachers need an understanding of metacognition and the ability to foster it. Rather than questions based solely on knowledge and comprehension, all students should be exposed to a higher level of thought. A variety of activities that foster creative, critical, and evaluative thinking are essential. A thinking classroom is a learning classroom.

* Products need to invite complexity of content as well as complexity of thought. Products also need to take into account different learning modalities and learning style preferences. To depend solely on written products with limited response opportunities sadly limits the extent to which students can show what they know and can do.

* Teachers clearly need an understanding of age-appropriate as well as intellectually-appropriate activities. These are not one and the same thing. For the 6 year old who plays soccer like a 6 year old, who does math like a 9 year old, who reads like a 12 year old, and may behave emotionally at times like a 4 year old, different activities are needed. If the school dictates that all first graders must use the same reading text, how will this child's needs ever be met? The asynchronous {out of sync} development of the gifted child makes the classroom prescription of curriculum a challenge for even the most capable teacher. Yet without differentiation, school becomes a place to be endured that fails to recognize and provide for the gifted child's intellectual needs.

* Teachers need to understand and be comfortable with flexible grouping and with tiered assignments so that groups change based on the entry level, application ability, and abstraction levels of the children. The question often arises, "But, is it fair for some students to be doing other work?" Perhaps the response should be, "Is it fair for all to be on the same page, the same day, responding in the same way?" In a regular class, if one lesson is presented the same way to everyone, chances are that one third will get it, one third already knew it, and one third have no clue. In other words, two thirds of the class are not learning. Katie asked her teacher in a small voice if there wasn't something else that she could do. "I did that at home last year on my own. I'd be glad to help you do something else," she said. The question is, "What is Katie learning?" With flexible grouping, one group can work on needed skills, another on a more difficult level, while a third group is solving a related problem or doing research at a more complex level. This is not to say that the advanced group is doing the fun things while the others complete more mundane tasks. They should all have projects that reflect their learning styles, interests, and ability levels. Some materials and activities that adjust quite naturally and flexibly to different levels can include, but are not limited to: attribute blocks, tangrams,

pentaminoes, crossword puzzles, word searches, novels, creative writing, painting and drawing, modeling clay, sorting and classifying, patterning, and independent study.

* Assessment must be used to influence and incorporate curriculum. Feedback about student progress, or the lack thereof, necessarily dictates the differentiation with rate, depth, and complexity of curriculum. Assessment which is effective allows for student comparison based on individual growth and achievements rather than against other children. We cannot expect that all children who enter the classroom will look alike, behave alike, or learn alike. Clearly communicated standards with criteria for excellence provide a window through which children have room to grow and to achieve their highest potential.

SALLY WALKER is Executive Director of IAGC and is a nationally known speaker and writer in gifted education. She is one of three authors of *Teaching Young Gifted Children in the Regular Classroom.* She is also the author of *The Survival-Guide for Parents of Gifted Kids: How to Understand, Live With, and Stick Up For Your Gifted Child.*

THE GIFTED CHILD IN THE REGULAR CLASSROOM

Jolene Smyth

Guiding Our Students

In many areas of education today, students are empowered to be accountable for their learning experiences. An effective educational environment gives students ownership of their education. This is especially important for gifted and talented students, for they have the ability to take responsibility for their learning and run with it.

As educators, we are responsible for guiding these special students in appropriate directions. In *Teaching Young Gifted Children in the Regular Classroom* (Smutny, Walker, and Meckstroth, 1997), the authors state: "That simple objective—to make your classroom one that holds promise for every child—requires a learning environment that has been consciously designed not only to open wide the door to advanced pursuits, but also to entice a child to step through it" (p. 25). Therein lies the mandate for educators to hold wide open the doors of educational opportunity for all students.

One way to help students of any ability level become immersed in their education is to make it meaningful to them. If students can relate to what they are learning and experience its significance to their lives, they will be interested and eager to learn more. Although gifted and talented students are generally eager to learn, teaching to 25 different learning levels in one classroom can be taxing for a teacher. It is essential then, to develop curricula that enables classmates to work at their individual ability levels alongside one another.

One important step toward accommodating each student's learning ability is to identify his learning style. This will take some time at the beginning of each year, but once a teacher discovers the learning styles of the students, lessons can be presented in a manner that facilitates each one's growth. After identifying the gifted student's learning style, it is important to provide opportunities for the child to work and learn in that mode. In an appropriate learning environment, all students can be motivated, interested, and comfortable.

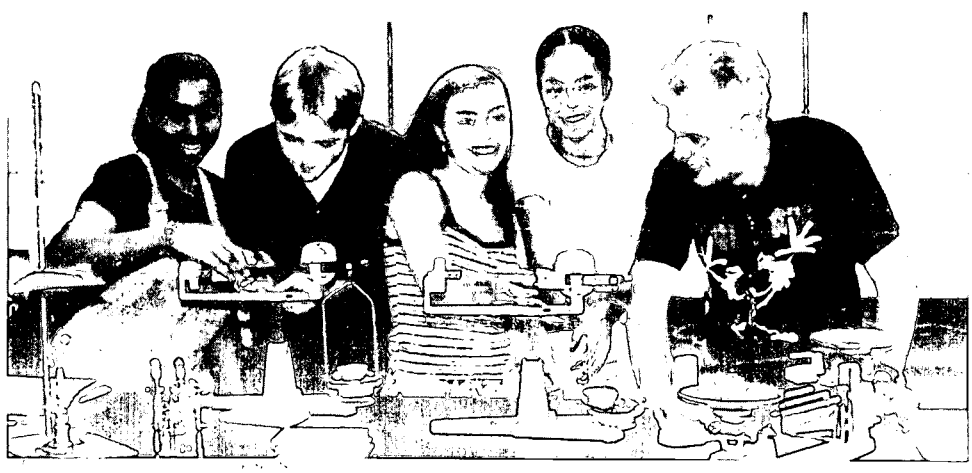
Classroom Environment

The environment of a classroom directly relates to the learning "comfort" level of its students. Children who feel safe and secure in their learning environment are willing to take the risks that true learning requires.

If gifted and talented students do not feel this level of comfort, they will not take risks to excel, to explore the unknown; they will not know that it is okay to be wrong; they will not understand that taking risks and being wrong are parts of the learning process. All students—whether gifted, average or below average—must feel at ease in their learning environments before their teachers can expect them to be successful.

Smutny (op. cit., pp. 31-32) offers nine features of a child-friendly classroom, to help us develop and plan classrooms that provide comfortable learning environments:

1. Bright, colorful and attractive, with books and objects of nature on display and music playing when appropriate.



2. Use of thematic instruction so connections among content areas occur easily and naturally.
3. A wide range of materials available to students.
4. Activity centers that invite self-initiated, hands-on experimentation.
5. Seating arrangements that are flexible for easy periodic changes based on different group and individual needs.
6. Attractive, lesson-related activity options for students who successfully complete work before their classmates do.
7. Evaluation of students that identifies their areas of strength, areas in which they can improve, and areas where they need more challenge.
8. A portfolio of each child's work, maintained to document his mastery and skill levels.
9. Parent/teacher communication that recognizes parents as playing an integral role in their children's education.

An Activity for Most Learning Styles

A wonderful activity, entitled "Earth: The Apple of Our Eye" (included at the end of this article) brings together classmates of different learning levels and provides excellent opportunities to incorporate the nine classroom features listed above. Gifted students take true ownership of their learning in this project and are inspired to learn more about the subject matter independently.

Gifted and talented students often are passionate about issues in which they have special interest. This activity enables them to channel their passion into effective avenues, into cause-oriented activity. Many young students are aware that we have limited amounts of natural resources. They are genuinely concerned about this and can become very passionate and often fearful about its possible effects. They feel empathy for the animals or the societies that will suffer as a result of wastefulness.

The Activity as Part of a Larger Unit

The "Apple" activity is appropriate for many areas of the curriculum, particularly science and social science, and can be included as part of larger units. In addition to science skills, students draw upon their math, social studies, and language arts skills as projects related to the activity evolve. The arts can be incorporated and there are many books available that offer creative ideas. These ideas might include having students act out a play portraying an endangered species and society's influence on it. Some students will want to write their own plays—and what better time to evaluate whether the students are understanding the concepts, than while they are employing their different skills and talents to demonstrate their ideas. Participating in dramatizations of the concepts may also help the less gifted and talented students understand them.

This activity can be used as an introductory lesson for a unit on conservation and ecology. Students can choose topics relating to the subject matter of this activity and then research and write about them. The instructor can offer a variety of materials in the classroom and encourage students to utilize the library for numerous sources in their research.

As an alternative to a research paper, students can write a play or skit to demonstrate a point about conservation. Students can choose whether to work in groups or individually for either the research paper or the play.

Throughout the unit, many tools and techniques can be used to develop the students' thinking, to help them express the passion he or she may be feeling for conservation and ecology through participation in the activities. As a class, students can work on conserving the natural resources in their classroom. Mini-centers can be set up for students to explore—one full of books, journals, posters, and videos of all levels for students to browse through and read at their leisure.

The unit can provide opportunities for students to write creatively about conservation and ecology. Posters, photographs, and pictures from nature magazines of endangered species, littered roads, wasteful usage of natural resources, rain forest destruction, and beautiful preservation of some of our natural resources, will inspire many students to write. Writing can take the form of descriptive poetry, free verse, documentary, biography—whatever is appropriate to communicate the student's idea.

The activities may motivate some students to bring in pictures that they find while doing their own research. As the students incorporate their work and activities in this way, they make the connection that they are learning something that is paramount to their immediate lives and environment. They will then begin to understand the relevancy of their education.

A child-friendly classroom looks inviting, with a wide range of materials available in the mini-centers. Centers are student initiated (a recycling project works well in this way). Students are grouped with classmates of various academic levels. As they work together to develop the project and the concepts of ecology and conservation spark their diverse interests, they take on different levels and areas of responsibility for the project.

Using a thematic unit lends itself to a wide range of valuative options. Assessment can be based on different lessons completed throughout the course of the unit, allowing the educator to point out areas of strength, areas needing improvement, and areas where a student needs greater challenge. It is most helpful to maintain a portfolio for each student of drawings, writings, and other papers related to the project.

Parents can play a pivotal role in this unit by practicing recycling and conservation at home. Many students like to involve their family in what they are learning and feel proud when they can report to the class on what they are doing in their home to recycle and conserve our natural resources.

In the following activity, the projects the students choose should be exciting, interesting, and fun for both student and teacher. The teacher should be careful to allow sufficient time for the students to be able to research and not only write, but talk about their chosen topics. Many students will become enthusiastic to learn more about the topics. They will want to share and apply their knowledge at home and school in various ways.

The activity will be of interest to students at many academic levels. It enables them to perceive and understand the object of the lesson by demonstrating to them how few natural resources

we really have. Depending on the age of the children, they can actually use the knife and cut the apple and be actively involved in discovering for themselves just how small and precious our natural resources are.

This activity was introduced during a workshop conducted by Fredric Tarnow entitled "Hands-On Minds-On Science." It is taken from Population Education, a project of Zero Population Growth, Inc. It is designed for all levels of learners in the classroom and can be adapted to fit into most any curriculum. Its greatest value lies in how it draws students of various academic levels and learning styles immediately into the topic and inspires them to learn more about it.

ACTIVITY

Title: Earth: The Apple of Our Eye

Introduction: This activity is a visual demonstration illustrating that there are limits to our sources of food and water. It fits into a larger unit on conserving our natural resources, a subject of concern to many students.

Objectives:
- To enable students to visualize the limited amount of natural resources available to us.
- To enable students to perceive how much of the earth is habitable and how much is uninhabitable.
- To enable students to understand and demonstrate conservation of water and food resources.

Concepts:
- Students will gain an understanding of the limited amount of natural resources available to us.
- Students will appreciate the need to conserve water and other natural resources.
- Students will learn that much of the earth is not suitable as a source of drinking water or for farming and is therefore uninhabitable.

Process Skills:
- Students will observe shrinking topsoil and understand water availability.
- Students will classify habitable and uninhabitable land on earth.
- Students will classify ocean water by what is safe for food production and what is not.
- Students will analyze the current rate of food production versus the destruction of natural resources.

Introductory Demonstration or Attention-Getter:

Two hundred years ago, most of America's croplands had at least 21 inches of topsoil. Today, it is down to around six inches. We lost six million acres of prime farmland between 1982 and 1992—an area roughly equivalent to the state of Vermont. (If that eroded cropland soil were to be gathered annually and put on a football field, each year's pile would be about 200 miles deep.) Four of those six million acres were lost to urban and suburban expansion. The other two million acres, or one billion tons of topsoil, were lost through erosion caused by deforestation, unsustainable farming practices, and animal grazing. Worldwide, we lost 25 billion tons of topsoil per year during that decade.

In the United States, over 40% of the groundwater (which is used as drinking water for over half the population) is contaminated by industrial, agricultural, and even household pollution, waste disposal into the ground, and chemical wastes from mining and petroleum production. After contamination, it is extremely difficult and costly to purify groundwater. For example, one quart of used motor oil, poured into the sewer, can contaminate up to two million gallons of drinking water.

Materials:
- apples
- knives
- paper towels

Procedures:

Instructor notes: Adapt the project for younger students by doing the cutting for the students and simplifying the italicized language. The italics refer to the portion of the apple that has just been cut.

For the topsoil experiment:

1. Have the students hold the apple up. *This represents our planet.*
2. Cut the apple into quarters. Hold out three quarters in one hand and one quarter in the other. *The three quarters represent water and the one quarter represents land.*
3. Set aside the three quarters representing water. Take the quarter representing land and slice it in half, lengthwise. Take one half (which now equals 1/8 of the apple) in each hand, and hold one of them up. *One-eighth of the earth's surface, or half of all land, is inhospitable to people and to crops. These are the polar regions, deserts, swamps, and high or rocky mountains.*
4. Set aside the "inhospitable" 1/8 and hold up the other hand with the remaining 1/8. *This 1/8 of the earth's surface, the other half of all land, represents the total area on which people can live but not necessarily grow food.*
5. Slice the "hospitable" 1/8 lengthwise into four pieces (4/32). Put 3/32 in one hand and 1/32 in the other. Hold up the hand with 3/32. *Each of these four pieces represents 1/32 of earth's surface. These three represent land that is not arable. Some of it has never been arable because it is too rocky, wet, cold, steep or has soil too poor to produce food. Some of it used to be arable, but now is not because it has been turned into cities, suburbs, highways, shopping centers, schools, parks, factories, parking lots and other forms of development that makes it incapable of growing food.*
6. Set aside the 3/32 and hold up the hand with 1/32. *So, only 1/32 of the earth's surface has the potential to grow the food needed to feed all the people on the whole earth.*
7. Carefully peel the 1/32 slice of earth and hold up the peeling. *This tiny peeling represents the topsoil—the dark, nutrient-rich soil that holds moisture and feeds us by feeding our plants. The United States currently loses an inch of topsoil every 16 years. Because it takes nature 500 years to build one inch of topsoil, it is considered a non-renewable resource.*

For the water experiment:

8. Return to the 3/4 of the original apple that represent ocean waters. Hold them up. *Some of our food comes from the sea. Fish provide about 16% of the animal protein consumed by humans and a little over 5% of our total*

protein intake. But despite their seeming uniformity, many regions of ocean are unproductive due to a lack of the nutrients that support marine life. In these regions, the capacity to produce food for us is limited.

9. Set aside 2/4. Cut the remaining 1/4 in half. Set aside one of the halves (which equals 1/8 of the apple). Hold up the other 1/8. *This 1/8 represents the productive zones of the ocean along the equator and the western margins of continents. Currents cause welling up which brings nutrients to the surface. These nutrients support large numbers of marine plants and animals.*

10. Slice the 1/8 representing productive zones into four equal pieces (4/32). Hold three pieces in one hand and one in the other. Hold up the hand with three pieces. *3/32 of the earth represent coastal areas around the world where fishermen earn their livelihoods. Hold up the other hand. The last 1/32 represents the productive area along the Pacific coast of North America, historically one of the richest ocean regions in the world.*

11. Peel the skin from the last 1/32. *This peeling represents the photic zone, the top 100 meters (330 feet) of the ocean which light can penetrate, supporting photosynthesis. Since the marine food chain depends on photosynthesizing plants, especially phytoplankton and algae, almost all ocean life is concentrated in this narrow photic zone. One hundred meters down, the amount of light is only 1% of what it is at the surface.*

12. Cut a very small wedge from the tiny 1/32 peeling. Hold it out. *Fresh water is another precious and finite resource that is essential to all life on this planet, including human life. Although 3/4 of the earth is covered by water, only a tiny portion of it is readily available for human use. It is what we drink, cook with, bathe in, and water crops with when rain doesn't provide enough moisture. Fresh water is supplied by groundwater, rivers, lakes, and streams. Although this sliver isn't exactly to scale, it represents the three one-hundredths of 1% of earth's water that is fresh.*

Results:

The class can see the minuscule amount of the apple that is left to represent water resources and for topsoil to be used in production of our food supply.

Discussion questions: Discussion questions, although endless with this experiment, might include the following:

- How do the factors mentioned above contribute to erosion of arable land?
- If we exhaust the food-producing resources we have now, won't science devise new ways to increase food production as it has done in the past?
- What conclusions can we draw about the relationship between a growing population and a shrinking amount of land capable of growing food for those people?
- How can we help preserve farmland?
- What other sources of clean fresh water are available to us?
- How can we protect our fresh water?
- What jeopardizes the oceans' health and capacity to produce food for us?
- Does drinking bottled water help conserve our water resources?
- ıking bottled water better for humans than drinking tap water?
- How much waste do we produce in making bottled water (i.e., the manufacturing, the plastic bottles)?

Student evaluation can be based on:

- The students' responses to this demonstration as written in their science journals.
- Written or oral presentations. Inspired by the demonstration, students can choose and research related topics of particular interest to them.
- Diagrams or graphs of the different parts of the apple and how it is divided to represent the useful and non-useful land and water.

Conclusion: The class discussion can conclude when the students select the topics they wish to research further.

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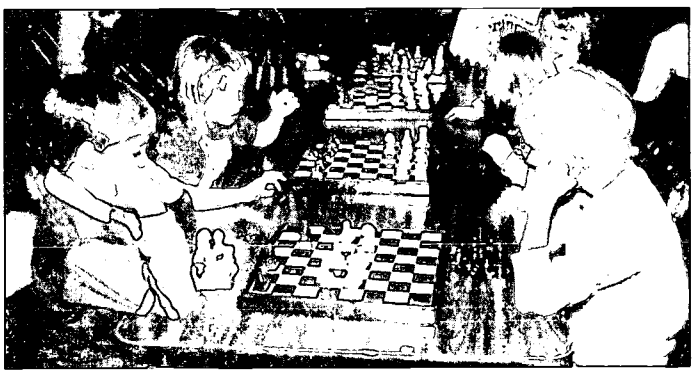

PARENT EXPECTATIONS: SERVING GIFTED CHILDREN IN THE REGULAR CLASSROOM

Sandra Warren

"She's getting all 'A's,' what more do you want?" a frustrated teacher asked parents of 10-year-old Kerri after they attempted to explain her boredom with school. The only response the parents could come up with was, "Shouldn't there be more?"

And, shouldn't there be more?

Parents of gifted children the world over wonder this same thing after their motivated, eager gifted offspring enter school enthusiastically and come home in despair. Lacking knowledge of educational jargon and the latest curriculum trends, it is confusing to parents, at best. It makes no sense to them. After all, aren't all teachers well trained and knowledgeable about the gifted children in their charge? Aren't gifted children the desired top-of-the-class kids? The students that teachers dream of having? The perfect students? The answers to all four questions are a resounding, "No! No! No! And, No!"

Parents ask, "Shouldn't there be more?" But they don't know what. They just know that something has turned their eager learners into children on a downward spiral.

Seeking answers, they go to school to ask and are often surprised to find defensive attitudes where care and concern should be. It would be unfair to say that all parents of gifted children experience this, but far too many do.

The recent "inclusion insanity" prevalent in education across America in the last few years has effectively moved many communities to eliminate gifted programs. With gifted children back in the regular classroom and teachers struggling with the impossible—to be all to all and do all for all—there is an even greater need for understanding.

So aren't all teachers well trained?

Well "yes," to a certain degree, and "no" when it comes to teaching gifted children. Most teachers in this day and age are well trained. University education program strands are becoming more demanding and selective, making it tougher to choose education as a career. In addition, state boards of education and school districts themselves are requiring more updating through extended college coursework to keep teaching certificates current. And yet the problem, teaching gifted children, persists. Parents wonder, "Why?"

I believe the problem begins with teacher-training programs in our universities. Research continues to support the fact that gifted children learn, think, feel, act, and react differently than most other children their age. Still, the prevailing belief among educational institutions is that the gifted child will "get it anyway," and that educators don't have to do anything different for them. It's as if the one hand won't accept what the other hand has proven.

As we turn the corner on the new century, most colleges still do not require teacher candidates to take coursework related to the teaching of gifted children. And so the myth continues. Old stereotypes prevail: Give them more work! Keep them busy! ing gifted kids busy is what tunes them out and turns them off.) This lack of understanding perpetuates the myth that giftedness is an ego thing existing in the minds of over-achieving, ego-driven yuppie parents, when in fact it is a biological difference in brain function (Clark, 1983).

Enter the gifted parent, concerned about grades, behavior, and attitude changes observed in their child. Because neither side understands the nature of the problem, often negative words are exchanged and frustrations mount. The hard-working, concerned teacher doesn't understand what more can be done. The upset, concerned parents don't know what to ask for; they just know things aren't right and they want change. Thus the stereotype of the pushy, demanding gifted parent continues.

After 20-plus years of advocating for parents of gifted children, I've come to realize that most parents believe things don't happen in school for their gifted child because the teacher simply doesn't want to do what's needed. They don't understand that teaching gifted students involves a whole new way thinking, relating, and differentiating curriculum.

How different the exchange becomes when both sides understand gifted children. When parents and educators understand giftedness, the discussion turns to the needs of the individual gifted child in terms of teacher, classroom, subject, and school district limitations; of responsibilities both at home and at school. Once understood, parents advocate for their gifted children in more positive ways, becoming working partners with the educational community.

What is it that parents of gifted children want?

The answer is simple. Like most parents, they just want to have their child's educational needs met. A reasonable enough request, but difficult to fulfill because gifted children's needs can only be met with differentiated curriculum. And, as was noted earlier, very few educators are trained to do that differentiation. Even teachers who are trained are often held down to an educational philosophy and a political atmosphere that allows only certain types of differentiation to certain degrees and at certain levels.

I believe that most parents also want their children educated within the framework of the regular classroom. They don't want their children singled out or separated from their age peers, usually citing social reasons. These concerns, in my opinion, are misplaced. Parents fail to understand that, depending upon the level of giftedness and the personality of their child, the difference in the way the gifted child's mind processes information already separates them socially, emotionally, and educationally.

It is very important for gifted children to be around "like peers" to develop a more grounded sense of who they are and where they fit in. Only when we, as humans, meet someone who is richer, prettier, or smarter do we get a sense of normality. That's what is leveling. Gifted children need this experience so that they can feel accepted and normal. When children feel good about themselves, they then can feel good about others and relate to them in more positive ways.

Many parents and educators believe that keeping gifted children in the regular classroom keeps them in the "real world." Once again, I have to disagree. If the gifted child is achieving, he or she is probably at the top of the class, getting all "A's" with little effort or challenge. Other students undoubtedly resent them and find them hard to understand because of their level of intensity, their in-depth understanding and their achievements. Meanwhile, the gifted themselves acquire an unrealistic view of what learning and life is all about: easy, simple, no need to work. Sad is the situation where a gifted child grows up never knowing what it is to fail, to get a "B", to have to work hard to achieve, and to never experience challenge. The "real world" is full of challenge after challenge, highs and lows, successes and failures. The gifted child achieving in the regular classroom is experiencing a very unrealistic world. One wonders, will they be able to cope with the realities of life when faced with challenge and disappointment after 13 years of floating on top? Someone once said, "It's as difficult for a gifted child to work down to the level of the class as it is for a severely challenged (retarded) child to work up to the level of the regular classroom." Surely, the consequences of 13 years of unmet needs will have negative consequences.

To get a more well-rounded look at what parents of gifted children expect from a regular classroom teacher and/or the regular classroom, I asked gifted parents, who lurk as do I on a gifted list-serve in Ohio. These parents are obviously more informed than usual. Some, as you will see, shared "best practices" that worked for their child. Here are a few of their responses paraphrased below:

From Lori: "I believe that differentiation is a valuable tool, but has its limits. In order for differentiation to work, I feel strongly that the very top tier and the very bottom tier must be removed. It is unrealistic to expect teachers to be able to teach to such a wide spectrum of abilities in the same classroom"

From Mary Kay: "I believe that, at the elementary level, acceleration and then enrichment is necessary. What we get is usually the reverse (enrichment), usually never getting to the other half (acceleration)."

From Julie: "Acceleration is not always the solution. But when the system offers nothing better, we go with what we've got." (Accelerated child from first to third grade; second grade curriculum offered the child nothing new.)

Janet listed six interesting points:

1. "I would like a classroom teacher who recognizes characteristic traits of gifted children based on Dabrowski's 'overexcitibilities' and doesn't look for normative behavior.
2. "I would like to work together with the teacher—exchanging ideas and concerns; and I wish they could concede that I know my child better than they do.
3. "I wish my child would be given math and reading assignments at their appropriate levels regardless of the levels of other students.
4. "I wish sometimes my child would be allowed to study something independently of others.
5. "I would like someone to teach my gifted child survival skills when locked in inappropriate learning environments. one who can help them understand how to maintain their sanity when they are bored out of their minds.
6. "I would like a teacher who understands that you don't have to socialize with age peers to develop socially."

From Kirk: "With the caveat 'regular' and the time/attention limits that obtain, I can't see how much could be possible; perhaps some way to 'leave the gifted alone' to pursue their own direction?"

From Lois: "It does not matter what parents (in general) think they want, as they are so often rather clueless about what's possible/plausible.... I would hope teachers have read Carol Ann Tomlinson's *How to Differentiate Instruction in Mixed-Ability Classrooms* and Susan Winebrenner's *Teaching Gifted Kids in the Regular Classroom*.

From Sammy:

1. "A great teacher.
2. "A great, seasoned teacher.
3. "A great, seasoned teacher with some background/experience with gifted education and the academic and emotional needs of the gifted child.
4. "Support for this teacher's efforts in the form of a gifted consultant and/or sympathetic, understanding peers and administrators.
5. "Use of any/all available, appropriate materials, including but not limited to: testing out and curriculum compacting with concomitant acceleration of individual curriculum beyond grade level; grouping or pull-outs within the class, to accelerate or enrich with able peers; independent, supervised/mentored research, either individual or small group, with access to library and computer facilities and support services.
6. "Cooperation from the school when acceleration/grade-skipping seems to best meet the students needs."

From Monique: "Teachers don't have to do anything different or special for a child allowed to take appropriate level subjects, except give him/her access. This allows them not only to be appropriately placed educationally, but also gives them an opportunity to find intellectual peers.

"One child skipped the first grade and was placed in a regular second grade classroom where he was provided with curriculum above grade level...The teacher pulled curriculum guidelines for grades three, four, and five for each academic subject and prepared lessons for my child matching class guidelines to his needs."

From: Lori: "I would cluster gifted children within the classroom and give them appropriately advanced materials. I would allow children to skip grades or take individual subjects with upper-grade classrooms."

From Lynn: "Give students a list of assignments that they can choose from. The assignments are at all levels, from basic knowledge to synthesis of information." (Hopefully, gifted students would choose assignments that displayed a higher order of thinking.)

From Terry: "Regular classrooms should go back to reading groups, language groups, math groups, science groups. This works. It helps everyone learn on their own level. The groups

should be flexible, changing who is in based on the topic being covered. Give them alternative activities—hopefully acceleration. Don't waste their time on stuff they already know or can learn quickly if they apply themselves.

"Get rid of the standard Rebecca Sitton spelling word lists. They are ridiculous for gifted kids and many others. Pretest kids out of the whole year and then go on to more advanced vocabulary. The regular classroom can do more for gifted kids. Some of it is teacher training, some of it is preparing the materials for them to use, and some of it is giving permission or suggesting that they teach in skill-level groups."

The common thread running through all of the above suggestions is that teachers need additional training in differentiating curriculum for gifted learners and that school districts need philosophies that allow flexibility and access to advanced curriculum no matter how old the child may be.

Are parents expecting too much from the public education system? Perhaps. It would take an exceptional, superb, high-energy regular classroom teacher to accomplish what needs to be done for the gifted while still meeting the needs of all the other children in the class. The list of suggestions above, although appropriate for doing what's right for gifted children, would reduce most sincere, concerned, regular classroom teachers to tears. When do they have time to plan for this, and what other support systems are in place to help? Do they have a gifted resource person on staff to turn to? Are administrators and other teachers supportive? Are there classroom aides or helpers who can take over while they work with the gifted?

Educated parents know what to say and how to say it in a non-threatening, productive way. They know how to document their child's abilities and how to communicate their concerns. They are more realistic in their expectations and are more apt to become a positive working team with the school for their child's sake. They also know, when push comes to shove, how to work in a positive political manner to effect change.

Educated teachers are more flexible and open to the suggestions and concerns of the parents of their gifted students. They know how to differentiate curriculum, know their own limitations, both personal and within the educational organization that employs them, and understand how to help parents find other resources and solutions to their child's problems, concerns, and interests.

It is clear that educating gifted children in the public schools is a very complex problem. Parents and teachers share the responsibility to learn all they can about this unique, yet diverse group of children

Are parents of the gifted expecting too much of our public schools? Maybe. But those expectations will not change as long as we have a Constitution that guarantees "equal opportunity in education" to all students. Parents will always interpret that to mean, not equal education, but the opportunity to have their child's educational needs met, whether "gifted" or not.

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THE GIFTED READER IN THE REGULAR CLASSROOM: STRATEGIES FOR SUCCESS

Jerry Flack

The whole reason for going to school is to get the impression fixed for life that there is a book side to everything.

Robert Frost

Reading is central to the education of gifted students. Through reading, gifted students gain access to the wide world of knowledge. Reading is the key that opens doors to the worlds of science, mathematics, the arts, literature, and other disciplines.

Robert Frost was correct. There is a book side to everything, and the fortunate gifted student is the one whose caregivers and teachers have nurtured reading talent from earliest childhood onward and continue to do so. Reading is the precious tool that allows gifted students in regular classrooms to chart their own courses and to have the freedom of unlimited learning. Reading is the space capsule that allows gifted children to reach for the stars, pursuing their education well beyond the confines of lockstep progression through the traditional curriculum.

Gifted readers, as Maya Angelou shares below, are not bound by time or space constraints. Reading yields lifelong pleasures and greatly increases the intrinsic desire of gifted students to learn. Reading also begs for creative participation. When gifted students read about the lives of great artists, authors, and inventors, their own wellspring of creativity is enhanced and challenged. Reading also invites reflection and provides solitude when needed.

The reading program for gifted students in regular classrooms can be innovative, challenging, and enriching, or it can be stultifying, dull, and inhibiting. The expedient to highly successful reading experiences for gifted students in regular classrooms is the willingness of teachers to be flexible and

creative in providing advanced and enriched reading curriculum that both challenges and excites learners.

In this article, the author shares strategies educators can utilize to build upon the existing knowledge structures and process skills gifted students already possess. The strategies outlined attend to both nonfiction reading and a guided study of literature.

I have tried often to search beyond the sophistication of years for the enchantment I so easily found in those books. To be allowed, no, invited into the private lives of strangers, and to share their joys and fears, was a chance to exchange the Southern bitter wormwood for a cup of mead with Beowulf or a hot cup of tea and milk with Oliver Twist.

Maya Angelou

Nonfiction Reading

Several years ago, the author worked with reading specialists and regular classroom teachers in the Kalamazoo (Michigan) Public Schools to develop a series of reading strategies regular classroom teachers could employ with gifted readers for whom basal readers offered few challenges. The desire was not to eliminate the basal readers, but rather to provide meaningful reading experiences that built upon new reading knowledge introduced in the district-adopted reading program. The following 15 strategies were suggested by this author as inservices for regular classroom teachers as they considered the needs of gifted students. Primarily, the strategies speak to nonfiction reading.

1. *Research skills.* From their earliest school experiences, gifted students should be taught how to find out things for themselves in the library, via interviews, e-mail, and on the Internet. Gifted students need to be taught independent inquiry skills early on which enable them to select appropriate research topics, ask important search questions, find and evaluate resources, and take notes. They should also gain skills in organizing and outlining data, developing plans of study, sharing information obtained through research, and evaluating the success of their inquiries.

Once gifted students acquire inquiry skills, they can continue their education at their own pace; in addition they can become valuable allies with regular classroom teachers in searching for information and resources teachers can use with the entire classroom. Classroom teachers can ask for volunteers among gifted students to use the school library or access the Internet in locating and later sharing with the entire class critical information on topics to be studied. For example, if a classroom teacher knows that the social studies unit on the Oregon Trail will commence in two weeks, she can wisely employ the talents of gifted researchers in her classroom to begin finding print and electronic resources on this important chapter in American history. The following are examples of the kinds of investigations gifted readers can chart:

* How do people work?
* What kinds of work do architects, marine biologists, and genetic engineers really do and how do they do it?
* How was Yellow Fever conquered?
* What are contemporary researchers doing to eliminate or in drug-resistant plagues?
* Who invented Velcro?
* What sort of person was Albert Einstein? What prompted him to choose a career in mathematics and science?
* How was the atomic bomb developed? What was the Manhattan Project?
* How was the tunnel under the English Channel constructed?
* What are the 10 greatest engineering feats of the 20th century?

2. *Biography studies.* There is no discipline taught in the regular classroom that cannot be extended and enriched for gifted readers through the adroit use of biography. Art can be extended when gifted students read biographies of Georgia O'Keeffe and Faith Ringgold. Science can be enriched as gifted students read about the lives of Marie Curie and Elijah McCoy. Biographies of Wilma Rudolph and Tiger Woods can make physical education a more rewarding experience. Memoirs by writers such as Yoshiko Uchida extend language arts experiences for gifted readers. Uchida could well write about the experiences of Americans of Japanese ancestry in internment camps during World War II in her book *The Bracelet*, because she experienced the internment herself, as she relates in her memoir *The Invisible Thread.* Math students can witness the courage and productivity of Benjamin Banneker in biographies such as Andrea Davis Pinkney's *Dear Benjamin Banneker.* In a music class, students may sample individual biographies such as Julia Downing's *Mozart Tonight*; or read from collective biographies such as Kathleen Krull's delightful *Lives of the Musicians: Good Times, Bad Times and What the Neighbors Thought.* Biographies not only extend the curriculum for gifted students, they also introduce students to the finest exemplars of talent within respective disciplines.

3. *Create original reading materials for others.* One of the ways students can combine the first two reading strategies is through biographical research and the creation of products designed to be shared with others. For example, one of the author's sixth-grade students greatly enjoyed reading about Henry Ford and his work in the creation of the automobile industry in the U.S. The student researched the life of Ford and then wrote his own humorous story, modeled after Robert Lawson's *Ben and Me,* which he shared with classmates. Just as Lawson's Amos Mouse was the true genius behind Benjamin Franklin's many accomplishments, Clyde, a lizard, was revealed by the student to be the inventor who supplied Henry Ford with his best ideas.

4. *Write, photograph, and draw original materials for real publishers.* There are many outlets for student writing, photography, and other products at the local, state, and national levels. One of the best resources to help teachers find these opportunities for gifted readers and writers is Scott Pendleton's *The Ultimate Guide to Student Contests*, Grades K-6 (a secondary book is also published). Pendleton describes competitions as diverse as the Ocean Pals National Student Poster Contest, the International Wildlife Film Festival Photography Contest, or a poster/essay contest annually sponsored by MADD. *Disney Adventures* each years seeks 21 reporters, ages 7 to 12, and supplies them with a *Disney Adventures* press kit that includes a camera and a tape recorder. The lucky reporters then spend a year keeping the magazine

relevant and interesting to elementary and middle grade students.

These are just a very few of the many national competitions. Local and statewide contests appear in every community and state. Check with the reference department of local libraries to locate these worthwhile ventures. Competitions provide students with countless opportunities to create, edit, and prepare their best products for real audiences. They also provide valuable feedback to talented youths from media professionals, as well as money and scholarship prizes to gifted students.

5. *Explore careers.* What is the difference between a psychologist and a psychiatrist? How does one create a career in sports medicine? It is never too early for gifted readers to begin thinking about how they would like to work as adults. The world of career exploration is media-rich. There are books such as Shelly Field's *100 Best Careers for the 21st Century* and Internet sites such as *FutureScan* magazine http://www.futurescan.com. *FutureScan* highlights careers in architecture, the environment, law, and veterinary medicine. Lerner Publications features an entire series of books in its series "Exploring Careers." One entry of appeal to today's youth is Barbara Lee's *Working in Sports and Recreation.* One of the author's former students knew by seventh grade that he wanted a career in law. Hence, one of his projects was to determine the top 10 law schools in the U.S. Not surprisingly, he completed his undergraduate work at one of these schools and received a law degree from another at which he edited the school's law journal. He is now a successful attorney—the youngest person ever brought into his legal firm as a partner. Determination and purpose such as this young man exhibited by the age of 12 should never be discouraged; rather it should be encouraged and facilitated. What the young man learned about the legal profession in his trips to the library far outweighed any fare missed while absent from the regular classroom.

6. *Learn about the history of languages.* How did the English language evolve? How and why has English changed in the past millennium? What are dialects and how do they impact communication? Gifted readers should have many opportunities to learn about the language they are capable of using so expertly. One of the classic tools for such studies is *The Story of English* by Robert McCrum, William Cran, and Robert MacNeil. Richard Lederer pays tribute to English and its great contributors such as Shakespeare in *The Miracle of Language*, and he has a bit of fun with the English language in *Anguished English.* Ken Vinton's *Alphabet Antics* is one fine resource to engage younger readers in an exploration of the English alphabet. Vinton celebrates each of the 26 letters, but also makes readers aware of the existence of many other alphabets such as the manual alphabet, semaphore, and Braille.

7. *Develop a vocabulary for the study of literature and the arts.* Students are always well served by learning the terminology of such fields as literature and the arts. Gifted readers should continually be expanding their vocabularies. As Ludwig Wittgenstein said, "The limits of my language stand for the limits of my world." Words are power. Gifted students should be learning new words every day. One way to facilitate vocabulary enrichment is to introduce talented students to resources such as *The New York Public Library Desk Reference* which includes expansive lists of literary terms such as allegory, allusion, antagonist, anthropomorphism, and anti-hero. Widely used terms in music, dance, architecture, and art are also included in this fine reference source.

8. *How were great and not-so-great discoveries made?* When, where, and how was petroleum discovered? Levis? Tennis Shoes? Gold in California? Today's gifted students can learn much about the past that will equip them to create exciting futures. Charlotte Foltz Jones has produced two fascinating books about discoveries and inventions, *Mistakes That Worked* and *Accidents May Happen.* She relates the history of such inventions and products as Wheaties, liquid paper, artificial sweeteners, microwave cooking, the telephone, Coca-Cola, and VELCRO. The Carolrhoda "Household History" series includes books about toasters, eyeglasses, irons, vacuum cleaners, shoes. Also included is Arlene Erlbach's book *Teddy Bears,* which provides a history of teddy bears as well as information about teddy bear crazes, songs, and other lore. *From Indian Corn to Outer Space: Women Invent in America* is Ellen H. Showell's and Fred M. B. Amran's tribute to the remarkable women, past and present, who have changed lives for the better with their ingenuity. Leta Hollingworth was the first person to create curriculum specifically for gifted students more than 70 years ago. Among other things, she believed it was essential for very bright children to be well grounded in the history and evolution of everyday things. Today's gifted students should fare no less.

9. *Mini-Studies.* What is law? What is the Magna Carta? What is the Bill of Rights? What is the role of precedent in law? What are the roots of the Constitution of the United States? What other nations have adopted the U. S. form of constitutional government? Investigate five great Supreme Court cases. What is judicial review? How does a bill become a law? Of course, studies do not have to be limited to law. Gifted readers can delve into any topic of interest.

Some may find a history of mathematics particularly fascinating. They may find Kendall Haven's *Marvels of Math: Fascinating Reads and Awesome Activities* especially promising. Haven shares with students stories about the invention of Euclidean geometry in 295 BC, the invention of zero as a number by al-Khwarizmi in AD 800, and the invention of calculus by Sir Isaac Newton in 1666. He also pays tribute to Grace Hopper, inventor of computer language in 1944. Gifted learners find challenge in every field they explore. Students may become ladybug-ologists, endangered species experts, or Olympics information specialists. The point is to allow gifted readers to research areas of learning that excite and challenge them.

10. *Students love trials.* Challenge them to research a famous case such as the Lindbergh kidnapping trial. Note, in this case, that Agatha Christie built the plot of her famous Hercule Poirot mystery, *Murder on the Orient Express*, upon the Lindbergh kidnapping tragedy. Younger students may definitely enjoy putting Hansel and Gretel, the Big Bad Wolf, and other fairytale characters on trial. Historically, older gifted readers can explore famous trials in history such as the Salem Witch Trials. One fine reference for the latter is Lori Lee Wilson's *How History Is Invented: The Salem Witch Trials.* For a planned jury trial experience that involves substantial historical and/or sociological research, expert witnesses, drama study, and a host

of other investigations, see "An Advocacy Trial" in the author's book *Mystery & Detection* (Flack, 1990).

Literature is a transmission of power. Textbooks and treatises, dictionaries and encyclopedias, manuals and books of instruction— they are communications; but literature is a power line, and the motor, mark you, is the reader.

Charles P. Curtis

Literature

Literature is lasting power, the finest kind of power—the power of the intellect. Educators who want to give young people a great gift teach them to love literature. In regular classrooms with gifted readers, books are everywhere. Shelves and book carts contain numerous outstanding examples of a wide range of literary genres. Quotations about the power and value of literature are found on posters that decorate classroom walls. A reading center may also be a part of the classroom environment.

Classroom teachers should be concerned about developing the reading of gifted, talented, and creative youth in at least three ways: they want their students to read widely, critically, and creatively. First, gifted readers should experience and savor a comprehensive reading program. Teachers and library media specialists need to expose gifted readers to the choice authors of literature for children and adolescents. Student awareness of who is writing, what is being written, and common literary themes and styles should be developed. Youth should read often and widely enough to become author-conscious. That is, after a time, they should recognize a prose passage by Virginia Hamilton, Katherine Paterson, or Gary Paulsen as easily as they can recognize and attribute a poem to Robert Frost or Carl Sandburg.

Young gifted readers do not automatically select good literature to read. Library media specialists, parents, and teachers need to share great books with students through oral reading. Reading lists of literature for both children and young adults may be secured from most local libraries and school library media centers. The American Library Association publishes pamphlets on Outstanding Books for College Bound students in several categories that include fiction, biography, nonfiction, fine arts, and drama. To secure copies, teachers and library media specialists may write to: The American Library Association, 50 E. Huron Street, Chicago, IL 60611; or visit the ALA web site on the Internet at http://www.ala.org//.

Gifted readers also need to learn to read critically. They need to develop the ability to discriminate between good literature and trivial or poorly written works. Teachers with a love of literature can be especially helpful in recommending quality literature to talented youth. Literary criticism with its emphasis on the analysis and evaluation levels of Bloom's taxonomy is one component of critical reading. Another critical reading skill is the ability to discern an author's purpose. Good teachers help students to develop appropriate criteria for judging literature and applying it to what they read. Good critical readers come to know that themes such as death, the nature of [illegible]sm, and coming of age are found in literature; they can appraise multiple works with similar themes and determine which authors handle themes truthfully and with grace and which authors miss the mark.

Ultimately, students need to read creatively. Good literature should stimulate their own thinking about important ideas and themes, and be the catalyst for finding and using their own voice to write about things that matter to them. Critical reading is chiefly a convergent process, even when practiced with high-level text material; creative reading is a divergent process. Creative readers go beyond the text page. They do get off the subject and may begin with a discussion of a work they have read, but then vault beyond the printed page to discussions of life itself.

In 1980, the author taught a seventh-grade girl who wanted to read *Hamlet* as an extension of the class reading of Shakespeare's *The Taming of the Shrew*. This was during the time that Americans were being held captive in Iran. The student's creative response to a reading of that great piece of literature was to rewrite Hamlet's famed "To be or not to be" soliloquy as if President Jimmy Carter were Hamlet deliberating in anguish over what best course of action to take. She found meaning in what she read, and she responded creatively.

It is impossible to suggest in one brief article all the great literature that gifted young readers should sample. Rather, readers are invited here to look at 10 outstanding novels for young people that feature gifted, creative, and talented central characters.

In a sense, reading is the greatest of all sports: it begs the participation of your life.

Bruce C. McPherson

Fiction with Gifted Characters

Characters depicted in Newbery Medal fiction for youth display a panoply of traits and characteristics familiar to teachers of gifted, creative, and talented students. Some characters are skillful problem solvers. Others are precocious, budding scientists. There are creative, insightful writers, artists, and musicians. Some of these youthful characters are supremely confident and handle their giftedness with aplomb and admirable poise. Others are deeply troubled and confused. Some are lonely and isolated, while others have an admiring throng. In short, literature with gifted characters offers gifted readers a literary microcosm of the world of gifted youth which they can explore and, at least for a time, vicariously inhabit.

The tapestry of literature about talented and creative youth is complex and diverse. There are deep, troubling novels by skillful authors like Virginia Hamilton and Katherine Paterson that provide readers with rich, fully developed characters involved in complex human relationships that require young readers to engage in critical thinking involving moral reasoning and evaluation. Whether young readers are reticent or comfortable in talking about their own creativity or giftedness, the world of fiction offers a reasonably safe arena in which they can explore, discuss, and evaluate the behaviors of gifted characters who may reflect their own interests, ambitions, and concerns. Literature about gifted youth may provide the grist for a young person's thinking about his or her own giftedness. It

may provide answers or at least provoke thoughtful questioning.

A special kind of friendship forged between two lonely, gifted children is the subject of Katherine Paterson's hauntingly beautiful *Bridge to Terabithia*. Jesse Oliver Aarons Jr. is a talented young artist whose cultural, geographic, and socioeconomic isolation threaten to extinguish his giftedness. Only the music teacher at Lark Creek recognizes Jesse as unusually talented. His father disdains his talent for art, perceiving it as unmanly.

In the summer of his fifth-grade year, Leslie Burke enters Jesse's world. The precocious Leslie comes from a world of culture and ideas foreign to Jesse and the other children of Lark Creek. Her parents are authors; she reads *Moby Dick* and *Hamlet* and listens to classical music. The isolation both children feel serves as a catalyst to cement a rare and beautiful friendship, perhaps one so rare that it was meant only for their magical kingdom of Terabithia. In this special wooded retreat they are totally free to be gifted, to be themselves without apology.

Jesse teaches Leslie the survival skills, the mores of rural culture. Leslie, in turn, provides Jesse with an emotional mirror in which to see and appreciate his giftedness. Her tragic death awakens him to the knowledge that he can be comfortable with his gifts, that he can cope with the world, and that he can find meaning in life.

This Newbery Medal-winning novel provides a very special window through which gifted children can view some of the special problems they may face in growing up and the unique friendships they can forge to cope with their loneliness and lack of acceptance.

Katherine Paterson won her second Newbery Medal for the beautifully written *Jacob Have I Loved,* a modern retelling of the story of Jacob and Esau. As World War II rages in the background, a private war rages within Sara Louise Bradshaw. Her twin sister Caroline is the favored, the gifted, the adored one with the magical voice. "She was so sure, so present, so easy, so light and gold, while I was all grey and shadow." Paterson's novel offers a rare glimpse of what life may be like for the sibling of a gifted youth who feels less gifted. While she is gifted in her own right, the radiance that accompanies Caroline's triumphs blinds Louise to her own worth. Only with healing time and maturity does she come to accept and value herself.

Virginia Hamilton further explores familial relationships in *Arilla Sundown*. Arilla Adams is a gifted adolescent searching for her own identity, being both loving and ashamed of her family and its roots. "This is the queerest, dumbest family that ever there was," she laments. Her mother is Black, has been a ballet dancer and now teaches dance. Her father is part Black, part Native American, and not wholly content nor accepted in the non-Indian world. Her brother Jack Sun Run is a rebellious youth who drowns his own uncertainty about his racial heritage in an orgy of Amerind pride. Arilla is bright and excels in both language arts and math. Her brother suggests her solitary search for her identity is misunderstood by her peers. "The signal they get from you is one of thinking. Of the smarts. You get good grades and they understand being alone when it's a smart girl with an arty mom." Arilla's coming to terms with her father, her r understanding of her brother, and her gradual acceptance of herself add up to a thoroughly satisfying novel about a gifted youth growing up.

Another Newbery Medal winner is Elizabeth Borton de Trevino's *I, Juan de Pareja*, a novel steeped in history. Juan de Pareja is born into slavery in 17th-century Spain. When his late mother's mistress dies, he is "inherited" along with his mistress's other "possessions" by her nephew, the artist Velazquez. Juan's growth to manhood is paralleled by the artist's growing stature as a painter. Juan travels with his master to the Spanish court of King Philip IV and to the Vatican of Pope Innocent X. His travels are exciting and his master is kind, but Juan yearns to be a free man and an artist, a profession forbidden to slaves.

This book offers readers a central character who personifies the extreme obstacles gifted and creative individuals of the past have often had to overcome. It reminds readers that giftedness is not something newly invented for the space age, nor is it bound by race, nation, or station in life. Giftedness is talent realized through courage and determination.

No discussion of precocity in characters from fiction would be complete without mention of Charles Wallace, Meg's "dumb baby brother" in Madeleine L'Engle's *A Wrinkle in Time*, winner of the 1963 Newbery Medal. Charles Wallace does not even talk at 4, but by the age of 5 speaks in complex sentences, learns new words like "exhaustive" daily, and can quote definitions of words such as "compulsion" verbatim from the Oxford Concise Dictionary. Like their parents who are gifted scientists, Meg and Charles Wallace Murry are exceptionally gifted intellectually. The siblings' search for their missing father involves richly portrayed fantasy, but is equally a search for identity and self. Early in the novel, Meg complains to her mother, "I hate being an oddball." Their companion, Calvin O'Keefe, is another gifted young man whose talent and ability cause him to be seen as different and out of sync. Happily, readers can follow the further adventures of Meg and Charles Wallace Murry in *A Wind in the Door* and *A Swiftly Tilting Planet*.

The Westing Game by Ellen Raskin also won the Newbery Medal and features four gifted, creative, and talented youths. The novel is both a mystery and a puzzle game for readers to unravel. Sixteen heirs to the Westing fortune, valued at over $200 million, engage in a game to determine the murderer and beneficiary of Samuel W. Westing. Doug Hoo, 18, is one of the heirs. He is also a gifted high school athlete who can outrun college milers and goes on to win gold medals in the Olympic Games. Chris Theodoraskis, 15, is confined to a wheelchair. Although speech is difficult for him, he is an exceptionally bright youth and a gifted ornithologist. His older brother, Theo, is a talented writer. The prime sleuth in *The Westing Game*, however, is Tabitha Ruth Wexler, 13, better known as "Turtle." She is not only a good detective, but is also an accomplished stock market player. Raskin provides readers with an exceptionally fine mystery plot and with characters whom she wisely follows into adulthood, where they are refreshingly free of gender stereotyping. Turtle, for example, becomes an enormously successful corporation executive.

E. L. Konigsburg won her first Newbery Medal in 1968 for her novel *From the Mixed-Up Files of Mrs. Basil E. Frankweiler.*

Eleven year-old sleuth Claudia is bored with "simply being 'Straight-A Claudia' Kinkaid." Thus she enlists the support, financial and moral, of her brother Jamie for the great adventure of her life. Claudia runs away from home and the injustices she feels she suffers at being the only girl among four children. Claudia and Jamie encamp for a week in New York City's Metropolitan Museum of Art and become involved in a quest as art detectives to determine the authenticity of a statue presumed to be Michaelangelo's "Angel." Jamie senses Claudia's need to be different: "You're never satisfied. If you get all A's, you wonder where are the plusses. You want to be Joan of Arc, Clara Barton, and Florence Nightingown all in one." At the end of the adventure, Claudia has her uniqueness; she possesses the secret of "Angel."

Both Jamie and Claudia are very bright children. Not only are they straight-A students in school, but they are street-smart as well. They survive quite nicely in New York City for a week on less than $25. In the novel's finale, they also tackle the inextricable files of Mrs. Frankweiler with the skill of accomplished detectives.

The View from Saturday also features gifted students and won Konigsburg her second Newbery Medal. This time the author tells the story of the Epiphany Middle School Academic Bowl team that defies all the odds to become the state champions. The lives and stories of the four sixth-grade team members—Nadia, Ethan, Julian, and Noah—and their extended families plus their coach, Mrs. Olinsky, become the grist for Konigsburg's incredibly imaginative mind and virtuoso writing talent. Before she is done, the talented author weaves a web that snares a delightful family wedding, the activities of a retirement community in Florida, saving turtles, wonderfully endearing characters, and of course, Saturday morning tea parties. The collection of stories of the students and their teacher, told in multiple voices, is ultimately a story about discovering the gifts in one's self and in others. One of the joys of *The View from Saturday* for gifted readers is sorting out the characters and the multiple plot lines. Less able students may find the book confusing, but gifted readers love the challenge this wonderful book provides.

Lois Lowry is another double winner of the Newbery Medal. She won her first award for *Number the Stars*, a novel which portrays the story of two girls, one Christian and one Jewish, in Copenhagen in 1943. In telling the individual story of Annemarie Johansen and Ellen Rosen, Lowry effectively tells the real-life story of the heroic Danish Resistance that saved the lives of at least 7,000 Jews who were taken to freedom in Sweden during some of the darkest hours the world has ever known.

The Giver is a very different kind of novel. Twelve-year-old Jonas lives in what seems to be a perfect world. Community harmony is pervasive. There is no crime, poverty, sickness, or unemployment. Readers discover, however, that there is also no color and no collective memory. The citizens have paid a terrible price for their peace and comfort. Jonas is the gifted young man the elders choose to become the Receiver of the community memories. These memories are transmitted to Jonas by the Giver, the community elder who alone knows things such as color, snow, mountains, and the dark secrets of ceremonies such as "release." *The Giver* is an especially provocative novel for gifted youngsters to read, ponder, and discuss because Lowry so brilliantly explores the feelings of "being different" that gifted youth experience. What happens to individuals when society insists upon expunging individual differences such as giftedness and forces "sameness"?

Karen Hesse's *Out of the Dust* is one of the most recent novels featuring a gifted protagonist to win the Newbery Medal. Written entirely in blank verse, the separate dated entries cover the seasons of 1934-35 in the Oklahoma Dust Bowl. The miraculous short poems form a mosaic revealing the life of Billie Jo Kelby, a talented and remarkably resilient young heroine. Both family and Depression-era history are at the heart of *Out of the Dust*. The story is based on two desperate and related historical events: the Great Depression and the devastating dust storms that plagued Oklahoma in the 1930s. Hesse weaves historical fact with storytelling and characterization of the highest order to produce an amazing story that reminds one of a Greek tragedy. How do individuals and families survive in the face of such unimaginable grief? How do people survive relentless, unremitting punishment from nature? How much pain and loss can one person, one family endure?

The novel opens in the winter of 1934 with Billie Jo and her Ma and Daddy, a loving and hard-working Oklahoma farm family, struggling to survive on land that is fast blowing away. Billie Jo has a gift for the piano, and Ma grudgingly allows her to play at dances celebrating President Roosevelt's birthday. Each verse entry reveals to readers the times, the conditions, and the daily lives of Billie Jo's family and the people important to her. Ma has her beloved apple tree and rules for dining; Pa has his great challenge to raise crops where there is no rain; Billie Jo has her dreams of being a pianist. A strong sense of everyone in the community pulling together to survive the difficult times emerges in the first third of the novel. But hard times suddenly become nightmarish as a horrifying fire claims both Ma and her unborn child, the baby boy Daddy had always wanted. Billie Jo's hands, badly burned when she tries to save her mother's life, are scarred, and she is left both bereft of her mother and of her dreams of becoming a pianist. Billie Jo and her Pa are silent, each blaming the other for the tragedy that has visited them. The silence between them becomes as deafening and smothering as the dust storms that howl outside their now bleak, empty home. Yet Billie Jo is able to transcend the tragedies that become her history and emerges as a courageous and resilient young woman whose story will likely stay with readers for a long time.

Truly each new book is as a ship that bears us away into the movement and splendor of life's infinite ocean.

Helen Keller

Book Sharing Ideas

The scene of the crime. It is almost closing time at the local library in Anytown, USA. A young man enters the door and stealthily moves to the section marked Young Adult Fiction. Hurriedly, almost feverishly, he stalks the shelves. A book encased in an electric-blue dust jacket emblazoned with red stripes and lettering catches his eye.

"I'll do that one." he says to no one in particular. Book in

hand, he sits at a nearby table, opens a notebook to blank pages, and glances furtively, first left and then right. "Good," he thinks, "No one is watching."

Nervously, he handles the book, turning it over in his hands, opening the cover. Then he quickly begins to copy down the words a publicist has been assigned to write for the inside flaps of the dust jacket. The pages of the novel remain unexplored territory. As the last words are hurriedly copied, the youth is already in motion, heading toward the exit. A cynical smile begins to emerge on his face. He has pulled off another successful heist. The book report due the next morning is done.

The book-sharing ideas presented here constitute an effort to prevent the kind of criminal activity described above. Share these ideas and others with gifted readers at the beginning of the school year. Students can then refer to the list periodically as book-sharing opportunities occur throughout the year. Gifted readers should also be encouraged to read the book review and criticism pages of children's and young adult literature resources such as the *Horn Book* magazine or *School Library Journal* to note how professionals in the world of literary criticism write about books. They can pattern their own reviews on exemplary models drawn from professional writing.

1. Make a list of the major locations, such as houses, stores, streets, parks, and rivers mentioned in a novel. Draw a map showing a birds-eye view of the area. Number each locale on the map. At the bottom of the map list each locale and describe what happens there in the novel. (Example: 1. Essex Park. Colonel Moran's body is discovered here.)
2. Plan a Chinese New Year's dinner for the characters in a novel you have read. Prepare a fortune cookie for each of the main characters. The fortunes should relate to the respective personalities of the characters and the events that involve them in the book.
3. Create a special edition newspaper related to the characters, plot, and setting of a novel you have read. News stories, features, classified ads, advice columns, cartoons, horoscopes, and sports may be created to highlight the characters and events in the novel.
4. Assume that you are a world famous psychologist. Write a case-study profile of the main character in a novel you have read. Where appropriate, recommend a specific course of therapy for the character.
5. Create a poster which bookstores might utilize for autographing parties featuring the author of the book you have just read.
6. From the Yellow Pages of the phone book, select five businesses in which the main character of a mystery novel might be interested. Explain the connections.
7. A very impatient man with a bad temper asks you to describe the main character in the novel you have read in exactly 64 words. Can you do it?
8. Create an old-fashioned patchwork quilt. Such quilts were created from scraps of fabrics assembled into a block. Using the image of a block quilt, plus the collage technique, make a block quilt that represents a single character, many characters, actions, scenes, and events from a favorite novel. The "scraps" may be drawings, magazine pictures, newsprint, commercial packaging, wallpaper samples, or other unique media.
9. Create a board game based on the plot or subject of a book. Movement around the playing board may be determined by the ability of participants to answer questions about the contents of the book.
10. Create a passport for the main character or subject of a book. Include a photo or drawing of the person, and reference all travel the character or person experiences. Include probable future destinations as well.

I find television very educating. Every time somebody turns on the set, I go into the other room and read a book.

Groucho Marx

Reading About Authors and Illustrators

There is much that young people can learn about creativity and problem solving from an ever-growing treasury of Internet web sites and books by and about the most popular and esteemed children's writers and illustrators. Where do writers find their ideas? How do illustrators work? How do creators' life experiences inform their own works? The answers to these questions and much more may be found in outstanding resources available for the home, school library, and classroom. Gifted readers should learn how gifted adults work and how they create the works that earn Newbery and Caldecott awards.

When gifted readers have access to computers and the Internet, tremendous opportunities are open to them for new learning. The best general site for author and illustrator inquiries is "The Children's Literature Web Guide" from the University of Calgary: http://www.acs.ucalgary.ca/~dkbrown/.

The Calgary site contains a wealth of links to outstanding web sites, including a long list of author and illustrator web sites. D.K. Brown is one of the first persons to announce the winners of the Caldecott and Newbery awards each year. Madeleine L'Engle, Jean Craighead George, Virginia Hamiliton, Katherine Paterson, and Leo and Diane Dillon are among the many authors and illustrators whose web pages can be accessed directly from the Calgary site. Web sites created to honor past masters such as Laura Ingalls Wilder, Sir Arthur Conan Doyle, Beatrix Potter, J.R.R. Tolkien, and Lewis Carroll are also linked to the Calgary Children's Literature Web Page.

Pat Cummings won the 1992 Boston Globe-Horn Book Award for the best children's non-fiction book of the year, *Talking with Artists*. The book features conversations with Caldecott medalists Leo and Diane Dillon, Richard Egielski, Chris Van Allsburg, and David Wiesner. Other noted illustrators profiled in Cummings' book are Lois Ehlert, Jerry Pinkney, and Lane Smith, all Caldecott Honor medalists. One of the many fine virtues of *Talking with Artists* is its inclusion of elementary school photographs of the artists plus samples of their childhood creations along with contemporary photographs and art works. Young gifted readers and illustrators can see what some of their favorite artists looked like when they were kids themselves. They note that a sculpture of a 6-year-old future Caldecott medalist such as Chris Van Allsburg is not of museum quality and, importantly, not beyond their own reach. Learning to be an artist is an evolutionary process; artists are ever growing in their skill development and creativity.

Looking Back is the latest effort of Lois Lowry, and it is a fine memoir about growing up, facing the challenges of adulthood, being a successful author, and coping with tragedies such as the death of her son, an Air Force pilot, in a 1995 plane crash. Alma Flor Ada recounts her childhood in Cuba in *Under the Royal Palms*. She loses a beloved uncle in a plane crash and learns the secret of another uncle who dedicates his life to healing lepers. Holidays such as Christmas are opportunities for sharing joy and stories with a large, extended family.

Twayne Publishers produces titles in the United States Authors Series that include biographies and critical studies of such popular and award-winning authors as Gary Paulsen, Cynthia Rylant, Robert Lipsyte, and Laurence Yep. Works such as *Presenting Gary Paulsen* by Gary M. Salvner provide both teachers and gifted readers with background information on the lives of the authors and critical summaries and evaluations of their life works.

Poet, teacher, and anthologist Lee Bennett Hopkins wrote to his colleagues in the children's literature field across several decades, always asking them to respond to the kinds of questions kids most frequently ask when he visits schools: Where and how does he find ideas, and what are his favorite childhood memories? Hopkins presents his great collection of responses in *Pauses: Autobiographical Reflections of 101 Creators of Children's Books.* Although the entries are necessarily brief, given the number of respondents, the reminiscences and comments of such legendary illustrators and authors as E.B. White, Ezra Jack Keats, Beverly Cleary, and Ellen Raskin make for wonderful reading all will enjoy. One of the particular delights of these recollections is learning how some of the classics of children's literature came into being. For example, Robert McCloskey was busy creating murals for the Lever Brothers Building in Boston when he became fascinated by the mallard ducks in Boston Public Gardens. Working as any dedicated worker should, McCloskey plunged into an intensive study of mallard ducks. He drew them from every conceivable angle; he consulted an ornithologist at Cornell University; and he studied stuffed specimens at the American Museum of Natural History in New York City. He even went to a market and purchased four squawking mallards who lived with him in a small apartment! The result was an American classic, a Caldecott Medal, and one of the most popular children's books of all time, *Make Way For Ducklings.*

McCloskey's story is repeated in Leonard S. Marcus' *A Caldecott Celebration,* a 60th anniversary tribute to the Caldecott Medal, initiated in 1938 and given annually to the illustrator of the best picture book. Marcus shares the history of the award and profiles six of its best-known recipients including McCloskey, Maurice Sendak, Marcia Brown, and Chris Van Allsburg. The illustrators share their inspiration for, and the mechanics of, creating their classic picture books.

When I was about eight, I decided that the most wonderful thing, next to a human being, was a book.

Margaret Walker

Literary Pursuit

As gifted readers explore the wide world of children's and young adult literature and non-fiction throughout any school year, they may enjoy testing themselves. One fun way to involve gifted students is the game of Literary Pursuit. The question master assembles prompts and questions that connect with what the students are reading. Periodically, she gives students opportunities to demonstrate mastery of the facts of literature. Here are a few sample questions:

- What is the name of the cat in *Mrs. Frisby and the Rats of NIMH*? (Dragon)
- Where did Anne Marie hide Ellen's locket in *Number the Stars*? (In the pocket of her sister Lise's dress)
- In *Dear Mr. Henshaw*, what nickname does Leigh's dad call her that she does not appreciate? ("Kid")
- In *Hatchet*, what did Brian call the berries he found? (gut cherries)
- What country does *Lon Po Po,* a Red Riding Hood fairy tale, come from? (China)
- Who wrote *The Little Prince*? (Antoine de Saint Exupery)

The world of books is the most remarkable creation of man. Nothing else that he builds ever lasts. Monuments fall. Nations perish. Civilizations grow old and die out. After an era of darkness new races build others, but in the world of books are volumes that live on still young and fresh as the day they were written. Still telling men's hearts of the hearts of men centuries dead.

Clarence Day

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CLIMBING THE SLIPPERY PYRAMID—GIFTED CHILDREN AND THE SOCIAL STUDIES

Ronald Levitsky

As a young teacher 25 years ago, I tried to impress my seventh graders on the first day of school. Pointing to a diagram on the blackboard of Maslow's Pyramid of Needs, I explained that we would be studying human needs as part of our geography lesson. I added that Maslow was a psychologist and asked if anyone could define the word "psychologist."

From the back of the room a boy raised his hand and asked, "Freudian or Jungian?"

I knew I was in trouble and mumbled an unsatisfactory response. Over the course of the school year, the boy quietly did his assignments, politely participated in class discussions, and with seemingly little effort, routinely scored "A's." Delighted with his work, I assumed I was meeting his needs. He never let me know that I probably wasn't.

Many years later, I asked a seventh grade geography class to write a poem based on what they had observed in an Amazon rainforest video. While grading the assignment, I was startled to read a poem which, for several stanzas, compared the Amazon River to a school. Such an extended metaphor, called a conceit, is a highly sophisticated literary device used by the great English poet John Donne. My student poet, [illegible]led as behaviorally disordered, paid little attention in class and completed few assignments. Only after checking the boy's records did I learn of his high I.Q.

By this time I was noticing more anomalies, such as boys who trailed after me during outdoor recess, wanting to discuss political controversies rather than shoot baskets; or students who played with little toys and gadgets during a lecture, yet understood everything of importance that had been said; or girls who scored extremely high on standardized tests, yet worked to hide their ability from classmates.

Maslow, the psychologist referred to earlier, identified self-actualization as the "...ongoing actualization of potentials, capacities, and talents, as fulfillment of mission (or call, fate, destiny, or vocation), as a fuller knowledge of, and acceptance of the person's own intrinsic nature..."

He further states that adults who exhibit self-actualizing creativity retain the child-like ability to be "open to experience," as well as "easily spontaneous and expressive." In addition, they "...are relatively unfrightened by the unknown, the mysterious, the puzzling, and often are positively attracted to it...." (Maslow, 1968).

Sadly, the students in my experience were not being encouraged to demonstrate their self-actualizing creativity.

Even the boy who wrote the wonderful Amazon poem did not follow up with more poetry because I did not recognize how important it would be to give him that opportunity.

It took several years before I learned how to work with gifted students. In part this was due to a nagging belief that my classes were demanding enough for all students. Also, like my colleagues, I was scrambling to keep up with the alphabet soup of educational reform—alternative assessment, cooperative learning, writing-across-the-curriculum, multiple intelligences, problem-based learning, and technological innovations. In addition, the growth of special education, especially the inclusion movement, required individualized educational programs for a significant number of children.

However, in my work as a classroom teacher, individualizing lessons for special education students had prepared me to do the same for gifted children. By this time I had taken courses in gifted education and had begun to network with like-minded colleagues. Although at the time our district had no formal gifted program, I realized that, even if one were available, a gifted coordinator would probably not have expertise in social studies curriculum at the junior high level. This meant that if I wanted such a program for my classroom, I would need to develop it.

Classroom Principles

Fortunately, several of my colleagues, well versed in gifted education, and a supportive administration helped me to clarify a few principles that continue to guide the gifted activities in my classroom.

First, a teacher must have commitment to the belief that the needs of gifted children are as important as those of other children. Because gifted children are so intelligent, it is easy for the teacher to erroneously believe—as I had for so many years—that they can take care of themselves. The other daily demands on a teacher make it easy to defer planning for a handful of students. However, whenever preparing a unit, the teacher must include opportunities for the gifted.

Secondly, a teacher needs to rely upon his/her creativity. There are few packaged units for gifted students at the junior high level. Just as any good educator would supplement the text by creating or adapting interesting materials for the class in general, they should be willing to do the same for the gifted. In several instances I utilized areas of personal interest, such as Russian history, to create a curriculum both exciting and challenging.

Differentiation is essential. Requiring gifted students to complete activities in addition to their usual classwork is unfair and frequently viewed by them as punishment. Activities need to be given as alternatives to the regular curriculum. There are many strategies for differentiation in the social studies that are described in the pages that follow (Sorenson, 1988).

Finally, flexibility is crucial. Gifted characteristics—such as a questioning attitude, a highly developed sense of humor, and a sense of independence—can often cause behavior problems (Cramer, 1988). While some gifted students respond positively to alternative units that take a structured academic approach, others prefer something more artistic or dramatic. [illegible]ng activities in collaboration with these students often yields exceptional results (Tomlinson, 1993).

Flexibility is also important in deciding who will participate in these special activities. Clustering is defined as "...organizing a heterogeneous classroom by assigning students with similar needs, interests, and/or abilities to the same classroom" (CAG Position Statements, 1992). Within my classroom, I have allowed all students the opportunity to participate in these activities, encouraging those whom I believe will especially benefit from them. Students tend to be self-selective, and usually only those who can meet a challenging assignment will take it. Such group work, "whereby students are expected to share expertise and effort in order to create a common project/product," is called collaborative learning, and gifted children usually enjoy such opportunities (CAG).

I call these self-selective clusters "Special Interest Groups" (SIG) and find that, over time, a core group of gifted children elect to participate in them. Because these activities are open to all, other students occasionally participate in an activity that interests them. In addition, there aren't student or parental complaints regarding an elitist, segregated program. Even more important, such an approach avoids hurting the feelings of students who just miss the cut-off in more formal gifted programs (Allaman, 1987).

Classroom Strategies

My most ambitious curricular modification is to allow students to form a special interest group that follows an alternative unit. This allows them to replace the regular unit with a parallel but more challenging one.

Early in the school year, my seventh grade geography students undertake a three-week unit on Russia. It includes an overview of geography/climate, history/culture, and current problems. Students also have the option of choosing a more challenging three-week unit entitled, "The Russian Revolution."

"The Russian Revolution" requires students to read a selection from Karl Marx's Communist Manifesto, view Eisenstein's silent film "Battleship Potemkin," compare Communism as seen in Mayakovsky's poems versus a selection from Solzhenitsyn's *Gulag Archipelago*, and read Orwell's *Animal Farm*. Assessment is based on a Bolshevik Revolution essay, a debate, a writing assignment on Animal Farm, and a final project.

I had prepared the unit as a requirement for a graduate class, "The Gifted Child in the Regular Classroom," and did not know how my students would respond. However, a Special Interest Group elected to try the unit. They enjoyed the readings, especially Animal Farm, as well as the silent film, and engaged in a lively debate on the Bolshevik Revolution.

The students' work was both creative and insightful. For example, Henry entitled his essay, "Oucho Marx and the effects of the Russian Revolution," and ended it as follows:

"Communist Russia was like a box of chocolates, it was good some of the time (the Russians were the first to send a man into space), not so good some of the time (the cold war with the U.S.A. left them with a weak economy), and you always knew that it would never last."

For her *Animal Farm* assignment, Erin wrote poetry in the style of the Russian poet Mayakovsky:

The peasant
is tired of having the bourgeois rule him.
Land it is they want!
Land for the peasants to grow on!
Down with the czar!
Friends from afar!
Unite!
Embrace!
Rejoice!
Bolshevism is here!

Amy chose to illustrate key passages from the novel and clearly revealed Orwell's sharp-edged irony of pigs on two legs playing cards with their former human enemies.

As mentioned earlier, there are few packaged units for gifted children in junior high social studies. Brown University's *Choices for the 21st Century Education Project* has developed over a dozen excellent units on current American foreign policy controversies (such as U.S. Trade Policy and American support for the developing world), as well as historical decisions (reconstructing such critical debates as whether or not to adopt the Constitution in 1787 or to drop the atomic bomb in 1945). Students break into teams to advocate one of several options in lively debate.

Although *Choices* is written for high-level high school students (the reading level is challenging), I have adapted several units for my regular junior high classes. When my seventh graders studied China, I offered the Choices "China on the World Stage" as an alternative unit without any modifications. Once again, many gifted students chose to do this. They enjoyed role-playing various Chinese citizens in a town meeting, setting Chinese folk songs to music and singing them, and the culminating activity—debating U.S. policy toward China.

One exchange offers an example of their ability to handle the material:

Henry: If we attempt to force democracy on the Chinese, what happens if China uses its veto power to stop U.N. peace-keeping missions in Bosnia and other countries?

Walker: If they try to bar our peace-keeping missions, they will themselves suffer from not taking part in the international community.

Of course, the key problem is how to teach simultaneously two units—the regular one for most of the class and the alternative for the special interest group. Although scheduling can be difficult, the special education inclusion movement has helped me to implement a gifted program.

Since a special education teacher is frequently in my class and teaches strategies that benefit all children, I am able to utilize his expertise on a regular basis. In the case of the Russian Revolution and China units, two days a week I worked in the library with the gifted students, while my special education colleague taught the lesson I had prepared for my regular class. During the other three days of the week, the gifted students worked independently on the unit in the library.

Of course, a much simpler approach than creating an alternative unit is to offer a wide variety of project choices at the end of a regular unit. Projects give students the opportunity to explore an area of interest while utilizing a favorite learning style and intelligence. For example, a Latin American project list might include writing the biography of a famous person, making a three-dimensional map of a nation, presenting a skit of a trip through the Amazon rainforest, or singing and playing mariachi music.

A few years ago I offered the class an additional project based on the seizure by urban guerrillas of the Japanese Embassy in Peru. After I created a three-option debate in the style of a *Choices* unit, teams of interested seventh graders researched and advocated their option in a debate before the class. One group, acting as judges, prepared questions for all three sides.

The level of debate was high, as evidenced by a question that Erin, one of the judges, asked the government supporters:

"Lately the *Wall Street Journal* and the *New York Times* have said that Peru has become an 'economic miracle' and a 'virtual gold mine' since Fujimori became President. However...the number of Peruvians who fall into the category 'very poor' has doubled since 1991, and about 70,000 children die each year of malnutrition and preventable diseases. Is this really an economic improvement? Wouldn't you expect that these conditions would make the Peruvian population unhappy?"

Another student approached me with an idea for an independent project. The class had read about the terrible pollution problem in Mexico City, and Jenna wished to investigate this issue. Her investigation became a problem-based learning project and, after a great deal of research, she prepared a presentation to the class which delineated the problem and offered several practical solutions to the Mexican government.

One benefit of special units and more challenging projects has been the opportunity to utilize accelerated learning for certain students. For example, last year a fifth grader had far outstripped his peers in his age level curriculum. His teacher asked me if the boy could participate in any junior high activities. At the time my eighth graders were studying immigration and about to engage in a *Choices* debate, "U.S. Immigration Policy in an Unsettled World."

Thanks to the fifth grade teacher's flexibility, Tyce joined one of my classes for a week to prepare and present the debate. Since he had worked with the same class previously on a science fiction unit in language arts, the older students accepted him, and everyone benefited from his presence. Later in the year, Tyce also participated with my eighth graders in a Supreme Court simulation.

Self-Guiding Range

As mentioned above, Jenna, who asked for the opportunity to investigate the pollution of Mexico City, is an example of what Carol Ann Tomlinson (1993) calls a student in the "self-guiding range." Encouraging gifted children to be self-guided learners often results in the most satisfying educational experiences, as was the case with Ellen.

Bright, articulate, and musically-talented, Ellen entered seventh grade without much interest in social studies. For example, she chose not to participate in the Russian Revolution unit. When I offered the *Choices* unit on China, she again initially refused. We conferenced, and she asked, "Is there much reading?" After I replied (stretching the truth), "No," she agreed to participate.

Ellen discovered that she not only liked the unit but enjoyed the lively interaction with her peers. Besides the debate, she participated in role-playing a Chinese citizen in a town-hall meeting and loved singing Chinese folk songs. The experience hooked her on finding ways to challenge herself.

Later in the year, when students were given a list of Latin American projects, Ellen asked if she could do a report on salsa dancing. I suggested that she do an I-Search paper, in which she chronicled her research. The results were exceptional. For example, one day during school, Ellen's mother took her to a nearby high school where a woman was presenting salsa-robics.

"I learned a lot about the feel for the dancing and the feel for the music," Ellen related. "She told me things that helped me understand the concept of this kind of dancing—things that cannot be found in books or on the Internet. For example, she told me how mothers dance with their children on their hip before they know how to walk, so the child learns the beat and rhythm."

Ellen became so enthusiastic that, not only did she learn salsa dancing in downtown Chicago, but she convinced a seventh grade boy to take lessons with her. Her class presentation included a demonstration and the participation of the entire class in basic salsa dance steps.

In eighth grade U.S. history, Ellen continued her preference for self-guided learning. For the unit on Industrialization, a Northwestern University practicum student and I developed a lesson on the Pullman Strike as an alternative to the regular unit. Its culminating activity was to debate whether Eugene Debs was responsible for the strike and its violence.

Ellen didn't want to participate in the debate. Instead, she wanted to write a poem. Her poem developed into a 10-page epic—a sort of Greek tragedy with key characters presenting their opinions backed by a chorus of workers. Here is an exchange between U.S. Attorney-General Olney and Jenny, a working girl.

Narrator:

The place was the Drake Hotel
Beautiful displays of flowers emitted an innocent smell.
The dim lighting of the fancy Oak Room
Serving politicians here is my 'nom de plume.'
The Attorney General walked in and I greeted him with a smile.
I had no intentions of telling him the wait would be a while.

Olney:

The mail was being delayed
Making sure that doesn't happen is why I get paid.
the president calls me up about the welfare of our nation
I had to act fast—and so I put troops at all those stations.

Jenny:

No, you don't understand—Respect is what we demand!
We're striving to be treated well enough to survive
With you are your silly troops how did you expect us to stay alive?
Everything was peaceful until the troops came
Deaths and injuries have only you to blame.

With the help of a fellow student who is a talented actor, Ellen staged the poetic drama for the class. It was as effective as the Pullman debate, if not more so.

Finally, I offered an elective on the decision to drop the atomic bomb on Japan, again with a *Choices* unit as its centerpiece ("Ending the War Against Japan: Science, Morality, and the Atomic Bomb"). I had assumed that Ellen would participate in the debate. However, while volunteering to act as a debate judge, she asked if she could do something artistic.

The result was a remarkable collage depicting a mushroom cloud and a hand releasing a dove, with the words, "Freedom Is Not Free." The inspiration for her design came from two sources—the Chagall stained glass windows she had seen a few weeks earlier at the United Nations, and a flyer advertising a new car. When I asked where she found the time to tear and paste the several hundred bits of paper, Ellen replied, "I was grounded for the weekend."

Conclusion

It has been a long time—almost an entire career—since that seventh grader surprised me with his "Freudian or Jungian" question. It took me almost that long to begin to understand from where that question was coming and the kind of child who would ask it. As a young classroom teacher, I had been taught that my curriculum should "shoot for the middle." More recently, special education reforms, especially inclusion, have helped me appreciate the importance of making curriculum accessible for children with learning difficulties.

So too the movement in gifted education has made me reconsider my teaching methods. With the help of graduate courses, colleagues who have become my mentors, a supporting administration, and most importantly, a group of remarkable children, I have come to understand the importance of finding ways to make my classroom an exciting and challenging place for all students.

Maslow's Pyramid of Needs—which includes safety, belongingness, and love—is topped by self-actualizaton. It is a slippery wall for anyone to climb, especially for those gifted students whose creative needs are not always understood by their teachers. To help them with the climb, we need to have a basic understanding of what giftedness is and the willingness to adapt our classroom practices. Perhaps most important is not to come at these children with preconceived notions of what curriculum is good for all of them, but to be flexible and remember that sometimes the best teaching is simply to listen to what our students—all our students—have to tell us.

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LEARNING IS SERIOUS BUSINESS, NOT ENTERTAINMENT

John F. Feldhusen

We hear constantly that learning should be fun and that good teachers should make it so. Perhaps some of the underachievement of American youth as compared with students in other countries can be attributed to this mistaken and probably harmful idea (Stevenson & Stigler, 1992). Mastery of any set of skills requires practice, some drudgery, and much remembering of crucial information and concepts (Goleman, 1995, p. 30). Teaching students that everything should be fun leads to habits and expectations that eschew hard work. It also evokes teaching that panders to the quest for amusement or entertainment rather than learning of important skills and concepts.

Intrinsic Motivation

Intrinsic motivation is the process that leads students to study and practice because of an internal desire to learn and master significant educational material (Ames, 1992). Self-efficacy is the motivational effect derived from a student's sense of accomplishment (Schunk, 1991). Both self-efficacy and intrinsic motivation have to do with a students' capacity to set, strive for, and attain worthwhile goals (Betts, 1991). Extrinsic motivation is often inimical to success in learning because it deflects the student from achieving goals and evokes a quest for rewards and reinforcements, not learning (Amabile, 1990).

"Flow" (Csikszentmihalyi, 1990) is very strong intrinsic motivation, absorption in an area or a topic of study. It reveals students' areas of special talent or aptitude and engages them at a deep level in efforts to learn, to understand, and to master the content or skills of a subject. It certainly is the type of motivation that teachers should always strive to induce in students. In contrast to the deep intrinsic motivation of "flow," "fun" and extrinsic motivation focus students' attention on external entertainment and make them dependent on teachers for reinforcement of learning.

The Joy of Learning

When students are having fun, they get excited and their attention focuses on the fun activity, not on the quest to learn. Because school is often boring anyway, students will praise the teacher for providing fun in contrast to the dreariness of other times.

I do not argue that there cannot or should not be moments and periods of elation or absorption when time is forgotten and students experience the joy of total preoccupation with a learning or performance task. After the boredom of practice and effort to master new skills, procedures, and systems, the wonderful sense of self-regulation and then self-efficacy emerges. Walters and Gardner (1986) refer to these moments of elation as "crystallizing experiences." Maslow (1970) called them "peak" experiences. It is the times when we feel that we are achieving our goals or mastering new learning tasks.

Self-Direction in Learning

There is also a great need to communicate to students that they must do the learning (Schunk, 1991), that they will have to spend time working alone, learning vital information and

procedures that must be remembered, studying and analyzing complex ideas, and even drilling and practicing procedures as artists, medical professionals, and people in music understand so well (Csikszentmihalyi, et al, 1993).

It is often in the process of setting goals (Ames, 1992) that one sees drill, practice, or drudgery as inevitable if the goals are to be attained. "I want to know the periodic table." "I will learn the names of all the Presidents who held office for two terms and their political positions." "I want to make a flower vase with Play-Doh." "I am going to write a report on Amish people." "I want to learn how to kick a football." "I have to learn how to do e-mail on my personal computer." There may be some drudgery in achieving these goals, but the end results justify it.

School grows more and more boring, irrelevant, and unchallenging for students as they progress upward through the grades (Harter, 1996; Feldhusen, Wood, & Dai, 1997), and thus it is natural that students want teachers to counteract that boredom with fun or they create fun in learning themselves. However, it is clear that a sense of self-efficacy and self-esteem in learning situations comes not from fun or pleasure but from a sense of competence or growing competence in domains deemed important. Harter's research shows clearly that "...perceptions of competence are substantial predictors of self-esteem." (p. 38). Parent and teacher support in learning situations, not fun or amusement, are also strong determiners of self-esteem.

Learning Goals

Research by Schunk and Zimmerman (1996) shows that self-regulation and self-efficacy in learning is seen in students who set personal goals; have been taught the important self-regulatory skills of monitoring progress, evaluating achievements, seeking help, and time management; and have access to peer and teacher models of effective learning. To accomplish worthwhile learning goals students must learn to:

- follow directions
- receive information
- observe and emulate models
- do some rote learning of basic information and procedures
- strive to practice or perform the actions specified in the goal
- generate or receive feedback about how well they are progressing toward the goal
- judge or evaluate their success as they approach or attain mastery of the goal.

Hopefully students will have acquired prerequisite or antecedent information and skills so that they will be ready for the new learning task or goal.

Self-Evaluation

If there is fun, pleasure, or amusement in learning it may or should come chiefly after the task, goal, or information has been learned or mastered, and students sense from teacher feedback or self-generated reinforcement, their success and the joy of achievement. Teachers at all levels of instruction, from preschool to graduate school, should play that key instructional role of monitoring students' progress in learning and offer feedback and reinforcement as appropriate to students' successes in learning. As they mature, however, students should become increasingly able to generate their own feedback and reinforcement in learning. Students of all ages can be taught to critique their own work and progress and to avoid excessive dependence on teachers. The processes of self-evaluation in learning may be painful at times and far from "fun" as one sees persistent shortcomings and failures in a new learning task, but increasingly the emerging sense of self-regulation, self-efficacy, and self-esteem more than justifies the efforts.

The Teacher Role

From the teacher's point of view, trying to make learning "fun" may lead to excessive emphasis on the creation of amusement while losing sight of the fundamental instructional goals that should guide the learning process (Schunk, 1990). Teachers sometimes boast of how much fun their students had in a learning activity and tell little or nothing about what students learned or mastered. Far better for a teacher to be able to tell about a students' new-found mastery of writing or math skills; for a physical education instructor to have her students demonstrate their skills on a balance beam; for a high school social studies teacher to exhibit his students' essays on multiculturalism; or a college teacher of languages to recount her students' successes in speaking and writing French. The instructional activity along the way may be arduous and sometimes even boring for teachers and students, but the end result is significant learning and growth in self-regulation, self-efficacy, and self-esteem.

Now nothing said so far implies any need to purposely devise learning activities that are painful, boring, or otherwise unpleasant, but it does recognize that some excellent, first-rate teachers and/or professors will be harshly demanding and not the least bit inclined to pander to the amusement or entertainment of students. Predominantly we will encounter them at the high school and college level, but some elementary teachers may be both warm and encouraging as well as quite demanding in their expectations of excellent work from their students (H. Feldhusen, 1993). High teacher expectations will produce superior student achievement of learning goals (Phillips, 1997). It should also be noted that the standards movement in American education clearly orients the classroom and learning experiences toward definable goals for all students (Wiggins, 1992). Hard work on the part of teachers and students is called for to master the goals specified by the standards.

Very good teachers at all levels have clear conceptions of what they want students to learn, a repertoire of techniques (and materials) to teach them, awareness and understanding of individual differences in learning among their students, and ability to assess students' accomplishments or failures to learn. Thus, it is natural that they have high expectations for student learning, and they may be perceived as serious in their efforts to teach, not simply striving to amuse or entertain students. The satisfaction that flows to teachers and students when real learning and mastery follow instruction does indeed lead to the joy of self-efficacy and self-esteem (Bandura, 1993).

The relatively new constructivist movement in education also teaches us that students learn best when they are actively involved in the quest for understanding and meaning (Fosnot, 1996). Rather than being passive receivers of knowledge who must be entertained or rewarded with "fun," the constructive learner is actively engaged in the personal goal of understanding and mastering new material and skills. The sense of achievement and

mastery that flows from such efforts is the ideal motivation for future efforts to learn.

Summary

Making learning fun runs the risk of inducing extrinsic motivation, evoking the orientation that there should be no work or effort, and diverting students' attention from the material to be learned. The excitement of fun may turn both teacher and students away from learning goals or objectives and focus their attention on the joy of the activity. Good debriefing activities after an exciting learning activity in which students reflect on the activity and what they should have learned can overcome this problem to some extent, but an explicit awareness of the learning goals during instruction can provide the best conditions for students' metacognitive control of the learning process and productive learning outcomes (Schunk & Swartz, 1993). They should also come to view the learning process as involving effort on their part and sometimes drill and practice.

Kindermann, McCollam, and Gibson (1996) summarize this orientation well: "Engagement in the classroom is seen as the prime indicator of school motivation, and as the outcome of the extent to which children's needs are met by environmental characteristics at school. Typically, engaged children are described as selecting tasks at the border of their competencies, taking initiative when there is an opportunity, exerting effort and concentration when working on tasks, and persisting when tasks demand more than routine effort. " (p. 283)

Ultimately we want students to learn the vital declarative knowledge we seek to teach, master the procedural knowledge that is essential to achievement in the discipline and use, both in real-world situations in their daily lives at home and in school, and later in their careers.

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GIFTED STUDENTS AND THE NEED FOR HUMOR IN THE CLASSROOM

Dan G. Holt

Laughter in the classroom, is it a good or bad thing? Well, negative laughter at someone's expense is not a good thing, but that does not mean there should not be laughter in any classroom at any time. Learning is fun...or rather, it is supposed to be fun. Remember the laughter of the baby that learns something new, or one of those "ah-ha" experiences you have had? It is contagious and feels great. In fact, laughter from positive humor is healthy for the spirit and the body. In order to practice, teach, and encourage positive humor in the classroom we need to understand it. The more you understand positive humor the more likely it is you will create a happy, secure environment at home or in the classroom where it will be both safe and fun to learn.

It is a well-established fact that humor is one of the main identifying characteristics of gifted children (Clark, 1980; Gallagher, 1985; Renzulli, et al, 1976; Silverman, 1989; Torrance, 1974; Tuttle, Becker, & Sousa, 1988; Van Tassel-Baska, 1989). This is because there exists a significant link between humor and intelligence (Brodzinsky & Rightmyer, 1980; Holt & Willard-Holt, 1995; Webb, et al., 1989; Ziv, 1981, 1990). Getzels and Jackson (1962) found that creative, gifted students consider humor much more important than do their non-gifted peers. Does this mean that gifted students are perceived as more humorous than their non-gifted peers? The answer is, as with most things, a qualified yes.

The ability to understand and use humor in the manipulation of language clearly involves metalinguistic skill and is consistent with gifted children's cognitive skills (Bernstein, 1986). Mental flexibility includes the passive abilities to cope with change, see things more objectively; and the active abilities to think creatively, solve problems, and take risks (Morreall, 1991). Gifted students seem to have the capacity for more mental flexibility than do their peers in the general population. However, the ability to perceive, identify, comprehend, and respond to humor does not mean they can produce it. In fact, this can be very challenging to a highly gifted student. The attempt at producing humor can either ingratiate them with or alienate them from their peers.

Gifted children find quite often that their humor, as with many other interactions with peers, is not always understood or appreciated. Why? The question "Do ya get it?", referring to the punch line of a joke, illustrates the common knowledge that being able to understand is a prerequisite of enjoying humor as discussed above. "Eschew Obfuscation" will not be humorous unless the meaning of each word is known. A gifted child, taking for granted that peers know these words, would be very disappointed if the attempt at humor falls flat. This is one reason gifted students tend to relate better to older children and adults. In dealing with this and other frustrations, gifted students may resort to the negative use of humor (Holt & Willard-Holt, 1995).

Humor is a natural defense mechanism against the deleterious effects of stress. We cannot, and should not, shelter students from stress and upset, but we can and should provide them with training in the ways to cope with that stress and upset. T[illegible] positive humor can be taught (Holt, 1994). Too often, though, the classroom itself becomes the source of stress for students. Usually this occurs when the teacher is not having fun and the atmosphere of the classroom is one that allows for no humor, or humor that is negative and hurtful.

Positive humor in the classroom does not mean learning is not taking place. Learning involves the complete self, including emotions. There is nothing to indicate that our emotion and the ability to learn are separate from one another; actually, research has shown quite the contrary (Caine & Caine, 1991). As an example, it is well established that the creative process is enhanced when the barriers of self-censorship are broken down with laughter. The ability to perceive from different perspectives allows us to bring together thoughts that we normally keep separate due to preconceived barriers of "right" and "wrong", or "silly" and "nonsense." In order to learn, not just react, we must feel secure in our environment. In order to laugh with genuine feelings of joy, not in reaction to anxiety, we also need the feeling of security. It would seem, then, that we could combine the two and enhance our learning environment by creating an atmosphere of joy--the joy of learning.

Negative Aspects of Humor

A source of complexity and confusion that has led to disagreements among theorists is the variety of functions that humor appears to serve. There is disagreement on whether humor is fundamentally positive and constructive or negative and destructive. Humor may be seen to reflect the ugly, aggressive aspects of human nature, or it may be associated with the sublime, joyful, and innocent. Various theorists have differed in the way in which they view humor and either point out that it is a "...gift handed down from the gods or a scourge delivered up from the devils" (Keith-Spiegel, 1972, p. 25).

Inappropriate laughter or humor is, of course, not healthy. Laughter that stems from ridicule does not make us feel better about another or ourselves. Ridicule is one of society's methods of preserving the status quo. Stereotypical jokes, which put down groups of people, have three purposes. The first purpose is to support prejudices by drawing others into agreement through laughter. It would then follow that the second purpose is to make the joke teller feel good; thus the instigator of the laughter feels good about himself in spite of the joke's hateful message. The third purpose is to reinforce the stereotype so that there is no threat to the status quo.

When we try to let go of our stress through laughter obtained by ridiculing and gossiping, and there is a connection between ridicule and gossip, we know we may ourselves end up as targets of ridicule and gossip. The old saying of "What goes 'round, comes 'round," has a ring of truth. By doing this, we are causing even more stress within ourselves than was coming from the outside world. We are creating a non-trusting, emotionally unsafe environment. If that environment is our work place (classroom), then we are faced with a hostile environment during about a third of our lives, and that will spill over into the other two-thirds rapidly.

Laughing at ourselves is very important, as long as we do not ridicule ourselves in the process. Laughing at our own group often serves as a way of keeping the group separate and cohesive in order to protect itself. Very often we put down our own groups in the same way other groups put us down, thus perpetuating the racism, sexism, or whateverism that is coming from the outside. This undermines our group (or personal) self-image so that we cling to each other in fear. People often joke about their weight, height, or age in a very put-down sort of way, thus keeping control and diffusing any real or imagined tension with laughter. However, it is possible to laugh at ourselves without self-deprecation or self-put down. We can merely relate the facts of our experience or situation without any judgment or criticism.

Teasing is another way of attempting to control other people and situations. Teasing is defined as using, without permission, inside information about how someone feels--in other words, emotional manipulation. The key word here is "permission." Most teasing is done without permission. When we tease someone, we expect him or her to be a good sport (laugh) when we are misusing inside information about them. This is a form of emotional abuse. Teasing plays with another person's pain, attempting to get the teased person to react so the teaser can laugh. If the person being teased objects and says, "you're hurting my feelings," that person will most likely be accused of being too sensitive. The teaser will say, "I was only teasing! Can't you take a joke?" This adds insult to injury.

Most of us have been teased as children, and consequently, we tease each other. Very few of us have taken the time to think about what teasing does, where it comes from, or what it is. I believe teasing revolves around issues of powerlessness, embarrassment, hostility, and anger. Teasing is very confusing because it sends a mixed message. When teased, we are uncertain whether the teaser is trying to make affectionate contact with us in some strange way, or whether the teaser is actually expressing hostility. If we are angry with someone, we need to express it directly: "I am very angry." If we feel affectionate toward someone, it is most effective to say, "I like you." However, to tease is to say neither and both. This lack of clarity creates more tension and stress. I would point out that no child gives an adult permission to tease them, especially a teacher in a classroom.

Another area I will mention in passing is tickling. We cannot tickle ourselves. Therefore, it has to do with an interaction between two or more persons, and it creates tension, which is then expected to be released in laughter. Tickling between consenting peers is not hurtful and can be very enjoyable, but most frequently tickling occurs without permission between people of different physical size and/or strength. I would suggest you consider that tickling can be a very strong form of aggressive manipulation. Usually, it is not intended to be violent, but it nonetheless invades our personal space and stimulates the lighter levels of fear and anger.

Also worthy of brief mention are the differences in perception of humor by males and females. Typically, males will razz, tease, and use mock hostile attacks to try to express humor; the competitiveness and aggression are being dealt with in what males consider a playful manner. Between males this is, for the most part, understood and accepted. The problems occur when males try the same type of humor with females, who usually take what the males are saying as genuine. The other side is that females have a tendency to use self-mocking types of humor and, of course, the males believe the females are serious. Wham! Instant miscommunication.

Humor and laughter can represent a powerful corrective force that can be used to humiliate and control those who do not conform to social expectations. It is also interwoven, in a complex manner, with all relationships. To deny the negative aspect of humor is unrealistic, but the belief that humor is exclusively a negative part of the human experience is a denial of that which adds joy to life itself.

We are not born with a sense of humor, but we are born laughers. Laughter changes our attitudes and our perspective, and from these we can develop a sense of humor, or a way of viewing the world playfully. This allows our sense of humor to be inclusive of all people and not dependent on a specific joke or topic. An inclusive sense of humor is warm and connected, broad and universal. It allows us to play with situations that are stressful instead of playing with others' pain to create laughter (Goodheart, 1994). Therefore, we as parents and teachers can have an enormous influence on the development of a healthy sense of humor in our children by modeling positive humor.

The Positive Perspective of Humor

Throughout history, various writers have stressed the beneficial effects of humor. To possess a good sense of humor has been considered a sign of a healthy, well-integrated personality. One of the earliest admonitions is found in the Bible, which states "...a merry heart doeth good like a medicine" (Proverbs 17:22). Kant wrote in *Critique of Judgment* (1790) that "In the case of jokes, we feel the effect of this slackening in the body by the oscillation of the organs, which promotes the restoration of equilibrium and has a favorable influence upon health."

Herbert Spencer (1860) put forth the theory that laughter is a mechanism for releasing excess tension and therefore an important restorative mechanism. Others, such as Armstrong (1921), Bliss (1915), Eastman (1921, 1936), McComas (1923), and Mindess (1971), contended that humor is one of humankind's most noble attributes and reflects an expression of tolerance, acceptance, and sympathy toward other people. They view humor as a liberating force that frees individuals from the often-stifling constraints of social convention and environmental pressures. Mindess (1977) states that by "...giving humor a central place in our repertoire of self-perceptions...we may exert a greater effect on the course and outcomes of our struggles than any one has yet envisualized."

Torrance (1977) asserts that, "Without humor life would probably be unbearable to most people." Humor affects all parts of life and is not limited to either the negative or the positive. We have all laughed at someone and *with* someone, and know the distinction.

Three Myths About Laughter

Myth #1: A sense of humor and laughter are the same.

A sense of humor is learned, but laughter is innate. A sense of humor is an intellectual process, whereas laughter spontaneously engages every major system of the body. In the natural human process of healing and changing, we "move" our emotions. First, we become aware of our painful emotions; then we release the associated tension through the appropriate form of catharsis (such as laughter or crying).

We then automatically rethink the situation. Catharsis results in clearer thinking, which in turn enables us to take sensible, more appropriate action. If this natural process is not allowed, we become increasingly rigid and reactive, repeating behaviors that are increasingly unsuccessful. We know that positive humor can be taught in the classroom (Holt, 1993, 1996) and can exist in the work place (Lane, 1993). We also know that the benefits can produce not only emotional well-being, but also better physical health.

Myth #2: You need a reason to laugh.

Many of us unconsciously censor our laughter because at some level we think our reason for laughing is not good enough. It is important to note here that in reality laughter is unreasonable, illogical, and irrational. We do not need a reason to laugh. When we see a 6-month-old baby laughing, we do not demand "What's so funny?" but rather delight in the response and often join in the laughter. We can also do this with adults. If you wish to stop someone from laughing, simply ask them why they are laughing. When we begin to think, instead of respond, we stop laughing. This is very important to remember when we are in situations where laughter is inappropriate, as when you are pulled over by a police officer or a teacher.

Myth #3: We laugh because we are happy.

Beverly Sills has been quoted as saying "I'm a cheerful woman, not a happy one. A happy woman has no cares; a cheerful one has cares but has learned to laugh about them." The reality is, we are happy because we laugh. Those of us who have laughed until we have cried know that in the middle of the process, we cannot tell which is which. We do not laugh because we are happy and cry because we are sad; we laugh or cry because we have tension, stress, or pain. Laughter and tears re-balance the chemicals our body creates when these distressed states are present, and so we feel better after we have laughed or cried.

Many of us will not laugh because we believe it indicates we are happy when we know we are not. However, if we can override this self-imposed restriction and just join in the laughter around us, we will find it is contagious and often we can experience the state we call happiness despite our difficulties. Hearse drivers often relate that they have heard family members of the deceased laughing on the drive to the cemetery. These people are probably not laughing because they are happy but because the laughter is releasing emotions and allowing a physical re-balancing of the chemicals.

The Physical Effects of Humor and Laughter

"When one is laughing, one's attention is focused. One cannot do anything else or think of anything else. Everything else, whether it is depression or stress, stops." (Leone, 1986)

A large body of evidence in the field of psycho-neuroimmunology is providing evidence that the impact of humor plays a significant role in maintaining good health and in recovering from poor health. Pessimism, a negative attitude, negative emotions, a feeling of helplessness, hopelessness, and giving up play equally important roles in breaking down our health and in blocking recovery from poor health. Humor and physiological arousal are interrelated.

In a study conducted by Schachter and Wheeler (1962), groups of experimental subjects were divided into three sub-groups. One sub-group was given an injection of the hormone epinephrine (adrenaline), the second sub-group an injection of plain saline, and the third sup-group an injection of a drug called chlorpromazine (a mild tranquilizer). None of the subjects was informed as to which substance he/she had received, or whether it was different from what other subjects had been given. All subjects were shown a movie and then asked to rate it with respect to how funny it was. The results were that those who received the epinephrine (stimulant) rated the movie as very humorous; those who were injected with the saline rated the movie as "okay"; while the group that received the chlorpromazine (tranquilizer) failed, as a group, to appreciate the humor in the film. This study provided some of the first documented evidence that humor is not just psychological, but has a profound connection with the physiological states of the body.

Various research studies have validated the mind/body connection. Children with Hemophilia have actually been known to bleed not only from physical injuries but also from feelings of sadness (Klein, 1989). Findings such as this, among many others, indicate that a positive attitude--which a sense of humor can provide--does have a physiological effect. In studying the physical effects of laughter, William Fry, M.D., indicated that research has shown that mirthful laughter affects most, if not all, of the major physiological systems of the human body. The cardiovascular system, for example, is exercised as the heart rate and blood pressure rise and fall in laughter. The heavy breathing creates a vigorous air exchange in the lungs and provides a healthy workout for the respiratory system. The muscles release tension as they go through the isometric exercises of tightening and relaxing during laughter. In addition, opiates may be released into the blood system, creating the same feelings that long-distance joggers experience as a "runner's high." Dr. Fry states that 20 seconds of laughter is similar in benefits obtained in an aerobic workout of three minutes of hard rowing (Fry & Salameh, 1986).

Until recently, it was thought that the brain and the immune system were separate and unrelated systems. Then research began providing evidence that they communicate by means of direct neural connections between the brain and those organs, which are central to the production of immune cells (bone marrow, thymus gland, lymph nodes, and spleen). Individual immune cells have receptors capable of receiving chemical messages sent out by the brain. The brain "talks" to the immune system by means of different chemical signals (McGhee, 1991).

Research also indicates that laughter may even increase the production of many types of T cells, which are important in the immune system of the body (Berk, 1991). Berk (1989) reports that since laughter increases the activity of natural "killer cells," we may be helping place our bodies in a better position to fight off any new virus or bacterium, and defend against the proliferation of cancer cells by finding more humor in our lives. Humor has been linked to the increased production of antibodies (immunoglobulin). Immunoglobulin A (IgA), found in the mucous secretions, plays an important role in protecting the body against upper-respiratory infections (e.g., flu and colds). Research has shown that the IgA level can be increased by viewing a one-hour comedy program (Berk, 1991, Dillon et al., 1985; Lefcourt et al., 1990). Dillon and Totten (1989) provided

evidence that pregnant women who used humor to help cope with daily stress not only had fewer cases of upper-respiratory infections due to higher levels of IgA, but their newborn infants were also less likely to have upper-respiratory infections than the newborns of mothers who rarely used humor to cope.

We know that negative moods weaken the immune system (Kemeny, 1984), while positive moods strengthen it due to the increased production of IgA (Stone, 1987). In addition, Berk (1989) has shown that watching a one-hour comedy has led to reduced levels of four neuroendocrine hormones (epinephrine, cortisol, dopac, and growth hormone) associated with the classical stress response. Regular laughter helps prevent the build-up of stress hormones in the blood. It should be mentioned that these stress hormones weaken the immune system (Borysenko, 1982). Evidence is building that a sense of humor serves as a type of protective buffer against the immunosuppressive effects of stress. Therefore, it can be stated that humor is, at least in part, responsible for maintaining a healthy body by building the immune system and helping to guard against physical problems associated with stress.

Everyday stress which adds up to create intolerable situations (Paydel, 1978) can be effectively coped with using positive humor. If positive humor can be seen as a way to cope with the loss of your keys, being late for a meeting, burning your meal, getting lost, or any of the other hundreds of small daily stressors, then it can be an effective, healthy coping mechanism.

Research has indicated that gifted adolescents were very receptive to the use of humor and needed only to be given the opportunity and methods for the constructive use of positive humor to be able to make significant changes in handling the stress in their daily lives (Holt, 1994).

Positive humor definitely has a place in the classroom. Children use a sense of humor to deal with the world. Moderately gifted children use humor extensively (Ziv, 1984). Several characteristics typical of gifted students can be effectively approached and dealt with by use of positive humor. For example, gifted students are very concerned with issues of justice and fair play (Renzulli, et al., 1976). Various social, moral, and ethical issues can be addressed and explored through humor, such as by discussing political cartoons.

Perfectionism is a common characteristic of gifted students (Renzulli). Humor can provide a safe window through which the student can observe, understand, and enjoy the human condition with all its imperfections, as by viewing well-written situation comedies. The ability to make connections and establish relationships among disparate data is typical of gifted children (Renzulli). Humor allows for, even encourages, an enhanced awareness of the world and its various juxtapositions. Creativity, flexibility, and self-expression all describe gifted children (Renzulli). Writing and performing humorous mini-plays, songs, or short stories can help students explore serious situations through humor. Humor provides an outlet for thoughts and feelings and also helps the child develop the ability to be organized in thought and concise in expression.

The enhanced capacity of gifted students' abstract reasoning, frequently combined with accelerated abilities to obtain and process information, enables them to absorb, process, and speculate on concepts not normally encountered until a much older age (Gross, 1989). Hollingworth (1926) noted that while children of average ability are still involved with egocentric concerns, highly gifted children are becoming very aware of questions dealing with origin, destiny, and philosophical issues. Gifted students need positive methods of dealing with the deep, and often depressing, issues of life they become aware of at very young ages. Humor is natural and involved in almost every aspect of life. It is a universal part of the human experience. Positive humor can be the "safety valve" which allows the experience of life to continue, yet keeps the stress of existence from growing to unbearable levels. Besides all that...it feels good!

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IMAGINING TREES: A SAMPLE UNIT FOR YOUNG GIFTED CHILDREN

Joan Franklin Smutny

Most young children I know love trees. They touch them, feeling the rough bark against their fingers. Sometimes they'll look up the trunk to the highest branch and imagine standing there, or watch a crow family fluttering at the top. They are quick to tell me about that special tree in their backyard they learned to climb, the tree that holds the swing at their friend's house, or the large maples in the park where they play games. They often draw trees and sometimes they pick a leaf off a branch and trace it on paper, studying the veins that make a web [illegible] bright green surface.

Trees are an excellent subject for integrating art, science, language arts, and even history. Guided by the teacher, children can choose sources to develop project ideas of their own. With adjustments, these activities can be used for kindergarten through third grade. Basic resources I would recommend are:

Sky Tree Portfolio featuring a series of paintings by Thomas Locker printed on a collection of 14 posters (text by Candace Christiansen).

Forest Life by Barbara Taylor.

The Forest Has Eyes by Elise Maclay (illustrated by Bev Doolittle).

Have You Seen Trees? by Joanne Openheim (illustrated by Jean & Mou-sien Tseng.

The Great Kapok Tree: A Tale of the Amazon Rain Forest by Lynne Cherry.

Trees and Forests by Scholastic.

If these sources are difficult to acquire, you can improvise with whatever is available through your school and by mining the many different nature books and magazines on the market. I have used Thomas Locker and Candace Christian's *Sky Tree Portfolio* extensively because it integrates science and art and is ideal for young children.

To Begin

Allow the children time to think about experiences they have had with trees. Discuss the different parts of the tree—roots, bark, branches, leaves, etc. Through a series of questions and informal discussions, you can talk about how each of these parts contributes to the life of the tree. I always find it helpful to show a class of young children pictures of different kinds of trees and have them contribute their personal experiences with trees they know. That way you can discuss the needs of the tree for light, minerals, water, etc. in different contexts and they will see how trees respond very specifically to different environmental surroundings.

Have books and magazines around for this initial exploration. Ask them to look at a tree and think about light and the fact that the leaves on the branches take the light from the sun and convert it into energy for the tree. You can ask: Is your tree in a forest? If so, then it lives in a shady place. If you were a tree, how would you get the light you need? The study of how light brings energy to plant life is only one aspect of a trees. Here are some other areas you could explore with kids, using pictures, diagrams, videos, etc.:

- the two main groups of trees, broad-leaves and conifers
- different places where trees live—the poles, temperate zones, tropical areas and how these climates affect trees (e.g., the huge barrel-shaped trunk of the Baobob tree helps the tree to store water and protect it from evaporation during the dry season)
- what happens to trees in different seasons (including dry and wet for tropical climates)
- what happens to trees during the night and in the day
- insects and animals that depend on trees and that provide nutrients for them
- people who live in the forest and depend heavily on trees

These are just a few options. More will evolve as children interact with the different materials you provide.

Integrating Subjects and Media

After exposing the children to different kinds of trees, climates, and environments, ask them to choose a tree species and to imagine they are that tree. Give them plenty of time to talk about the different possibilities, review pictures, storybooks, -rs, or even watch a short video on forests. Next, stimulate their imaginations through a series of leading questions:

- Where do you live?
- What kind of climate do you live in? Is it dry? rainy? cold? warm?
- What kind of land surrounds you? woods? rocks? desert? hills?
- What kind of bark do you have? What do your leaves look like? How tall are you?
- What kinds of animals live around you? inside you? Who crawls or hops on you?
- What do you have that helps the animals around you?
- Are there other trees around you? How tall are they? How wide?
- What are the greatest need of trees like you?

Children can respond to these questions by drawing, writing, or discussing their thoughts with the teacher or with each other. Catalysts are critical to this process. I use Thomas Locker's *Sky Tree Portfolio* because each poster is a work of art and depicts a single tree in a wide range of seasons, weather conditions, and times of the day. On the back of each poster, author Candace Christian raises questions about each tree and provides a couple of paragraphs on some vital aspect of tree science. For example, on the back of "The Summer Tree" painting, she asks: "What does the tree do during the long summer days?" She continues: "All summer the tree bathes its leaves in the light of the sun. The leaves also take in air. The roots are actively absorbing water and minerals from the soil. The water, air and minerals meet in the green leaves and with the help of the sunlight, the tree creates its own food: sugars. No human being or animal can create sugar out of air, earth and water. It must be interesting to be a tree!" The portfolio is an exquisite blending of art and science that invites young gifted children to enter the world of trees with knowledge and imagination.

You can produce a similar effect as *The Sky Tree Portfolio* by collecting and laminating photographs and calendar pictures and writing some text of your own under each. In this way, the children discover some new facts about trees, while also feeling the beauty and artistry communicated by the artist. The combination of science and art will enable young students to explore different ways of expressing scientific facts creatively, and conversely, their creative ideas will prompt them to seek to dig deeper into the science behind their stories, poems, drawings, sketches, even dramatizations. Students can represent the daily process of making food for themselves; of the kinds of animals, birds, and insects that surround them; and of their feelings about seasonal and other changes.

I always find it helpful to offer suggestions on how they might approach their imaginative work. What should they focus on? Here are some ideas that have worked well with young gifted children (you will have to adjust them to the age and ability of the children you teach). I encourage them to use whatever medium or media they like — writing, painting, sketching, diagrams, oral tellings, silent movement, dramatization.

- if you are a very old tree (200 years old perhaps), tell

or show a couple of the most amazing events in human history you have seen

- think about your most favorite season—why do you love it best? what are you doing in that time? how does it feel?
- tell a story about how you as a tree saved a person's life. OR tell a story about a special person who stopped someone else from chopping you down.
- express how you feel about your leaves. What do you like best about them? What do they do for you? How does the sun feel when it's beating down on them? Tell a story about your leaves.
- what would you say was the scariest moment in your life? (possibilities: anything that would endanger the trees bark, roots, access to sunlight; or human actions such as chopping to widen a road or make room for a foundation, chemical applications, etc.) how did you survive?
- focus on the animals that live in and on you. who are your favorites? the squirrel family who sleep at night in the hollow on one side of your trunk? the crow family who sleep in a large nest on your highest branches? the sparrows who chirp around you all day long?

There are many other possibilities. This is just to get them started. When gifted children are thinking about what to do, I try to keep them focused on what most interests them about trees and I offer suggestions on how they might explore these interests. I also help them consider what media would give them creative latitude and enable them to display their understanding. If they enjoy drawing, I point out that they can draw the inside of the tree, or sketch the unique, interconnecting shapes of the bark in a close-up vision of a piece of the trunk. They can also create an expressive painting of the tree at a particular moment, or a series of images on the theme of the tree's roots—the relation of a tree's roots to people's roots. A poem or story can accompany this, or a dramatization.

For gifted children, this process can go on for some time. With some guidance and encouragement from you, they can begin to experiment and even diverge from original representations. The poetically inclined might attempt to represent the feelings deep inside the tree when winter arrives and the birds fly south. Another might choose to write a letter from a tree to humans, pleading for them to stop chopping the forests and telling them a history of its own tree family. Another child might create a series of science diagrams and mix these with expressive images of trees—highly subjective and original. Young gifted children will love the process of mixing media, impressions, ideas both scientific and artistic, and finding a way to create a new vision of the rich and wonderfully varied world of trees.

The mighty tree stands over the bushes*
Like a mighty king
Standing proud and tall
Swaying with joy in the wind
the bushes quivering
in the presence of this character

its once green leaves turn bright yellow and red
falling one by one on the dark soil
for it is fall now; the leaves raked up
but its green leaves will come again.

* A poem by a young gifted child in a creative writing class taught by Joan Franklin Smutny.

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MAXIMIZING THE POTENTIAL OF MINORITY ECONOMICALLY DISADVANTAGED STUDENTS

Dorothy A. Sisk

Providing equal access for all ethnic and socioeconomic groups to gifted programs is a concern for both educators and the community, particularly in schools that serve diverse ethnic populations (Baldwin, 1977; Rito & Moller, 1989; Howells, 1992; Maker and Tissot, 1995; Torrance and Sisk, 1998). Despite this concern, there still exists a serious underrepresentation of culturally different students in most gifted programs.

This underrepresentation is due to reliance on standardized intelligence and achievement tests as major indicators of giftedness. Many culturally diverse students are not able to perform on these tests at the levels required-90 to 95 per cent or higher.

In Florida, a study by Sulkes (1987) found that minority students were referred for gifted testing less frequently, partly because many teachers were not trained to recognize high potential in children from economically disadvantaged backgrounds, and also because parents of these children are often unaware of the benefits of gifted education and unable to advocate for them.

Another serious problem is that large numbers of minority economically disadvantaged students who are included in gifted programs withdraw upon experiencing difficulty with academic assignments. Difficulties arise because these youngsters, many of whom have limited English proficiency, have had little experience with abstract, higher-level thinking, advanced vocabulary and communication skills, and are baffled by the academic demands of gifted classes. In addition, minority students enrolled in gifted programs often receive a great deal of peer pressure to drop out of the programs. This coupled with parental pressure to succeed can result in considerable bipolar stress for the students.

A Collaborative Effort

Concern about the serious underrepresentation of economically disadvantaged students in gifted programs led the author and two colleagues, Dr. June Maker of the University of Arizona and Dr. Roberta Daniels of Arkansas State University, to collaborate on a research project called STEP UP (Systematic Training for Educational Programs for Underserved Pupils).

The major goal of the project was to establish a system for identifying minority economically disadvantaged students with gifted potential and to provide these students a transitional curriculum of study to meet their educational needs and enhance their potential. Project STEP UP (1990-1993) was based on two primary assumptions that guided the project: (1) Giftedness exists in all racial/ethnic groups, and (2) Realization of intellectual potential begins with recognition of high potential.

The project has had a significant impact on gifted programs in the participating states of Arkansas, Arizona, Florida, and Texas. In the state of Florida, identification procedures developed in STEP UP were added to a State Plan B for identification of minority economically disadvantaged gifted students. The project outcomes included the following:

1. Alternative methods and criteria for identifying underserved gifted and talented students who are economically disadvantaged and bilingual .
2. New approaches to teacher training and professional development.
3. Active curriculum infused with an emphasis on higher-level thinking processes, communication, and self-concept development.
4. New ways of identifying and involving community mentors as role models and instructors for at-risk students.
5. Methods to actively involve parents in their children's education in and out of school.
6. Effective programs for at-risk students that will positively affect the school climate of the participating schools.

The project operated under the premise that standardized test scores and the typical check list of gifted characteristics used by many districts for preliminary referrals often fail to identify high-potential economically disadvantaged minority students. To counteract this, teachers were provided a research-based checklist of characteristics of minority economically disadvantaged gifted students developed by Sisk (1990).

Considerable time was allocated for discussion with teachers and administrators concerning these characteristics and how they are manifested in specific classroom behaviors. Teachers were asked to recall incidences in which at-risk children quite surprisingly had offered statements or made inferences in the classroom that demonstrated their high potential. Following these discussions, teachers were asked to nominate students to form a high-potential pool for further consideration for participation in the project.

Teachers in the states of Arizona, Arkansas, Florida, and Texas were provided training on the use of the Structure of Intellect (SOI) Test of Learning Abilities (Meeker, 1975), and the test was then administered to the high-potential pool of students. The SOI was chosen because it does not represent a traditional intelligence test and involves students in a broad-spectrum testing experience, measuring 26 different abilities. Using these SOI test results, teacher recommendations, and non-traditional assessment (the Kaufman Brief Intelligence Test, the Slosson Intelligence Test, Peabody Picture Vocabulary Test, Raven Matrices, and portfolios), nine groups of 18 students were selected to participate in the project, to begin when the students entered second grade in the fall of 1990.

In Arizona, Dr. Maker also used a comprehensive assessment based on activities that she designed from the Howard Gardner Multiple Intelligences Model (MI) as well as the SOI. Four groups of 18 children in Arizona were identified for participation. After the first year, a satellite site was established in Houston, bringing the total number of sites to 14 for the duration of the project.

Research on Intervention Programs

Research on intervention programs with at risk-students indicated that the project would experience a series of obstacles as the staff engaged in helping students reach their true potential (Torrance, 1977, Rito & Moller, 1989, Howells, 1992). The experiences in STEP UP confirmed this.

In Lakeland, Fla., a site was disbanded after the first year of operation to comply with an Office of Civil Rights ruling that

placement of 18 high-potential minority students in a self-contained class is a form of segregation. Another obstacle was the low expectation held by many of the teachers, administrators, parents, and students, as well as language barriers in Texas, Florida, and Arizona. In Arizona, a Navajo-speaking teacher and an English-speaking teacher were assigned as team teachers to signal equal parity of the languages to the students. In the Texas sites, bilingual teachers were employed and the STEP UP groups were designated as bilingual high-potential groups.

Another obstacle was the low self-concept exhibited by the students and their apathy toward education. As a result of these obstacles, the development of positive student motivation became an imperative for the project. The parent component that had been considered an important part of the project was soon elevated to a central focal point as many of the parents had little formal education, the home environment lacked toys, magazines, books, and newspapers, and the parents needed better parenting skills to reinforce project efforts to enhance their children's high potential. These obstacles were viewed as challenges and factored into the project procedures.

The project can be best described in three sections: Active Involving Curriculum, Higher Level Thinking, and Creative Leadership.

Active Involving Curriculum: Many of the original STEP UP teachers were fearful of being asked to develop new curriculum for the project. The staff assured them that they would be using their district's curriculum, and the teachers would infuse the curriculum with innovative teaching strategies to expand, and in many cases accelerate, the curriculum. The STEP UP children were regularly assessed and encouraged to move at their own pace. Local achievement and ability information were used as baseline data for the children. This procedure was particularly effective in mathematics and language arts.

The curriculum developed by Bronson (1995) in "Project Success: Integrating Language Arts and the Arts" was used as the primary focus in language arts. In mathematics we used "Decision-Making Math." The project emphasized communication and rhetoric since many of the minority children in the states of Arkansas, Texas, and Florida were African-American, and rhetoric had been listed as a talent indicator by the NAACP. The teachers encouraged the students to commit to memory verses by Black poets such as Langston Hughes and Maya Angelou and to dramatically portray this poetry to classmates, parents, and community groups. Bilingual students were encouraged to develop fluency in both languages and to write daily assignments in Spanish, Navajo, and English. The STEP UP classrooms in Texas and Florida were housed in Chapter I schools that had four to six computers available through funds earmarked for at-risk students. The computers were a real asset to the program; modems linked the teachers at the different sites and put the classes in touch with information systems that were sophisticated and wide-ranging. CD-ROM programs allowed students to tour the world and expand their curriculum. It was particularly effective in the rural sites.

With a class size of 18, teachers engaged the students in many group activities using cooperative learning to build self-understanding and understanding of others. The concepts of leadership, teamwork, and service were stressed, and most individual and group student projects had an outreach component to the school or the community. These outreach activities helped s[illegible]e students to the positive personal value of service to the individual as well as the community.

Higher Level Thinking/Questioning Processes: For 30 minutes each day, students engaged in mind-stretching strategies for thinking skills, based on the SOI modules, lessons from Building Thinking Skills (Black & Black, 1985), and de Bono's (1973) lateral thinking. They were also challenged with tangrams, attribute blocks, and a variety of puzzles and manipulatives which were available in classroom learning centers. During the daily thinking-skills time, teachers worked with students individually and in small groups. They were taught to think through problems and tasks and to engage in metacognitive activities as they discussed their reasoning. The students also used the Osborn Parnes Creative Problem Solving Method to identify problems, formulate solutions, and to evaluate and implement action plans (Parnes, Noller and Brindi, 1977).

New Approaches to Teacher Training

My two colleagues and I were active participants in the classroom, working side-by-side with teachers and students. Four teacher-training skills were emphasized: focusing, empowering, facilitating, and transforming. Focusing established an atmosphere of order where the teacher served as a guide and modeled the behavior of a learner. This was a vital part of the learning partnership between the teacher and students. Empowering involved teachers in decentralizing the classroom and encouraged students to take responsibility for their learning. Through active involvement with real problems, the students learned the value of education. Facilitating was the key strategy for teachers as they worked with the children in a self-paced instruction. The teachers were encouraged to stress self-motivation and to help students learn to work independently, with self-checking techniques to encourage positive learning and ownership of their work. Transforming was utilized in the move from teacher-directed to student-directed learning where teachers served as coaches. As students mastered skills, they were encouraged to act as peer tutors. They were taught to articulate and rationalize their own mental procedures, and this process reinforced deeper levels of understanding and perception.

Identifying and Involving Community Members

Community leaders were invited to the classrooms by teachers, students, and parents as resource people to address community problems and to share their personal experiences with the students, particularly the individuals who had made a difference in their lives. Many of these community leaders offered to serve as mentors to the students, and a number were instructors in the classroom. As these leaders shared their satisfaction in their accomplishment, the children were encouraged to share a sense of pride in their contributions. The community members stressed that the children focus on what they want to do, find someone doing it, and then model that behavior. The students learned about networking when the successful leaders shared how they worked with their own colleagues to solve problems.

Outreach Activities

The students were provided with a number of educational and cultural field trips that enabled them to experience behind-the-scenes activities. Most of the STEP UP students had never attended a ballet, an opera, a concert, or a puppet show. They were able to see actors, actresses, singers, and directors all working together to bring a production to fruition. These trips were used as springboards to introduce new vocabulary and to build on what the students had learned on the trips.

Emphasis was placed on building pride in the diverse cultures. The students learned about the history of different cultures and the leaders who made things happen. Some of the most successful evening activities were ones in which parents came to the school and shared food, dancing, and singing of traditional songs from their individual cultures.

Creative Leadership Component: All of the components were important, but the creative leadership component was central to the success of the project. Many students had developed negative attitudes toward authority, school, and learning, and they exhibited low self-concepts and apathy. The project staff and teachers worked diligently on this component. Students were involved in daily affirmations about what each could accomplish and aspire toward. These affirmations were prominently displayed for parents, teachers, and students to view.

Active Parent Involvement

Parents played an active part in the creative leadership program. In their parenting classes they learned how to motivate their children and themselves. They also discovered how to view the positive side of life's challenges, and to network with one another. Six seminars for parents were developed by C. Shannon (1993) to provide information on the key areas of focus in Project STEP UP. Each of the seminars was designed for active participation, direct experience with the topic, and group interaction for the participants. The six seminars included: Recognizing the Gifts; Divergent Thinking Skills; Mind Stretching Strategies; Creative Thinking Styles; and Questions for Kids.

A series of activities was also developed in the form of STEP UP Grams to provide parents with hands-on activities in the home. Regular communication with the parents helped establish a trusting atmosphere and a high degree of cooperation.

Results

Of the 243 original participants in the STEP UP Program, over 50 per cent of the students were able to qualify for their district's gifted program based on traditional tests used by the school districts over a three-year period.

General Recommendations For Identification Process For Economically Disadvantaged Students

1. Use teacher judgment in the referral and selection process, and acquaint teachers with the strengths of minority economically disadvantaged children.
2. Plot the information from a number of tests and sources (objective and subjective), and use this as baseline data.
3. Use appropriate criteria for children from economically disadvantaged minority groups based on their strengths, or develop separate norms with means and standard deviations calculated for each group.
4. Use pre-test, followed by a period of teaching and post-test; this data can be supplemented with classroom observations.
5. Analyze sub-test scores, and use the strengths of the economically disadvantaged minority child.
6. Establish model schools in economically disadvantaged areas, and emphasize locating students with high potential among these schools.

The project continues to bring teachers together at their district's expense each summer at Lamar University to share new active curriculum ideas and to "retool" the teachers and staff. The STEP UP program has been extended to include Head Start children and their parents under the auspices of an Even Start grant in Beaumont, Texas. Many of the original 14 program sites have expanded the project throughout their school districts, particularly the thinking-skills component. In Florida, the Plan B programs for identifying minority economically disadvantaged children have appreciably increased the participation of these students. Dr. Maker has expanded the Arizona project with a bilingual focus in a number of Discover grants based on the use of the Multiple Intelligences Model (MI) with Navajo children.

Project STEP UP has added new research and information on the needs of high-potential minority economically disadvantaged students. The following needs were identified:

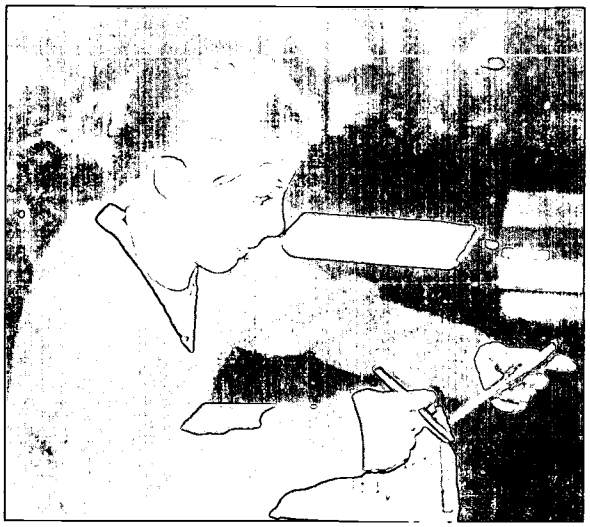
1. Encouragement to pursue ideas and integrate new ideas without forced closure or product demanded.
2. Building higher-level productive thinking skills and problem-solving skills; contributing to solutions of meaningful real-world problems.
3. Exposure to a curriculum focusing on alternatives, abstractions, consequences of choices, and opportunities for making generalizations and testing them.
4. Learning to clarify the feelings and expectations of others.
5. Learning how one's behavior affects the feelings and behavior of others.
6. Transcending negative reactions of teachers, parents, and students.
7. Finding purpose and direction in a personal value system.
8. Learning to set realistic goals and accept setbacks as part of the learning process.

The majority of the participating students exhibited increased self-confidence and a greater desire to achieve. Parents reported a renewed interest in learning, not only in their participating children, but in the siblings and other family members who saw them achieve. The Even Start continuation of the STEP UP project gives parents opportunities to work on their ABE or GED and to become positive role models for their children. The program "Parents as Teachers" was used to increase the family's ability to cope. Support was built on the strengths the whole family and individual members had. Many of these parents indicated that their expectations for the family have changed and that they actively encourage their children to do well academically and to pursue higher education.

Positive Effect on Total School Climate

In an interview, the principals, Project STEP UP teachers, and regular classroom teachers overwhelmingly agreed that the project had a positive effect on the entire school. Teacher workshops were open to all teachers at the schools. Principals reported that the focus on identifying and enhancing high potential created a positive attitude toward education that was noticeable in the behavior of teachers, who placed a new emphasis on providing a responsive and stimulating environment for all children.

The project demonstrated that high-potential students could be identified in economically disadvantaged populations and, through the provision of a transitional curriculum, can develop and enhance their individual giftedness. Changes in identification practices, curriculum and instruction, and attitudes about the abilities of minority economically disadvantaged children will promote the recognition of giftedness in students regardless of their socio-economic status, linguistic background, or cultural



heritage. The framework presented in STEP UP offers an effective way to accomplish this objective.

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THE EFFECTS OF TRANSITORY DISABILITIES ON THE HIGHLY GIFTED: A DESCRIPTIVE CASE STUDY

Mary Christensen

Concern for gifted handicapped students has generated an awareness of the need for a new field of education. "This new field of education for gifted handicapped is emerging as the result of the intersection of special education for handicapped and for gifted students" (Whitmore, 1985, p.5). While this field is still in its infancy, the dominant focus to date has understandably centered on persons with permanent disabling conditions. However, another group within the gifted population also bears special consideration, as it is has been virtually unmentioned; educators must additionally recognize that gifted students who experience a temporary disabling condition are a to wrestle with a unique set of difficulties.

The purpose of this paper is to bring focus and insight regarding the impact of transitory disabilities on the gifted youngster who is already coping with the complex educational and social-emotional issues surrounding giftedness. This paper presents the case study of a highly gifted 11-year-old boy who was confined to a wheelchair for six months, and subsequently was severely limited in physical activities for several additional months.

The Case Study

Greg was a highly precocious child from infancy. His parents report that he spoke in fluent sentences by 16 months,

read simple children's books by 21 months (when he was barely able to pronounce many of the words), and was able to sing complete songs learned from popular radio stations before the age of 2. They report that he was a highly social toddler/preschooler with quite a sense of humor and propensity for entertaining adults as well as other children. By age 6 he expressed an interest in music and began to study piano. His music teacher reported that Greg had extraordinary ability to simply watch him play a composition and then to replicate the song from memory with very little reliance on written music. The teacher's astonishment at this natural ability was mixed with admiration for the great expression this child was able to put into his music at so young an age. Comments of concern, however, were also noted as Greg was warned that he must learn to read music more effectively if he wished to truly progress in his music study. These were among the earliest foreshadowings of complicated school-related problems which were to escalate into full-blown underachievement syndrome by junior high age.

During primary years, school achievement remained very high as measured by both standardized achievement tests and daily classroom grades. School records reflect fourth grade as an apparent "turning point." Although standardized achievement tests continued to place him in the 99th percentile across subject areas, daily performance was dropping radically, with teachers commenting on incomplete and careless assignments. While gifted programs were not available, an educational evaluation was administered privately to confirm or deny the presence of superior ability and/or learning disability. Results of the testing reflected no learning disability problems, but did confirm very superior range ability, as Greg scored 153 on the WISC-R. Classroom teachers made few efforts to modify the curriculum, and the underachievement pattern increased. Report cards reflected poor school habits and inconsistent effort, though end of year SRA scores continued to report consistent 99th percentile achievement levels. Not surprisingly, both parents and teachers noted the beginnings of self-esteem problems and socialization concerns at this time.

It was in the midst of this complex, yet not uncommon, situation that Greg's disabling automobile accident occurred. His leg was severely injured which resulted in wheelchair confinement throughout most of his sixth-grade year, and subsequent later restrictions and surgeries even into senior high school years.

Strengths and Weaknesses

Several characteristics of the gifted personality both complicated and facilitated the coping and adaptation process which needed to occur. These characteristics might be viewed as strengths or weaknesses depending on how they interacted with Greg's newly disabling condition.

A dominant quality of which Greg himself spoke frequently was his problem with procrastination. As his underachievement pattern had become more entrenched, developed basic skills occasionally lagged behind his measured intellectual capabilities. This dyssynchrony between perceived abilities to produce an acceptable product and actual accumulated skills sometimes generated withdrawal from effort to perform. The characteristic of perfectionism, so common to the gifted personality (Whitmore, 1980), has been linked to procrastination (Adderholt-Elliot, 1987), and in Greg's case further exacerbated the need to procrastinate about academic performance, as it ame increasingly more intimidating to risk less-than-perfect products. With the onset of the broken leg and resulting casts and wheelchair confinement, frustrations mounted as even small efforts required far more physical energy than had previously been required. Under such a situation of limitations, Greg's teachers naturally anticipated academic performance to increase, as school-related tasks are perceived as those requiring less physical mobility. However, given the existing under-achievement pattern, attacking school tasks actually required tremendous effort for Greg, and this fact was now compounded by the many physical restrictions. Not recognizing this linkage, school personnel instead communicated to Greg's parents that they were disappointed that he was not "using his time more wisely" now that he was confined and should be working to raise his grades. The opposite, in fact, occurred in this case, as academic performance plummeted during his sixth-grade year.

It is well recognized that gifted individuals frequently experience their world with great intensities, and that emotional intensity is a major influencing characteristic for many (Silverman, 1993). One aspect of this is witnessed in the importance of relationships. For this young adolescent, this translated into a very difficult factor in his story, as maintaining normal social relationships became problematic due to the physical restrictions. This, however, was not noticed as particularly complicating, thus supportive strategies to help him cope were not implemented.

The lengthy period of diminished physical activity generated yet another extremely painful issue, weight gain, which greatly affected Greg's self-esteem. His self-perception—that of a personally unattractive "fat kid"—appears to have become a self-fulfilling prophecy as he gained more weight even after the months of physical limitation had ended. Not until the summer prior to college was he able to shed the unwanted weight and corresponding negative self-perceptions.

Among the personal strengths which appear to have facilitated the coping process was his single-minded drive toward desired goals. This kind of intensity is well-documented in the literature regarding the psychology of the gifted (Piechowski, 1979, 1986; Piechowski & Colangelo, 1984; Shiever, 1985; Silverman, 1993). His parents would frequently remark about his persistent determination as they wondered how it might be harnessed into constructive personal and academic channels. The tenacity with which he approached lengthy high school halls on crutches (after later corrective surgery in his junior year of high school) is but one example of the strength of his drive to avoid social isolation. On one occasion his shoulder muscles literally "gave out" and he tumbled down the stairs. Counselors and teachers queried why he would not have stopped sooner and simply been late for class; from Greg's perspective, it was part of an effort to fit in, i.e. to avoid the loneliness which frequently accompanies a disabling condition as well as extreme giftedness.

A trait which is often associated with giftedness is the ability to approach problem-solving from creative and unusual perspectives (Daniels, 1997). This quality was a valuable strength as Greg sought ways to cope with boredom and inactivity caused by his injury. In the weeks immediately following the injury, he found numerous avenues to participate with siblings and friends in unusual ways; he often generated innovative ideas to reverse roles in order that he might join an otherwise prohibited activity. By eighth grade he had become highly computer literate, a self-taught programmer who prided

himself on being able to "crack" any program through a trial and error problem-solving strategy.

Conclusion

In reviewing this case study, several observations emerge. Clearly certain factors were facilitative while others were obstructive to the adaptive mechanism which needed to occur. The existing elementary school frustration when the accident occurred intensified the difficulties in forming a constructive response to the disability. The lack of supportive measures taken in the school environment constituted an obstructive force in his overall recovery. The sum and total of adjustments made by the school environment consisted of allowing the wheelchair in the classroom, and asking classmates to assist when it was absolutely necessary that Greg attend an assembly in the gymnasium (which required negotiating the stairs). While school personnel were not deliberately insensitive, there is little evidence of any realization that more had changed for this young man than simply the physical confines of the wheelchair. His gifted personality with its many complexities, in combination with this transitory but disabling condition, generated a multiplicity of confusing needs for this developing adolescent.

It seems an awareness of such students' highly unique situations must become a focus among educators as well as society-at-large. The consequences of ignoring the problems faced by such students are many. This young man faced frustration, social isolation, and weakened self-esteem as a result of the interaction of two sets of conditions—his giftedness and his disability—both of which were basically out of his control. In Greg's case one can only speculate how growing up might have been a more positive experience had he found a more actively supportive environment at school. However, in the case of the thousands of other gifted young people who may currently be experiencing some kind of transitory disabling condition, there is time to do more than speculate. It is essential that both society in general and the society of the school develop a heightened sensitivity for the complexities faced by such children, as well as a network of understanding and support to assist their adjustment and growth. If nurturing the growing young person is the charge of educators, then this is a challenge of leadership which must be accepted.

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CREATIVE WAYS TO IDENTIFY AND SERVE TALENT IN YOUR K-3 CLASSROOM*

Joan Franklin Smutny

Here is Isabella. At the age of 4 she was helping her mother calculate and compare prices on a grocery list at the supermarket in their neighborhood. Numbers intrigued her. She counted every moment she got and seemed hungry to do more. Now she is six and in school, she sits mute in her seat and barely speaks. Isabella is still learning English and feels safest when she is silent. The teacher has no knowledge of her talent in math.

Here is James, a first grader fascinated by art. By first grade, he had begun a cartoon series called "Fly By Night," a play on words he thought quite clever. It consisted of little humorous vignettes about a fly detective who investigates wrongdoing at night. His mother has amassed piles of evidence of James' prodigious creative gifts, yet his teacher only remarks on his reading disability. Recently, she made him sit in the corner for doodling on his note pad during a spelling class.

Here is Sam, who entered Kindergarten reading third grade b[illegible]w he is in first grade reading *Charlotte's Web* and yet he can hardly spell. At first he was in an accelerated reading group, but his eccentric spelling and practically illegible handwriting have slowed him down. Also, when the teacher asks him questions about his reading, he sometimes misses basic facts, and embellishes storylines or mistakes them.

Here is Grace, a second-grade child who always seemed quite average. Then one day, the teacher did a living history unit on Plymouth Plantation. Grace decided to put herself in the shoes of the native inhabitants of Massachusetts during that time. She wrote and illustrated stories, drew up maps, read voraciously, and recounted details of the time period-details that the teacher had never taught. The teacher wondered how she could have had Grace so long in class and never noticed her ability.

Here is Leon, a kindergartner whose only real interest appears to be climbing onto tables and shelves and humming tunes to himself. According to his mother, Leon is a talented violinist, but he is losing interest in his daily practice sessions.

When the teacher asks him to play for the class, he refuses. When she asks why, he says that he wants to learn to play the tunes in his head but he can't do it.

In the regular kindergarten through third grade classroom, there may be any number of reasons why a teacher may miss a gifted child. They can range from the unevenness of early childhood development to cultural differences, learning disabilities, unique or unconventional learning styles, low socioeconomic background, and emotional problems. All the gifted children on the previous page may be at some risk of becoming invisible in the classroom. Because of such factors as uneven development, particularities in learning styles, talents, and cultural and linguistic differences, teachers do not always recognize who they are.

Broadening the Scope

The first step in finding young gifted children is to prepare for the diversity of talent in your regular classroom. In any student population, homogeneity of talent rarely exists. In the kindergarten through third grade classroom, the variation between different gifted children increases considerably. First of all, physical, social, and cognitive development is rapid and variable in young children. Cognitive and motor skills come suddenly: one moment the skill is not observable; then it suddenly appears. Since this is the case, the use of one method of identification yields few results. Testing, for example, may work at one time and not at another; observations may yield insights into one child's language ability, while for another, it may be a highly imaginative story dictated at home to the child's mother. Another student who at one time struggled to read school-assigned texts, may suddenly catch up and surpass classmates who had helped him previously, or a child who reads sixth grade books may have mastered spelling and handwriting at the level of those at the lower end of the class.

There may be a gifted student in your class with learning disabilities, someone who rarely performs at the level of her true potential. An LD gifted child often feels frustrated with her performance because of the gap between potential and execution. She has a quick grasp of material presented in class and can analyze a number of elements simultaneously, but in the process of expressing her thoughts or solving problems, breakdowns arise that hinder the full development of her ideas. Then there is the highly creative child-the student who cannot seem to stop diverging from class assignments into the ways and byways of imaginative "what if" scenarios. He may feel absolutely lost in the simplest math problems because he thinks so differently from what the assignment requires. These students will show flashes of true talent, but may seem so inconsistent that they are overlooked as candidates for gifted programs.

If you teach in a culturally and economically diverse school, you may discover different kinds of talents as well as attitudes toward them. Research on the cultural values and traditions of your community will guide you to the sorts of talents and interests likely to emerge from your students. It will also sensitize you to areas of U.S. schooling and society that may be uncomfortable to a gifted Latina student, for example, or to a gifted child from a local housing project. Children from nonmainstream communities will trust you more if you demonstrate an understanding of their needs and sensibilities. There are young gifted minority or bilingual students who will camouflage their talents because their culture discourages individual distinction or at least the kind of attention that America places on exceptional ability. Americans so used to the competitive, individualistic framework for achievement that they do not always realize how alien this can be to other cultures. If you have children who seem uncomfortable with special attention, you can provide quieter, less overt ways for identifying their strengths and letting them know that you have noticed their fine work.

A Creative Approach to Identification

Identifying different kinds of gifted children in a regular K-3 classroom demands a more creative approach than may be commonly used in schools. Creativity is a practical and realistic way to discover hidden talents in young students, whether it is uneven development, learning disabilities, learning preferences, language or cultural factors that make them invisible. Using a variety of approaches over an extended period of time gives your students many alternative venues and contexts for expressing their abilities and provides you with a more accurate picture of their strengths and development over time.

Using Checklists

A practical way to find gifted children in the early years of school is to look for particular kinds of behaviors and characteristics. Checklists are useful aids to this process. Here is a list parents and teachers have found helpful:

- Has a long attention span for activities that interest him/her.
- Works independently and uses initiative.
- Loves books and reading activities.
- Is extremely curious about many things—asks "Why?" "How?" "What if?"
- Raises insightful questions about abstract ideas like love, justice, etc.
- Discusses and elaborates on ideas in complex, unusual ways.
- Is very interested in cause-effect relationships.
- Loves playing with number concepts and figuring out how to solves math problems in unique ways.
- Learns quickly and applies knowledge to new contexts with ease.
- Has vivid imagination and ability to improvise games or toys from commonplace materials; can generate other options for doing something in the spur of the moment.
- Is extremely creative-makes up elaborate stories, excuses; sees many possible answers/solutions; spends free time drawing, painting, writing, building, experimenting, inventing.
- Has spontaneous and whimsical sense of humor.
- Likes to play with words. Absorbs the speech patterns and vocabulary of different people and imitate them in stories, rhythms, or games.
- Is often singing, moving rhythmically, or using mime in self-expression.
- Is responsive to music and can improvise with easily memorized tunes, rhythms, or sounds.
- Is a leader in organizing games and resolving disputes.
- Is sensitive to the feelings of others, empathic in response to others' sorrows or troubles.
- Expresses concern about world problems such as near extinction of animal species, political injustice, poverty, etc.
- Has a high intuitive gift and a willingness to follow "hunches" even if he/she cannot justify them at the moment they come.

You can expand, exchange, or delete any number of items to adapt the list to the unique strengths, interests, and needs of your

student population. You might also like to consult the Fisher Comprehensive Assessment of Giftedness Scale: *What to Look for When Identifying Gifted Students* (Fisher, 1994). It ranks children's sensibility which is their keen consciousness, enthusiasm, interest, in-depth focus, and serious concern. The scale compares this essence of giftedness 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 broader view deepens the scope for finding gifted children beyond test scores.

Adapting the Curriculum for a Variety of Talents

There is no point in looking for a wide range of talent in the regular classroom unless the curriculum offers learning situations that allow that talent to express itself. This seems obvious, but some teachers do not recognize how vital creative teaching is to identifying talent, especially among nonmainstream populations. By creative I do not mean solely artistic (although the arts have a vital role to play in the curriculum). I mean divergent, explorative-full of impromptu inspirations and intuitive leaps, inventive, innovative. Bright children need maneuvering space in the projects they do. They need to feel that they have something to bring to the study and exploration of a subject and that they can, at least occasionally, use media and methods they choose.

I like to encourage teachers of young children to evaluate the learning space (the physical room where their class meets) and the curriculum, and to ask themselves these questions: to what extent does the daily classroom experience I provide allow young gifted children of many different types, sizes, races, socioeconomic backgrounds, learning styles and preferences to express themselves? What talents do I rate above others and to what extent does my teaching emphasize these particular gifts? Sometimes, teachers realize that they have paid less attention to a particular talent area because of pressures to adhere to a strict curriculum of academic content and skills.

A good rule of thumb to follow is to use the checklists as a guide to the development of your room and curriculum. If, for example, one of the items on your checklist is creative problem-solving or musicality, then you need to explore how to incorporate these elements into the life and culture of your classroom. Perhaps you can organize your room and learning centers thematically. It is a simple matter to integrate music, theater, art, science, history, and language arts in the study of a particular subject or theme. Gifted students love mixing media and exploring a variety of facts, impressions, and experiences of a subject in their pursuit of new ideas.

One of the children on the first page of this article was a child who never appeared other than average. When the teacher encouraged the children to explore history imaginatively-to research the subjects that interested them, put themselves in the hearts and minds of those who lived then, and use whatever materials were at hand-Grace came alive. Talents that had lain fairly dormant through years of learning skills and receiving knowledge passively, suddenly made themselves known when prompted into action. There are many children out there of all ethnicities and cultures who may not be strong auditory or visual learners and they may never grow in classrooms where this kind of learning dominates. Providing learning experiences where children interact with a subject in personal, creative, as well as analytical ways, enables those students with other learning st el challenged and excited.

Developing Portfolios

One of the most effective ways to document talent in young and especially minority, economically disadvantaged, creative, or learning disabled learners is to collect a wide range of their work, and to gather many observations and anecdotes describing behavior from parents and community members. This information could take the form of an ongoing portfolio and record of achievement. The process of compiling 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 in kindergarten through third grade. Advantages of portfolio assessment are that it:

- 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 curriculum, and creates a source of pride and accomplishment for the child..
- 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.

Organize Seminars for Parents, Teachers, and Community Leaders

The more informed parents, teachers, and community people are about the nature of giftedness in young students, the more that can be done for them. In addressing parent and teacher groups, I find people hungry for information on this topic and eager to try new ways to identify talent and meet the unique educational needs of bright young students in the classroom. Many of them are surprised to discover that giftedness is far more complex than the stereotype held up by our society. I once met a parent who at first did not believe her young son to be gifted because he could not read or write. Yet he possessed an extraordinary artistic talent. One day, he surprised her by meticulously labeling a series of dinosaurs he had drawn. Focusing on reading and writing, this mother initially failed to see the gifts of her son or to recognize that, in some children, it takes time for skills to catch up with talent.

As a teacher or gifted coordinator, you might first talk to the principal about having seminars for parents and/or other teachers that will communicate the most current research on giftedness in young children. Part of ensuring the future development of these bright young students is creating an awareness of their existence and special needs. The impact such a recognition can have should never be underestimated. A gifted six-year old with a disability may languish in a classroom where his disability dictates what he is taught and how far he can go. A model of deficiency exerts a profound influence on his thinking and keeps him from ever discovering the talents that lie dormant within him. A kinetic learner who does exceptional work in hands-on, explorative activities but only performs moderately well through a predominantly visual model of instruction needs as much validation and attention as the child whose learning style is more visual. A bilingual child may exhibit real talent in poetic language and yet still struggle with comprehension in some areas.

Helping the adults in these students' lives recognize the full

spectrum of talent in young children will pave the way for greater educational opportunity and self-expression in the classroom. Young students need to feel free to "fall in love" with something (Torrance, 1983), to test their strengths in activities that challenge and captivate them. As the teacher, you can create this freedom in the classroom, even in the most structured areas of the curriculum. As you communicate with parents, use checklists, analyze test results, assess the wide range of assignments and projects your students do in the classroom, and develop your portfolios, you may meet with some surprises. You may find strengths and abilities in children you formerly thought were intellectually average. You may discover that a young boy you considered a behavior problem is actually a highly gifted child, or a girl from a housing project is verbally precocious despite the fact that she speaks in a dialect. Be prepared for the unpredictable. Enjoy the surprise of discovering rare talents you never noticed before.

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A KALEIDOSCOPE OF LIFE WITH YOUNG CREATIVE CHILDREN*

Karen Meador

There is no single snapshot of a young creative child or model to which a youngster can be compared. Yet, parents and primary and early childhood teachers describe episodes in which young children display creative thinking, and these combine to provide an interesting kaleidoscope of scenarios. This article is written for parents, however, it also provides valuable information for teachers. The scenarios help guide readers toward recognition and understanding of creative thinking in young children, and the article includes valuable suggestions for parents.

Originality

"It's a beautiful morning and day today . . .", six-year-old Brandon came racing back in the house after his mom sent him out to catch the morning school bus. "Write it down, write it down," he said. "Brandon, you're going to miss the bus," cried his mother. "No," Brandon replied, "write it down before it goes away." He was singing the words and tune to an original song he composed while waiting outdoors. His mom grabbed the tape recorder, they successfully captured the song, and Brandon managed to get on the bus. Later that day, he and his mom brought the vocal treasure to his piano teacher, and Brandon refused to do anything during his lesson until the teacher wrote down every word and note. The remainder of the lesson Brandon played from the transcribed music until he knew the piece by heart and could sing along. His teacher played chords to embellish the song, and Brandon was thrilled with the results.

Brandon's new song was creative as indicated by Amabile (1989) and Parnes (1970) who describe creative behavior as that which is "novel" or "unique" and "appropriate" or "relevant". *It's a Beautiful Morning and Day Today* bore no similarity to any other familiar music, and while Brandon had written one or two songs during his piano lessons, he had previously used a formula-driven approach to writing. The song was quite appropriate within music genre for children, and Brandon's creative thinking manifested in a product that many enjoyed.

The above scenario illustrates one of the components of creative thinking, originality, which ". . . results when something is created for the first time" (Meador, 1997, 38). Some of the other components of creative thinking including fluency, flexibility, and elaboration will also be discussed in this article. Another example of a young child's original thinking follows.

Mom stood by the door and watched as Kristen leaped off the school bus. It was their usual routine to meet outside and walk in together, and today Kristen, a first grader, was waving a large piece of paper. As the child grew closer, Mom could see that the large paper had been constructed by taping many regular-size pieces together and that these had been jaggedly cut into an oval. When the two got inside, Kristen explained that this was a design for a doll blanket and that Mom "must" make it immediately! "The problem," Kristen said, "is that the blankets won't stay on my dolls, so I've made one that will." She showed her mom how the oval blanket had a second small piece attached at the top forming a cap to cover part of the doll's head. The bottom of the blanket was designed to fold up over the doll's legs; then the sides would fold in toward the doll and velcro would hold it in place creating a neat package. Although Mom tried to explain that she would need to make the blanket later, Kristen persevered and finally they went to work. First, they tested Kristen's idea using scrap fabric and made a few adjustments to the design. Finally Mom made the new doll blanket from a soft fabric and Kristen proudly displayed it to her friends. Mom never asked what the child was supposed to have been doing in school while she was designing the blanket.

Kristen used original thinking when designing the doll blanket. Her Mom indicated that the child had not previously seen either the oval shape in a blanket or the velcro at the bottom. Kristen might have piggybacked on the idea of her own hooded bath towel used when she was a baby to create the cap for her doll blanket.

Fluency

As Kristen grew older, she displayed her creativity in

countless other ways including elaborate hat-making, a project that lasted several months. On her own, she figured out how to use various sizes of paper bowls to create small hats. She produced a large number of hats, adorned with ribbons, fabric, feathers, buttons, and other items, and each hat had an entirely different look. As her skill increased, she began to take liberties with the basic structure of the hats such as cutting away the rounded portion of the bowl leaving only the rim or putting two rims together. Kristen's fluency, " . . . the ability to produce a quantity of ideas, answers, or problem solutions" (Meador, 1997,1), in hat production contributed to her becoming an expert at the task, and this led to more original and unusual products.

Elaboration

A first grade teacher's directive asking students to draw where they lived also resulted in a creative product. Most students completed the task in less than fifteen minutes, yet, Mario wanted to continue his work during recess. Although he worked diligently, he still did not finish before the class returned. Eventually, Mario asked and was allowed to take the drawing home, and he returned it following completion. It was easy to see why he needed extra time. Mario represented his home, a red brick structure, in grand detail. Each brick was drawn separately as were the shingles on the roof. Additionally, Mario included the shrubs around the house and the sidewalk leading to the front door. This depiction varied greatly from those produced by his peers due to Mario's elaboration, a concept defined in Webster's 1995 dictionary as the result of something "planned or done with careful attention to numerous details or parts." Mario's drawing was an indication of his skill in creative elaboration and the detail with which he viewed the world at a young age. Mario continued to display creative thinking, and in fifth grade he wrote an elaborate 15-page short story that intrigued his classmates, teachers, and others.

Some of the examples above describe creative products in the arts, and perhaps the most obviously beautiful essence of creativity is captured in artistic forms. Yet, we must not narrow our definition to this domain. Engineers, doctors, machinists, plumbers, and others all use creative thinking at one time or another especially when facing a new dilemma or problem.

Creative thinking is a necessary component of problem solving and is described by Torrance (1995) as "the process of forming ideas or hypotheses, testing hypothesis, and communicating the results (p. 23)." Problems encountered by adults may include things such as how to manage a formal dinner for a large number of people in a small house and how to entertain small children in the dark when the electricity has gone out and they are frightened. While we may readily recognize these situations as problems, those faced by children, viewed from an adult perspective, may not seem like problems at all. Young children encounter problems during play such as how to pretend to cook dinner without a toy stove. Usually they pretend a chair, box, or something else is a stove and solve their problem without adult assistance. Children may also enjoy "dressing up" and assuming various pretend roles while they play. The example below illustrates how a four-year-old handled the problem of how to be a dog.

One Friday morning, unbeknownst to his mother, Jordan decided to be a dog. He demonstrated the first hint of this when he hung a sock over each ear and crawled into the room where his mom was working. Mom was not sure what to think until she heard Jordan bark, a real sign that he meant to be a dog. Jordan the dog barked in several different tones, but after Mom played along, petted the dog child, and repeated "nice doggy" many times, she returned to her work. Jordan, however, was not through playing dog, nor was he satisfied with the amount of attention his mom allowed him. Soon, he returned, crawling into the room with a plastic bowl in his mouth, and dropped it in front of Mom. Jordan then began to whine like a dog and rub his face against Mom's leg. When Mom failed to recognize his need for food, the dog child began to howl, and finally Mom decided to get with the plan and find the dog some food. Jordan ate the Cheerios Mom provided from the bowl in a dog-like manner, eventually tired of the game, and later Jordan the boy returned.

It appears that Jordan's behavior was creative. If he had not seen socks placed over someone's ears to make them look more dog-like then we can describe this as original. He may have used flexible thinking when he did not get food from Mom the first time he entered the room. Davis and Rimm (1994) describe flexibility as "the ability to take different approaches to a problem, think of ideas in different categories, or view a situation from several perspectives (p. 189)". If Jordan's goal was to bark to get food and when this did not work he approached the problem differently by getting a bowl, then he was a flexible thinker.

All of the scenarios depict real children whose creative thinking resulted in tangible products including a song, a picture, a doll blanket, and hats. In many other instances creative thinking is not so obvious, such as when it involves a different way of doing something resulting in the same action or product as the old way. For example, a young child who has been taught to count the silverware when setting the table for dinner may instead choose to say the name of each person to be seated while getting it. This results in the appropriate table setting, and even though the child could easily count, it may have been more interesting to complete the task using people's names. Later, in school, creative thinking may be demonstrated as students provide alternative methods for completing math problems.

Children use creative thinking in obvious or subtle ways during problem-solving, when producing things, and a multitude of other ways. Adults may recognize it by the way children put words together in an interesting form or the extent to which they describe an occurrence.

Suggestions to Encourage Creativity

Value Creativity

What are your own views about creativity? It is important to continually expand our views and definitions of creativity in order to encompass multiple domains and facets of our lives. Look for creativity. Whether at a concert, business meeting, the grocery store, or watching television, note unique ways in which information is presented and problems are solved. The children are watching, and they are quick to catch on to what parents accept and model.

Ask Good Questions

Standard what, where, and when questions, such as "What is your teacher's name?" "Where did you go after school?" and "When do you have recess?" do not encourage creative thinking or discussion. When a child replies with what is often a single word answer, parents must ask another question to gain any real information. Plan to ask questions that give the child a chance to be fluent and elaborative or to give original ideas that may come from a unique perspective. Following are a few suggestions for types of open questions that allow the child to think of multiple answers.

How would _____ change if _____?

What would happen if _____?

What do you think about _____?

What do you think should have happened?

If you were ____ , what would _____ look like? (perspective)

What is another way to _____?

One of the easier ways to ask questions and initiate conversations with children is to begin by reading a book. Children especially benefit from hearing stories about book characters who model creative thinking and a short picture book resource list is provided at the end of this article. A more complete list and other suggestions may be found in *Creative Thinking and Problem Solving for Young Learners* (Meador, 1997). Following are questions about *Where the Wild Things Are* (Sendak, 1963) based on the questions starters listed above. How would the story change if the Wild Things lived by the sea?

What would happen if the Wild Things did not let Max become King?

What do you think about the way Max's Mom put him to bed without any supper?

What do you think should have happened instead?

If you were a Wild Thing, what would Max look like? What is another way for Max to get from his room to where the Wild Things live?

Provide Creative Space

Young creative children often make things and although individual pieces, such as the hats described above, may be completed quickly, others may take several days or longer. Families experience difficulty when siblings rearrange projects, when company comes and the child's room needs to be neat, or when adults simply can no longer stand what appears to be a mess. Much anguish will be spared if children are provided a space where they can place their work without fear of sibling or adult invasion. It is vital that children learn to think about, plan, and implement creative ideas and to then persist until satisfied with a task. It is hard to commit to this when they fear their project may be dismantled at any time.

Children also need psychological space where they can play with creative thoughts without fear of being laughed at or reprimanded. At times an adult's first instinct is to remark that the idea is "crazy" or "silly". Yet, it is best if children can avoid inappropriate adult reactions and self-criticism until they have fully explored an idea. The phrase "interesting idea" is often appropriate when children want some type of reaction to their creative thoughts.

At times it is difficult for adults to determine whether a child is exercising creativity or simply getting into trouble. No matter how novel the lipstick drawing created on a wall by a youngster, adults do not want to encourage this inappropriate activity. In this case, the child must learn where and with what tools he or she must draw. Creativity can bloom in the same environment where children learn responsibility and respect for the property of others.

Summary

Children display their creativity in ways that will surprise, delight, or possibly upset adults. Their creative abilities emerge in an environment that values and encourages creative thinking, and ly forms of creativity may evolve into important problem- ving and product development during later years. Learn to look for and enjoy the kaleidoscope young children provide as they practice creative behaviors.

RECOMMENDED PICTURE BOOKS

Anaya, R. *(1995). The Farolitos of Christmas. New York: Hyperion Books for Children.*

Carle, E. *(1996). Little cloud. New York: Philomel Books.*

Day, A. and Darling, C. *(1997). Mirror. New York: Farrar, Straus, Girox.*

Emerson, S. and Post, H. *(1994). The magic boots. Layton, UT: Biggs Smith.*

Gray, L. *(1993). Miss Tizzy. New York: Simon & Schuster.*

Kilborne, Sarah *(1994). Peach and Blue. New York: Alfred A. Knopf.*

Mathers, P. *(1998). Lottie's new beach towel. New York: Atheneum Books for Young Readers.*

McNaughton, C. *(1996). Oops! San Diego: Harcourt Brace & Company.*

Perry, S. *(1995). If. Venice, CA: Children's Library Press.*

Ross, T. *and* ***Barron, R.*** *(1994). Eggbert the slightly cracked egg. New York: G. P. Putnam's Sons.*

Say, A. *(1996). Emma's rug. Boston: Houghton Mifflin.*

Schenk de Regniers, B. (1997). What can you do with a shoe? NY: Margaret K. McElderry Books.

Yamaka, S. *(1995). The gift of Driscoll Lipscomb. New York: Simon and Schuster*

Yorinks, A. *(1990). Ugh. New York: Michael di Capua Books.*

RECOMMENDED FOR PARENTS

Amabile, T. *(1989). Growing up creative: Nurturing a Lifetime of Creativity. New York: Crown Publishers, Inc.*

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NAGC NEWS

Passow Teacher Scholarships

The Board of Directors offers a scholarship, in memory of A. Harry Passow, for gifted education, K-12 classroom teachers wishing to continue their education. Two scholarships will be available in 2000 for $2,000 each. Criteria and application forms are available from the NAGC National Office. Applications must be postmarked by April 1, 2000.

Over 100 Summer and Enrichment Programs on the Web

The NAGC web site now includes a geographical listing of summer and enrichment programs for gifted students. This resource is updated regularly and provides valuable information for teachers and parents. For information about listing a program or to obtain an application form, contact Nadine Hartke in the NAGC National Office at (202) 785-4268.

Winners of NAGC Website Redesign Competition

NAGC is pleased to announce that David Tayman, a student at Toms River High School East in Toms River, New Jersey, was the second place winner and the recipient of a $500 award in the NAGC website competition. No first place award was given. Dustin Kirk of Custer High School in Custer, South Dakota, was the third place winner and the recipient of a $300 award.

Atlanta in 2000

Crossroads to the Future is the theme for NAGC's first convention of the new millennium. The annual event will be held November 1-5, 2000, at the Westin Hotel in Atlanta. Members of the Atlanta Local Arrangements Committee kicked off their efforts in Albuquerque with a great party, bags of Georgia peanuts and peaches for attendee name badges. Pre-convention action labs always attract attention and attendance. Some of the trips planned in Atlanta include: The Carter Presidential Library; Torrance Center for Creative Studies; Through the Eyes of Southern Writers; Handling Science at Zoo Atlanta; Atlanta African-American Tour; Chieftains Trail Native American History Tour; Callaway Gardens and Warm Springs; CNN Center Tour; and trips to gifted programs in a variety of schools in Atlanta and the surrounding areas. Register early to guarantee space in the activity you choose. **Registration materials will be mailed on April 1, 2000.**

NAGC Membership Application

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*A Parent Associate Membership is available to parents and grandparents ONLY. This limited membership category is available to assist families who are interested in receiving *Parenting for High Potential* magazine, but otherwise cannot buy a full membership. Home address is required for this category. No purchase orders are accepted - personal check or credit card only.

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IAGC VISION

It is the vision of the Illinois Association for Gifted Children that the diverse expressions of gifts and talents of all individuals are valued by society.

Responsibility for nurturing, encouraging, and supporting the full development of potential in children and youth is accepted and shared by their families, educators, and communities. Individuals value themselves and their accomplishments. Their contributions are celebrated by society.

Goals

- *To promote advocacy efforts that benefit gifted and talented children by establishing an effective political network.*
- *To develop standards of quality for what teachers and other professionals need to know about educating children with gifts and talents.*
- *To develop standards to evaluate the appropriateness of programs and services which affect the lives of children with gifts and talents.*
- *To foster professional growth of educators by providing opportunities to learn about standards of quality for understanding and teaching children with gifts and talents.*
- *To network with others by disseminating news and information to educators and parents through regular communication in the form of a newsletter, journal and the Internet.*
- *To work cooperatively with the Illinois State Board of Education, universities, and other organizations that serve children with gifts and talents.*

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