

Briggs, C. J., & Renzulli, J. S. (2009). Scaffolding CLED students to promote greater participation in programs for the gifted and talented. *Journal of Urban Education: Focus on Enrichment*, 6(1), 1–15.

Scaffolding CLED Students to Promote Greater Participation in Programs for the Gifted and Talented

Christine J. Briggs, PhD
University of Louisiana at Lafayette

Joseph S. Renzulli, EdD
University of Connecticut

Abstract: Scaffolding Culturally, Linguistically, and Ethnically Diverse (CLED) Students to Promote Greater Participation in Programs for the Gifted and Talented: With the emphasis on high-stakes testing inherent in No Child Left Behind, students whose language or academic skills differ from those tested by state and national assessments may be regarded deficient, and not well suited to high levels of academic challenge (Gallagher, 2004). As a result CLED students with potential for high level learning are given low level pedagogy, highly prescriptive and didactic in nature—emphasizing the accumulation, storage and retrieval of information as assessed through standardized tests (Renzulli, 2008). These issues may continue to adversely affect the representation of high potential CLED students for gifted programs. Research findings (Briggs, 2003) indicate a need to provide challenging learning experiences for students who may not fit a traditional “gifted” profile yet with sparking interest and scaffolding these same students can demonstrate gifted behaviors and move closer to developing their achievement potential. Tools that support this nurturance of talent, specifically in CLED students include use of the Schoolwide Enrichment Model (SEM) and the Schoolwide Enrichment Model–Reading (SEM-R), Renzulli Learning, front loading, and connecting school and home/community environments. Each method will be described with examples of use provided.

During the past four decades, educators have increasingly recognized the need to reform and enhance the education of culturally, linguistically, and ethnically diverse (CLED) students in U.S. schools (Baldwin, 2002; Castellano & Diaz, 2002). Even with this consideration, CLED students continue to be over-identified for remedial classes and under-represented in gifted and talented (GT) programs and services (National Academy of Sciences, 2002). Too often, representative numbers of CLED students are not included in programs for gifted and talented students, when compared to demographics of CLED students in the total school population (Maker & Schiever, 1989; Ford & Grantham, 2003). The vast majority of young people participating in gifted and talented programs in the U.S. represent the dominant culture (National Academy of Sciences, 2002; Donovan & Cross, 2002), perhaps because many educators hold a

more traditional view of giftedness. National surveys indicate that only 10% of those students performing at the highest levels are CLED students, even though they represent 33% of the school population (Gallagher, 2002).

A correlation exists between the identification of gifts and talents in students and high scores on achievement or IQ tests (Frasier & Passow, 1994; Ford & Grantham, 2003; Ford & Trotman, 2001). This form of giftedness, described as school-house or academic giftedness by Renzulli (Renzulli & Reis, 1985, 1997), is usually characterized by high grades, high scores on standardized achievement and aptitude tests, and strong classroom performance. With the current emphasis on this traditional type of giftedness, identified CLED students generally represent a fraction of the talented CLED students in our schools—students whose gifts may be latent or newly emerging (Baldwin, 1978; Frasier & Passow, 1994; Ford & Harris, 1999; United States Department of Education, 1993).

Obstacles – Deficit/Difference Models, Gatekeepers

Identification and subsequent provision of gifted program services to CLED students are influenced by the specific assessment tools used for identification, educator bias and perceptions of cultural behaviors, quantity and quality of teacher preparation for working with CLED students, and degree of variety in instructional strategies. Educator bias occurs when preconceived ideas about what constitutes giftedness results in a failure to recognize indicators of giftedness in CLED students with high potential (Bruch, 1975; Callahan et al., 1995; Ford & Grantham, 2003; Grossman, 1998). For the past 20 years, two views of cultural differences have existed; one focused on cultural deficits and the other on cultural differences. The cultural deficit model presents the belief that the dominant culture is normative, and different customs and behaviors are deviant or inappropriate (Briggs, 2003).

The cultural difference perspective advocates variations in behavior and customs between people of different cultures is to be expected. This model shuns value judgments about cultural beliefs and behaviors, and presents various cultures, including the dominant culture, as parallel or co-cultures (Ford, Howard, Harris, & Tyson, 2000; Morris, 2002). Teachers who employ a cultural differences perspective recognize CLED students' individual communication and working preferences and respond in one of two ways: they either recognize differences but require CLED students to adapt to fit into the common societal group, or they recognize differences and modify the learning environment to support student learning preferences (Baldwin, 2002; Ford & Grantham, 2003; Ford et al., 2000; Morris, 2002; Renzulli & Reis, 1997). Teacher behavior also impacts underachievement exhibited by students. In order to reverse the pattern of underachievement, five traits have been identified as influential in this process. These include:

- Taking time to get to know the student—a trait that not only is documented in gifted education in differentiation but also identified as a quality of culturally responsive teachers.

- Focusing on positive traits of the student—changing from deficit to difference model of thinking.
- Understanding the role of facilitator—supporting learning but not didactically providing learning.
- Applying the role of teacher as researcher—learning being a collaborative effort involving teacher and student in the process.
- Conveying a belief in the student’s abilities—mentor role to support and develop student areas of strength. (Baum, Renzulli, & Hebert, 1995).

With the emphasis on high-stakes testing inherent in *No Child Left Behind*, students whose language or academic skills differ from those tested by state and national assessments may be regarded deficient, and not well suited to high levels of academic challenge (Gallagher, 2004). As a result CLED students with potential for high level learning are given low level pedagogy, highly prescriptive and didactic in nature—emphasizing the accumulation, storage and retrieval of information as assessed through standardized tests (Renzulli, 2008). These issues may continue to adversely affect the representation of high potential CLED students for gifted programs.

Sparking Engagement Through Interests and Learning Profile Matches

Giftedness is about diversity, and the goals and practices of gifted education and multicultural education are both striving for the same outcome—curricular options to support the development of student potential and achievement. With the goal of nurturing talent, and a focus on CLED students, a variety of methods can be used to tap into student interests and learning preferences to promote greater student engagement and motivation for learning. The multicultural education movement has been influential in the current focus on culturally responsive teaching. By connecting students’ cultural and personal histories to the curricular content, students will demonstrate higher achievement and continue to demonstrate high ability and potential for high end learning (Bernal, 2002). Tools that support this nurturance of talent, specifically in CLED students include use of the Schoolwide Enrichment Model (SEM) and the Schoolwide Enrichment Model–Reading (SEM-R), Renzulli Learning, front loading, and connecting school and home/community environments. Each method will be described with examples of use provided.

SEM/SEM-R

One tool to cultivate student interest and match learning profiles is through the use of Renzulli’s Schoolwide Enrichment Model (SEM). This model is based on a broadened conception of giftedness and over 30 years of research and field testing (Reis & Renzulli, 1994; Renzulli, 1978). The SEM model is founded on encouraging the enjoyment of learning and providing opportunities for students to pursue creative work through exposure to various topics, and exploring areas of student interest and fields of study. In addition, the model provides students with knowledge and skills in an interest area and applies advanced content, process training skills, and methodology training to self-selected areas of interest (Renzulli, 1977a). Within the model students are identified

for the talent pool and are eligible for several types of services. Formal and informal methods are used to identify students' interests and encourage students to pursue these interests in a variety of ways. Learning style preferences and product development choices are also assessed. Curriculum compacting is used to help streamline curriculum and eliminate previously mastered content and skills. This process allows time to pursue work in an area of interest or passion. The three types of enrichment included in the model are presented in Figure 1.

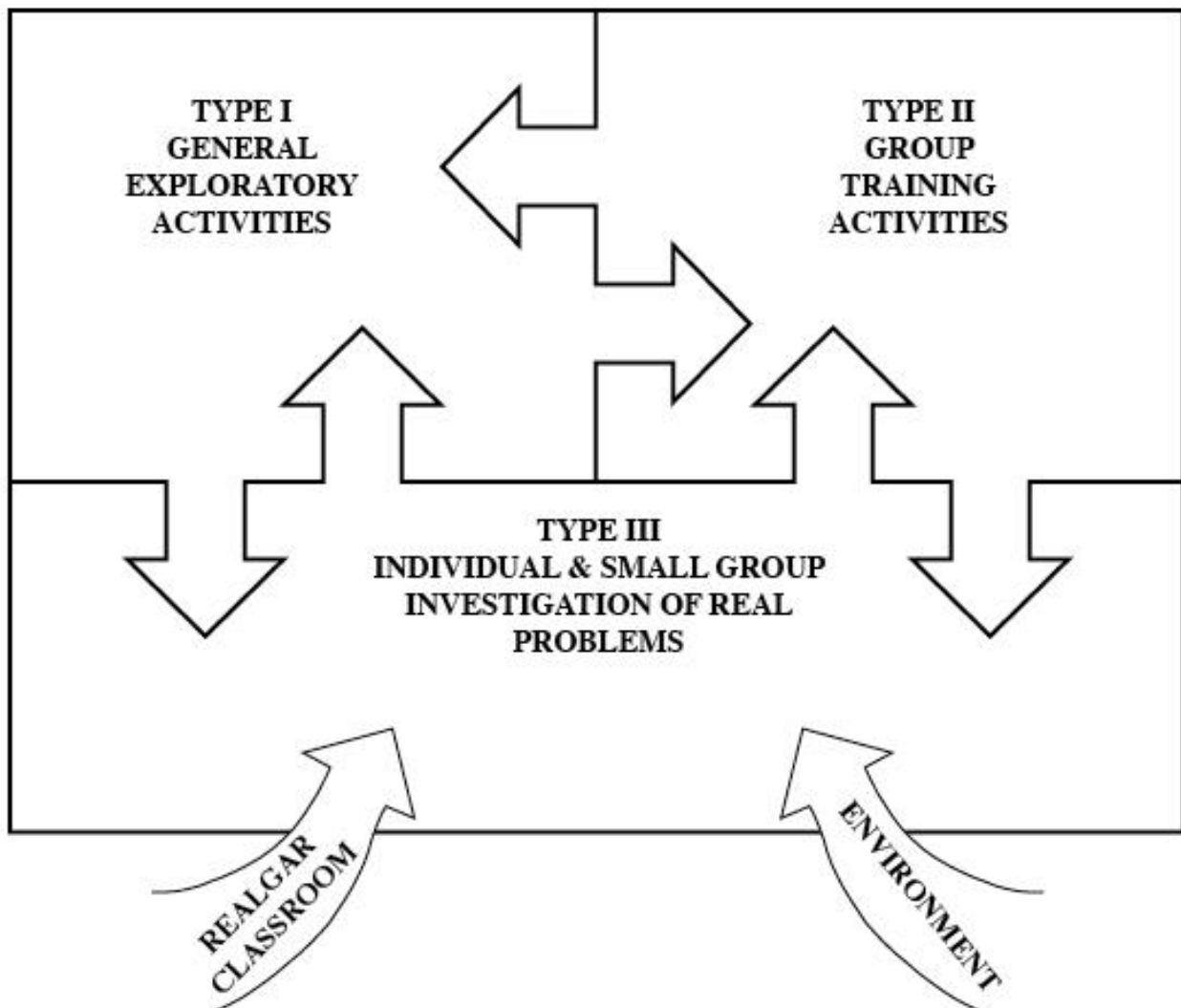


Figure 1. Schoolwide Enrichment Model

The Schoolwide Enrichment Model–Reading (SEM-R) applies the fundamental components of SEM to reading instruction, providing opportunities for exposure to a variety of topics through the use of read-aloud books, stories, and chapters purposefully selected by a teacher to develop and stimulate student interests in unexplored areas. Type I enrichment is designed to expose students to a range of topics, issues, and tasks not usually covered in traditional curriculum (Reis, et.al, 2004).

SEM-R also provides students with skill training to use critical thinking, affective processes, skills in the use of advanced level reference materials as well as skills in written, oral, and visual communication. Type II enrichment uses teaching methods designed to promote the development of thinking and feeling processes including creative thinking, problem solving, and communication skills (Reis, et.al, 2004).

Finally SEM-R provides opportunities for students to explore areas of interest in greater depth through student generated questions, research, problem finding and solving, and sharing results with a real world audience. Type III enrichment supports students in applying interests, knowledge, creative ideas, and task commitment to a self-selected problem or area of study. In addition, Type III enrichment facilitates the acquisition of advanced level understanding of knowledge (content of a field) and methodology (work of professionals in a field; Reis, et.al, 2004).

SEM-R uses three stages to support student reading development. Phase I provides exposure and skill development—Type I & II, through the use of read aloud books, higher order questioning and thinking skills instruction. Phase II focuses on increasing levels in the development of students reading abilities and engagement in independent reading of student selected materials. These texts are between 1 to 1.5 grade levels above students' current instructional reading level. During independent reading time, teachers work one on one with students in reading strategy use, including phonics and vocabulary development as well as higher level discussion of the students' choice of books.

Phase III of SEM-R allows for student independent choice activities with the intent to provide opportunities for students to spend time exploring areas of interest to them. These can include center tasks, book discussions, reading on the web, individual or small group studies in the Enrichment Triad Model (Renzulli, 1977b).

The use of student centered reading builds a meaningful connection between the student and the text, which is not only a component of SEM but also of culturally responsive classroom practices. SEM-R research has spanned the past 8 years and results indicate gains in students' time spent reading, eyes on text, fluency, and comprehension (Reis et al., 2007; Reis et al., 2008).

Renzulli Learning System

The Renzulli Learning System (RLS) (<https://renzullilearning.com>) is an Internet based enrichment program that is built on a high-end learning theory that focuses on the development of creative productivity through the *application* of knowledge rather than the mere acquisition and storage of knowledge. The system, which is sponsored by the University of Connecticut Research and Development Corporation, is based on more than 30 years of research dealing with student strength assessment and advanced level learning guided by the Enrichment Triad Model (Renzulli, 1977b). The RLS has been widely used in schools throughout the country serving CLED students.

The Renzulli Learning System goes beyond the popular “Worksheets-on-line” or courses online that, by and large, have been early applications of ICT in most school situations. These early applications have been based on the same pedagogy that is regularly practiced in most traditional teaching situations, thereby minimizing the role of the Internet to a gigantic encyclopedia rather than a source of information for first-hand investigative and creative endeavors.

The Renzulli Learning System is a comprehensive program that begins by providing a computer-generated profile of each student’s academic strengths, interests, learning styles, and preferred modes of expression. A search engine then *matches* Internet resources to the student’s profile from 14 carefully screened databases that are categorized by subject area, grade level, state curricular standards, and degree of complexity. A management system called the Wizard Project Maker guides students in the *application* of knowledge to teacher or student selected assignments, independent research studies, or creative projects that individuals or small groups would like to pursue. Students and teachers can evaluate the quality of students’ products using a rubric called The Student Product Assessment Form. Students can rate each site visited, conduct a self-assessment of what they have gained from the site, and place resources in their own electronic Total Talent Portfolio for future use. RLS also includes a curriculum acceleration management system for high achieving students that are based on the many years of research and widespread use of a curricular modification process called Curriculum Compacting (Reis & Renzulli, 2005). Students and teachers can use the RLS anytime and anywhere where there is Internet access.

Teacher functions allow downloading of hundreds of reproducible creativity and critical thinking activities as well as numerous off-line resources for lesson planning and curricular integration. Management functions allow teachers to group students by interests and learning styles. The management tools also allow teachers to place teacher-selected resources in individual, whole class, or selected students’ portfolios for classroom or special project use. Teachers can oversee all students’ activity including where and when students have been on-line using the RLS, projects or assignments underway or completed, and areas where curriculum has been compacted. The system can be used at home and during summer, and parents can view their own son or daughter’s work on the system. The principal or designated project manager can also examine all activity taking place in a given building or program. This feature allows for accountability, system assessment, and guidance in staff development and program planning needs.

In an experimental study (Field, 2008) about the use of RLS with culturally and linguistically diverse children, quantitative procedures were used to investigate the use of RLS on oral reading fluency, reading comprehension, science achievement, social studies achievement, and attitudes about school and reading of 383 elementary and middle schools students. The research took place in an urban middle school where half of all students are considered to be at risk due to poverty or other factors. Students in grades 6–8 ($n=198$) were randomly assigned to use Renzulli Learning for 2–3 hours each week for a 16-week period. Students in the treatment groups were compared to

students who did not have the opportunity to use Renzulli Learning in control classes in the same school. A two-way repeated-measures ANOVA was used to explore differences between treatment and control students. After 16 weeks, students who participated in Renzulli Learning demonstrated significantly higher growth in reading comprehension ($p < .001$), significantly higher growth in oral reading fluency ($p = .016$), and significantly higher growth in social studies achievement ($p = .013$) than those students who did not participate in Renzulli Learning.

Instructional Design and Strategies

As part of a research study to identify promising practices for increasing the representation of CLED students in gifted services, Briggs (2003) found curriculum/instructional strategies used by gifted programs included three subcategories: implementation of a continuum of services (Renzulli & Reis, 1985; 1997) ($n = 14$; 56%); adoption of a specific curriculum framework ($n = 8$; 32%); and an emphasis on directly addressing the needs of CLED students ($n = 5$; 20%).

A continuum of services developed by program personnel incorporated several instructional methods, such as individualized instruction, use of advanced content, training in research skills, and development of creative and critical thinking skills. Programs also emphasized differentiation (depth and complexity and thematic units), questioning strategies, project/interest based activities, hands-on experiences, problem solving, and enrichment opportunities.

Three different frameworks were used in these programs. First, curricular frameworks were used to guide instruction, including areas such as dual language/bilingual methods, field specific knowledge and skills, and service learning ($n = 3$; 12%). Second, some of the programs identified particular curriculum models that were used as their curriculum focus, including the Schoolwide Enrichment Model (SEM; Renzulli & Reis, 1985; 1997), the Purdue Model (Feldhusen & Kolloff, 1986), or a differentiation model using Kaplan's (1999) interdisciplinary themes based on depth and complexity ($n = 4$; 16%). Third, two programs created a specific framework for their individual needs (8%). Programs using one of the above reported to have an increased number of CLED students participating in gifted services as a result of implementing one of these models.

Front Loading

With the focus on educational standards in the U. S. the stage has been set for all students to receive a general, content-based education. Concurrently, the differentiation movement states that while content is critical, how the content is delivered, and what students do with the content may need modifications to effectively meet the individual learning needs of students. Just as one group of students may need modifications such as books on tape and alternative assessment methods, other students need different curricular modifications in order for their academic needs to be met and to reach their academic potential.

Recent research identifies districts that have used specific strategies and models to increase program enrollment and retention of CLED students in gifted programs (Tomlinson, et al., 2004). Cited strategies include providing talent development opportunities prior to the identification process (defined here as “front loading”), demonstrating administrative support for program changes, preparing teachers to implement changes, and turning to the community for resources and support. The use of front loading; provides inductive, higher order learning options for students who come to school with different, non-traditional academic experiences. This approach allows students to take part in tasks requiring these skills and to make connections between academic content and the students’ perceptions of reality.

This process of front-loading bridges the gap in the readiness of some CLED students, nurtures their abilities, and prepares them for success in advanced content programs. Research (Briggs, 2003) in the use of front loading indicates 20% of programs serving gifted students used front loading prior to formal identification. All of the programs that used front loading were affiliated with public schools, and had some form of university partnership.

Project Excite

Project Excite serves an urban community in the Midwest and illustrates the use of front loading to prepare CLED students for acceleration and high levels of academic performance. This project resulted from the collaborative efforts of the Evanston, IL School District and Northwestern University and addressed the disparity between the numbers of CLED students enrolled in the district and the number of CLED students identified and served in district gifted programs. The student enrollment in this district represents a very diverse population: 43.7% African American, 7.1% Latino, 2.5% Asian American, and 45.6% European American. Staff at the Center for Talent Development at Northwestern University helped develop Project Excite as a way to increase the number of CLED students prepared to take advanced placement courses in math and science in high school. Third grade students participate in a program every other week each trimester and 4th and 5th grade students may attend three separate 8 week sessions in the fall, winter, and spring, with an optional spring session for 6th graders preparing for the pre-algebra placement assessment. A summer session is also offered in grades 3–8.

One of the main goals of the program was to address the achievement gap between CLED students and other students in the district. Additional program goals were developed to address related achievement gap issues, such as teachers’ low expectations for student achievement, poverty, low quality schools, perceived negative ramifications of achieving, lack of access to extra-curricular programs and “tacit knowledge” about education, and students’ own lack of belief in their abilities and talents.

Several specific goals for the program were also developed. First, the program was developed to increase the identification of minority children in early elementary school with potential and/or demonstrated talent and ability in mathematics and science. This

goal is implemented through teacher nominations of promising CLED students and the use of various nonverbal assessments. Once identified, the program goal is to provide these students with supplemental educational opportunities, including advanced learning opportunities, to help them fully realize their abilities. Ideally, students receive support through their freshman year of high school so that they are prepared to enter into and succeed in advanced math and science tracks at Evanston High School. A 2004 investigation of Project Excite (Olszewski-Kubilius, Lee, Ngoi, & Ngoi, 2004) found that following participation in Project Excite's summer classes, 17.3% of middle school students were placed in a high ability group for instruction in math; 14.8% were placed in the next course in the sequence in math; and 12.3% were placed in an advanced course at the local high school. Thus, approximately 44% of the participants in the summer programs went on to participate in high-ability or advanced-level math classes. Overall, after 2 years of involvement with the program, there was a 300% increase in the number of minority children eligible for an advanced math class in grade 6.

Another goal is to provide increased support for high achievement and talent development through sustained interactions with older student role models, teachers and other adults. Contact with older mentors can reinforce students' beliefs in their abilities, help them maintain motivation in times of stress, and assist them as they negotiate important transitions such as the move to middle or high school (Renzulli & Reis, 1985; 1997; Wright & Borland, 1992). Finally, Project Excite strives to create a positive peer culture in the elementary and middle school by encouraging the formation of a supportive group of peer program participants. Research on underachieving, urban, CLED students has demonstrated that positive peer influence and support can help to avoid underachievement in gifted students (Reis & McCoach, 2000).

In Project Excite, the curriculum is delivered through hands-on science and math activities including measuring, graphing, manipulating, and experimenting. After-school and Saturday courses were designed through collaborative efforts of the high school math and science teachers and elementary teachers. The hour-long after school classes are held at the high school in the physics lab, providing access to real lab experience. The Saturday and Summer Enrichment Program portion of Project Excite is held at Northwestern University, exposing students to the university community. Tutoring is provided as part of this program to support students who struggle with other content areas. Front loading advanced content in these areas with students who might otherwise have limited access to challenging material and skills is intended to excite, support and motivate students possessing latent talent and/or interest. Nurturing these talents and interests has the potential to improve the representation of CLED students in advanced placement math and science programming in this district's diverse, urban high school.

Additionally, other programs employed front load curricular practices specifically selected to meet the unique needs of CLED students. In these programs, curricular methods were used to help students make connections between the curriculum, specific program opportunities, and students' language and culture. In the Mentor Connection program at the University of Connecticut, for example, research professors from

culturally diverse backgrounds are invited to make research presentations to students providing exposure to content areas of interest that are not in the traditional high school curriculum sequence.

In other programs, CLED students were given early access to enriched experiences, providing exposure to important learning opportunities prior to identification for the gifted program. Young Scholars, in Fairfax County, Virginia began the use of enriched learning experiences in the primary grades where lessons are provided to *all* students to strengthen their critical/creative thinking and help them make connections to the required district content. It is through these lessons that students have the opportunity to develop their emerging giftedness. And it is through these lessons that teachers obtain an awareness of student strengths and interests. This knowledge helps teachers make decisions about how to differentiate instruction, including providing access to more challenging content and using groups based on ability, interest and learning profiles.

Some programs in the study provided dual language classroom opportunities in which bilingual students could learn in both English and their first language. Still other programs provided opportunities for integrating cultural traditions into the learning process.

Overall curricular modifications used by the studies' programs to support student connections and learning fell into two categories; use of a curriculum model (25%) and use of a wide range of gifted education instructional or assessment strategies (63%). The most frequently used instructional or assessment strategies were: enrichment and exposure activities (29%); use of alternative assessments (17%); implementation of gifted instructional strategies and materials (17%); incorporation of themes (16%); emphasis on problem solving and higher order thinking (16%); use of higher order questioning strategies (13%); implementation of differentiation/individualization (13%); and focus on student interests to guide curriculum development (12%; Briggs, Reis, & Sullivan, 2008).

In 9 of the 25 programs in this study, specific efforts were used to address the under-representation of CLED students in gifted programs through a curriculum delivery system. To achieve this goal, two strategies were described by program directors; linking learning to real world applications (Renzulli, 1977b; Renzulli & Reis, 1997) and addressing achievement gap issues in a direct way. In programs using real world applications, students worked with professionals in a field, addressed community problems, and were encouraged to give back to their communities. This is one strategy that is found in both gifted education and culturally responsive teaching. In programs that attempted to reduce the achievement gap, specific need areas were identified for specific populations, pertaining to language, culture, access to content, and services to bridge the disparity between school-valued knowledge and student strengths. The following case study provides an illustration of the use of relevant curriculum for CLED students.

The Euclid Avenue Gifted/High Ability Magnet

The Euclid Avenue Gifted/High Ability Magnet is located in a neighborhood school in Boyle Heights area of Los Angeles and serves students in grades 1–5 with 352 of the 800 students enrolled in the school participating in the gifted/high ability magnet program. The magnet program has existed for 15 years and is based on the work of Kaplan (1999). The Gifted/High Ability Magnet exists as a “school within a school.” The goal is to increase levels of depth and complexity in curricular challenges. The school population and the magnet program population are both 98% Hispanic. In the magnet program, only one child is African American and less than 5 were European Americans. All of the participants in the program are eligible for free or reduced lunch. The program demonstrates almost 100% retention of students at the elementary school level, and 75% of participants go on to participate in gifted education programs at the middle school level. Most students transition from classification as Spanish speakers to English speakers while participating in the program, and data indicates increasing numbers of CLED students are attending competitive, gifted magnet schools after leaving this urban elementary school. This data showed that the number of students identified for these competitive gifted magnet schools had doubled in the last 5 years (Kaplan, 1999).

The program goals of the Gifted/High Ability Magnet are to provide a dual-language model, offer diverse academic opportunities for children to develop their talents in two languages while gaining English proficiency, and to build creative and critical thinking skills. The Gifted/High Ability Magnet, using Kaplan’s (1999) approach to depth and complexity, identifies universal themes at each grade level. Teachers examine their district reading and math curriculum materials to select universal themes that encompass both curriculum foci. This process familiarizes teachers with universal themes that can be implemented across content areas to promote deep, interdisciplinary understanding. The teachers identified the following themes for study: change (grade 2); order (grade 3); relationships (grade 4); and power (grade 5). Differentiated questioning skills, tasks, and products, along with high levels of teacher input and creativity were observed in magnet classrooms. The program uses a 3-day instructional pacing schedule, enabling teachers to move more efficiently through required content and using the remaining 2 days for additional opportunities to explore content in greater depth and complexity.

Students in the Gifted/High Ability Magnet actively learn in a rich environment including classrooms with Internet access, evidence of grade level themes, depth and complexity icons, and engaged discussions of small groups of students about advanced content. Enrichment opportunities are also available during the summer since the school serves as a demonstration site using Kaplan’s approach for adding depth and complexity.

Changing Teacher/Student Roles

In making classrooms more student-responsive, the role of the teacher changes from the provider of information to the facilitator supporting student learning. As part of this alteration of roles, a more collaborative environment develops and supports knowledge, attitudes, and skills required to function in communities (Banks & McGee-Banks, 2001).

Instead of a teacher identified as having all knowledge and “pouring it into the vessel,” teachers and students explore content through investigations to find answers to questions and to practice the work of a field or discipline. One program exemplifying this practice is The Mentor Connection, a 3-week summer program for gifted and talented high school juniors and seniors at the University of Connecticut Storrs. This program provides students with the opportunity to complete an in-depth study in an interest area, prepare for challenging college experiences, and further identify academic interests. Mentorships are available in a variety of content areas including the physical and biological sciences, literature, history, the arts, communications, and theater. In addition, mentorships can be individually developed to meet the unique needs of participants. The purpose of the program is to recognize students’ interests, abilities, and motivation as important to learning and to provide opportunities for students to manifest their talents at high levels of creative productivity. Approximately 60% of participating students are from culturally diverse groups, and this number has increased each year over the course of the program. The program is based on Renzulli’s Enrichment Triad Model (1977b; Renzulli & Reis, 1985; 1997). Central to the program’s philosophy are the ideas that above average ability, creativity, and task commitment can be found in individuals from every ethnic and cultural group and across all socioeconomic levels, and that this creative productivity can be developed and nurtured.

During the 3-week program, students work with a researcher to learn advanced methodologies at their site, assume the duties of a professional, and learn how to perform the work of a researcher at their mentorship site daily from 9:00 a.m. - 4:00 p.m. Activities on-site provide an opportunity for students to learn about field specific techniques, recording data, and laboratory work. The exposure to university life and working with a mentor in a student area of interest has proven to be successful in opening the door for under-represented students and has demonstrated an impact on college enrollment. Over 99% of Mentor Connection students have attended college, and approximately 30% of Mentor Connection participants attended the University of Connecticut, reporting that their decision to matriculate is due to the connections made during the program. Mentor Connection students have turned down more competitive Ivy League colleges and universities to attend the University of Connecticut in order to have the opportunity to continue to conduct undergraduate research with their mentor from this program. This demonstrates the impact of student interests on productivity as well as life decisions such as college attendance.

Making Home/Community and School Connection

A key feature of diverse gifted programs is a commitment to building bridges between school and home (Briggs, 2003). Strategies used by these programs to increase communication and interaction included involving parents as volunteers ($n=6$, 24%), consistently disseminating program information ($n=18$, 72%), and making family and culture connections ($n=7$, 28%). In programs with an emphasis on identifying and serving CLED students, parents tend to help in the classroom and lead student learning groups. In the majority of the programs, parents also volunteered for field trips and fundraising activities, often serving as chaperones or supplying food or services. To ensure dissemination of information to parents, programs held parent meetings and

support groups; issued newsletters and program brochures; held parent-teacher conferences; and maintained websites. In programs reporting family and culture connections, educators used translators for meetings and print materials, gave student homework that required family participation, and fostered collective decision-making between students and parents concerning course selections.

Some program directors reported numerous efforts to address specific parental needs and areas requiring additional support, including transportation, gifted characteristic awareness, and safety concerns. These efforts were reportedly used to help parents accept the program by considering the benefits for their children. A primary focus involved working with parents to help them connect the goals of home and school. In one program, parents were asked to serve as cultural leaders for student groups, and they helped build connections with home values and program instruction. In another program, parents were involved in program leadership and served on the advisory board or assisted with carrying out program goals to meet guidelines.

Project College Bound

Project College Bound demonstrates the use of school to parent connections to support student access to college. This project, based in the Los Angeles Unified School District, was developed 5 years ago to assist students in the college application and financial aid process during grades 10–12, with an end goal of increasing the number of gifted CLED students eligible for admission to, and graduation from, competitive schools across the nation. In the first graduating group identified for Project College Bound, almost all of the 273 participants enrolled in college. The number of African American students from this district who attended a University of California school increased by 150%, and the number of Latinos increased by 31%. In the first year cohort, other data indicated admissions to Ivy League schools, including Harvard, Princeton, Columbia, Cornell, Yale, Dartmouth and University of Pennsylvania, as well as other competitive colleges and universities, such as Georgetown, University of Chicago, University of Michigan, Purdue, Colgate, Howard, Wesleyan, Pepperdine, Morehouse, and Stanford.

In this program, students eligible for free lunch who participated in gifted programs in elementary or middle school, and who have high school GPAs of 3.0 or higher, are identified and made known to college guidance counselors in their high schools. They are then invited to participate in the program, and, if they accept, monitored monthly for scholastic progress and eligibility for competitive colleges, especially those found in the California University system.

A parent network is developed in each school to monitor the progress of targeted students. The program director meets with the parent group monthly to develop active relationships with both the parents and students. Presentations by the program director, college admission personnel, and the district technology staff include topics such as how to complete admissions applications, admissions essays, test preparation, financial aid, the community college transfer program, and other sessions as needed. Twelfth-grade students in the program receive specific sessions, such as how to understand and compare different admission and financial aid offers. Parents receive a toolkit that

includes information on college and financial aid, monthly check-lists to monitor college information, and information on summer residential opportunities for 11th grade students. In addition, a one-day conference is held for rising 12th grade students and their parents.

Understanding the unique needs of the culturally diverse students in the district enabled the program director to provide speakers for the parent workshops in two languages (Spanish and English) and designate topics that addressed the cultural diversity of the student population, such as distance of the college from home, number of other diverse students who attend specific colleges and universities, and other issues that may be of concern to parents and students.

Conclusion

The interventions described in this article are examples of how through shared efforts and recognition of gifted potential in CLED students, more diverse students gain access to more advanced content and learning experiences that support the demonstration of high abilities. So what needs to change? The majority of the program directors in the study reported changes in identification procedures as their primary effort to better recognize and serve CLED students with gifts and talents (Briggs, 2003). Others noted that they incorporated probationary placement and talent spotting during enriched learning experiences (Renzulli & Reis, 1985, 1997). Other programs provided a probationary or trial period when students participated in gifted programs or challenging lesson opportunities so they could demonstrate their abilities within the context of instruction.

The curriculum/instructional strategies used in the 25 programs studied can be categorized into four areas: early intervention; best practices in gifted education; enrichment/challenge opportunities; and mentorships (Banks & McGee-Banks, 2001; Ewing & Young, 1993; Kaplan, 1999; Maker & Schiever, 1989; Renzulli, 1994; Sleeter, 1990; Slocumb & Payne, 2000). Early intervention opportunities addressed discrepancies in students' early learning experiences and the knowledge necessary for subsequent placement in gifted programs. These learning experiences included exposure to content information, use of higher order thinking skills, and product/performance development.

All program directors involved in this study referred to the use of gifted education strategies as part of the program curriculum, including acceleration, enrichment, and connecting learned concepts with the content field or discipline (Feldhusen, 1994; Renzulli, Leppien, & Hayes, 2000; Renzulli & Reis, 1985; 1997; Tomlinson et al., 2004). The use of acceleration in programs included exposure to a range of learning opportunities and focusing on specific student needs. Enrichment opportunities were reported as the most often used gifted program strategy in this study. Program directors discussed various enrichment methods used to broaden student experiences and knowledge. Many of the enrichment learning experiences included student interests and community cultural offerings. Programs that made connections between learning and the content field or discipline were reported to involve students in thematic or

interdisciplinary units, working in a specific field, and working with a professional in the content field. The thematic and interdisciplinary units used by the programs provided students with a way to link each learning experience to another, and to see the shared understandings between and within the different content fields. The final curriculum/instructional strategy mentioned by program coordinators in this study was the use of mentorships; matching students with a professional in their interest field who facilitates student learning in that field.

The reported use of early intervention, gifted education strategies, enrichment and challenging learning, and mentorship suggests these program directors made an effort to bridge the gap between CLED students' command of currently valued knowledge and skills, and their potential. The effectiveness of these interventions as discussed by program coordinators (Briggs, 2003) is closely related to teacher professional development and readiness to assume responsibilities for maximizing the impact of the interventions.

Culturally diverse groups of high potential and gifted students present new and different challenges to teachers, especially if these groups are from low socioeconomic backgrounds. Under these circumstances, it is often difficult to identify academically talented students and without some of the conscious decisions to modify programs to uncover students' potential for high-level performances and productivity at advanced levels of excellence, these students remain out of the learning community for which they are capable and may fail to reach their potential.

References

- Baldwin, A. Y. (1978). *Educational planning for the gifted: Overcoming cultural, geographic, and socioeconomic barriers*. Reston, VA: The Council for Exceptional Children.
- Baldwin, A. Y. (2002). Culturally diverse students who are gifted. *Exceptionality*, 10(2), 139–147. https://doi.org/10.1207/S15327035EX1002_7
- Banks, J. A., & McGee-Banks, C. A. (2001). *Multicultural education: Issues and perspectives*. New York: John Wiley and Sons.
- Baum, S. M., Hebert, T. P., & Renzulli, J. S. (1995). *The prism metaphor: A new paradigm for reversing underachievement* (CRS95310). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/crs95310.pdf>
- Bernal, E. M. (2002). Three ways to achieve a more equitable representation of culturally and linguistically different students in GT programs. *Roeper Review*, 24(2), 82–88. <https://doi.org/10.1080/02783190209554134>
- Briggs, C. J. (2003). *Exemplary interventions and practices that develop the gifts and talents of culturally, linguistically, and ethnically diverse students*. Unpublished doctoral dissertation, University of Connecticut, Storrs.
- Briggs, C. J., Reis, S. M., & Sullivan, E. E. (2008). A national view of promising practices and programs for culturally, linguistically, and ethnically diverse gifted and talented students. *Gifted Child Quarterly*, 52(2), 131–145. <https://doi.org/10.1177%2F0016986208316037>

- Bruch, C. B. (1975). Assessment of creativity in culturally different children. *Gifted Child Quarterly*, 19(2), 169–174. <https://doi.org/10.1177/001698627501900224>
- Callahan, C. M., Hunsaker, S. L., Adams, C. M., Moore, S. D., & Bland, L. C. (1995). *Instruments used in the identification of gifted and talented students* (Research Monograph 95130). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm95130.pdf>
- Castellano, J. A., & Diaz, E. I. (2002). *Reaching new horizons: Gifted and talented education for culturally and linguistically diverse students*. Boston: Allyn & Bacon.
- Donovan, S. M., & Cross, C. T. (Eds.) (2002). *Minority students in special and gifted education*. Washington, DC: National Academy of Sciences - National Research Council.
- Ewing, N. J., & Yong, F. L. (1993). Learning style preferences of gifted minority students. *Gifted Education International*, 9(1), 40–44. <https://doi.org/10.1177/026142949300900109>
- Feldhusen, J. F. (1994). Learning and cognition of talented youth. In J. VanTassel-Baska (Ed.), *Comprehensive curriculum for gifted learners* (pp. 17–28). Boston: Allyn & Bacon.
- Feldhusen, J. F., & Kolloff, M. B. (1986). The Purdue three-stage enrichment model for gifted education at the elementary level. In J. S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented* (pp. 126–152). Mansfield Center, CT: Creative Learning Press.
- Field, G. B. (2008, submitted). *The effects of the use of Renzulli learning on student achievement in reading comprehension and fluency, social studies and science*.
- Ford, D. Y., & Grantham, T. C. (2003). Providing access for culturally diverse gifted students: From deficit to dynamic thinking. *Theory Into Practice*, 42(3), 217–225. https://doi.org/10.1207/s15430421tip4203_8
- Ford, D. Y., & Harris, J. J., III. (1999). *Multicultural gifted education*. New York: Teachers College Press.
- Ford, D. Y., Howard, T. C., Harris, J. J., III, & Tyson, C. A. (2000). Creating culturally responsive classrooms for gifted African American students. *Journal for the Education of the Gifted*, 23(4), 397–427. <https://journals.sagepub.com/doi/pdf/10.1177/016235320002300405>
- Ford, D. Y., & Trotman, M. F. (2001). Teachers of gifted students: Suggested multicultural characteristics and competencies. *Roeper Review*, 23(4), 235–239. <https://doi.org/10.1080/02783190109554111>
- Frasier, M. M., & Passow, A. H. (1994). *Toward a new paradigm for identifying talent potential* (Research Monograph 94112). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm94112.pdf>
- Gallagher, J. J. (2002). *Society's role in educating gifted students: The role of public policy* (RM02162). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm02162.pdf>
- Gallagher, J. J. (2004). No child left behind and gifted education. *Roeper Review*, 26(3), 121–123. <https://doi.org/10.1080/02783190409554255>

- Grossman, H. (1998). *Ending discrimination in special education*. Springfield, IL: Charles C. Thomas Publisher.
- Kaplan, S. N. (1999). Teaching up to the needs of the gifted English language learner. *Tempo*, 14(2), 20.
- Maker, C. J., & Schiever, S. W. (Eds.). (1989). *Critical issues in gifted education: Defensible programs for cultural and ethnic minorities*. Austin, TX: Pro-Ed.
- Morris, J. E. (2002). African American students and gifted education: The politics of race and culture. *Roeper Review*, 24(2), 59–62.
<https://doi.org/10.1080/02783190209554130>
- National Academy of Sciences. (2002). Minority children in gifted and special education. Report released January 16. *Council for Exceptional Children*, 8(7), 1 & 5.
- Olszewski-Kubilius, P., Lee, S.-Y., Ngoi, M., & Ngoi, D. (2004). Addressing the achievement gap between minority and nonminority children by increasing access to gifted programs. *Journal for the Education of the Gifted*, 28(2), 127–158. <https://doi.org/10.1177/016235320402800202>
- Reis, S. M., Eckert, R. D., Jacobs, J. K., Coyne, M. D., Richards, S., Briggs, C. J., Schreiber, F. J., Gubbins, E. J. (2004). *Schoolwide enrichment model reading framework*. Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.
- Reis, S. M., Eckert, R. D., McCoach, D. B., Jacobs, J. K., & Coyne, M. (2008). Using enrichment reading practices to increase reading fluency, comprehension, and attitudes. *Journal of Educational Research*, 101(5), 299–314.
<https://doi.org/10.3200/JOER.101.5.299-315>
- Reis, S. M., & McCoach, D. B. (2000). The underachievement of gifted students: What do we know and where do we go? *Gifted Child Quarterly*, 44(3), 152–170.
<https://doi.org/10.1177/001698620004400302>
- Reis, S. M., McCoach, D. B., Coyne, M., Schreiber, F. J., Eckert, R. D., & Gubbins, E. J. (2007). Using planned enrichment strategies with direct instruction to improve reading fluency, comprehension, and attitude toward reading: An evidence-based study. *Elementary School Journal*, 108(1), 3–24. <https://doi.org/10.1086/522383>
- Reis, S. M., & Renzulli, J. S. (1994). Research related to the Schoolwide Enrichment Triad Model. *Gifted Child Quarterly*, 38(1), 7–20.
<https://doi.org/10.1177/026142940301800104>
- Reis, S. M., & Renzulli, J. S. (2005). *Curriculum compacting: An easy start to differentiating for high-potential students*. Waco, TX: Prufrock Press.
- Renzulli, J. S. (1977a). *Interest-A-Lyzer*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (1977b). *The Enrichment Triad Model: A guide for developing defensible programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (1978). What makes giftedness? Re-examining a definition. *Phi Delta Kappan*, 60(3), 180–184, 261. <https://www.jstor.org/stable/20299281>
- Renzulli, J. S. (1994). *Schools for talent development: A practical plan for total school improvement*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (2008). Engagement is the answer. *Education Week*, 27(43), 30–31.
<https://www.edweek.org/leadership/opinion-engagement-is-the-answer/2008/07>

- Renzulli, J. S., & Reis, S. M. (1985). *The Schoolwide Enrichment Model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., & Reis, S. M. (1997). *The Schoolwide Enrichment Model: A how-to guide for educational excellence* (2nd ed.). Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., Leppien, J. H., & Hays, T. S. (2000). *The Multiple Menu Model: A practical guide for developing differentiated curriculum*. Mansfield Center, CT: Creative Learning Press.
- Sleeter, C. E. (1990). Staff development for desegregated schooling. *Phi Delta Kappan*, 72(1), 33–40. <https://www.jstor.org/stable/20404308>
- Slocumb, P. D., & Payne, R. K. (2000). *Removing the mask: Giftedness in poverty*. Highlands, TX: RFT Publishing.
- Tomlinson, C. A., Ford, D. H., Reis, S. M., Briggs, C. J., & Strickland, C. A. (2004). *In search of the dream: Designing schools and classrooms that work for high potential students from diverse cultural backgrounds*. Washington, DC: The National Association for Gifted Children & Storrs, CT: The National Research Center on the Gifted and Talented.
- United States Department of Education. (1993). *National excellence report: A case for developing America's talent* (Report No. PIP-93-1201). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED359743) <https://files.eric.ed.gov/fulltext/ED359743.pdf>
- Wright, L., & Borland, J. H. (1992). A special friend: Adolescent mentors for young, economically disadvantaged, potentially gifted students. *Roeper Review*, 14(3), 124–129. <https://doi.org/10.1080/02783199209553406>