The Schoolwide Enrichment Model: A Focus on Student Creative Productivity, Strengths, and Interests

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How can we develop the potential of our academically able children? What services should be provided to students who are identified for gifted and talented programs, as opposed to those for all students? How can we help children learn to think creatively and value opportunities for creative, self-selected work? These questions lie at the core of the Schoolwide Enrichment Model (SEM), developed to encourage and develop creative productivity in young people. In this chapter, a chronology of how the SEM model was developed, a description of the original Enrichment Triad Model, and a summary of pertinent research highlights are presented (Renzulli & Reis, 1994). A description of the model is followed by an explanation of Renzulli Learning, a new SEM service delivery resource that uses a computer-generated profile of each student’s academic strengths, interests, learning styles, and preferred modes of expression.

The SEM promotes engagement using three types of enjoyable, challenging, and interest-based enrichment experiences. Separate studies on the SEM have demonstrated its effectiveness in schools with widely differing socio-economic levels and program organization patterns (Reis & Renzulli, 2003; Renzulli & Reis, 1997). The SEM was developed using Renzulli’s Enrichment Triad Model (Renzulli, 1977; Renzulli & Reis, 1985, 1997) as a core and has been implemented in thousands of schools across the United States and internationally (Bursa, 1998). The effectiveness of the SEM has been studied in over 30 years of research and field tests, suggesting that the model is effective at serving high-ability students and providing enrichment in a variety of educational settings.

A BRIEF HISTORY AND THEORETICAL UNDERPINNINGS OF THE SEM

The original Enrichment Triad Model (Renzulli, 1977), the curriculum core of the SEM, was developed in the mid-1970s and initially implemented as a gifted and
talented programming model in school districts in Connecticut and the northeast of the United States. The model, field-tested in several districts, proved to be quite popular and requests increased from all over the United States for visitations to schools using the model and for information about how to implement it. Thus began over 36 years of field-testing, research, and dissemination.

Present efforts to develop giftedness are based on a long history of theoretical or research studies dealing with human abilities (Sternberg, 1984, 1988, 1990; Sternberg & Davidson, 1986; Thorndike, 1921). A few additional general conclusions from the most current research on giftedness (Sternberg & Davidson, 2005) provide a critical background for this discussion of the SEM. The first is that giftedness is not a unitary concept, but there are many manifestations of gifts and talents, and therefore, single definitions cannot adequately explain this multifaceted phenomenon. The confusion about present theories of giftedness has led many researchers to develop new models for explaining this complicated concept. Most agree that giftedness is developed over time and that culture, abilities, environment, gender, opportunities, and chance contribute to the development of gifts and talents (Sternberg & Davidson, 2005).

The SEM focuses on the development of both academic and creative–productive giftedness. Creative–productive giftedness describes those aspects of human activity and involvement where a premia is placed on the development of original material and products that are purposefully designed to have an impact on one or more target audiences. Learning situations designed to promote creative–productive giftedness emphasize the use and application of information and thinking skills in an integrated, inductive, and real-problem-oriented manner. Our focus on creative productivity complements our efforts to increase academic challenge when we attempt to transform the role of the student from that of a learner of lessons to one of a first-hand inquirer who can experience the joys and frustrations of creative productivity (Renzulli, 1977).

Why is creative–productive giftedness important enough to lead to questioning of the traditional approach that has been used to select students for gifted programs on the basis of test scores? Some research (Neisser, 1979; Reis & Renzulli, 1982; Renzulli, 1978, 1986, 2005) tells us that there is much more to identifying human potential than the abilities revealed on traditional tests of intelligence, aptitude, and achievement. Accordingly, the SEM integrates opportunities for both academic giftedness and creative–productive giftedness.

THE THREE-RING CONCEPTION OF GIFTEDNESS

The SEM is based on Renzulli’s (1978) “three-ring” conception of giftedness, which defines gifted behaviors rather than gifted individuals (see Chapter 5 by Renzulli and Daloz in this book and visit http://www.gifted.unc.edu/sem/semart13.html for a diagram and more detail). This conception encompasses three interrelated components and is described as follows:

Gifted behavior consists of behaviors that reflect an interaction among three basic clusters of human traits—above average ability, high levels of task commitment, and high levels of creativity. Individuals capable of developing gifted behavior are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Persons who manifest or are capable of developing an interaction among the three clusters require a wide variety of educational opportunities and services that are not ordinarily provided through regular instructional programs.

(Renzulli & Reis, 1997, p. 8)

Longitudinal research supports the distinction between academic giftedness and creative–productive giftedness; for example, Perleth, Sierwald, and Heller (1993) found differences between students who demonstrated creative–productive as opposed to traditional academic giftedness. Renzulli’s research has suggested that gifted behaviors can be developed in certain people, at certain times, and under certain circumstances (Renzulli & Reis, 1997).

These questions have led us to advocate labeling the services students receive rather than labeling the students, for we believe that emphasis should shift from the traditional concept of “being gifted” (or not being gifted) to a concern about the development of gifted and creative behaviors in students who have high potential for benefiting from special educational opportunities, as well as the provision of some types of enrichment for all students. This change in terminology may also provide the flexibility in both identification and programming endeavors that encourages the inclusion of “at risk” and underserved students in our programs. Our ultimate goal is the development of a total school enrichment program that benefits all students and concentrates on making schools places for talent development for all young people.

THE ENRICHMENT TRIAD MODEL

The Triad Model (Renzulli, 1977), the curricular basis of the SEM, was originally designed as a gifted program model to encourage creative productivity on the part of young people by exposing them to various topics, areas of interest, and fields of study; and to further train them in applying advanced content, process-training (such as critical and creative thinking skills) and methodology training to self-selected areas of interest using three types of enrichment. The original Triad Model with three types of enrichment was implemented in programs designed for academically talented and gifted students.

For a diagram of the Enrichment Triad Model, see http://www.gifted.unc.edu/sem/semexec.html under “An Overview of the Enrichment Triad Model.”

Type I Enrichment

In the Enrichment Triad Model, Type I enrichment is designed to expose students to a wide variety of disciplines, topics, occupations, hobbies, persons, places, and events that would not ordinarily be covered in the regular curriculum. In schools using this approach, an enrichment team of parents, teachers, and students often organizes and plans Type I experiences by contacting speakers, organizing mini courses, or arranging other activities of potentially high interest to students that either complement or extend the regular curriculum. Type I enrichment is mainly designed to stimulate new interests leading to Type II or III follow-up on the part of students who become motivated by Type I experiences. Type I enrichment can be provided for general groups, or for students who have already expressed an interest in the topic area.
tained programming model in school districts in Connecticut and the northeast of the United States. The model, field-tested in several districts, proved to be quite popular and requests increased from all over the United States for visitations to schools using the model and for information about how to implement it. Thus began over 26 years of field-testing, research, and dissemination.

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Type II Enrichment

Type II enrichment includes materials and methods designed to promote the development of thinking and feeling processes. Some Type II enrichment is general, and usually provided to groups of students in their classrooms or in enrichment programs. This general Type II training includes the development of:

- creative thinking and problem solving, critical thinking, and affective processes;
- a wide variety of specific learning how-to-learn skills;
- skills in the appropriate use of advanced-level reference materials; and
- written, oral, and visual communication skills.

Other Type II enrichment is specific, as it cannot be planned in advance, and usually involves advanced instruction in an interest area selected by the student. For example, students who become interested in botany after a Type I on this topic would pursue advanced training in this area by reading advanced content in botany, collecting, planting, and carrying out plant experiments; and undertaking more advanced research methods training for those who want to go further and pursue a Type III in that area.

Type III Investigations

Type III enrichment involves students who become interested in pursuing investigation of a self-selected area and are willing to commit the time necessary for advanced content acquisition and process training in which they assume the role of a first-hand inquirer. Type III products can be completed by individuals or small groups of students and are always based on students' interests. Type III enrichment enables students to:

- apply interests, knowledge, creative ideas, and task commitment to a self-selected problem or area of study;
- acquire advanced-level understanding of the knowledge (content) and methodology (process) used within particular disciplines, artistic areas of expression, and interdisciplinary studies;
- develop authentic products that are primarily directed toward bringing about a desired impact upon a specified audience;
- develop self-directed learning skills in the areas of planning, organization, resource utilization, time management, decision making, and self-evaluation; and
- develop task commitment, self-confidence, and feelings of creative accomplishment.

THE SCHOOLWIDE ENRICHMENT MODEL

The SEM (Renzulli & Reis, 1997) has three major goals designed to challenge and meet the needs of high-potential, high-ability, and gifted students; and at the same time, provide challenging learning experiences for all students. These goals are:

- to maintain and expand a continuum of special services that will challenge students with demonstrated superior performance or the potential for superior performance in any and all aspects of the school and extracurricular program;
- to infuse into the general education program a broad range of activities for high-end learning that will challenge all students to perform at advanced levels, and allow teachers to determine which students should be given extended opportunities, resources, and encouragement in particular areas where superior interest and performance are demonstrated;
- to preserve and protect the positions of gifted education specialists and any other specialized personnel necessary for carrying out these goals.

With the Enrichment Triad Model as its theoretical and curricular basis, the SEM identifies a talent pool of approximately 10–15 percent of above-average-ability/high-potential students through a variety of measures, including achievement tests, teacher nominations, assessment of potential for creativity and task commitment, as well as alternative pathways of entrance (self-nomination, parent nomination, etc.). High achievement and/or intelligence quotient (IQ) test scores automatically include a student in the talent pool, enabling those students who are underachieving in their academic school work to be included (see http://www.gifted.uconn.edu/sem/semart04.html for more information on SEM identification).

The SEM has three service delivery components that provide services to students, including the Total Talent Portfolio, Curriculum Modification and Differentiation, and Enrichment (see http://www.gifted.uconn.edu/sem/semhand.html under "Schoolwide Enrichment Model"). These three services are delivered through the regular curriculum, a continuum of special services (see http://www.gifted.uconn.edu/sem/semhard.html under "Continuum of Special Services"), and a series of enrichment clusters.

The Total Talent Portfolio

In the SEM, teachers help students to understand more fully dimensions of their learning, their abilities, interests, and learning styles. This information, focusing on their strengths rather than deficits, is compiled in a management form called the "Total Talent Portfolio" that can be used subsequently to make decisions about talent development opportunities in general education classes, enrichment clusters, and/or in the continuum of special services (see http://www.gifted.uconn.edu/sem/semhard.html under "Dimensions of the Total Talent Portfolio"). The major purposes of the Total Talent Portfolio are:

- to collect information about students' strengths on a regular basis;
- to classify this information into the general categories of abilities, interests, and learning styles;
- periodically to review and analyze the information in order to make decisions about providing opportunities for enrichment experiences in the general education classroom, the enrichment clusters, and the continuum of special services; and
- to use this information to make decisions about acceleration and enrichment in school and in other educational, personal, and career decisions.

This expanded approach to identifying talent potentials is essential if we are to make genuine efforts to include a broader, more diverse group of students in enrichment
programs. This approach is also consistent with the more flexible conception of developing gifts and talents that has been a cornerstone of the SEM, addressing concerns for promoting more equity in special programs.

Curriculum Modification and Differentiation Techniques

The second service delivery component of the SEM is a series of curriculum modification techniques that can:

a. adjust levels of required learning so that all students are challenged;

b. increase the number of in-depth learning experiences; and

c. introduce various types of enrichment into regular curricular experiences.

The procedures that are used to carry out curriculum modification include curriculum differentiation strategies, such as curriculum compacting, and increased use of greater depth in regular curricular material (Reis et al., 1993; Renzulli, 1994). Curriculum compacting is an instructional differentiation technique designed to make appropriate curricular adjustments for students in any content area and at any grade level, through:

a. defining the goals and outcomes of a particular unit or segment of instruction;

b. determining and documenting which students already have mastered most or all of a specified set of learning outcomes; and

c. providing replacement strategies for material already mastered through the use of instructional options that enable a more challenging and productive use of the student’s time.

An example of how compacting is used is best represented in the form, “The Compactor” that serves as both an organizational and record-keeping tool (see http://www gifs.adu.com/siegel/curriculum/Compacting/section3.html). Teachers should fill out one compactor form per student, or one form for a group of students with similar curricular strengths. Completed compactor forms should be kept in students’ academic files, and updated on a regular basis.

Enrichment Learning and Teaching

The third service delivery component of the SEM, based on the Enrichment Triad Model, is enrichment learning and teaching that has roots in the ideas of a small but influential number of philosophers, theorists, and researchers such as Jean Piaget (1975), Jerome Bruner (1960, 1966), and John Dewey (1913, 1916). The work of these theorists, coupled with our own research and program development activities, have given rise to the concept we call enrichment learning and teaching. The best way to define this concept (Renzulli & Reis, 1997) is in terms of the following four principles:

1. Each learner is unique, and therefore, all learning experiences must be examined in ways that take into account the abilities, interests, and learning styles of the individual.

2. Learning is more effective when students enjoy what they are doing, and therefore learning experiences should be constructed and assessed with as much concern for enjoyment as for other goals.

3. Learning is more meaningful and enjoyable when content (i.e., knowledge) and process (i.e., thinking skills, methods of inquiry) are learned within the context of a real and present problem; therefore, attention should be given to opportunities to personalize student choice in problem selection, consideration of the relevance of the problem for individual students at the time the problem is being addressed, and authentic strategies for addressing the problem.

4. Some formal instruction may be used in enrichment learning and teaching, but a major goal of this approach to learning is to enhance knowledge and thinking skills acquired through formal instruction with student-determined applications of knowledge and skills that result from students’ own construction of meaning.

The ultimate goal is to replace dependent and passive learning with independent and engaged learning. Although all but the most conservative educators will agree with these principles, much controversy exists about how these (or similar) principles might be applied in everyday school situations. A danger also exists that these principles might be viewed as yet another idealized list of glittering generalities that cannot be manifested easily in schools that are entrenched in the deductive model of learning. Developing a school program based on these principles is not an easy task. Over the years, however, we have achieved success by gaining faculty, administrative, and parental consensus on a small number of easy-to-understand concepts and related services, and by providing resources and training related to each concept and service delivery procedure.

RESEARCH RELATED TO THE SEM

The effectiveness of the SEM has been studied through more than 20 years of research and field-testing (Gubbins, 1995; Olenchak, 1990; Olenchak & Renzulli, 1989; Reis & Renzulli, 2003; Renzulli & Reis, 1994). This research suggests that the model effectively serves high-ability students in a variety of educational settings, and in schools serving diverse ethnic and socio-economic populations. These studies also suggest that the pedagogy of the SEM can be applied to various content areas, implemented in a wide variety of settings, and used with diverse populations of students including twice-exceptional students (high-ability students with learning disabilities) and those who underachieve. Additionally, the research suggests that the use of the SEM results in more use of advanced reasoning skills and thinking skills, and students who are involved in SEM activities achieve at higher levels on traditional achievement tests than students who continue to use regular curricular or remedial activities. A summary and table of relevant research and pertinent references is available at http://www.gifted.adu.com/sem/rssem.html.

SCHOOL STRUCTURES OF SEM

The Regular Curriculum

The regular curriculum consists of everything that is a part of the predetermined goals, schedules, learning outcomes, and delivery systems of the school. The regular curriculum
might be traditional, innovative, or in the process of transition, but its predominant feature is that authoritative forces (i.e., policy makers, school councils, textbook adoption committees, state regulators) have determined that a regular curriculum should be the "centerpiece" of student learning. The regular curriculum is influenced by the implementation of SEM through differentiating the challenge level of required material, using curriculum compacting and the enrichment recommended in the Enrichment Triad Model (Renzulli, 1977). Although our goal in the SEM is to influence rather than replace the regular curriculum, the application of certain SEM components and related staff development activities has often resulted in substantial changes in both the content and instructional processes of the entire regular curriculum.

The Enrichment Clusters

The enrichment clusters, a second component of the SEM, are non-graded groups of students who share common interests, and who come together during specially designated time blocks during the school day to work with an adult who shares their interests, and who has some degree of advanced knowledge and expertise in the area. The enrichment clusters usually meet for a block of time weekly during a semester. All students complete an interest inventory developed to assess their interests, and an enrichment team of parents and teachers tally all of the major families of interests. Adults from the faculty, staff, parents, and community are recruited to facilitate enrichment clusters based on these interests, such as creative writing, drawing, sculpting, archaeology, and other areas. Training is provided to the facilitators who agree to offer the clusters. The main rationale for participation in one or more clusters is that "every child is special if we create conditions in which that child can be a specialist within a specialty group" (Renzulli, 1994, p. 70).

Enrichment clusters are organized around interdisciplinary themes or cross-disciplinary topics (e.g., a theatrical/television production group that includes actors, writers, technical specialists, costume designers). The clusters are modeled after the ways in which knowledge utilization, thinking skills, and interpersonal relations take place in the real world. Thus, all work is directed toward the production of a product or service. Cluster facilitators do not prepare a detailed set of lesson plans or unit plans in advance; rather, key questions are addressed by the facilitator and students:

1. What do people with an interest in this area (e.g., film making) do?
2. What knowledge, materials, and other resources do they need to do it in an excellent and authentic way?
3. In what ways can the product or service be used to have an impact on an intended audience?

Enrichment clusters incorporate the use of advanced content, providing students with information about particular fields of knowledge. The methods used within a field are also considered advanced content by Renzulli (1988a), involving the use of knowledge of the structures and tools of fields, as well as knowledge about the methodology of particular fields. Enrichment clusters are not intended to be the total program for talent development in a school, or to replace existing programs for talented youth. Rather, they are one component of the SEM that can stimulate interests and develop talent in the entire school population.

They can also serve as staff development opportunities as they provide teachers with an opportunity to participate in enrichment teaching, and subsequently to analyze and compare this type of teaching with traditional methods of instruction. In this regard, the model promotes a spillover effect by encouraging teachers to become better talent scouts and talent developers, and to apply enrichment techniques to general education classroom situations. Research indicates that enrichment clusters result in increased use of advanced thinking and research skills in gifted and other students in both clusters and regular classroom settings (Reis, Gentry, & Maxfield, 1998).

The Continuum of Special Services

A broad range of special services is the third school structure addressed in the model, as represented at http://www.gifted.uconn.edu/sem/semhand.html. Although the enrichment clusters and the SEM-based modifications of the regular curriculum provide a broad range of services to meet individual needs, a program for total talent development still requires supplementary services that challenge our most academically talented young people. These services, which cannot ordinarily be provided through enrichment clusters or the regular curriculum, typically include: individual or small-group counseling, acceleration, direct assistance in facilitating advanced-level work, arranging for mentorships with faculty members or community persons, and making other types of connections between students, their families, and out-of-school persons, resources, and agencies.

Direct assistance also involves setting up and promoting student, faculty, and parental involvement in special programs such as Future Problem Solving (an international education program focused on creative thinking skills), state and national essay competitions, mathematics contests, and many others. Another type of direct assistance consists of arranging out-of-school involvement for individual students in summer programs, on-campus courses, special schools, theatrical groups, scientific expeditions, and apprenticeships at places where advanced-level learning opportunities are available. Provision of these services is one of the responsibilities of the SEM teaching specialist or an enrichment team of teachers and parents. Most SEM teaching specialists spend two to three days a week in a resource capacity to the faculty, and three days providing directed services to students.

NEW DIRECTIONS IN THE SEM

Renzulli Learning® (see http://www.renzullilearning.com/default.aspx) is the newest component of the SEM. It is an interactive online program that aids in the implementation of the SEM by matching student interests, expression styles, and learning styles with a vast array of educational enrichment activities and resources, designed to enhance and challenge high-potential students' learning processes. Field (2009) studied the use of Renzulli Learning with students in both urban and suburban schools.
of the school population. The bad news is that the motivation for these changes is often based on mistaken beliefs:

a. that we can adequately serve high-potential students without some form of grouping;

b. that we do not need special program teachers;

c. that special program teachers are best utilized by going from classroom to classroom with a "shopping cart" of thinking skill lessons and activities.

The non-negotiables for implementing the SEM clearly contradict these beliefs.

1. The first non-negotiable is that anyone who tries to implement an SEM program has read our book entitled The Schoolwide Enrichment Model: A How-to Guide for Educational Excellence (Renzulli & Reis, 1997). A thorough knowledge of the goals and components is essential.

2. Although we have advocated a larger talent pool than traditionally has been the practice in gifted education, and a talent pool that includes students who gain entrance on both test and non-test criteria (Renzulli, 1988b), we firmly maintain that the construction of services necessary for the development of high-level potentials cannot take place without identifying and documenting individual student abilities. Targeting and documenting does not mean that we will simply play the same old game of classifying students as "gifted" or "not gifted," and let it go at that. Rather, targeting and documenting are part of an ongoing process that produces a comprehensive and always evolving Total Talent Portfolio documenting student abilities, interests, and learning styles. All information in the TTP should be used to make individual programming decisions about present and future activities, and about ways in which we can enhance and build upon documented strengths. This information enables educators to recommend enrollment in advanced courses or special programs (e.g., summer programs, college courses), and provides direction in developing specific interests and resulting projects within topics or subject-matter areas with potential for advanced learning.

3. Enrichment specialists must devote a majority of their time to working directly with talent pool students, and this time should primarily be devoted to facilitating individual and small-group investigations (i.e., Type IIIs). Some of their time with talent pool students can be devoted to stimulating students' interest to conduct Type IIIs through advanced Type I experiences and advanced Type II training, focusing on learning the research skills necessary to carry out investigations in various disciplines.

4. Schoolwide Enrichment Model programs must have specialized, trained personnel who work directly with talent pool students, to teach advanced coursework and to coordinate enrichment services in cooperation with a schoolwide enrichment team. The old cliche, "something that is the responsibility of everyone ends up being the responsibility of no one," has never been more applicable than when it comes to enrichment or gifted education specialists. The demands made on general education classroom teachers, especially during these times of mainstreaming, heterogeneous grouping, and accountability testing leave precious little time to challenge our most able learners and to accommodate interests that clearly are
above and beyond the regular curriculum. In a study completed by researchers at The National Research Center on the Gifted and Talented, Westberg, Archambault, Dobyns, and Salvin (1993) found that in 84 percent of general education classroom activities, no differentiation was provided for identified high-ability students. Accordingly, time spent in enrichment programs with specialized teachers is even more important for high-potential students.

Related to the last non-negotiable are the issues of teacher selection and training and the scheduling of special program teachers. Providing unusually high levels of challenge requires advanced training in the discipline(s) that one is teaching, in the application of process skills, and in the management and facilitation of individual and small-group investigations. It is these characteristics of enrichment specialists and the services they provide rather than the mere grouping of students that have resulted in achievement gains and high levels of creative productivity on the parts of special program students.

CONCLUSION

The current emphasis on testing connected to federal legislation, the standardization of curriculum, and the drive to increase achievement scores have produced major changes in education during the last two decades. The absence of opportunities to develop creativity in all young people, and especially in talented students, is troubling. In the Schoolwide Enrichment Model, students are encouraged to become partners in their own education and develop a passion and joy for learning. As students pursue creative enrichment opportunities, they learn to acquire communication skills and to enjoy creative challenges. The SEM provides the opportunity for students to develop their gifts and talents and to begin the process of lifelong learning, culminating, we hope, in creative productive work of their own selection as adults.

REFERENCES


