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

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Abstract

This article includes an introduction to the Schoolwide Enrichment Model (SEM), with its three components: a total talent portfolio for each child, curriculum differentiation and modification, and enrichment opportunities from the Enrichment Triad Model. Also included is a brief history of the SEM and a summary of 30 years of research underlying this programming model in gifted education and talent development. Exciting new directions in SEM are introduced, including Renzulli Learning, an internet-based tool that identifies students' interests, learning styles, and expression styles that subsequently matches students with thousands of differentiated resources.

We have spent the last 30 years conducting research about the kinds of services that should be provided to students who are identified for gifted and talented programs. We have been particularly interested in the services that should be made available for high-end learners, as opposed to those that should be given to all students. Don't all children have the right to learn and use critical and creative thinking skills? Shouldn't all children benefit from some opportunities for enriched learning experiences? We have been also researching how enrichment and gifted programs can be used to develop academic gifts and talents.

We also have retained our interest in creative productivity in gifted and high potential children and whether we can further develop this productivity if students participate in enrichment or gifted programs. Development of the Schoolwide Enrichment Model has been guided by our beliefs that we can help students grow by providing them opportunities for creative, self-selected work. Students who complete such work are more likely to pursue similar opportunities in college and career. This will increase our world's talent pools of engaged, highly productive scholars, researchers, physicians, engineers, architects, authors, and creative producers in every field of interest. These are the beliefs that have guided our work in the development of the SEM.

The Schoolwide Enrichment Model

The Schoolwide Enrichment Model(SEM) was developed to encourage and develop creative productivity in young people. In this article, we present a brief chronology of how the SEM was developed, a description of the original Enrichment Triad Model, and a brief summary of pertinent research highlights (Renzulli & Reis, 1994). A description of the model is followed by an explanation of 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. After this strength-based profile is completed, a highly sophisticated search engine matches carefully selected Internet resources with each student's profile. This breakthrough in technology enables teachers to provide true differentiated instruction and enrichment and saves thousands of hours of teachers' time in implementing the SEM.

The SEM promotes engagement through the use of three types of enrichment experiences that are enjoyable, challenging, and interest-based. The SEM developed using Renzulli's Enrichment Triad (Renzulli, 1977; Renzulli & Reis, 1985, 1997) as a core. It has been implemented in thousands of schools across the United States (Burns, 1998) and interest in this approach has continued to expand internationally. 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, including schools serving culturally diverse and low socioeconomic populations (https://gifted.uconn.edu/schoolwide-enrichment-model/semresearch/).

A Brief History of the SEM

The original Enrichment Triad Model (Renzulli, 1976), 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, initially field-tested in several districts, proved to be quite popular, and requests were received from all over the country for visitations to schools using the model and for information about how to implement the model. A book about the Enrichment Triad Model (Renzulli, 1977) was published, and increasing numbers of districts began implementing this approach. It was at this point that a clear need was established for research about the effectiveness of the model and for other vehicles that could provide technical assistance for interested educators to help develop programs in their schools. Different types of programs based on The Enrichment Triad were designed and implemented by classroom, gifted education, and enrichment teachers. Thus began almost 30 years of field-testing, research, and dissemination.

Theoretical Underpinnings of the SEM

Present efforts to develop giftedness are based on a long history of previous theoretical or research studies dealing with human abilities (Sternberg, 1984, 1988, 1990; Sternberg & Davidson, 1986), and a few 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 definition 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, but 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 premium 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 (content) and thinking skills in an integrated, inductive, and real-problem-oriented manner. In the SEM, traditional academic gifts are developed using curriculum compacting, acceleration, differentiated instruction, and various forms of academic enrichment. 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 firsthand inquirer who can experience the joys and frustrations of creative productivity (Renzulli, 1977). This approach is quite different from the development of giftedness that tends to emphasize deductive learning; advanced content and problem solving; and the acquisition, storage, and retrieval of information. In other words, creative-productive giftedness enables children to work on issues and areas of study that have personal relevance to the student and can be escalated to appropriately challenging levels of investigative activity.

Why is creative-productive giftedness important enough to question the traditional approach that been used to select students for gifted programs on the basis of test scores? Why do some people want to rock the boat by challenging a conception of giftedness that can be numerically defined by simply giving a test? The answers to these questions are simple and yet compelling. A review of research literature (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. Furthermore, history tells us it has been the creative and productive people of the world, the producers rather than consumers of knowledge who have been recognized in history as "truly gifted" individuals. Accordingly, the SEM integrates opportunities for academic giftedness as well as creative productive giftedness.

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. This conception encompasses three interrelated components (see Figure 1) 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)

Our research on the SEM has led us to advocate a fundamental change in the ways we believe that the concept of giftedness should be viewed. For 30 years, we have advocated labeling the services students receive rather than labeling the students, for we believe that a shift should occur from an emphasis on 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 underachieving 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. This approach allows us to use the word, "gifted," in descriptive program materials. This use of terminology is important for public relations purposes and for reimbursement in states that provide supplementary funding for special programs. At the same time, however, it avoids the hard core labeling which is usually a source of controversy, especially in communities with large numbers of high achieving students. We also recommend strength-oriented profiles for each student that document advanced characteristics in achievement, interests, learning styles, and preferred modes of expression. This approach also gives direction to strength-based services. Thus, for example, if a student is two or three grade levels above his or her peers in math, there can be little argument about providing one or more services such as curriculum compacting, an advanced math group, special mentoring opportunities, grade skipping, or enrollment in a college or online course. Or if a student has demonstrated outstanding examples of creative writing or film making, we have a rationale for targeted special services. This approach is obviously a departure from hard-core labeling of gifted or not gifted, but it is much more acceptable because it just "makes sense!"

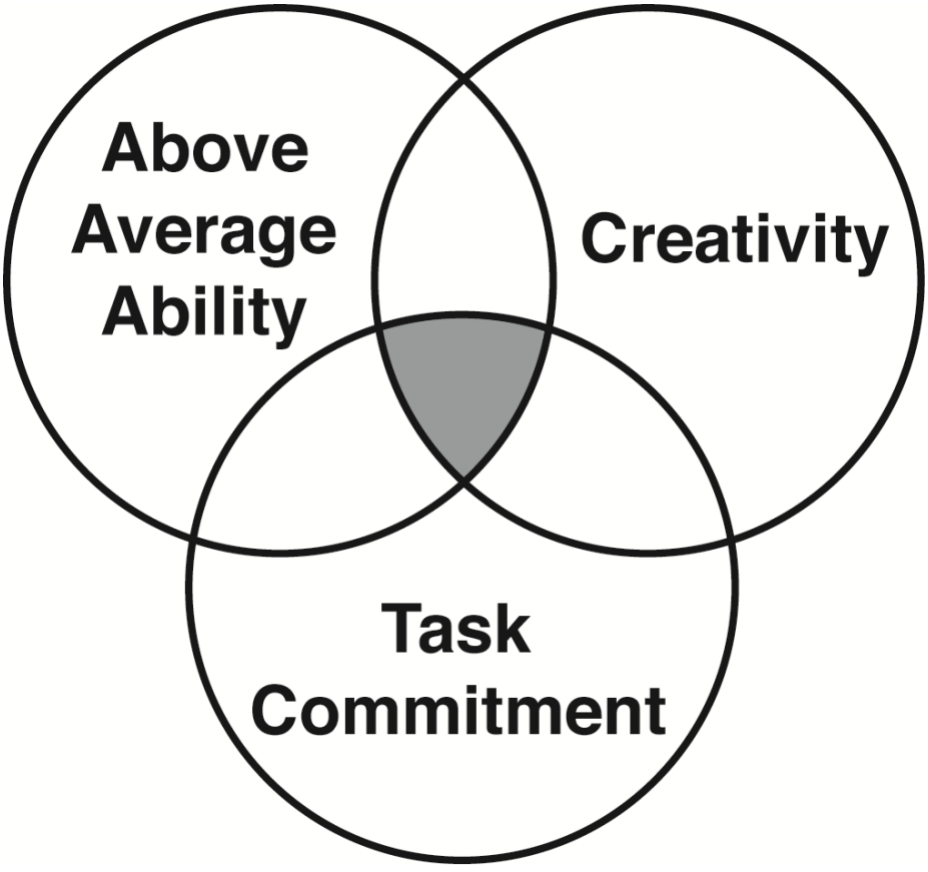

Figure 1: The three ring conception of giftedness

The Enrichment Triad Model

The Enrichment Triad Model (Renzulli, 1977), the curricular basis of the SEM, was originally designed as a gifted program model that would encourage creative productivity on the parts of young people by exposing them to various topics, areas of interest, and fields of study and train them to apply advanced content, process-training skills, and methodology to self-selected areas of interest using three types of enrichment. The original Triad Model with three types of enrichment (see Figure 2) was initially implemented in programs designed for academically talented and gifted students.

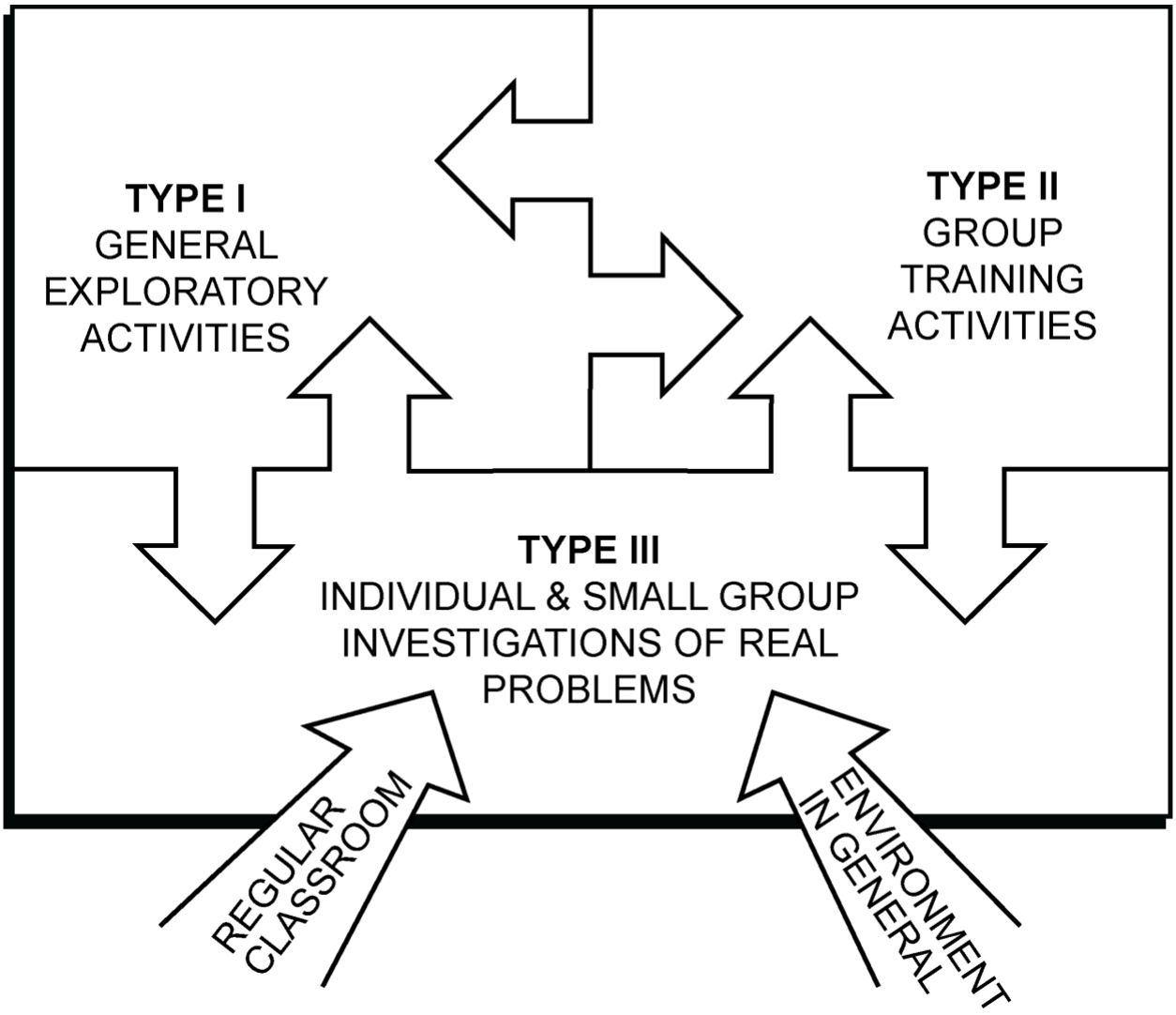

Figure 2: Enrichment triad model

In the Enrichment Triad Model, Type I enrichment exposes 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;

arranging mini-courses; conducting enrichment clusters, demonstrations, and performances; using Internet resources; or by ordering and distributing films, slides, CDs and DVDs videotapes, or other media. Type I enrichment is mainly designed to stimulate new interests, leading to Type II or III follow-up on the parts of students who become motivated by Type I experiences.

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 (a) creative thinking and problem solving, critical thinking, and affective processes; (b) a wide variety of specific learning how-to-learn skills; (c) skills in the appropriate use of advanced-level reference materials; and (d) 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 and compiling, planning, and carrying out plant experiments. Those who want to go further and pursue a Type III in that area would be provided with more advanced methods training (Renzulli, 1982).

Type III enrichment involves students who become interested in pursuing 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 enrichment provides opportunities for applying interests, knowledge, creative ideas, and task commitment to a self-selected problem or area of study. It also enables students to acquire advanced levels of knowledge (content) and methodology (process) used within particular disciplines, artistic areas of expression, and interdisciplinary studies. When students do Type III studies, they develop authentic products with impacts upon specified audiences as well as self-directed learning skills in planning, organization, resource utilization, time management, decision making and self-evaluation. Perhaps most importantly, they develop task commitment, self-confidence, and feelings of creative accomplishment.

Type III products can be completed by individual or small groups of students and are always based on students' interests. A book written by a fifth grade student named Gretchen from Haynes School in Sudbury, MA, provides one example of a Type III study. Gretchen had two passionate interests as a fifth grader: the literature of Louisa May Alcott and cooking. Gretchen had read all of Louisa May Alcott's books and identified in each book any specific food mentioned. She researched the recipes of the time that would have been used to make the food (such as buckwheat cakes), field-tested each recipe (including making substitutions for ingredients no longer available), and created an original cookbook. Gretchen spent a year and a half working on a cookbook that combined vignettes of scenes from Little Women and Little Men with many authentic 19th century recipes for making the foods described in the novels. The Louisa May Alcott Cookbook was accepted and became the first book contracted by Little Brown with a child author. In Gretchen's Type III, both the process she used and the final product involved high levels of creative engagement and clear evidence of creative work.

During the time that we were experimenting with and watching the success of many gifted and enrichment programs based on the Enrichment Triad Model, we were also working on methods for differentiating curriculum (curriculum compacting) and in matching the needs of

academically talented students with appropriate levels of challenge and interest-based materials. The development of individual educational plans for academically gifted and talented students became a priority in our research and a guidebook that recommended interest and learning styles analyses of students, coupled with curriculum compacting and modification, was published (Renzulli & Smith, 1978). It was also during this time that we became increasingly interested in identification procedures that would include greater numbers of academically talented and creative students who could excel and would benefit from participating in Enrichment Triad Programs.

Expanded Identification and the SEM Model

As our experience increased with Triad programs, so did our concern about students who were not being identified to participate in these programs. These students were often excluded from enrichment programs because they did not score in the top 1–3% of the population in achievement or intelligence tests, but their teachers believed they would excel when they had the opportunity to become involved in high levels of creative productive work. We also found students who were reading and doing mathematics at an accelerated level who were missing the cut-off scores for inclusion in the gifted program by a point or two. Earlier research by Torrance (1962, 1974) demonstrated that students who excelled on creativity measures achieved well in school and on achievement tests, but were not selected for gifted programs because their aptitude scores were below the cutoff for admission. Research by Reis (1981) found that when a broader pool of students (15% of the general population identified as the talent pool) participated in Types I and II enrichment experiences, they completed Type III products that were of equal or higher quality as those of students who were traditionally identified as "gifted" because they scored in the top 3–5% in aptitude. This research led to field tests and trials with the Revolving Door Identification Model (RDIM; Renzulli, Reis, & Smith, 1981), in which a talent pool (10–15%) of students received regular enrichment experiences and the opportunity to "revolve into" Type III creative productive experiences. In the RDIM, students were selected for participation in the talent pool on the basis of multiple criteria, including achievement scores, teacher nomination, creativity, and other locally selected indicators. Once identified and placed in the talent pool through the use of multiple criteria students were observed in classrooms and enrichment experiences for signs of advanced interests, creativity, or task commitment. This part of the identification process, called "action information," was found to be an instrumental part of assessing students' interests and motivating them to become involved in Type III creative products. In the RDIM, students did not revolve in and out of the gifted program, but rather revolved in and out of various levels of enrichment. Further support for this approach was contributed by Kirschenbaum (1983) and Kirschenbaum and Siegle (1993) who demonstrated that students who are rated highly on measures of creativity tend to do well in school and on measures of achievement. The development of the expanded identification on the RDIM led to the need for new guidelines about how the components of the previous Triad and the RDIM could be implemented. The resulting work was entitled The Schoolwide Enrichment Model (SEM; Renzulli & Reis, 1985, 1997).

The Schoolwide Enrichment Model (SEM)

The Enrichment Triad Model serves as the theoretical and curricular basis for the SEM that is currently implemented in a variety of settings, including gifted programs, enrichment programs, magnet and charter schools, and theme schools. In the SEM, a talent pool of approximatelyl0–15% of above average ability/high potential students is identified through a variety of measures including: achievement tests, teacher nominations, assessment of potential for creativity and task commitment, and alternative pathways of entrance (self- nomination, parent nomination, etc.). High achievement tests and/or IQ test scores automatically place a student in the talent pool, enabling those students who are underachieving in their academic schoolwork to be included.

Once students are identified for the talent pool, they are eligible for several kinds of services. First, interest and learning styles assessments are used in the development of a Total Talent Portfolio for each talent pool student. Informal and formal methods are used to identify and assess students' interests and to encourage students to further develop and pursue these interests in various ways. Learning style preferences include: projects, independent study, teaching games, simulations, peer teaching, computer-assisted instruction, lecture, drill and recitation, and discussion. Second, curriculum compacting and other forms of differentiation and curricular modification are provided to all eligible students. This elimination or streamlining of curriculum enables above average students to avoid repetition of previously mastered work and guarantees mastery while simultaneously finding time for more appropriately challenging activities (Reis, Burns, & Renzulli, 1992; Renzulli, Smith, & Reis, 1982). A form, entitled the Compactor, (Renzulli & Smith, 1978) is used to document which content areas have been compacted and what alternative work has been substituted. Third, a series of enrichment opportunities organized around the Enrichment Triad Model offers three types of enrichment experiences through various forms of delivery, including enrichment clusters. Type I, II, and III enrichment are offered to all students; however, Type III enrichment is usually more appropriate for students of higher levels of ability, interest, and task commitment.

The SEM (Renzulli & Reis, 1997) has three major goals that are 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: (a) 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; (b) 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; and (c) to preserve and protect the positions of gifted education specialists and any other specialized personnel necessary for carrying out these goals.

The SEM, outlined in Figure 3, has three service delivery components that provide services to students: the Total Talent Portfolio, curriculum modification and differentiation, and enrichment. These three services are delivered through the regular curriculum, a continuum of special services, and a series of enrichment clusters.

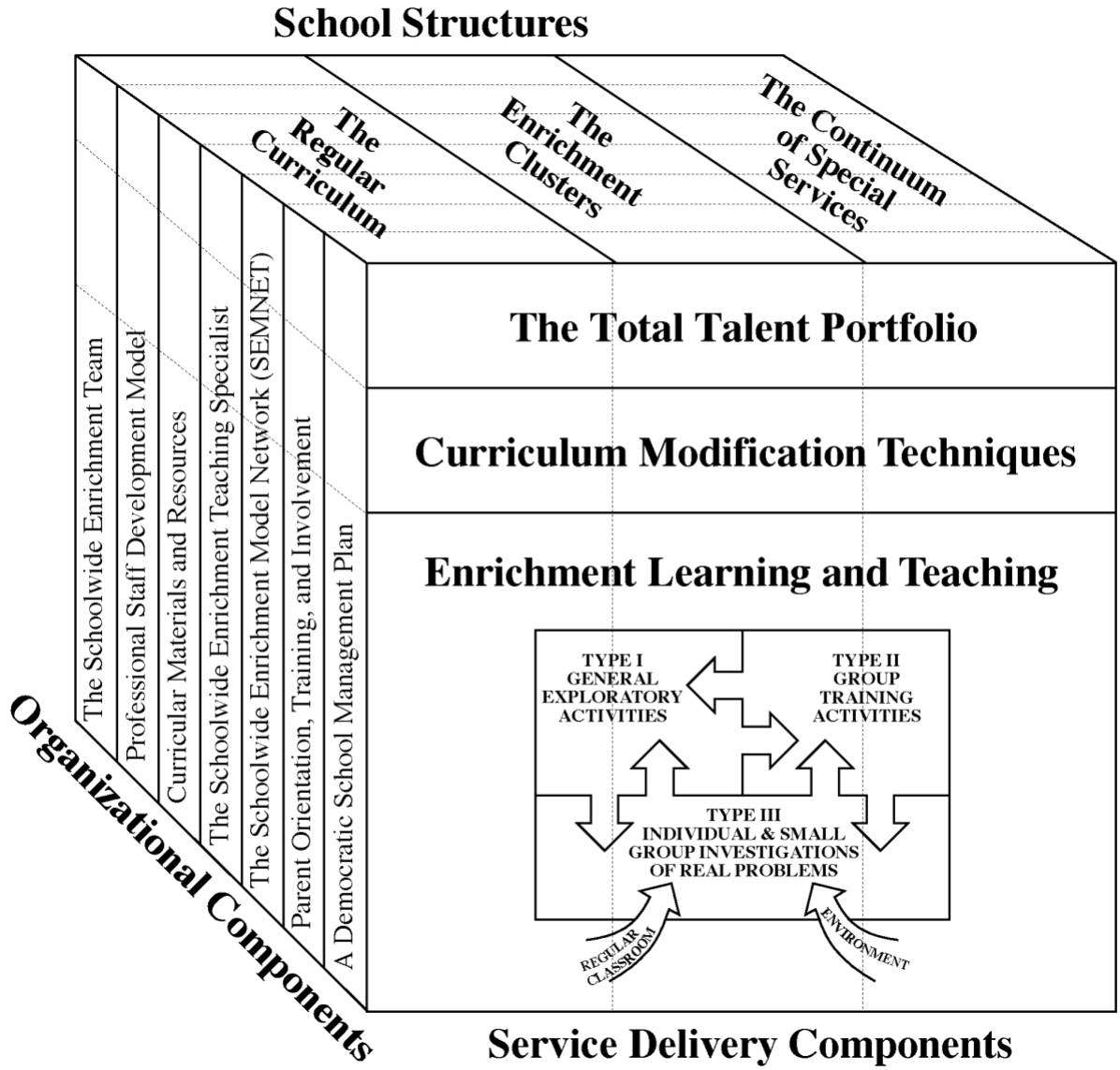

Figure 3: Schoolwide Enrichment Model

The Total Talent Portfolio

In the SEM, teachers help students better understand three 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 subsequently used to make decisions about talent development opportunities. The major purposes of the Total Talent Portfolio are: (a) to collect information about students' strengths on a regular basis; (b) to classify this information into the general categories of abilities, interests, and learning styles; (c) to periodically 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 (d) to use this information to make decisions about acceleration and enrichment in school and in later

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 & 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 into 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 curricular 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.

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, has given rise to the concept we call enrichment learning and teaching. The best way to define this concept 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, 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 skill acquisition that is gained through formal instruction with applications of knowledge and skills that result from students' own construction of meaning. (Renzulli, 1994)

The ultimate goal of learning guided by these principles is to replace dependent and passive learning with independence 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. Numerous research studies and field tests in schools with widely varying demographics have been conducted (Renzulli & Reis, 1994). These studies and field tests provided opportunities for the development of large amounts of practical know-how that are readily available for schools that would like to implement the SEM. They also have shown that the SEM can be implemented in a wide variety of settings with various populations of students including high ability students with learning disabilities and high ability students who underachieve in school.

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 (e.g., policy makers, school councils, textbook adoption committees, state regulators) have determined that the regular curriculum should be the "centerpiece" of student learning. Application of the SEM influences the regular curriculum in the differentiation of the challenge level of required material using curriculum compacting and the enrichment recommended in the Enrichment Triad Model (Renzulli, 1977) integrated in regular curriculum activities. 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 resulted in substantial changes in both the content and instructional processes of the entire regular curriculum.

The Enrichment Clusters

Enrichment clusters are non-graded groups of students who share common interests, and who come together during specially designated time blocks during school 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, archeology, and other areas. Training is provided to the facilitators who agree to offer the clusters, and a brochure is developed and sent to all parents and students that discusses student interests and select choices of enrichment dusters. Students select their top three choices for the clusters and scheduling is completed to place all children into their first, or in some cases, second choice. Like extracurricular activities and programs such

as 4-H and Junior Achievement, the main rationale for participation in one or more clusters is that students and teachers want to be there. All teachers (including music, art, physical education, etc.) are involved in teaching the clusters and their involvement in any particular cluster is based on the same type of interest assessment that is used for students in selecting clusters of choice.

The model for learning used with enrichment clusters is based on an inductive approach to solving real-world problems through the development of authentic products and services. The Enrichment Triad Model is used to encourage the learning of specific methods and the development of higher order thinking skills, both authentically applied to creative and productive situations. Enrichment clusters promote real-world problem solving, focusing on the belief 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 various characteristics of differentiated programming for gifted students on which the Enrichment Triad Model (Renzulli, 1977) was originally based, including the use of major disciplines, 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, direction is provided by three key questions addressed in the cluster by the facilitator and the 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 is also considered advanced content by Renzulli (1988), 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 spill-over effect by encouraging teachers to become better talent scouts and talent developers and to apply enrichment techniques to general education classroom situations.

The Continuum of Special Services

A broad range of special services is the third school structure targeted by the model. 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 who are capable of working at the highest levels. These services, which cannot ordinarily be provided in enrichment clusters or the regular curriculum, typically include: individual or small group counseling; acceleration; direct assistance in facilitating advanced level work; mentorships with faculty members or community persons; and other types of connections between students, their families, and out-of-school persons, resources, and agencies.

Special services include setting up and promoting student, faculty, and parental involvement in special programs such as Future Problem Solving; Odyssey of the Mind; the Model United Nations program; state and national essay competitions; and mathematics, art, and history contests. 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 Schoolwide Enrichment teaching specialist or an enrichment team of teachers and parents who work together to provide options for advanced learning. Most schoolwide enrichment teaching specialists spend 2 days a week in a resource capacity to the faculty and 3 days providing direct services to students.

New Directions in the SEM: Using Renzulli Learning™ to Provide Enriched, Differentiated Learning for All Students

Renzulli Learning™ is the newest tool for the implementation of the SEM. It is an interactive online program that matches student interests, expression styles, and learning styles with a vast array of enrichment educational activities and resources designed to enrich gifted and high potential students' learning process. Using Renzulli Learning™, students explore, discover, learn, and create independently and in a safe environment using the SEM married to the most current technology resources. Renzulli Learning™ consists of a series of services that represent the various components of SEM.

The Renzulli Learning System (RLS) Profiler is an interactive assessment tool that identifies students' talents, strengths, interests, and preferred learning and expression styles, providing a comprehensive student learning profile. The RLS Profiler consists of carefully selected, user-friendly, research-based questions related to a student's particular interests. The system assesses students' interests in 13 major categories including: Performing Arts, Writing and Journalism, Mathematics, History, Fine Arts, Sciences, Athletics and Sports, Photography/Video, Social Action, Business, Technology, Literature/Reading, and Foreign Languages.

Students' expression styles are also assessed, whether they are writing, oral debates, stage performance, sculpture, dance, or a host of other expressive techniques; the student shares how he or she most enjoys interacting with the world. The Profiler considers 10 specific expression styles: Written, Oral, Hands-on, Artistic, Audio-Visual/Display, Dramatic, Service, Technological, Musical, and Commercial.

Renzulli Learning™ also assesses learning styles, or the ways students like to learn new information, ranging from individualized study to large group learning, from paper-based review to digital technology, focusing on 9 learning styles: Lecture, Computer-Assisted Instruction, Discussion, Peer Tutoring, Group Work, Learning Games, Technology, Simulations, and Independent Studies. Students answer questions about their interests, learning and product styles in 30–50 minutes, and the Profiler produces an accurate, printable assessment of each student's interests, abilities, and how that individual best learns. Even better, the RLS Profiler reflects the world of learning from the students' perspective, not necessarily that of their parents or teachers. This makes it possible to provide enrichment based on the Enrichment Triad Model with optimum effectiveness and efficiency. By representing the student's view, the Profiler assessment becomes a major productivity tool for teachers—placing them literally months ahead in their efforts to understand each child's learning style(s) and to be able to respond to and incorporate those styles as part of an effective learning plan.

The Renzulli Enrichment Database includes thousands of carefully screened, grade-level appropriate, child-safe enrichment opportunities that are regularly monitored, updated, enhanced, and expanded at a rate of over 500 per month. The Enrichment Database provides teachers with a vast storehouse of differentiated enrichment materials and resources for students with varying ability levels, interests, learning styles, and preferred styles of expression. To truly individualize and differentiate for students of various needs, teachers using the RLS have easy access to a virtually unlimited supply of enrichment activities and resources that make such differentiation possible. The data bases are organized into 14 separate categories, representing a wide range of educational activities. These include: Virtual Field Trips, Real Field Trips, Creativity Training Activities, Training in Critical Thinking, Independent Study Options, Contests and Competitions, Websites Based on Personalized Interests, High Interest Fiction Books, High Interest Non-Fiction Books, How-To Books for Conducting Research and Creative Projects, Summer Program Options in Special Talent Areas, Online Activities and Research Skills, Research Skills, Videos, and DVDs. All enrichment database entries are carefully researched by Renzulli Learning™ educational specialists, screened for grade-level applicability, and coded as one of the 14 enrichment categories. Elements of each category are then matched to students' top three choices of interests, learning and product styles, providing each student with a unique personalized selection of enrichment opportunities. The search automatically links each student's profile (interests, learning styles, and product styles) with the Enrichment Database to generate a customized list of activities designed to appeal to that student's grade level, interests, and abilities, as well as his or her learning and expression styles.

A secondary self-directed search enables students and teachers to enter a set of one or more self-selected keywords to locate specific database entries from their own individual activity list or from the entire database. This feature is particularly useful for selecting a particular topic for project work or for in-depth study. A global search capability enables students and teachers to access the entire Enrichment Database, across all interests, expression styles, learning styles, or even grade levels. This permits students with above-grade capabilities to locate and pursue new activities and threads of interest, all within the safety of a prescreened information environment. It also helps teachers identify possible projects and other curriculum enhancements within the same space their students explore. The RLS combined search facilities offer children an extensive, expanding menu of learning opportunities and offer teachers a new and valuable resource for their classroom preparation.

The Total Talent Portfolio provides a complete record of the student's online learning activities and academic progress and an online portfolio to save his or her best work. The Talent Portfolio enables students to create and post writings, Internet links, images, and other work on projects or areas of interest.

The Wizard Project Maker is an online project-management tool that helps students to create their own high interest projects and store them in their own Talent Portfolio. Over 200 Super Starter Projects are being added to the Project Maker to enable students to begin the process of doing projects on a small-scale, short term basis that may later enable them to initiate and complete projects more independently.

Renzulli Learning™ also offers a series of management tools designed to help teachers, administrators, and parents follow individual students' learning progression, analyze group usage patterns, and formulate lesson plans and classroom organization. The RLS features a collection of administrative reports that make the process of enriching each student's learning process more efficient. These tools enable teachers, parents, and other mentors to learn more about their students and to make grouping and enrichment easier. Reports include printable listings of individual and group interests and individual and group summaries of student expression styles and learning styles. Also available are teacher learning maps for enrichment differentiation activities; downloadable enrichment projects; downloadable creativity training activities; background articles by leading educational practitioners; lesson plans for using the RLS effectively; and outstanding websites for teachers.

These components provide both students and teachers with unique educational experiences directly suited to each individual's learning profile, while simultaneously giving parents insights about their child's enrichment needs. Renzulli Learning™ also helps all teachers better understand and know their students and thus meet their diverse needs. Perhaps the most significant aspect of the RLS is its emphasis on a student's strengths, celebrating and building upon students' academic abilities and interests, in the tradition of SEM. This online program matches students' interests, learning styles, expression styles, abilities, and grade level to thousands of opportunities designed to provide enriched, challenging learning. It gives teachers a virtual equivalent of multiple "teaching assistants" in their classrooms—each and every day—to implement the SEM. Teachers can also access exciting websites to help their own teaching and download creative activities to use in their classroom. They can monitor students' progress by accessing their profiles and viewing all of the activities and assessments that they have completed. Teachers using this system can even submit their own ideas for activities and interact with other teachers, enrichment specialists, curriculum coordinators, and administrators from around the country. Finally, parents can view their child's progress, his or her profile, and their choice of enrichment activities and projects.

Conclusion

There may never have been a time when so much debate about what should be taught has existed in schools across the globe. The current emphasis on testing in so many countries, the standardization of curriculum, and the drive to increase achievement scores has produced major changes in education during the last two decades. Yet at the same time, our society continues to need to develop creativity in our students. As overpopulation, disease, war, pollution, and

starvation increase both here and throughout the rest of the world, the need for creative solutions to these and other problems is clear.

Enrichment programs have been the true laboratories of our nation's schools because they have presented ideal opportunities for testing new ideas and experimenting with potential solutions to long-standing educational problems. Programs for high potential students have been an especially fertile place for experimentation because such programs are usually not encumbered by prescribed curriculum guides or traditional methods of instruction. The SEM creates a repertoire of services that can be integrated in such a way to create "a rising tide lifts all ships" approach. The model includes a continuum of services, enrichment opportunities, and three distinct components: curriculum modification and differentiation, enrichment opportunities of various types, and opportunities for the development of individual portfolios including interests, learning styles, product styles, and other information about student strengths. Not only has this model been successful in addressing the problem of high potential students who have been under-challenged, it also provides additional important learning paths for creative students who achieve academic success in more traditional learning environments but long for opportunities for innovation in school.

The absence of opportunities to develop creativity in all young people, and especially in talented students, is troubling. In the SEM, students are encouraged to become responsible partners in their own education and to develop a passion and joy for learning. As students pursue creative enrichment opportunities, they learn to acquire communication skills and enjoy creative challenges. The SEM provides the opportunity for students to develop their gifts and talents and to begin the process of life-long learning, culminating, that we hope, will result in higher levels of creative and innovative work in their areas of interest and passion as adults.

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