

Revisiting the Schoolwide Enrichment Model— An Approach to Gifted Programming

Sherry Gibson



Joan Efinger

In recent years there has been a tendency in gifted education to refrain from endorsing any one model of instructional delivery. Educators and researchers alike have used a variety of models to serve gifted and talented populations. This eclectic approach allows all positions to be validated, while still remaining uncommitted to any one idea. This use of eclecticism often leads educators to believe in theories that may be contradictory to each other. The discipline can no longer afford to stand apart from the various theories and remain uncommitted (Slife & Williams, 1995). A consistent framework of instructional delivery is needed into which all special interests and programs unique to each school district can be incorporated into a functioning network to better serve our gifted and talented population.

Today gifted and talented students are defined, identified, and served



Students develop lingual abilities and engage in self-expression through the Type III activity of creative dramas.

through a combination of theories, models, and research. This excessive variation in instruction for gifted and talented students can create tremendous gaps and overlaps from year to year, teacher to teacher, grade to grade, and school to school. Teachers and schools are frequently left on their own to deal with an overabundance of academic lee-

way in content and use of a few popular theories. A gifted program in one part of a school district may differ substantially from a program in another part of the district.

This article provides a consistent framework through which educators may better identify and serve gifted and talented students by revisiting the dynamics of the Schoolwide Enrichment Model (SEM) in relation to student achievement.

What Does "Gifted" Mean?

Traditionally, to be identified as gifted or talented and placed into a special education program, a student must perform in the top 3%-5% of the school population. Florida Statute 6A-6.03019, "Special Instructional Programs for Students Who Are Gifted," defines a gifted student as "one who has superior intellectual development and is capable of high performance" (Florida

**TEACHERS AND SCHOOLS ARE
FREQUENTLY LEFT ON THEIR OWN
TO DEAL WITH AN
OVERABUNDANCE OF ACADEMIC
LEEWAY IN CONTENT AND USE A
FEW POPULAR THEORIES.**

Department of Education, 1999). Renzulli's (1978) definition of gifted and talented brings together the three features of ability, task commitment, and creative expression and requires that all three be jointly applied to a valuable area of human endeavor (see Figure 1).

Dynamics of Implementation

A talent pool of 15%-20% of above average ability/high potential students is identified through achievement tests such as the Florida Comprehensive Assessment Test (FCAT), high task commitment as observed through teacher nominations, and assessment of creativity through worksampling. This practice is unique, considering the traditional identification of 3%-5% of the school-age population and heavy reliance on IQ score as a determining factor for program eligibility.

What Is SEM?

The Schoolwide Enrichment Model (SEM) focuses on the development of gifted behaviors in a specific area of learning and human expression. The model suggests a behavioral definition of giftedness and greater emphasis on applying gifted program knowledge to larger segments of the population. Present educational reform initiatives have created a more receptive atmosphere for more flexible approaches that challenge all students (Renzulli & Reis, 1994a).

Joseph Renzulli's SEM is based on assumptions about learners and learning that are different from those that have guided public education for many years. It combines the previously developed Enrichment Triad Model by Renzulli with a more flexible approach to identifying high-potential students called the Revolving Door Identification Model by Sally Reis (Renzulli & Reis, 1994a). This model is a systematic set of specific strategies for increasing student effort, enjoyment, and performance by integrating a broad range of advanced-level learning experiences and higher-order thinking skills into any curricular area, course of study, or pattern of school organization.

A Framework, Not More Work

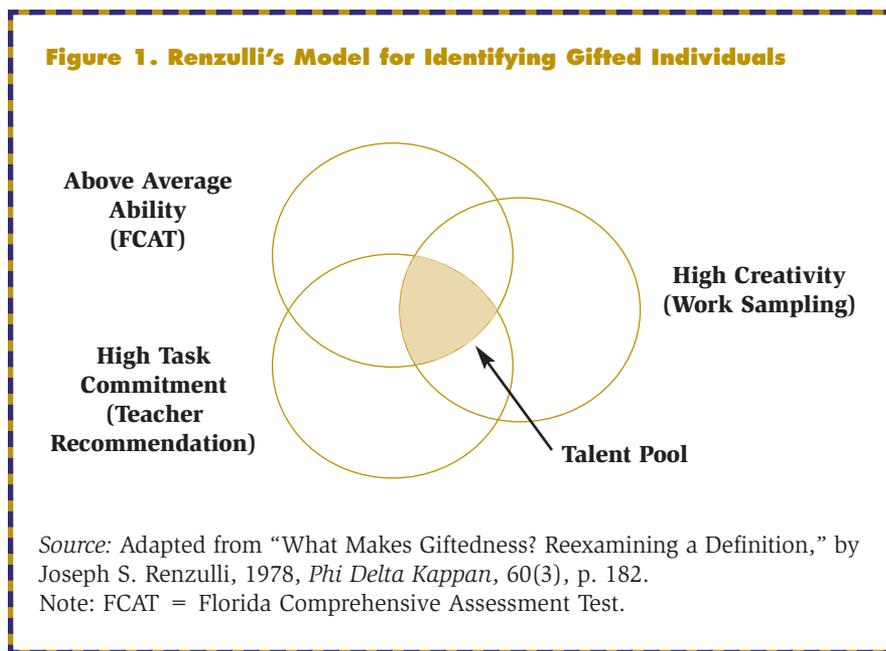
SEM provides a framework of effective practices to existing school structures

rather than layering on additional things for schools to do. SEM blends into school improvement activities that are already currently taking place. It focuses on use of concept rather than skill learning, use of interdisciplinary curriculum and theme-based studies, student portfolios, performance assessment, cross-grade grouping, and alternative scheduling patterns (see Figure 2). It provides opportunities for students to exchange traditional roles of lesson-learner for more challenging and demanding roles that require hands-on learning, firsthand investigations, and the application of knowledge and thinking skills to complex problems. The process identifies how opportunities, resources, and encouragement can be provided to support continuous escalation of student involvement in both required and self-selected activities (Renzulli, 1994/1995).

Delivery Components of SEM

Three service delivery components comprise the Schoolwide Enrichment Model (SEM). The combination of Total Talent Portfolios, Curriculum Modification Techniques, and Enrichment Learning and Teaching helps to ensure that students receive the most appropriate education based upon their individual interests and strengths.

- The assessment of the Total Talent Portfolio identifies a broad range of talent potentials in all students (see Figure 3). This helps focus attention on student interests and learning style preferences as well as strengths and abilities in traditional subjects and provides a flexible means of developing gifts and talents.



**GIFTED AND TALENTED STUDENTS
SHOW HIGH ABILITY, TASK
COMMITMENT, AND CREATIVE
EXPRESSION AND JOINTLY APPLY
ALL THREE FEATURES TO A
VALUABLE AREA OF HUMAN
ENDEAVOR.**

Figure 2. Definition of Terms

Acceleration—Educational approach that provides a child with learning experiences usually given to older children (Heward & Orlansky, 1992).

Achievement—What has been learned as a result of instruction (Salvia & Ysseldyke, 1998).

Creativity—The ability to solve a problem or come up with some novel solution that becomes a valued product in a given domain (Goleman, Kaufman, & Ray, 1993).

Curriculum Compacting—The condensing of textbook material that allows students to demonstrate mastery in less time (Renzulli & Purcell, 1995).

Enrichment—Educational approach that provides a child with extra learning experiences that the standard curriculum would not normally include (Heward & Orlansky, 1992).

Enrichment Clusters—Cooperative groups that engage in activities involving common interests that define a real-world product or service to be produced (Renzulli & Purcell, 1995).

Task Commitment—The ability of an individual to focus on a task for an extended period of time without distraction (Renzulli, 1978).

Total Talent Portfolio—Collection of student generated work designed to illuminate the very best ability of students and what strengths to capitalize upon (Renzulli & Purcell, 1995).

- Curriculum Modification Techniques are designed to adjust levels of learning so all students are challenged, increase the number of in-depth learning experiences, and provide time for enrichment into regular curricular experiences. This is achieved through curriculum compacting, textbook analysis, and removal of repetitious material.
 - Curriculum compacting allows students to be provided with challenging material above the level normally covered in the classroom.
 - Textbook analysis allows educators to determine which material is to be covered in greater depth.
 - After determining what students have already mastered, teachers use replacement activities. Time gained from eliminated content is then replaced with in-depth learning experiences on concepts and ideas that capture the essence of a topic or area of study through themes, patterns, and sequences.
- Enrichment Learning and Teaching is utilized through enrichment clusters. These clusters consist of nongraded groups of students who share com-

mon interests and come together during a designated time to pursue these interests. Enrichment clusters promote cooperation within the context of real-world problems that are organized around major disciplines.

An inductive approach to the problem-solving rather than traditional modes of teaching creates a learning environment that develops higher-order thinking skills. Supplementary services challenge students who are capable of working at the highest levels of their special interest areas (Renzulli & Reis, 1994b).

Structural Components of SEM

Three structural components help teachers apply Enrichment Learning and Teaching to the learning process. Type I and Type II enrichment experiences should identify situations that may lead to Type III experiences; which are the most advanced type of enrichment in the model and are pursued only on a voluntary and self-selected basis.

- Type I enrichment consists of general exploratory experiences that are designed to expose students to new topics and ideas, not ordinarily cov-

ered in the regular curriculum such as guest speakers, demonstrations, interest centers, and video presentations.

- Type II enrichment is designed to develop higher-level thinking processes and research and reference skills through activities such as research report writing or field trips.
- In Type III enrichment, students exchange their role as lesson-learner with that of firsthand inquirer and draw on the roles and skills of practicing professionals with a real audience. This can take the form of apprenticeships, mentorships, science fairs, stock trading, or other activities that engage the student in real world problem-solving situations (Renzulli & Reis, 1994b).

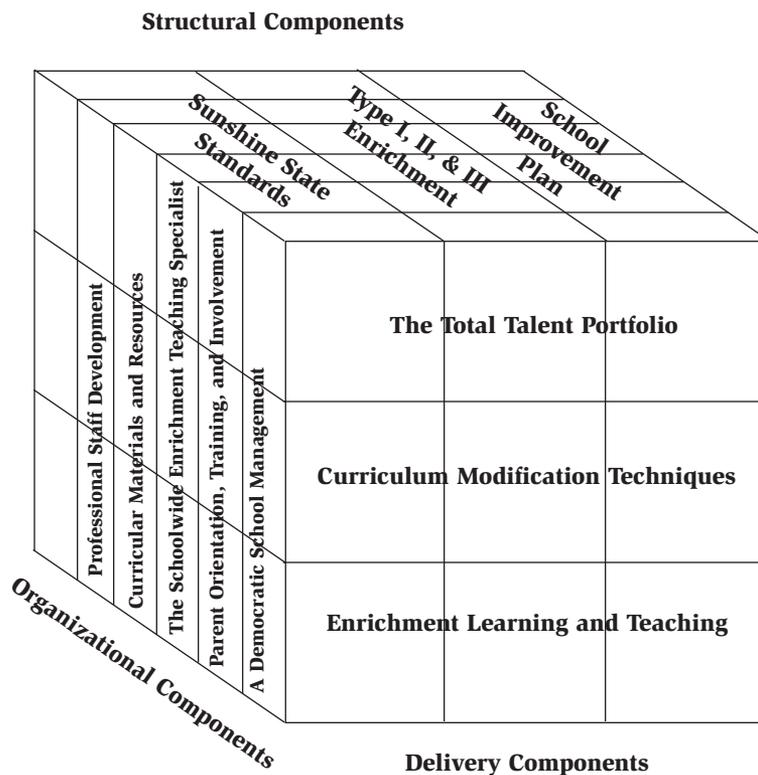
State curriculum guidelines such as Sunshine State Standards and the continuum of special services outlined in the School Improvement Plan add a dimension of accountability and alignment to the model.

Organizational Components of SEM

Several organizational components also contribute to the model's flexibility. The adaptability of SEM can be observed through the use of personnel and resources that already exist within an individual school site.

- Ongoing Professional Staff Development maintains school compliance with Florida Governor Jeb Bush's A Plus Plan as well as providing opportunities for genuine quality professional growth.
- Curriculum Materials and Resources are provided with school site money earmarked for special programs.
- The Schoolwide Enrichment Teaching Specialist position(s) can either be occupied by a select group of special education teachers, trained in the use of SEM, or by a single individual in charge of gifted programming at the school site. The function of this individual or individuals is to ensure the implementation of sound pedagogical techniques and consistent availability of enrichment activities for students.
- The Schoolwide Enrichment Team consists of stakeholders directly involved in, or responsible for, the

Figure 3. The Schoolwide Enrichment Model



Source: Adapted from *Schools for Talent Development: A Practical Plan for Total School Improvement* (p. 5) by Joseph S. Renzulli and Sally M. Reis, 1994b. Mansfield Center, CT: Creative Learning Press, Inc.

specified delivery of instruction to the identified talent pool. Team members might include school advisory council members, administration, teachers, and specialist(s). This team monitors and adapts the model as needed throughout the school year.

- Parent Orientation, Training, and Involvement enables parents and community members to become a part of Type III enrichment experiences by providing opportunities for firsthand inquiry based on their career or area of expertise. This support network also identifies areas of financial need and seeks outside assistance in obtaining the necessary resources.
- A Democratic School Management is required to ensure the academic freedom, flexibility, and creativity vital to the success of SEM.

Constructivist Foundation of SEM

SEM is based on the principles that each learner is unique, learning is more effective when it is enjoyed, learning is more meaningful when it is within the context of a real problem, and that knowledge results from students' own construction of meaning. The belief that students learn best when they are actively engaged in the learning process reflects the constructivist theory of learning (Gomez, 1996). The constructivist principles of instruction focus on enabling students to construct and use problem-solving strategies to develop their own meaningful understanding of ideas (Casareno et al., 1997). This reflects the cognitive perspective of curriculum development in which the mind assimilates new ideas into existing structures and accommodates those ideas by reorganizing this structure. This perspective contends that knowledge is constructed through use of prior

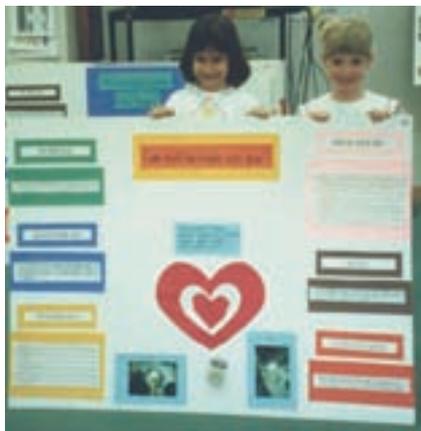
CURRICULUM MODIFICATION TECHNIQUES ARE DESIGNED TO ADJUST LEVELS OF LEARNING SO ALL STUDENTS ARE CHALLENGED, INCREASE THE NUMBER OF IN-DEPTH LEARNING EXPERIENCES, AND PROVIDE TIME FOR ENRICHMENT INTO REGULAR CURRICULAR EXPERIENCES.

knowledge and experience, which is then built on to process, interpret, and negotiate meaning and context. This process involves analyzing, interpreting, and reflecting on new information to construct meaning (Posner, 1995).

Research Supporting the Model

Recent investigations into how the brain learns and stores information has revealed that certain instructional delivery techniques enhance this process. Researchers suggest that educators strive to teach to both the left and right hemispheres of the brain. This research advocates the use of thematic lessons that provide meaningful content with frequent opportunities for reflection and review. This is based on the brain's ability to actively seek meaning through pattern-seeking mental programs. Education is further enhanced through the availability of enriched environments that encourage peer collaboration and application of concepts. Learners must talk about their learning as they learn. Learning activities should start and stop naturally, not on a schedule. Working memory in individuals under the age of 14 is limited to 5 to 10 min-

ENRICHMENT CLUSTERS PROMOTE COOPERATION WITHIN THE CONTEXT OF REAL-WORLD PROBLEMS THAT ARE ORGANIZED AROUND MAJOR DISCIPLINES.



Students used adhesive formulated from milk on their first-place winning entry in the science fair.

utes. Those individuals over the age of 14 possess a working memory of 10 to 20 minutes (Jensen, 1998).

Scientists assert that intelligence is a function of experience and that the basic element of thinking requires lived experience. Real learning that establishes meaningful cognitive connections, however, is not complete until output occurs in some personal expression of thought. Learning is the development of meaningful mental programs through the use of what we understand. When individuals learn, they understand less than 15% of what they hear or see. When individuals are given the opportunity to discuss the information, understanding increases to 40%. It is not until information is personally experienced and practiced that understanding increases to 80%. Maximum understanding, however, occurs only when individuals are given the opportunity to teach others what they have learned, increasing the percentage to 90% comprehension (Jensen, 1996).

***IN TYPE III ENRICHMENT,
STUDENTS EXCHANGE THEIR ROLE
AS LESSON-LEARNER WITH THAT
OF FIRSTHAND INQUIRER AND
DRAW ON THE ROLES AND SKILLS
OF PRACTICING PROFESSIONALS
WITH A REAL AUDIENCE.***

The area of the brain responsible for transferring information into long-term memory is the limbic system. This system is comprised of the hippocampus and the amygdala. The hippocampus oversees the formation and storage of memories. The amygdala processes the emotional content of information and memory. Rehearsal of information allows information to be placed in long-term memory. The intricate wiring of the limbic system shows that in order to learn, there must be a personal emotional connection to the information. Emotion must be ignited in order for remembering to occur (Sylwester, 1995).

Cognitive stimulation and mental activity produce new brain cells called neurons. The goal of learning is to make new and plentiful axon connections between these neurons. By age 10 the brain becomes “hardwired” in how it thinks and views the world. This process is a result of early cognitive experiences. A massive death of cognitive connections, called synapses, occurs by the age of puberty and results from a lack of interaction with the outside world (Brant, 1997). Scientists believe that early and continued exposure to hands-on, experiential learning can lessen the effect of this phenomenon.

Recent brain research supports the dynamics of the SEM as the most appropriate means of nurturing intelligence and fostering long-term memory (Renzulli & Reis, 1997). Through the identification and servicing of a larger population of talented students, this model increases the likelihood of increased student achievement among those students overlooked by traditional identification methods. Creativity and high task commitment are reinforced through activities that involve firsthand inquiry and critical thinking within the context of real-world problem solving that assist the brain in making cognitive connections (Jones, 1995).

SEM focuses on concept rather than skill by providing an enriched environment with opportunities for in-depth experience and investigation. Theme-based studies and flexible scheduling aspects of the program are based on the way the brain naturally constructs

***RESEARCHERS HAVE SHOWN THIS
MODEL TO BE AN EFFECTIVE
PROGRAM FOR ALL POPULATIONS
OF GIFTED STUDENTS—INCLUDING
THE UNDERSERVED.***

meaning. Creativity and high task commitment are reinforced through activities that involve firsthand inquiry and critical thinking within the context of real-world problem-solving that assist the brain in making cognitive connections. The curriculum modification utilizes teaching techniques that draw upon students’ ability to teach others, cross-grade mentorships, and occupational apprenticeships. These instructional methods allow understanding to reach 90% and increase the brain’s limbic system’s ability to store information in long-term memory. Curriculum compacting allows learners to avoid extraneous material and focus on central themes that are later used in the development of independent projects that ignite the emotions needed for long-term storage of information. Portfolios allow students to pursue a broad range of talent development and interests. This form of cognitive stimulation and mental activity creates plentiful axon connections between neurons and assists in brain cell production (Jensen, 1996).

The Schoolwide Enrichment Model (SEM) is a product of 15 years of research and field testing. It has been implemented in school systems worldwide, and extensive evaluations and research studies indicate its effectiveness. Research on the effectiveness of enrichment has been less widely reported because of the difficulty of measuring outcomes such as creative productivity, increases in affective processes, self-concept, and self-directed learning (Renzulli & Reis, 1994a). However, research studies conducted on SEM indicated positive growth for students in Grades 1 through 12, even those who were not identified

for gifted program services and those from underserved populations.

According to a study of the literature by Renzulli and Reis (1994a), SEM was shown to positively affect students' creative productivity, personal and social development, and reduce underachievement. In addition, researchers observed an increase in staff involvement and improved staff attitudes toward the gifted program as a result of the implementation of SEM.

Final Thoughts

Joseph Renzulli's Schoolwide Enrichment Model (SEM) allows schools to structure their gifted programs with a framework into which all other existing school programs can fuse. Renzulli (1998) stated, "The fastest way to get a polite but firm rejection from the central office is to threaten existing programs or policies to which decision makers have already been committed." Most efforts to make major changes in existing educational structures have failed. In times of political resistance and budget crunches there are no easy answers for transforming schools into places where talent development is valued and rigorously pursued (Renzulli, 1994/1995).

A good model in gifted education should inspire the development of strategies for creatively implementing activities that teach gifted students more effectively. Individual school sites must agree upon goals in order for the model to work successfully. Schools do not have to decide on one model to the exclusion of any other. One model should establish the goals for the program with other models used that are consistent with the objectives of the organizing model. SEM provides all students the opportunity to develop higher order thinking skills, pursue more rigorous content, and engage in firsthand investigation.

SEM takes a gentle and evolutionary approach to change with the vision that schools are places for talent development. Several researchers have shown this model to be an effective program for all populations of gifted students—including the underserved. Adoption of SEM allows for consistency in practice and delivery among programs. SEM out-

lines a clear set of goals and objectives, but provides a flexible planning structure for specific objectives that can be controlled by the individual school sites (Renzulli & Purcell, 1995).

Professionals need to take a look at issues that plague our progress in education and make initiatives for improvement and consistency. It is also difficult for teachers to step out of the role of being the knowledge-giver and assume the role of mentor and facilitator (Kirschenbaum, 1995). We are all stakeholders in education because today's schools mold the society of tomorrow into competent, creative, good citizens that preserve democracy and economic stability. Adoption of an organizing model like SEM provides consistency and allows for evolution within the discipline, while still allowing gifted programs a defensible means of pedagogy (Renzulli & Purcell, 1995).

References

- Brant, R. (1997). On using knowledge about our brain: A conversation with Bob Sylwester. *Educational Leadership*, 54(6), 16-19.
- Casareno, A. B., Ellis, E. S., Gregg, M., Larkin, M. J., Mayfield, P., Rountree, B. S., & Schichter, C. L. (1997). Partners in enrichment. *TEACHING Exceptional Children*, 29(4), 5-14.
- Florida Department of Education. (1999). *Florida statutes and state board of education rules*. Tallahassee: Author.
- Goleman, D., Kaufman, P., & Ray, M. (1993). *The creative spirit*. New York: Penguin Books.*
- Gomez, B. (1996). Service-learning and school-to-work strategies for revitalizing urban education and communities. *Education and Urban Society*, 28, 160-166.
- Heward, W. L., & Orlansky, M. D. (1992). *Exceptional children*. New York: Macmillan.*
- Jensen, E. (1996). *Brain-based learning*. Del Mar, CA: Turning Point Publishing.*
- Jensen, E. (1998). *Teaching with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jones, R. (1995). Smart brains. *American School Board Journal*, 182(11), 22-26.
- Kirschenbaum, R. J. (1995). An interview with Dr. Joseph Renzulli and Dr. Sally Reis. *Gifted Child Today*, 18(3), 26-29, 42.
- Posner, G. J. (1995). *Analyzing the curriculum*. New York: McGraw-Hill.*
- Renzulli, J. S. (1978). What makes giftedness? Reexamining a definition. *Phi Delta Kappan*, 60(3), 180-184, 261.

- Renzulli, J. S. (1994, December/1995, January). Teachers as talent scouts. *Educational Leadership*, 52(4), 75-81.
- Renzulli, J. S. (1998). A rising tide lifts all ships: Developing the gifts and talents of all students. *Phi Delta Kappan*, 80(2), 104-111.
- Renzulli, J. S., & Purcell, J. H. (1995). A schoolwide enrichment model. *The Education Digest*, 61(4), 14-16.
- Renzulli, J. S., & Reis, S. M. (1994a). Research related to the schoolwide enrichment triad model. *Gifted Child Quarterly*, 38(1), 7-14.
- Renzulli, J. S., & Reis, S. M. (1994b). *Schools for talent development: A practical plan for total school improvement*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., & Reis, S. M. (1997). *The schoolwide enrichment model: A how-to guide for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Salvia, J., & Ysseldyke, J. E. (1998). *Assessment*. Boston: Houghton Mifflin.*
- Slife, B. D., & Williams, R. N. (1995). *What's behind the research? Discovering hidden assumptions in the behavioral sciences*. Thousand Oaks, CA: Sage.*
- Sylwester, R. (1995). *A celebration of neurons: An educator's guide to the human brain*. Alexandria, VA: Association for Supervision and Curriculum Development.

BooksNow

To order the book marked by an asterisk (), please call 24 hrs/365 days: 1-800-BOOKS-NOW (266-5766) or (732) 728-1040; or visit them on the Web at <http://www.BooksNow.com/TeachingExceptional.htm>. Use VISA, M/C, AMEX, or Discover or send check or money order + \$4.95 S&H (\$2.50 each add'l item) to: Clicksmart, 400 Morris Avenue, Long Branch, NJ 07740; (732) 728-1040 or FAX (732) 728-7080.

Sherry Gibson, *Educational Leadership Ph.D. Program, Adrian Dominican School of Education, Barry University, Miami Shores, Florida; Instructional Specialist, Staff Development Department, Palm Beach County School District, West Palm Beach, Florida. Joan Efinger*, *Associate Professor and Clinical Nurse Specialist in Adult Mental Health, School of Nursing, Barry University, Miami Shores, Florida.*

Address correspondence to Sherry Gibson, Instructional Specialist, Staff Development Department, Suite C-124, 3308 Forest Hill Boulevard, West Palm Beach, FL 33406, (e-mail: gibson_s01@popmail.firm.edu).

TEACHING Exceptional Children, Vol. 33, No. 4, pp. 48-53.

Copyright 2001 CEC.