

Introduction

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The National Association for Gifted Children (NAGC) and the National Research Center on the Gifted and Talented (NRC/GT) are dedicated to recognizing and developing advanced abilities and talents in our nation's young people. To realize such a goal requires a concerted effort on the part of all who embrace the goal to ensure that the vision and action in support of it encompasses young people of all ages, in all economic groups and cultures, on varied developmental timetables, and in the widest feasible range of human endeavors.

Currently, the goal does not extend to many highly able young people in this country. Among those children and adolescents most likely to find themselves outside the circle of opportunity to develop abilities at the highest levels are students from many non-white cultural groups and those from low economic backgrounds.

That education in general has failed many such students is evidenced by persistent achievement gaps between these students and their more privileged, Caucasian peers. That the field of Gifted Education has failed many students from culturally diverse and/or low economic backgrounds is evidenced by persistent underrepresentation of these students in advanced classes and programs for students identified as gifted.

With the belief that awareness and knowledge are a step in the direction of ensuring equity of access to learning opportunities that, in turn, lead to the highest levels of academic excellence, NAGC and the NRC/GT offer this monograph. It is the hope of these two bodies that the work reflected in it will extend awareness of the need for planned, informed, proactive work on behalf of students from non-affluent and/or non-Caucasian backgrounds. In addition, we hope the monograph will provide concrete and specific guidance for supporting development of high potential in far greater numbers of such learners.

This monograph draws on multiple perspectives to suggest what it might mean to invest seriously in capacity development in high-potential learners from all cultural and economic groups. The first chapter of the monograph

presents an overview of the issue of underrepresentation of culturally and linguistically diverse learners in programs for gifted learners and other advanced learning opportunities. Their review of literature draws from a broad spectrum of sources both to identify issues and point the way to promising practices. The second chapter examines the literature of general education to determine those issues that experts in the broader field of education have found to be pivotal in shaping success for a broad range of culturally diverse learners in schools. This chapter emphasizes, but is not restricted to, literature related to African American learners. Chapter 3 proposes a framework for curriculum and instruction likely to be effective in helping high-potential students from diverse cultures to realize their advanced capacities. Chapter 4 provides a detailed look at seven gifted education programs with an emphasis on talent development in high ability, culturally diverse students. Chapter 5 capsules 16 gifted education programs from across the country designed to more effectively serve as catalysts for development of abilities in high-potential students from culturally diverse and/or low-economic groups. Chapter 6 follows the pattern of Chapter 5, this time providing an overview of 13 general education programs with success in guiding culturally diverse and/or students from low economic backgrounds to academic success. Finally, Chapter 7 offers recommendations for schools and school districts that want to be effective in ensuring that culturally diverse learners have full opportunity to access the benefits of a high quality, high-expectations education.

We hope that this examination of knowledge from multiple facets of education provides a greater understanding of both principles and practices that should be more broadly evident in our nation's schools. If the monograph contributes to understanding and practice that furthers recognition and development of the advanced abilities and talents in a broader spectrum of our nation's young people, NAGC, NRC/GT, schools, and all young people will benefit.

Chapter One

An Introduction to the Topic of Cultural Diversity and Giftedness

Christine J. Briggs and Sally M. Reis

The concept of the United States as a melting pot began in the early 20th century, with the goal of immigrant children becoming "Americanized," emerging as loyal citizens (Graham, 1998). Through this process of cultural assimilation, individuals were expected to acquire the values, beliefs, and practices of the dominant culture in the name of success. While this view may have appealed to some immigrants who wanted to be a part of "America," it also implied that culturally diverse people were inferior.

Schools have played an important, longstanding role in the immigrant "American" experience. In the early 20th century, American educators failed to successfully assimilate, acculturate, or mold our society into one single culture (Selakovich, 1978). Dominant culture students and teachers too often perceived immigrant children as ignorant, while immigrant parents regarded school as the essence of the American dream for their children and as a way for children to escape the economic and social hardships faced by their parents (Selakovich, 1978). Attempts to change immigrants, molding them to be more like the majority culture, have not been isolated in a single period in American history, but have occurred over different decades.

Immigrant Experiences

Graham (1998) chronicled four major educational change movements affecting culturally and linguistically diverse students over the past century. First, during the early 20th century Assimilation movement, immigrant children were expected to relinquish their cultural roots and become "Americanized." Second, the Life Adjustment movement, following World War II, categorized students into 3 distinct groups, determining their educational direction, in which 20% were educated for college, 20% received vocational training, and 60% received general life skills. In the third educational movement that Graham labeled "Access," a direct response to the *Brown vs. Board of Education* decision,

culturally, linguistically, and ethnically diverse (CLED) children were regarded as inferior by segregation that hindered their potential development. The fourth and current educational movement described by Graham is "Achievement," occurring as a direct response to the Nation at Risk report (National Commission on Excellence in Education, 1983) and calling for high academic achievement for all students. State assessments and instructional reform were called for as a result of this fourth movement. Graham's chronicle of these major educational movements in this century provides a useful background for the examination of current issues related to the underrepresentation of CLED students in gifted programs.

Power of Cultural Factors

For the past 20 years, two perspectives of cultural differences have existed, cultural deficit and cultural differences. The former holds the belief that people reared in different environments will be different while the latter suggests different cultures exist as parallel or co-cultures (Ford, Howard, Harris, & Tyson, 2000). Teachers who employ the 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 in the common societal group, or recognize differences and modify the learning environment to support student-learning preferences (Ford et al., 2000). Both perspectives acknowledge the impact that culture plays in the educational experiences of students. When the school and home environments are incongruent, students can face internal conflicts and a battle between loyalty to the cultural traditions of their heritage and educational pressure for individual excellence and conformity to mainstream society (Reis, Hébert, Diaz, Maxfield, & Ratley, 1995; VanTassel-Baska, Olszewski-Kubilius, & Kulieke, 1994). This difference between the home and school culture can have an impact on

CLED students' access to gifted programs, identification procedures, and instructional practices.

Student Struggles to Balance Home and School

Current federal educational policy in the U.S. requires all students to demonstrate academic achievement as part of the federal law known as No Child Left Behind. Administrators and teachers are pressured to ensure that all students demonstrate required skills as measured on standardized assessments and these may include curricula that seem irrelevant to or disconnected from the lives of some CLED students (Office of Educational Research and Improvement, 1998). Under these circumstances, CLED students are at a disadvantage and their gifts and talents may be masked. Different cultural groups have norms that may either match or differ from educators' expectations of gifted behaviors, such as social connectedness as opposed to the importance of individual performance. CLED students must create a personal identity that may or may not match a behavioral checklist of characteristics of gifted and talented students. In addition, many gifted and potentially gifted CLED students are also students of poverty who face difficult choices in balancing their community and school environments. These may include feelings of separation when they participate in gifted programs or excel in their academic studies, parental confusion about their children's needs for complex content, issues related to acceptance and separation from their friends and community peers because of grouping, limited economic resources, and differences in social class (Reis et al., 1995; Slocumb & Payne, 2000, p. 223).

If educators are aware of the home/school cultural disparity students may experience, they can strive to make changes in the ways they respond and provide opportunities for students to work in culturally relevant environments. In these environments, educators recognize and nurture the diverse manifestations of CLED students' gifts and talents.

Identification Practices

Many educators strive to meet CLED students' educational needs and create appropriate programming options. Programs for the gifted and talented, however, rarely have

representative numbers of CLED students in relation to their presence in the total school population. National surveys indicate that only 10% of students performing at the highest levels are CLED students even though they represent 33% of the school population (Gallagher, 2002). Few doubts exist regarding the reasons that economically disadvantaged, culturally, linguistically, and ethnically diverse student groups are underrepresented in gifted programs. Frasier and Passow (1994) found that many current identification and selection procedures are ineffective and inappropriate for the identification of these young people, and that limited referrals and nominations of CLED students affect their eventual placement in programs. The largest majority of young people participating in gifted and talented programs in the U. S. continue to represent the dominant culture. Educators may hold a more traditional view of giftedness because a correlation exists between identification of gifts and talents in students and high scores on achievement or IQ tests (Frasier & Passow, 1994). That form of giftedness, called schoolhouse giftedness by Renzulli and Reis (1997), is characterized by good grades, high scores on standardized tests, and model classroom behavior. Those CLED students who are identified as gifted and talented generally represent a fraction of the prospective talent or emerging gifts and talents of the large pool of CLED students in our schools.

A change in identification practices must encourage the examination of giftedness in cultural and environmental contexts and provide a basis for recognizing talents without excuses for differences in learning styles and expressions (Frasier et al., 1995). Within each cultural group, cultural characteristics may mask gifted behavioral characteristics. Maker and Schiever (1989) suggest, for example, that Hispanic gifted students who may have potential talents as leaders may also have to accept responsibility at home for taking care of younger children.

Standardized Assessments

Researchers in gifted education have debated for decades the question of how to define giftedness, and a single, unified definition does not and should not exist (Renzulli & Reis, 1997; Sternberg & Davidson, 1990). Research reports often reflect a psychometric construct of intelligence; a discrete, unitary construct measured by a paper and pencil test (Patton,

1997). Psychometric methods may identify students as gifted who may be good test takers, high-academic achievers, and/or members of a dominant culture group and these methods may not be effective in identifying talent potential in CLED students (Frasier & Passow, 1994). These descriptors may fail to connect assessment to programs, curricula, counseling, and evaluation particularly in the CLED population (Menendez, 1995; Zamora-Duran & Artiles, 1997).

Assessments used to identify gifted and talented students may represent a clash between cultures in which the mainstream culture is unable to recognize or underestimates the abilities of CLED students. Some researchers believe that tests do not measure scholastic achievement, but rather measure a student's achievement based on the cultural standards used to develop the test (Ford, Grantham, & Harris, 1996). The problems surrounding identification of students' gifts and talents have less to do with the student and more with "the system." This dilemma is compounded when the students' culture and primary language differ from the norm (Castellano & Diaz, 2001). Children who use a dialect or non-standard English are often prejudged about their abilities, directly affecting their instructional group assignment (Frasier et al., 1995).

The aptitude of CLED students may be underestimated by IQ tests (Callahan et al., 1995). Standardized tests should be carefully examined and scrutinized to take into account socioeconomic status and culture, as economic status correlates more closely with intelligence measures than does ethnicity (Martinson, 1972). Reframing beliefs from the use of tests providing all the answers to assessment embedded in instruction will help educators to become talent developers (Callahan & Hiatt, 1998).

The report, *National Excellence: A Case for Developing America's Talent* (Ross, 1993) broadened the definition of giftedness to include high potential and suggested the existence of a national responsibility to meet the needs of gifted students as well as those who display potential of giftedness. Even with this more inclusive definition, some educators continue to hold a more traditional view of giftedness and believe a correlation exists between identification of gifts and talents in students and high scores on achievement or IQ tests (Frasier & Passow, 1994).

Multiple Criteria

The *National Excellence* report (Ross, 1993) also suggested that schools must eliminate barriers to enable students to realize their potential. The under identification of CLED for gifted education programs is compounded by 5 elements demonstrated in identification methods and pre-identification instructional practices: elusive potential, indirect means of identification, exposure to different talent areas, neighborhood classroom consideration, and distinctive needs of CLED students (Zorman, 1991). The first element, elusive potential, can be described as the challenges associated with helping high-potential students perform well in childhood. This elusive potential may require a change in focus from discovering "signs" of giftedness or talent to nurturing students' talents by meeting their individual needs. The second, indirect means of identification, suggests two alternatives to traditional identification procedures: restructuring tests of intellectual ability to eliminate items that discriminate against CLED students and using multiple criteria for a holistic view of the student. The third element, importance of exposure, is concerned with the need to provide mediated learning experiences including help from others, use of supportive structures, and opportunities to understand and interpret interactions of the world. The fourth element deals with neighborhood and classroom considerations that examine student potential in light of their community environment and values and includes affective and cognitive student needs. Finally, the distinctive needs of CLED students emphasize the importance of different cultures and home and community environments and their impact on student achievement (Zorman, 1991).

The identification procedures used in the selection of students for gifted programs is crucial to achieving equity (Gallagher, 2002). Frasier and others (1995) identified three assumptions that can help to eliminate these barriers. First, CLED students who do not meet the traditional criteria for identification could participate in programs to develop and nurture their talents. Second, the demonstration of gifted behaviors in CLED students may be affected by the socio-cultural context. Finally, there is a need for new paradigms to guide identification the of CLED students' gifts and talents, and these talents must be embedded within their socio-cultural and economic context. Frasier and Passow (1994) propose eight elements to

improve gifted programs and services for traditionally underrepresented students, including the need for new constructs of giftedness, attention to cultural and contextual variability, more varied and authentic assessment, performance identification practices, identification through learning opportunities, attention to both absolute gifted traits and aptitudes, and different representations of gifted potential and performance within social and cultural contexts (p. xvii).

Many more talented CLED students than are currently served in gifted and talented programs have the potential to become creative producers in the future. Students creatively produce when they tap into their interests and strengths to develop products that address a real-world problem and/or audience. Several suggestions have been made to improve the identification of gifts and talents in CLED students. There must be a recognition of the students' performance potential, identification of students' interests and their role on student motivation, exposure to a wide range of learning opportunities, identification of the significance of students' neighborhoods, and a focus on specific student needs. If we believe that gifted behavior manifests itself "...in certain people, at certain times, under certain conditions" (Renzulli & Reis, 1985, 1997), a more accurate assessment of the gifts and talents of CLED students could be achieved, requiring school personnel to reflect on their ability to be sensitive to different ways giftedness may be demonstrated.

Ford (1997) suggested that while tests are valuable tools for assessing students' needs and designing appropriate program services, no single measure should be used to make these important decisions. Gifted identification teams should use multiple criteria to gain a clear and accurate picture of a student's strengths and have an awareness of test bias issues, content, construct, and predictive validity to use test information correctly (Ford & Harris, 1999). Kitano and Espinosa (1995) suggest that CLED students need an array of program options to address different levels of language proficiency, different subject-matter interests, and varied talent areas, and suggest that developmental curriculum and enriched programs can "evoke" a gifted student's potential and can help to expand educators' conceptions of intelligence.

Cultural Influences and Assessment
Assessments, gifted characteristics

checklists, teacher and parent nominations, and portfolios must be evaluated in the context of students' cultural environment. Inter and intra-group differences must be considered when discussing gifted behaviors of CLED students. Educators should focus identification decisions on the strengths of individual students, both in and out of school, rather than the generalized descriptors for the dominant group that may not match the unique characteristics of diverse cultures. When trying to examine and identify gifted behaviors, educators must understand the common characteristics of giftedness with consideration to specific cultural behaviors that may be found in CLED students (Menendez, 1995). Without knowledge of how culture influences student behaviors, the gifts and talents of CLED students may become lights under the bushel basket, talents hidden by environmental conditions (Gallagher & Gallagher, 1994).

Teacher Perceptions

Educators' preconceived ideas about what constitutes giftedness may result in misunderstandings about identification of CLED students with high potential (Bruch, 1975; Callahan et al., 1995; Grossman, 1998). This misunderstanding is related to issues of varying importance, from an inability to recognize the need for a stimulating environment, to the fear of reducing program quality, and the belief that a limited number of gifted students will be identified from culturally, linguistically, and ethnically diverse groups. These issues may have an impact on the referral of CLED students for gifted programs. Students are often nominated for gifted programs by teachers who must have the knowledge, understanding, awareness, and appreciation of their own culture as well as their students' cultures.

A teacher's views can improve or hinder CLED students' chances for identification and, too often, teachers have the power to assume the role as the sole gatekeeper, one who can aid or block students in acquiring learning opportunities (Peterson, 1999). Teachers' awareness of cultural behaviors serves as a critical link in an effort to meet the needs of CLED students, as teachers are central to the implementation of any educational innovation. When educators hold preconceived ideas about what constitutes giftedness, the result is a reduction in the identification of CLED students

with high potential (Donovan & Cross, 2002) and poor situational opportunities may be created for assessment and measurement as well (Callahan et al., 1995). The recognition of a students' culture can play a significant role in the likelihood that they will be considered for gifted and talented programs.

A change in paradigm in how the gifts and talents of CLED students are interpreted is needed. Many CLED students are from low socioeconomic status (SES) homes, and students who live in poverty do not always have access to rich environmental opportunities as compared to their higher SES counterparts (Reis et al., 1995; Slocumb & Payne, 2000). The limited exposure to the experiences viewed as valuable by the dominant culture influences teacher perceptions of students' academic abilities, thinking processes, creativity, and potential for high-level work.

Teacher Preparation to Work with CLED Students

Contemporary educators continue to be challenged to assess, identify, and nurture the talents and gifts of large numbers of African Americans, Hispanics, Native Americans, and underrepresented Asian American populations. The way that the educational system responds to this challenge may determine the future of American society (Patton, 1997). It is essential for teachers to learn to understand how general characteristics used for identifying gifted behaviors may differ in a cultural context and how these behaviors influence identification of giftedness in CLED students.

Gallavan (2000) studied more than 50 reasons that teachers are not using effective multicultural education practices and identified 5 trends that summarize the reasons, including limited understanding of what defines multicultural education, the use of effective practices, motivation to learn these effective practices, a resistance to learning practices, and the responsibility to use effective practices in multicultural education. Teachers in this study who had received their college degrees more than 10 years ago were not required to take courses relating to multicultural education, and had a limited understanding of multicultural education and its practices.

However, it is not only experienced teachers who have limited understandings in this area, as it is a false assumption that new teachers will automatically acquire the knowledge, skills, and attitudes necessary to teach CLED students.

CLED students may underachieve in public schools and teachers may encounter difficult and frustrating situations in trying to help them succeed (Menchaca, 1996) without any training for this endeavor. To address this situation, a proactive approach is needed that would require additional pre-service and in-service instruction to provide all teachers with the necessary skills to meet the needs of students from different cultural and linguistic backgrounds. These skills include more field-based programs with opportunities to interact with CLED students and learn about other types of diversity (Menchaca, 1996).

Education courses at the university level should incorporate cross-cultural field experiences and culturally responsive pedagogy courses for undergraduate students to improve the understanding that culture is a normal part of development and not a "minority thing." Courses in curriculum could promote the development of lessons and units that integrate multicultural components and sensitivity and opportunities for future teachers to examine their own cultural histories. An increased awareness and time to analyze their own personal experiences and emotions would help future teachers to better understand themselves and others (Ford & Harris, 1999; Menchaca, 1996). This process is necessary for teachers to explore their life experiences themselves and consider how their personal perceptions about diversity may influence the success of their future students (Seidel & Friend, 2002). Through this process, future teachers can learn to develop the skills to teach CLED students through appropriate selection and implementation of learning strategies that ensure student success. With changing demographics, future teachers must hold high and rigorous expectations for all students (Nieto, 1999) and understand an array of teaching methods including those used in multicultural education.

In-service training frequently offers techniques and/or new materials rather than suggestions to change teaching practices (Calderon, 1997). In-service teachers should combine knowledge of the subject, a repertoire of teaching strategies, knowledge about learning theory, and knowledge of the student's language, culture, and development background. Kitano and Espinosa (1995) suggest how this may be accomplished for English-language learners by using language and cultural considerations in classroom strategies that support student achievement

such as scaffolding that supports students' transition into English classes, materials that develop bilingual enrichment tools, course offerings with advanced courses in primary language, instruction that creates culturally relevant classrooms, and mentors who act as role models.

Frasier and Passow (1994) believe that when teachers carefully consider cultural differences and environmental contexts, student performances are affected. Culturally responsive teacher training can provide the skills to recognize these elements and maximize strengths enabling more CLED students to demonstrate their potential (Banks & McGee Banks, 2001). Culturally responsive pre-service and in-service teacher training can promote understanding of diversity in classrooms and affect the identification and education of talented CLED students. When students' cultural, linguistic, and ethnic backgrounds are considered, the identification of gifted characteristics increases, as do student expectations and access to gifted programming.

Personal Cultural Awareness

Culture, in anthropological terms, includes all of the ways of living practiced by a group of human beings and transmitted from one generation to the next (Cross, Baker, & Stiles, 1997) and includes values, beliefs, attitudes, and norms unique to a group of people connected by race, gender, location, religion, or social class (Ford & Harris, 1999). It is critical for educators to be aware of themselves as having distinctive cultural experiences before they can try to support and nurture the cultures of their students (Arredondo, 1999). It is this personal journey that helps educators gain perspective about one's cultural background. This understanding can increase the awareness of how students receive information and form relationships within the context of their culture. If educators have an increased understanding of the impact of culture on the learning environment, they can change their classroom environments to nurture CLED students' gifts and talents.

It is essential to understand how the general characteristics used for identifying gifted behaviors may differ within a cultural context and the influence cultural behaviors could have on the identification of giftedness in CLED students. It is this interaction of culture, environmental influences, and performance

levels that must be considered when seeking to identify giftedness in CLED students (Baldwin, 1978). Racial and ethnic behavioral customs influence how advanced abilities may manifest themselves and may not match a list of mainstream characteristics (Maker & Schiever, 1989). An examination of the traditional characteristics of giftedness that may or may not be exhibited by CLED students indicates a need for a deeper understanding of student's culture by educators and society in general (Ford & Harris, 1999). A lack of understanding of the culture of this diverse group of students may provide one reason for the lower percentages of CLED students identified as gifted as summarized in Table 1.1.

The acceptance of cultural differences and recognition of the rights of people to maintain their own culture and beliefs requires a change in attitude on the part of educators who must develop a respect for cultures, values, personal traits, and behaviors different from their own (Maker & Schiever, 1989). Raising the cultural awareness of classroom teachers is the primary method to improve nomination and identification of CLED students as gifted and talented (Rhodes, 1992).

Academic and Emotional Needs of CLED Students

Issues of Poverty

CLED students often come from low socioeconomic status (SES) homes and may not demonstrate skills at the same levels as their higher SES peers. A principal factor in this gap is that families in poverty must choose between basic needs and the costs of books, educational games, and forms of enrichment and home opportunities (Slocumb & Payne, 2000). The educational system can provide a lifeline for low-SES students in breaking the cycle of poverty if the system opens up opportunities for more students (Slocumb & Payne, 2000). For CLED students and low-SES students to be successful with challenging curricula, educators must redefine the instructional environment and build on the skills and strengths that CLED students possess. Exposing students to what Renzulli (1994) has called "high-end" learning while filling in the gaps, will produce higher achievement than relegating CLED students to only remediation of their basic skills (Kaplan, 1999).

Table 1.1: Percentages of CLED Students in Total U.S. School Population and Identified Gifted.

<i>Year</i>	<i>1978</i>	<i>1980</i>	<i>1982</i>	<i>1984</i>	<i>1992</i>
Latino Total	6.8	9.0	8.6	13.2	13.7
GT	5.15	5.4	4.0	7.2	7.9
Over/under	U	U	U	U	U
American-Indian Total	.8	.7	.5	.8	1.0
GT	.8	.3	.3	.3	.3
Over/under	U	U	U	U	U
Asian-American Total	1.4	2.2	2.6	3.7	4.0
GT	3.4	4.4	4.7	6.8	7.0
Over/under	O	O	O	O	O
African-American Total	15.7	20.1	25.8	24.5	21.1
GT	10.3	11.1	11.0	12.9	12.0
Over/Under	U	U	U	U	U

Ford, D.Y., & Harris, J.J. (1999) *Multicultural and Gifted Education*. Reprinted with Permission.

Learning Styles

Ewing and Yong (1993) found that CLED students may differ in learning, preferred modalities, and instructional strategy preference as some broad, generalized qualities of CLED students are grounded in their history, values, language, and experiences in the United States and hold implications for learning style (Webb, 1998). For example, African American learners may prefer to develop relationships between concepts rather than memorize isolated facts. Their preference for learning environment may involve activities with planned, purposeful movement rather than sedentary, solitary activities (Webb, 1998). Contrasting these cultural preferences with the dominant instructional methods may suggest one reason that CLED students have difficulty having their strengths recognized and participate less often in gifted education programs. Many of these preferences can be addressed by developing the students' awareness of their own learning styles, providing flexibility in learning experiences, and developing resources that complement student styles.

Instructional Practices

While the primary educational goals for CLED gifted students should not differ from other populations, the system of delivery may vary from cultural group to group and from child to child (Baldwin, 1978). Recognition of

students who demonstrate high potential for exceptional performance must occur early with the provision of special instruction to help students meet this potential (Frasier et al., 1995).

Educational strategies that employ the philosophy of multiculturalism must be infused into traditional curriculum as well as in gifted program offerings (Ford, 1994). Regular education program goals must be broadened to include those that benefit all students (Sleeter, 1990), and educators must modify their programs, curricula, and strategies for CLED students to be successful while simultaneously helping them to maintain their cultural identities (Maker & Schiever, 1989). These instructional practices must have an impact on classroom work and address the problems of academic achievement and the demographic changes occurring in U.S. schools (Rios & Montecinos, 1999). Sleeter (1990) suggested using interdisciplinary units drawing upon the students' backgrounds, interests, and learning styles to include different perspectives. These units would enable teachers and students the opportunity to get to know each other and incorporate the contributions of various cultural groups, moving well beyond the celebration-of-culture weeks commonly found in schools (Banks, 1993). Stereotypes can be eliminated when material and learning experiences enable students to understand the similarities among individuals (Gomez, 1991), and all students can benefit from this approach. Students develop more

positive racial attitudes when realistic images of ethnic and racial groups are included in teaching materials in a consistent, natural, and integrated manner (Banks, 1993).

Alternative Assessments

Just as instruction must be culturally responsive, assessments must both align with curricula and be culturally sensitive. Culturally responsive classrooms provide multiple opportunities for students to demonstrate their learning. Students may, for example, choose to create plays, songs, books, or poems that reflect knowledge of the required content. Assessments need to reflect the goals of instruction, such as understanding important events in history or mathematical concepts. Broadening the ways in which students can share what they have learned enhances their understanding of content and may provide teachers with a better profile of the capacities of CLED students (Ford & Trotman, 2001).

Best Practices in Multicultural Education

Giftedness is about diversity, and the goals and practices of gifted education and multicultural education strive for the same outcomes, that is, differentiated curricular options that match unique learner characteristics. The primary issue in the underrepresentation of CLED students in gifted programs does not concern only current identification practices, but also involves pedagogical strategies employed prior to a student's nomination. If students have not had opportunities to achieve at high levels, they will never qualify for advanced programs.

The focus of multicultural education programs should be to seek educational equity by providing students with knowledge, attitudes, and skills required to function in their communities, nation, and the global community (Banks & McGee Banks, 2001). Multicultural education emerged in the 1960s Civil Rights movement as a way to eliminate discrimination and help develop an educational system that responded to the needs of CLED students. The multicultural education movement was influential in the current focus on culturally responsive teaching, suggesting that if educators can create culturally relevant classrooms, connecting students' cultural and personal histories to the curricular content, students will demonstrate higher achievement and continue to achieve

success in school and in gifted and talented programs (Bernal, 2002).

Culturally Responsive Classrooms

Culturally responsive teaching is rooted in multicultural education and can be defined as the development of a teaching and learning environment that intertwines cultural knowledge, prior experiences, frames of reference, and performance styles to make learning experiences relevant to all students (Gay, 2000). Teachers who create this type of learning environment practice the teaching characteristics suggested by Villegas and Lucas (2002), including diverse views on how individual and cultural experiences shape world views, the resources and attitudes that students bring to learning, the view of teachers as catalysts for change, constructivist methods to facilitate learning, and an environment in which students learn through strengths and interests in culturally inclusive environments. In culturally responsive classrooms, teachers also move beyond celebrating heritage months and famous people to make a bridge between diverse cultures and the dominant culture to develop and promote an appreciation for all cultures to improve curricular connections and academic achievement.

Students' demonstration of high levels of thinking and learning can be influenced by the learning opportunities teachers provide. If classroom experiences are not designed to foster critical and creative thinking and the development of original products, students cannot perform at the high levels usually expected of gifted students or those with gifted potential (Slocumb & Payne, 2000). Multicultural education strives to build student awareness of different perspectives such as race, ethnicity, religion, gender, and social class, and to support students in the development of social change (Kitano, 1991). Multicultural education and culturally responsive teaching literature emphasizes change in how curriculum and instruction is delivered to meet the needs of culturally, linguistically, and ethnically diverse students and to develop potential gifts and talents.

Desirable Traits for Multicultural Education Teachers

Educators of CLED students should model certain traits to enhance their personal connection with students and create learning

experiences that will nurture their intellectual and cultural needs (Ford & Trotman, 2001). These include traits such as awareness of the nature and needs of CLED students, the ability to address student preferences, learning, cognitive and behavioral styles, and the ability to employ multicultural materials and resources into higher-level thinking and questioning techniques. Exemplary multicultural teachers seek opportunities to increase their own cultural awareness, infuse multicultural education into the traditional curriculum, and scaffold student learning.

Environmental Scaffolding for Student Success

The U.S. Congress has mandated that colleges and universities complete a report card profiling teacher preparation programs and the students who graduate from them as part of an effort to hold teacher education programs accountable for the quality and diversity of the teachers graduating from their programs. While criticism and concerns about this process have been made, an opportunity to open communication about the subject matter in education courses is created by responses (Blair, 2001). With the changing demographics of our schools, future teachers may be able to pass an exam, but whether they know how to teach in a culturally responsive manner may depend upon the conditions, suggested by Ginsberg and Wlodkowski (2000), such as their ability to establish inclusion, develop positive attitudes, offer challenging and engaging learning that matters to students and has social merit, and their ability to engender competence in their students.

Teaching Strategies

The use of "one size fits all curriculum" helps to produce a uniform type of learning for all students and the impact may be anti-individual and anti-multicultural (Renzulli, 1994). Teachers who develop behavioral objectives to make students more alike may hinder sensitivity and appreciation to cultural diversity.

Consideration of the learning patterns of CLED students is important but incomplete without the use of rich content. Instructional units must have a foundation that enables students to learn the big ideas and the universal truths across and within fields, providing a place

to categorize learning and make complex connections. It is through a combined recognition of cultural and linguistic differences and rich content that our gifted CLED students can demonstrate their abilities and gain access to gifted services. If consideration of these principles and concepts does not occur, multicultural education could be reduced to a series of skills to master (Sleeter, 1990) or remediation that results in denying student access to deeper learning. The use of challenging, culturally sensitive units that enable teachers and students the opportunity to get to know each other and incorporate the contributions of various groups is critical (Banks, 1993). The goal would be to eliminate stereotypes and create learning experiences to enable all students to understand the similarities among individuals (Gomez, 1991). Students can develop more positive racial attitudes if realistic images of ethnic and racial groups are included in teaching materials in a consistent, natural, and integrated manner (Banks, 1993). Teachers, therefore, must help students learn how knowledge is created and how race, ethnicity, gender, and social class influences essential knowledge (Banks, 1993).

Within-School Support Systems

Some students who are identified as gifted may need specific scaffolding strategies to support their learning, and these needs are specific to their environmental needs, requiring unique supports to maintain CLED students in gifted programs. These may include creating an academic environment of competition, without home support, to help students deal with the separation they may experience from cultural peer groups, or from having to choose between academics and friends, and the limited support they have for goal-setting and future planning skills (Slocumb & Payne, 2000).

To help to establish these conditions, educators must be aware of how their students' cultures impact learning. Values in the African American community, for example, tend to be communal, emotional, person centered, and flexible. Students tend to be sensitive to how a teacher responds to them, reacting positively to frequent constructive feedback. It is from this foundation of awareness that school support systems develop, which may include options such as opportunities for peer tutoring, cooperative learning, mentors, and enrichment, as well as the core strategy of concept learning. These strategies reflect high quality in both

gifted and multicultural education.

Conclusion

The under identification of culturally, linguistically, and ethnically diverse students' gifts and talents has occurred during the last few decades and cannot be rectified by adding posters to the walls, studying famous people, or celebrating heritage months. It is only through strategic change in views and practices that the potential gifts and talents of culturally, linguistically, and ethnically diverse students will be identified and developed.

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Chapter Two

Guiding the Success of Students of Color: Themes from General Education Literature

Carol Ann Tomlinson and Cindy A. Strickland

At a time in our history when slavery and legally segregated schools seem to many students like artifacts of a foreign past, reverberations from that past echo in the halls and classrooms of many schools across the United States. Evidence is plentiful that African American students, and many other students of color, lag behind in realizing the promise of a high quality education in our nation's public schools. For example, students of color, with the exception of some Asian populations, continue to score below their White counterparts on standardized tests—even when controlling for socioeconomic status (Donovan & Cross, 2002). Data from the 1998 National Assessment of Educational Progress (College Board, 1999) reveal that only one in 20 African American twelfth graders has SAT scores commensurate with seniors admitted into highly competitive colleges and universities.

While it is the case that student test scores tend to increase with an increase in parental educational level, recent SAT scores for African Americans whose parents held graduate degrees averaged 951, while scores for White students whose parents held graduate degrees averaged 1130 (Nakao, 1998). In addition, standardized test scores of African American high school seniors whose parents were college graduates matched the scores of White students whose parents were high school graduates (Donovan & Cross, 2002).

Using grades as a measure of academic achievement reveals a similar shortfall for African American and other students of color. A 1992 national sample of college-bound high school seniors found that 10% of Latino students, 5% of Native American students, and 4% of African American students had a B+ average or higher. By comparison, 21% of White students had a B+ or higher average (College Board, 1999). It remains the case that low economic and minority students are underrepresented in advanced high school classes (College Board, 1999), and they are only half as likely as White students to be

identified for services in programs for gifted learners (Donovan & Cross, 2002).

According to the College Board definitions, high academic achievement equates to superior academic skills and content mastery at every level of schooling. At the high school level, that would translate to earning an A in all or most of the most advanced level classes, having a grade point average that positions the student in at least the top quarter of the graduating class, and winning academic prizes or recognitions. By these standards, disproportionately few African American students are high achieving (College Board, 1999). One report concluded that limited presence of minority students among top achieving students is seen in virtually all measures of academic achievement, including school grades, standardized test results, and class rank (Donovan & Cross, 2002).

There is no scarcity of bleak statistics to indicate that schools are missing the mark with African American learners, and with many other students of color. Dismal data to the contrary, however, there are—as there have always been—teachers, schools, and communities that shape academic success for students from diverse cultures and economic backgrounds (Perry, Steele, & Hilliard, 2003). These are places where students feel welcomed, know they are expected to perform, and are confident of the presence of support equivalent to the challenge. It is from these places, and the people who shape them, that we need to continue to learn.

The goal of this chapter is to distill some key themes from a vast body of literature in the field of general education focusing on attributes of teachers, classrooms, programs, and schools effective in developing the academic capacity of low economic and/or minority learners—with an emphasis on African American learners. It is our hope that by synthesizing this literature, more of us will more fully understand the issues involved in providing high quality education for students from varied cultural backgrounds and the steps we can take to become full and effective

partners in pursuit of that outcome. The digest that follows is brief, but reflects the thinking of many whose professional, and often personal, lives are dedicated to the mission of equity and excellence in schooling for students of color in the United States. The reference section at the end of the chapter provides options for readers interested in gaining a richer and more complete view of important thinkers on the topic of supporting academic success of students of color in contemporary schools—a topic core to the success not only of individual learners, but also to the success of our schools and our nation as well.

Key Themes from the Literature

Many themes evident in the literature of education point to characteristics of teachers, classrooms, schools, and programs successful in guiding the academic success of students of color—and often students from low-economic backgrounds as well. Below are seven themes recurrent in the literature and critical for those who would play the role of advocate for high quality educational opportunity and outcome for students of color. Educators who support the success of these learners:

1. Understand how culture affects teaching and learning;
2. Understand and address the role of student expectations in education of students of color;
3. Demonstrate an immutable belief, translated into consistent action, that students of color will succeed academically at high levels;
4. Understand and ensure the centrality of high quality curriculum in the success of students of color;
5. Develop policies and programs that support success for students of color in multiple ways;
6. Develop environments that are supportive and nurturing of students of color; and
7. Persist for meaningful change.

The remainder of this chapter elaborates on and provides sources of support for the efficacy of these themes. The subsequent chapter presents some programs in the field of general education that translate into action the hallmarks of success in helping students of color dream and achieve in ways that give substance to their dreams.

Understanding how Culture Shapes Teaching and Learning

Schools are not culturally neutral places (Boykin, 2000; Perry, Steele, & Hilliard, 2003). In fact, like all institutions, schools reflect the cultures of participants— particularly of those in positions of power (Delpit, 1995). Because it is currently the case that 90% of K-12 teachers in the United States are White, it is also the case that most schools reflect the perspectives and themes of a White culture more potently than they reflect the culture of the 36% of the student population that are students of color (Boykin, 2000; Lasley & Matczynski, 1997; Howard, 2000). Ways of thinking, learning, and interacting that are comfortable to many in the White culture are thus likely to shape the culture of schools. For instance, schools typically emphasize individualism and competition, while students from culturally diverse backgrounds may place a greater value on collectivism and collaboration (Boykin, 2000, 2002; Trumbull et al., 2001). Members of the dominant culture may not be as aware of culture and its impact as those from minority cultures (Carter, 2000; Robins et al., 2002). Thus, it is important for educators to recognize that systems conferring dominance to cultures of those in positions of power can have a striking influence on those whose cultures enjoy less privileged positions (McIntosh, 1989).

In general, schools that are successful in developing the capacity of minority populations are those in which administrators and teachers understand and value the cultures and traditions of the all the school's students and faculty and incorporate them into the daily routines of education to as great an extent as possible. Curriculum and instruction that ignore students' backgrounds hold little promise for engaging students (Bridges, 2001; Carter, 2000; Kea & Utley, 1998; Ogbu & Simons, 1998; Pena & Quinn, 1997; Smith, 1992; Walqui, 2000; Walters, 2002).

Education that acknowledges and reflects the cultures of diverse populations in schools is sometimes called multicultural. While responsiveness to diverse cultures may be approached variously in schools, it is clear that schools effective in developing the capacity of students of color move beyond a more simplistic view of multicultural education as an occasional day or month of acknowledgement of diverse cultures to a model in which cultural awareness is infused broadly in what is taught and how it is taught, as well as in school

policies and procedures (Carter, 2000; Ogbu & Simons, 1998; Robins et al., 2002). Teachers and administrators in these schools become culturally proficient or culturally relevant (Boutte, 1999; Ladson-Billings, 1994, 2002). That is, they become competent and comfortable with interacting in environments with people whose cultures differ from their own.

To be culturally proficient doesn't mean that you know everything there is to know about others. It means that you have the self-awareness to recognize how you--because of your ethnicity, your culture, and your life experiences--may offend or otherwise affect others... It means that you have the skills to take advantage of teachable moments to tell about yourself and to learn about those who differ from you (Robins et al., 2002, p. xii).

Educators who are culturally proficient or culturally relevant also operate from a fundamental belief in the individuals they teach, connect with their students both in and beyond the classroom, are passionate teachers who exhibit joy in teaching and learning, and accept responsibility for each student developing the skills that undergird success (Boutte, 1999). Such teachers ensure that students of color demonstrate academic competence and move beyond competence to choose academic excellence. They guide students of color in gaining the competence and confidence to live simultaneously in two cultures, and they coach students of color in becoming effective analysts and critics of the society in which they live (Ladson-Billings, 2002).

Because of their experiences as members of diverse cultures in schools and a society whose cultural norms are largely set by those outside their own cultural groups, teachers of color may be particularly culturally proficient or relevant. In spite of efforts to increase the percentage of minority faculty in our nation's schools, it remains the case that most students receive most of their education from White teachers (Denbo, 2002a; Ginsberg & Wlodkowski, 2000; Trumbull et al., 2001). This situation deprives culturally diverse students of important role models. It also isolates students of all cultures from the important source of interaction and experience with diverse perspectives that a multi-cultural teaching force can offer (Delpit, 1995; Keas & Utley, 1998). Students of color want and need to see themselves reflected in

school faculty. It is likely that schools effective in developing the capacity of learners of color place a premium on hiring teachers of color and seeking their counsel in regard to the education of all students in culturally sensitive and responsive environments (Delpit, 1995; Denbo, 2002a & b).

Of course, it is not the case that a teacher's color determines the teacher's effectiveness in working with students of color. In *Black Teachers on Teaching* (Foster, 1997), veteran teacher Ora Benson reminds us that just because people have the same skin color does not mean they are automatically "in sync" with one another.

My whole experience teaching kids has been searching for and finding out what we had in common even when it didn't seem like we had anything in common on the surface. Today people are confused about how people are alike and not alike. A lot of people think that just because you are the same skin color as someone else you will automatically be able to relate to them, but what they overlook is the many ways people who look the same are different because of their different experiences (Foster, 1997, p. 21).

Similarly, in *A White Teacher Talks about Race*, author Julie Landsman (2001) asserts her belief that teachers of any race can be successful with culturally diverse populations. In fact, it is teachers of any culture who are open to listening to and learning from students, and who have or can develop the empathy and understanding necessary to reach all students that we must seek out and nurture (Foster, 1997).

Teachers of any race who are effective in developing the capacity of students of color build on their own understandings about culture to design appropriate learning experiences for the full scope of their students. Students learn differently. They come to the learning situation with different thinking and learning styles. They gain knowledge differently, form ideas differently, act and react differently, and feel and decide differently (Guild, 2002). There is valuable research to guide teachers in understanding possible cultural differences in cognitive style, learning style, and ways of handling interpersonal relations (e.g. Guild, 2002; Lasley & Matczynski, 1997; Trumbull et al., 2001). Nonetheless, it is important for

teachers to understand that there is great diversity within a given culture (Cheng, 1996; Ogbu & Simons, 1998; Quindlen, 2002; Robins et al., 2002; Trumbull et al., 2001). Highly effective teachers look at individuals. As one educator noted:

What I see in this room, right now, are (student) differences, one from the other...I see (students) as different: not different as black from white, but student from student. Every time I notice this I become conscious of the absurdity of asking that any of them "represent" anyone but themselves (Landsman, 2001, p.88).

Whatever the scope of differences in culture, socio-economic status, native language, etc. in the classroom, it is the teacher who has the primary responsibility for understanding the diversity, communicating its value, and ultimately, guiding learners to realize the importance and benefits of diversity to the classroom community and to society at large (Carter, 2000; Ogbu & Simons, 1998; Robins et al., 2002; Walqui, 2000).

Through consistent instruction that is culturally sensitive and responsive, classrooms can become places of hope, where students and teachers gain glimpses of the kind of society we could live in and where all students have access to the academic and interpersonal skills needed to make this vision a reality (Ginsberg & Wlodkowski, 2000; *The History and Philosophy of Rethinking Schools*, 2001).

If the most effective teachers know their students well (Stronge, 2002) and if culture is indeed a predominant force in people's lives (Robins, 2002), then a student's culture cannot be ignored, for it is an essential part of students' identity. Rather, culture must be boldly acknowledged and addressed in today's classroom. Students want and need to connect with what is taught, and one way to do this is to have a multicultural learning environment and curriculum in which diversity is discussed, appreciated, and continuously called upon in promoting student achievement and identity (Delpit, 1995; Ginsberg & Wlodkowski, 2000; Lasley & Matczynski, 1997; Tatum, 1997; Wlodkowski & Ginsberg, 1995).

Responding to the Impact of the Culture of Schooling on Student Expectations

Student motivation to succeed academically is complex and multi-faceted for all learners—and certainly for students of color. Motivation to learn is highest when a given student finds tasks meaningful, interesting, engaging, rewarding, challenging, and supported; when the student feels welcomed in and connected to the classroom; when the student develops a favorable attitude about learning; and when tasks help the student develop a sense of personal efficacy and competence (Csikszentmihalyi et al., 1993; Ginsberg & Wlodkowski, 2000; Wlodkowski & Ginsberg, 1995). These are intricate goals for teachers to support and certainly for individual learners to develop. For students of color, motivation leading to school success is affected by factors key to the motivation of all learners and often by another layer of variables that affect motivation.

In many ways and over time, students of color receive messages that academic achievement is more an expectation for others than for them (Perry, Steele, & Hilliard, 2003). The paucity of educators of color who might serve as indicators that their cultures make significant leadership contributions to schooling (Denbo, 2002b), scant representation of contributions of persons of color in textbooks of all sorts (Ginsberg & Wlodkowski, 2000), and persistent over-representation of minority students in special education and underrepresentation in programs for gifted learners and Advanced Placement classes (Donovan & Cross, 2002) are just a few of the indicators signaling students of color that academic excellence is outside the circle of their options. The impact of these signals can be profound and durable.

Some researchers conclude that culturally and economically underserved students may avoid association with academic endeavors out of fear that they will be seen as "acting White" or embracing the dominant culture and thus abandoning their own (e.g., Ford, 1996; Ogbu & Simons, 1998; Wortham, Murillo, & Hamann, 2002). Other researchers (e.g., Steele, 1999a; Nogura, 2002) believe the issue may not be a desire to avoid "acting White," but rather may signify students' fear that negative racial stereotypes may be applied to them, and that they may indeed prove the stereotype true. Thus, if students think there is a chance that they will fulfill

expectations of poor performance, and they start to experience difficulty, they may well be quick to believe that they will fail even if they have done well in similar situations in the past. Steele further suggests that this “stereotype anxiety” may also be one reason that minority students under perform in testing situations.

As students—especially during adolescent years—experience the pain of extra vigilance against the stereotype threat, they may begin to withdraw mentally and emotionally from investing in academics. At the same time, they may begin intensifying their identification with others in the stereotyped group who support the disidentification (Steele, 1999a).

Another closely related factor that may determine whether or not a student is motivated to pursue success in school relates to a student’s personal experience with success. Success breeds success. It is unreasonable to expect that students who have seldom or never experienced academic success will begin or continue to value academic achievement (Lomax, West, Harmon, Viator, & Madaus, 1996; Perry, Steele, & Hilliard, 2003; Tomlinson, 1999, 2001; Quindlen, 2002).

To sustain school success one must be identified with school achievement in the sense of its being a part of one’s self-definition, a personal identity to which one is self-evaluatively accountable. This accountability – that good self-feelings depend in some part on good achievement – translates into sustained student motivation” (Steele, 1999b, p. 93).

The combination of all these factors often results in decreased motivation to achieve academically in adolescent students of color. This, in turn, may extort a high price in terms of future options, following students through adulthood. Schools, programs, and teachers successful in supporting the development of academic capacity in students of color understand these negative forces at work in the lives of many students of color.

In the light of that understanding, they take consistent and determined action to minimize, counterbalance, and/or eliminate the forces, replacing them with messages and experiences that speak of academic successes as a right and expectation of students of color. For example, educators can work to ensure that students are not racially segregated in classroom groups, that

students pursue endeavors (for example: debate clubs, science clubs, orchestra) not traditionally associated with members of their cultural group, and regularly incorporate information related to the history and culture of the students into the curriculum—helping them to “see what it means to be who they are” (Nogura, 2002, p. 4). In addition, educators can consistently point to the rich history of varied cultural groups; establish mentoring, tutoring, and homework assistance groups with students of color; hold conversations with students of color to talk about their experiences and develop effective responses to difficult situations; and create support groups that help students identify their own interests and strengths and identify with peers who share those interests and strengths (Shaffer et al., 2002).

Demonstrating Belief in and Expectation for Academic Achievement by Students of Color

Messages that mitigate pressures causing many learners of color to reject serious academic achievement as an option can be counteracted when important adults in their lives persistently demonstrate an immutable belief in the capacity of the student to achieve at high levels and translate that belief into consistent action to support high levels of academic achievement. In other words, student expectations, to a large degree, mirror teacher expectations. When expectations are high for students, teachers demand more of students and at the same time support them academically and psychologically. When expectations are low, students are given less opportunity to learn, and low-level instruction is the norm (Borman & Rachuba, 2000; Downs, 2002; Fashola & Slavin, 1997; Gould, 2003; Hilliard, 1991; Landsman, 2001; Lomax et al., 1996; Quindlen, 2002; Obiakor, 1999; Olson, 2002; Sadowski, 2001; National Middle School Association, 2002; Tomlinson, 1999, 2001; Tomlinson & Allan, 2000; Yonezawa, Wells, & Serna, 2002). Hilliard (2003) notes that while too many educators would be satisfied with grade-level performance for students of color, teachers successful with helping students of color excel focus on opportunities to achieve at levels of excellence.

A major step in communicating and supporting high expectations for academic performance occurs when teachers accept responsibility for student academic success. In

such settings, students achieve better than in settings where teachers blame students or the students' homes for academic failure (Boykin, 2000).

Teachers who are successful with supporting academic success in students of color have a mindset that failure is not an option. They have the psychological strength, determination, and ability to interact and talk with students so that students know the teacher wants them to succeed and won't accept less from them (Foster, 1997). They function as advocates rather than adversaries for students of color.

Such teachers continually seek strategies to ensure success for the largest possible number of students. They begin instructional planning with a focus on what students can do and know rather than on deficits (Boykin, 2000). They establish firm expectations for student attendance and deadlines for student work, understanding that leniency is a kind of disrespect. They use small-group instruction to teach skills necessary for success. They support student success with text and other reading materials in a variety of ways. They involve students in analyzing and planning for classroom and personal success, and in continual academic conversations in the class (Cone, 1992, 1993; Hopfenberg & Levin, 1993). They model for students, think aloud to guide student thought, delineate clear guidelines for success, ensure resources are available for task completion, share goal setting with their students, anticipate student difficulties and help circumvent those difficulties, and provide frequent feedback that is constructive and specific to individual learners' goals (Ginsberg & Wlodkowski, 2000). They continually analyze their own work with students for what works and collaborate with colleagues to seek new approaches to support success (Cone, 1993; Meier, 1995).

In addition to large doses of emotional support, teachers who care about and support students of color demonstrate their regard for the students by ensuring access to materials and activities that are high in quality and rigorous in demand. In *Black Teachers on Teaching*, Joelle Vanderall (1997) states her belief that this kind of respect does not go unnoticed by students. Julie Landsman (2001) quotes a group of her Black students talking about ways in which some teachers communicate a lack of respect for their possibilities, while others communicate a

positive belief:

White teachers show they are afraid of us. They try to be too nice. And you know...we take what we can get. You all got to tell us what you all want from us. Yeah, you watch some of those mean ol' teachers. 'Specially the black ones. They tell us what to do, no foolin' around. Even some white teachers do this. Shows they respect us...Shows they expect we know how to behave (p. 104).

Providing High-Quality Curriculum and Instruction

There is ample evidence that the quality of instruction a student receives is intimately connected to that student's achievement and satisfaction with school (Beck & Allezaht-Snyder, 2002; Bridges, 2001; Chavkin & Gonzales, 2000; Foster, 1997; Gibson, 2002; Kea & Utley, 1998; Landsman, 2001; Obiakor, 1999; Perry, Steele, & Hilliard, 2003; Quindlen, 2002; National Middle School Association, 2002; Steele, 1999a & b; Trujillo, Carraway, Wallack, & Ivery, 2002; Weissglass, 2001). Students of color are placed at risk in a variety of ways when curriculum and instruction fail to prepare them for thoughtful, high-level participation in the society. Failure occurs when students of color are predominately engaged in rote, drill-based curricula and instruction that are unstimulating, uninviting, unresponsive to student interests and experiences, and feel punitive to students (Boykin, 2000; Cole, 1995, 2001; Denbo, 2002b).

A "pedagogy of poverty" (Haberman, 1991, p. 290) focuses on teachers giving information, asking questions, giving directions, making assignments, reviewing, punishing noncompliance, settling disputes, and giving grades. Such a curriculum not only stems from and feeds beliefs that students of color are incapable of success with richer, more demanding curricula and instruction, but serves to diminish future possibilities for success by denying the understandings and skills that are gatekeepers to undergraduate and graduate options for study.

By contrast, a "pedagogy of plenty" (Hodges, 2001, p. 3) engages students in authentic tasks, provides a literacy-rich environment, helps students connect schooling with their lives, casts students as problem

solvers on problems of interest to the students, emphasizes meaning-making with important ideas, ensures that students work in a variety of grouping arrangements, necessitates and supports substantive dialogue and debate, assists students in making informed decisions, incorporates students' heritage into schooling, requires creative thought, and ensures both cognition and metacognition in the context of meaningful work (Hale, 2001; Hodges, 2001; Hopfenberg & Levin, 1993). Such curricular and instructional approaches are standards based (Boykin, 2000) but do not exist for the purpose of raising test scores; rather for developing minds.

We should not let the standardized testing tail wag the educational dog; a wider range of cognitive outcomes should be sought, consistent with a constructivist agenda, that may not be easily packaged into a standardized test....the purpose of promoting intellectual development ultimately should not be to increase test scores per se, but to promote economically rewarding and personally valued cognitive skills, knowledge, and understanding across a broad range of intellectual competencies, as well as other desired outcomes in the realm of affect and motivation. Students should be turned on to learning as a lifelong endeavor (Boykin, 2000, pp. 13-14).

High quality instruction is personalized, focused on student interest and needs, and based on a genuine desire to help each and every child grow as much as possible (Downs, 2002; Fashola & Slavin, 1997; National Middle School Association, 2002). It is rigorous and joyful; it pushes students to learn as much as they can as fast as they can and at the same time helping them appreciate their accomplishments (Tomlinson, 1999, 2001; Tomlinson & Allan, 2000).

High quality curriculum and instruction are of critical importance for children of color on several levels. They train the intellect and open doors for future opportunity to be sure. Providing such learning opportunities for students of color is, again, a matter of respect (Cone, 1993; Hopfenberg & Levin, 1993; Tomlinson, 1999). When we believe students are capable of academic success, we provide curriculum that reflects that belief. We cannot believe in the capacity of students of color to succeed

academically and simultaneously provide for them curricula and instruction that chiefly requires low-level cognitive involvement.

Schools and classrooms successful in developing the capacity of students of color understand the need to train the intellect and pave the way to high-level opportunity. They also understand that the messages we convey about our belief in students through the curriculum and instruction we plan for them will not be missed by students of color in our schools and classrooms. Thus these schools and classrooms, persistently and with support for success, involve students of color in curricula and instruction that build on student strengths, are high relevance, require inquiry and active learning, ensure acquisition of critical knowledge and skills (including skills of text interpretation and oral communications), and necessitate problem solving and independent projects (Boykin, 2000; Hopfenberg & Levin, 1993; Meier, 1995).

Develop Policies and Programs that Support Student Success

Skilled and motivated teachers can, within their own classrooms, create miracles. Schools effective in supporting development of capacity in students of color value and nurture that reality by providing policies and program structures that support both teacher and student excellence.

One key issue requiring focused attention from schools intending to be catalysts for development of academic capacity in students of color is access to advanced learning opportunities. Despite years of study and debate, it is still typically the case that there are low levels of participation by students of color in programs for students identified as gifted, K-12, and in advanced classes at the secondary level (Denbo, 2002b; Donovan & Cross, 2002). Currently, both types of classes are most often startlingly homogeneous in nature, with a disproportionately small number of learners of color in courses where the level of expectation and demand are high, and a disproportionately large number of students of color in remedial courses where less demanding curriculum and instruction is the norm (Landsman, 2001; Mehan et al., 1996; Olson, 2002; Yonezawa et al., 2002).

Because teacher expectations tend to be higher in those classes labeled advanced or honors, some educators advocate what we

often call gifted education for all students and for a school-wide focus on challenge rather than remediation (Awaya, 2001; Hopfenberg & Levin, 1993; Ogbu & Simons, 1998; Olson, 2002; Steele, 1999a & b). Without such preparatory experiences, students of color and students from low economic backgrounds may never be able to participate in large numbers in the societal opportunities that are an expectation for their White peers (Hilliard, 1991; Quindlen, 2002; National Middle School Association, 2002; Walters, 2002).

In addition, it is essential that schools modify policies to ensure open access to advanced learning opportunities for students of color and students from low economic backgrounds. Since many minority parents may not have access to the “insider information” about advanced classes (Bridges, 2001; Cheng, 1996, Yonezawa et al., 2002; Hilliard, 1991; Westby, 1997), there is a need for sustained effort by teachers and schools to explicitly provide this information to students of color and their parents (Awaya, 2001; Gandara et al., 1998; Ogbu & Simons, 1998; Walqui, 2000; Walters 2002).

Advanced Placement and other advanced courses are often the way to access high-level learning opportunities. Gamoran (2003) concludes that differences within schools relative to quality of instruction account for more of the achievement gap that exists between students of color and their White peers than do differences in quality of curriculum and instruction across schools. Tracking, he concludes, is an organizing device that perpetuates inequality of educational opportunity.

For example, studies by the Center on English Learning and Achievement show that students in high-track classes engage in dialogue to build broader and deeper understanding of literature and engage in substantial dialogue about important topics and challenging subject matter. Further, students in those tracks engage in more authentic writing, necessary to support metacognitive reflection on the learning process. By contrast, students in lower-track classes engage in fewer substantive discussions, spend less time constructing meaning, make fewer connections between reading and writing, have less homework assigned and completed, and spend more time on grammar drills. (Center on English Learning and Achievement, 2003)

Gamoran (2003) concludes that differences in track assignments and instructional quality

within those tracks contributes significantly to the literacy achievement gap in middle and high schools. Policies to ensure consistent access to high-level learning opportunities for students of color—including elimination of tracking at all levels of schooling—are an imperative for schools desiring to develop the capacity of students of color (Denbo, 2002a; Mehan et al., 1996; Shaffer et al., 2002; Thandwie, 2002). Notes one author (Mehan et al., 1996), “The sorting practices of the school constitute the very identities of the students they touch. *It is not that dumb kids are placed in slow groups or low tracks; it is that kids are made dumb by being placed into slow groups and low tracks*” (italics in original, p. 230).

Even when students of color do gain access to learning opportunities for students identified as gifted and/or to advanced classes, they are too often the only member of their cultural peer group in the class. Sometimes students choose to stay in less challenging classes because they are more familiar with what is expected there and don’t want to leave the support system provided by their friends (Yonezawa et al., 2002).

If significant numbers of culturally and economically diverse students are to succeed in advanced learning opportunities, they will need a strong support system that offers both affective support and support in addressing academic deficiencies that may be present due to less rigorous earlier schooling experiences (Donovan & Cross, 2002; Yonezawa et al., 2002). Recommended support structures include opportunities for help and enrichment both in and outside of the school day, special instruction in reading and math, double dose learning opportunities, tutoring, quality bilingual and/or ESL programs, field trips, homework clubs, and college and career guidance structured for their particular needs (Boykin, 2000; Gould, 2003; Ogbu & Simons, 1998; Walters, 2002; Williams & Krajewski, 2001). Further, it appears likely that schools successful in supporting academic success for students of color employ multiple support systems simultaneously working toward the same goals (Boykin, 2000; Tomlinson et al., 1997). Key to academic success of students of color, and thus an important element in school support systems, is connections between family and school.

Programs (and teachers) successful in supporting academic success for students of color also establish connections with students’ families, seeing them as substantive and integral

partners in the educational process.

It is generally agreed that parent involvement in children's schooling is the linchpin of student success. However, engaging parents from so-called "minority" communities requires teachers to become familiar with different ways of seeing the world...Only by understanding why people behave and think as they do can a teacher hope to make real connections with students and their parents. Authentic cross-cultural connections, based not just on tolerance, but on understanding and appreciation, are essential if students and their parents are to feel they are a part of the school. We know what happens when students and families do not feel as though they belong: less parent involvement, lower student achievement, and higher drop out rates (Trumbull et al., 2001, p. xiv).

In schools effective in developing the academic potential of students of color, "family" is taken to mean caregivers, legally and informally. Families need to know that they are partners whose perceptions, opinions, and experiences are valued by educators. It is parents' actual experiences with the school that affect how they see the schooling of their children (Brunn, 2002; Ogbu & Simons, 1998). Consequently, schools must work actively to gain or regain family trust and investment in schools—a trust too often damaged by negative personal encounters with schools and other public institutions (Denbo, 2002b). Educators successful in building bridges between school and parents of color develop cultural knowledge as a means of understanding and empathizing with family members and develop patterns of communication that support both the family and student academic growth (Trumbull et al., 2001).

In addition, schools effective in developing the academic potential of students of color establish ongoing staff development programs that guide teachers in developing the understandings and competencies necessary to work knowledgeably, artfully, and enthusiastically with students and families from varying cultural groups. Such programs help educators: reflect on their own cultural experiences and the similarities and differences among cultures; examine and, when necessary, modify their beliefs about students of color;

understand the culture, community, and language of students of color and how those elements can become effective vehicles for meaningful teaching and learning; gain information about the full range of contributions made to all disciplines by people of color; develop competencies necessary for effective cross-cultural communications; and develop culturally responsive pedagogy (Shaffer et al., 2002).

Developing Supportive and Nurturing Learning Environments

Schools and educators intent on development of capacity in students of color create nurturing and supportive learning environments where students of all cultures feel appreciated, respected, and cared about and at the same time feel stretched and supported for maximum growth. In these environments educators understand the challenges faced by many of their students, but enact a compassion of expectations rather than of excuses (Williams & Krajewski, 2001). In this way, educators help students pave the way to improved opportunity rather than replicating past difficulties.

All students, but perhaps most particularly students of color, desperately need relationships with educators who know them, care about them, and believe in them (Sadowski, 2001; Shaffer et al., 2002). Successful teachers of culturally diverse students frequently mention the importance of creating a bond, a strong sense of connection with each and every student (Foster, 1997; Ginsberg & Wlodkowski, 2000; Hilliard, 1991; Landsman, 2001; Nogura, 2002; Quindlen 2002; Steele, 1999a & b; Trujillo et al., 2002). This sense of connection encompasses not only recognition of similarities and differences, but also a sense of mutual respect for these differences; indeed a celebration of these differences. Teachers who are able to communicate this sense of connection tend to have students who are more engaged in learning, more motivated to succeed in school, and more resilient when encountering obstacles along the way (Borman & Rachuba, 2000; Nogura, 2002; Obiakor, 1999; Trujillo et al., 2002).

To establish and sustain this type of bond requires specific attitudes and skills on the part of the teacher. Affect-savvy teachers are likely to be self-aware and psychologically stable. They love learning and have a can-do attitude about

what they and their students can accomplish. They care about what they do on a personal and a professional level. They are interested in growth not only for their students but for themselves as well. Most of all, these teachers care about children, their lives, and their growth and development as people (Cheng, 1996; Foster, 1997; Robins et al., 2002; Weissglass, 2001). Veteran teacher Lorraine Lawrence explains:

Most efforts in education are aimed at developing better ways to test teachers' knowledge of subject matter. There is no question that teachers have to know the subject they plan to teach. But the kind of changes needed in education will not come only from having teachers better trained in their subject matter. We've got to devise ways to determine which teachers can develop the empathy and understanding necessary to teach all students, but especially black students. Until we do that we're going to continue to have large numbers of black students fall through the cracks (Lawrence, 1997, p. 100).

Educators in environments that balance nurturance with demand and support guide students to believe in themselves, dream, work hard, persist, and plan for their futures (Nogura, 2002).

Working for Meaningful Change

It is possible to change school practices and policies without making a positive difference in anyone's life. Meaningful change is quite a different thing than change. Teachers and schools that intend to support academic success in students of color pursue the former, not the latter. They understand the difference between adopting an idea and implementing it with fidelity. "The former is a paper transaction, the latter a human transaction that carries with it all the complexities of human societal dynamics" (Boykin, 2000, p. 15).

For a variety of reasons, teachers are resistant to changes that require them to make substantial changes in their teaching practices (Weissglass, 2001). This, of course, makes teacher-dependent change quite challenging. Thus leaders seeking changes that can transform the education and lives of students of color are judicious in the pursuit of change. They

work to establish a commonality of purpose and mission among staff members; are specific in expectations for the change and its implementation; provide necessary professional development, feedback, and support for teachers who are the frontline implementers of the change; empower teachers to make important decisions; study what works and what doesn't work, using assessment results and other data to refine practice (Boykin, 2000; Ginsberg & Wlodkowski, 2000; Hopfenberg & Levin, 1993; Reeves, 2002).

Such leaders work for change that is comprehensive (affects all facets of school life), authentic (moves from slogans to action to change minds, atmosphere, and practice in the school), sustained (endures over time in the day-to-day operation of the school), and systemic (not a collection of acts or activities but a coordinated network of initiatives to achieve clear goals throughout a school and/or district) (Boykin, 2000). Such leaders are bold and on a mission to demonstrate through action that:

Children can succeed in school if they are fortified where they are vulnerable through providing supportive and integrated academic, personal, and social services; through tutorial assistance and academic, cultural, and social skills enrichment activities as needed; and through fostering resiliency so that they can succeed even in the face of adverse circumstances (Boykin, 2000, p. 9).

The chapters that follow provides evidence both that educators and programs exist that daily defy stereotypes in favor of bold actions to change the course of the education and lives of students of color and/or low economic status in their schools.

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Chapter Three

Curriculum and Instruction for Culturally Diverse Gifted Learners

Donna Y. Ford

The 21st Century is witnessing an unprecedented change in its demographics. Like no other time in history, our nation is becoming overwhelmingly diverse, with Hispanic Americans and African Americans increasing drastically in numbers. However, as our nation and schools become more diverse than ever before, we have witnessed little demographic change relative to diversity in gifted education programs, classes, and services. Further, there is the opposite trend among the teaching profession, which has become increasingly less diverse. These changes—reverse trends and demographics—carry important implications for the field of gifted education relative to changes that may need to be made in policy and practice.

While it is painful—even shameful—to admit, historically, gifted education has been neither aggressive nor proactive at responding to issues of diversity and addressing the needs of students from ethnically and culturally diverse backgrounds. Noticeably absent in the discussion of services, programming, and instruction, including differentiation, has been attention to issues of diversity. A review of the gifted education literature on topics ranging from identification to programming, sadly, points to a picture of homogeneity and lack of differentiation in actual practice. Homogeneity is most blatant in areas of identification, definitions, instruction, and curriculum. For example, despite efforts to reverse this pattern, gifted programs tend to be extensively White and middle class. Despite efforts to reverse this pattern, most schools rely extensively on one measure – tests – to identify students as gifted. Despite efforts to reverse this pattern, most schools define giftedness in terms of cutoff scores and standard deviations. Despite efforts to reverse this pattern, most schools only serve intellectually and academically gifted students. And despite efforts to reverse this pattern, curriculum for gifted students seldom has a multicultural focus.

The history of gifted education, compared to special education, is a short one. And the history of addressing the needs of gifted students who are culturally diverse is even briefer. In reading

the literature in gifted education, it is apparent that several topics dominate the discussion: (1) how best to define giftedness; (2) how best to identify gifted students; and (3) how best to serve or service gifted students. Regardless of the content of the publications, a major theme is that, for gifted students to reach their potential, they must be appropriately identified and served. We have aggressively promoted the belief that gifted students can reach their full potential in school settings only if they are given an education that meets their particular needs as gifted students. Too often, teachers have taught gifted students by offering more of the same level of material, providing either enrichment or acceleration alone, focusing only on cognitive growth in isolation from affective, physical, or intuitive growth, teaching higher-level thinking skills in isolation from academic content, presenting additional work that is just different from the core curriculum and/or grouping students with intellectual peers without differentiating content and instruction (National Association for Gifted Children, 1994).

Recognizing that gifted education must be more than quantitatively different from general education—not just more of the same—scholars have developed various curricular and instructional models to serve gifted students. While there are differences in these models, under-girding all of them is the philosophy that “differentiated services” must be provided for gifted students, namely modifying the pace, depth, and breadth of curriculum and instruction relative to content, process, environment, and products. According to the National Association for Gifted Children (1994), at minimal, differentiation includes: acceleration of content; in-depth study; a high degree of complexity; advanced content; and/or variety in content and form. Delivery models that address at least one of these areas of differentiation include acceleration, enrichment, higher-level thinking skills, flexible grouping, and compacting, for example.

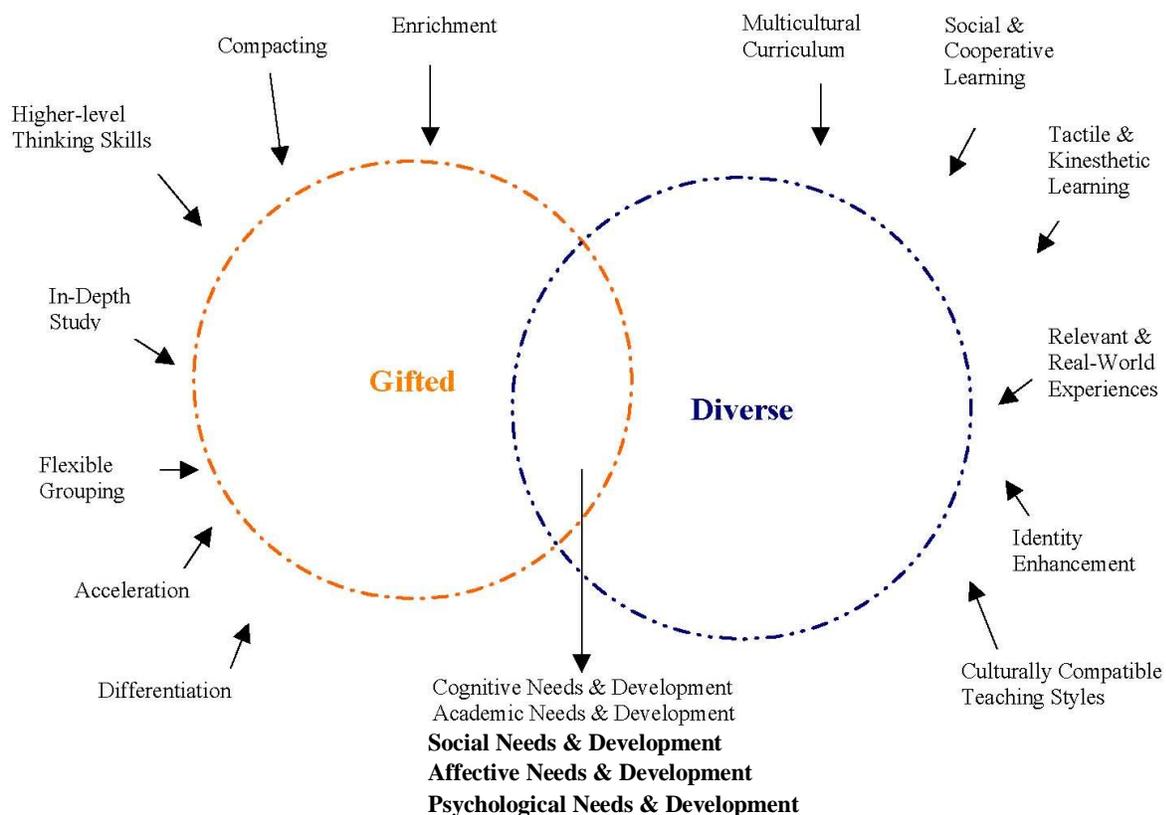
Strategies to differentiate curriculum and instruction for gifted students, as noted, address

modifications in at least four major areas: content; process; product; and learning environment. Strategies for content differentiation include presenting content that is related to broad-based issues, problems and themes; multidisciplinary approaches to teaching; streamlining content; and organizing content to emphasize higher-level skills and concepts. Strategies for process differentiation include an emphasis on independent or self-directed study, a focus on open-ended tasks, and in-depth learning on selected topics, particularly those of interest to the gifted student. In terms of products, differentiation provides students with opportunities to apply and synthesize what they have learned. Sample strategies include the development of products that focus on real-world problems, the creation of products that challenge existing ideas and produce new ones, and other products beyond paper-and-pencil tasks (e.g., writing papers, taking test, etc.). Finally, differentiating the learning environment includes a focus on self-

understanding and self-direction, and helping students to develop a positive and proactive attitude toward learning. All of these strategies are utilized with gifted students at the center of the teaching and learning process.

In the following pages, we build upon the exist body of work on gifted students by describing promising practices for working with students who are not only gifted, but also culturally diverse. Our *model* or *framework* is a simple one, and can be described using a Venn diagram (Figure 3.1). Our *position* is also simple—in meeting the needs of culturally diverse gifted students, it is essential that we do so by considering their different needs as students who are gifted and as students who are culturally diverse. A common statement in gifted education is that gifted students are gifted 24 hours a day, 7 days of the week (Ford & Harris, 1999). Likewise, culturally diverse students are culturally diverse 24 hours a day, 7 days of the week. Thus, we contend that the most effective

Figure 3.1: Venn Diagram Depicting Needs of Students Who are Gifted and Culturally Diverse: Sample Differentiation or Instructional Strategies



way to teach gifted students is to consider the combined needs associated with being gifted on the one hand and being diverse on the other. The strategies described herein borrow from two fields of education: gifted education and urban or multicultural education. In effect, we are bridging two fields to meet the dual needs of the students under discussion

Gifted Education

Compared to students in general, gifted students have unique needs associated with being gifted, with being *different* from other students. For example, relative to cognition, these students tend to: be abstract thinkers; be curious or inquisitive; see connections and relationships that others do not see; be insightful; have an extensive vocabulary; be independent thinkers; and enjoy experimentation and manipulating ideas. Gifted students are also more likely than other students to have a gap in different areas of development, referred to as “asynchrony.” While they may be cognitive and academically advanced, some gifted students may lag behind in social and emotional maturity.

In terms of social and affective development, gifted students may have more challenges than other students in finding true peers, age-mates with whom they can identify intellectually and socially. This concept of “dyssynchrony” can take its toll on gifted students who have trouble finding someone to relate to beyond their intellectual and academic interests. Educators – teachers, administrators, counselors, and psychologists – who are not familiar with, who ignore, and/or who minimize the various needs of gifted students are likely to be ineffective with them.

This last argument, albeit stated differently, also holds true for culturally diverse students – educators who are not familiar with, who ignore, and/or who minimize the various needs of diverse students are likely to be ineffective with them. In essence, we must ask ourselves, how are we responding to student differences? What are the effects of ignoring the needs of students who are gifted? What are the effects of ignoring the needs of students who are culturally diverse? What are the effects of ignoring the needs of students who are gifted and culturally diverse? Stated another way, how can we address the needs of students who are gifted? How can we address the needs of students who are culturally diverse? How can we address the

needs of students who are gifted and culturally diverse?

Americans have a love-hate relationship with gifted students whereby the products of talent are valued, but services to gifted students are viewed as elitist and anti-democratic. The initial, sporadic, and short-lived emphasis on gifted education raised many of the problems advocates of gifted education face today: under-funding, under-staffing, and a sort of studied inattention to the needs of gifted students. As Zirkel and Stevens (1987) reported, of the estimated 2.5 to 3.0 million gifted children in the nation¹, only 1.2 million participate in special programs for gifted students. Thus, even those districts providing gifted education often fail to serve all of their qualified students.

While two-thirds of states mandate the establishment of programs for gifted students, state guidelines tend merely to describe rather than mandate what is desirable. Gallagher (1988) identified four contributing factors: narrow definitions of giftedness and subsequent identification procedures; lack of offerings at certain grade levels or in certain subject areas; superficial provisions rather than substantive programs; and a lack of understanding of the many and varied needs of gifted students.

This scarcity of high quality programs is exacerbated by the fact that no mechanism exists to require the many mediocre programs to improve. Compounding the problem further are the pervasive inconsistencies in the shape and comprehensiveness of existing state and local initiatives. Some gifted students receive as little as three to five hours a week of special instruction, primarily in the form of pull-out programs that cannot possibly meet the diverse needs of these students.

Thus, like students of color, gifted students frequently face educational neglect. The National Commission on Excellence (1983) stated, "most gifted students should be provided with a curriculum enriched and accelerated beyond the needs of other students of high ability" (pp. 8, 24). As Renzulli and Reis (1991) emphasized, these needs extend beyond

¹ This figure is based on students who score in the top 3% to 5% on intelligence tests. It, therefore, underestimates the number of gifted students in general, as well as those not served. If one adopts a talent pool perspective, the number of gifted students would be greater. The figure also ignores gifted students with strengths in creativity, visual and performing arts, leadership, and academics.

cooperative learning, heterogeneous grouping, and the “dumbing” down of the curriculum. Rather, gifted students require a more intensive and individualized curriculum, more challenging tasks, increased opportunities for creative expression and enrichment, and practical guidance and experience. More recently, Davis and Rimm (2004) identified several goals of gifted education:

1. To provide programs to help meet the psychological, social, educational, and vocational needs of gifted students;
2. To help students become more capable of intelligent choice, independent learning, problem solving, and self-initiated action;
3. To strengthen skills and abilities in problem solving, creative thinking, communication, independent study, and research;
4. To reinforce individual interests;
5. To bring capable and motivated students together for support and intellectual stimulation;
6. To maximize learning and individual development, while minimizing boredom, confusion, and frustration; and
7. To help gifted students realize their potential and their contributions to self and society (p. xv.).

Below, we describe ways to meet these goals.

Differentiation: Teaching Gifted Students

Regardless of the model of service delivery a school adopts to service its gifted students, the concept of differentiation lays the foundation for gifted education curriculum. Effective curriculum and instruction for gifted students modifies content, process, product, and learning.

An effective curriculum for gifted students is first and foremost the general education curriculum, which is modified to meet their needs. The different and unique characteristics of the students serve as the basis for decisions on how the curriculum should be modified to meet their educational needs. Gifted education programs and services that build upon the characteristics and needs of gifted students are qualitatively different from the general education curriculum; a differentiated curriculum for gifted students is not based on quantitative adaptations (e.g., more work). In essence, it is agreed in the field that we must alter the general education curriculum in terms

of process, content, products, and environment.

Modifying Process. To modify process, teachers must redesign or restructure activities to be more intellectually demanding. For example, students need to be challenged by questions that require a higher level of response or by open-ended questions that stimulate inquiry and active exploration and discovery. The goal here is for students to think about subjects in more abstract and complex ways.

Modifying Content. Content can be modified through acceleration, compacting, variety, reorganization, flexible pacing, and the use of more advanced or complex concepts, abstractions, and materials. Content consists of ideas, concepts, descriptive information, and facts (Berger, 1991).

Modifying Products. Teachers can encourage students to demonstrate what they have learned in a wide variety of forms that reflect both knowledge and ability (Berger, 1991). Ideally, products should address real and authentic problems, concerns, and audiences.

Modifying Environment. All students learn best in a democratic, nonjudgmental, student-centered environment; however, gifted students appear to require more independence and opportunities to explore and inquire in a non-threatening setting.

Characteristics of a Differentiated Class

According to Tomlinson (1995), four characteristics shape teaching and learning in an effective differentiated classroom:

1. *Instruction is concept focused and principle driven.* Gifted students are given the opportunity to explore and apply the key concepts and principles of subjects being studied. This type of instruction helps students grasp and use powerful ideas and encourages students to expand their understanding and application of the key concepts and principles. Such instruction stresses understanding or sense-making rather than retention and regurgitation of fragmented bits of information (Berger, 1991).
2. *Flexible grouping is used.* In a differentiated class, students work in many grouping arrangements. Students may work alone, in pairs, and in groups. Arrangements can be

made based on readiness, interests, and/or learning styles. In a differentiated classroom, whole-group instruction may also be used for introducing new ideas, when planning, and for sharing learning outcomes (Berger, 1991).

3. *Students are active learners and explorers, with teachers serving as guides in the exploration.* Teachers work more as guides or facilitators of learning than as dispensers of information.

According to Tomlinson (1995), modifications of the general education curriculum can be made by teachers offering students a range, or continuum, of learning tasks developed along one or more of the following continuums:

1. *Concrete to abstract tasks.* Gifted students frequently benefit from tasks that involve more abstract materials, representations, ideas, or applications than other students.
2. *Simple to complex tasks.* Gifted students tend to benefit from assignments that are more complex in resources, research, issues, problems, skills, or goals.
3. *Basic to transformational tasks.* Gifted students often learn more from tasks that require greater transformation or manipulation of information, ideas, materials, or applications than other students.
4. *Single-faceted to multi-faceted tasks.* Gifted students appreciate tasks or assignments that have more steps or parts in their directions, connections within or across subjects, or planning and execution.
5. *Smaller mental leaps to larger leaps.* Gifted students tend to appreciate tasks that require greater mental leaps in application, insight, or transfer.
6. *More structured to less structure.* Gifted students learn more from assignments or tasks that are more open relative to procedures, solutions, decisions, and materials.

7. *Dependence to independence.* Gifted students learn when there is independence in planning, designing, and self-monitoring.

8. *Slower to faster pace.* Gifted students tend to benefit from acceleration, namely quick movement through prescribed materials and tasks. Hence compacting, telescoping, and grade or subject skipping may be used with them.

Multicultural Education: Teaching Culturally Diverse Students

The field of multicultural education, as a formal discipline, is in its infancy. It is a field of study and an emerging discipline whose major goal is to create educational opportunities for students from diverse racial, ethnic, social-class, and cultural groups (Banks, 1999; Banks & Banks, 1995). One of the important goals of multicultural education is to help all students acquire the knowledge, attitudes, and skills needed to function effectively in a pluralistic democratic society and to interact, negotiate, and communicate with people from diverse groups. Ultimately, multicultural education seeks to create a civic and moral community that works for the common good (Banks & Banks, 1995, p. xi). These goals are consistent with our democratic principles of equity and justice, as represented in founding documents, such as the Declaration of Independence. Multicultural education seeks to put the words of these documents into reality.

When designing the most appropriate educational experiences for culturally diverse students, at least three areas must be addressed: multicultural curricula considerations; multicultural instructional considerations; and culturally responsive learning environments, as described below. Before presenting these components, we must note that the notion of “differentiation” often discussed in gifted education applies equally well to culturally diverse students. When addressing their specific and unique educational needs, we must make modifications to content, process, product, and learning environments, as reflected in figure 3.2.

Figure 3.2: Differentiating Content, Process and Learning Environments in Gifted and Multicultural Education.

	Gifted Education	Multicultural Education
Content	Content is modified through the use of more advanced or complex concepts, abstractions, and materials.	Content is modified to include greater focus on multicultural concepts, issues, themes, events, and persons. Curricular resources and materials are multicultural.
Process	Activities are redesigned or restructured to be more intellectually demanding. Higher-level thinking, problem solving, inquiry-based learning are used, as well as acceleration.	Instructional strategies, including teaching styles, are modified to match more closely the learning and cognitive styles of culturally diverse students. Students' cultural backgrounds and characteristics are given substantive consideration in instructional practices.
Product	Students share their learning in varied ways, particularly by producing products that are authentic, address real issues, and have real audiences.	Students share their learning in many ways, but a multicultural focus is always present to some degree. Students develop products that address issues and solve problems germane to culturally diverse populations.
Learning Environment	Teachers create environments that are safe, non-judgmental, and student-centered such that students are at ease in taking intellectual and creative risks. Teachers create a sense of community in which all gifts and talents are valued and respected.	Teachers create learning environments that affirm students' identity as cultural beings; teachers use the cultural characteristics of diverse groups to create a learning community where all individuals are valued and respected.

Multicultural Curriculum – Modifying Content

In general, a culturally responsive curriculum is one in which the materials, content, and resources used to teach students have a multicultural focus. As with differentiating the basic curriculum for gifted students, as described earlier, multicultural education is also concerned with differentiation. Changes are made to the content of the curriculum, adding culturally diverse people, resources, books, events, topics, and issues, for example.

The overall goal of a multicultural curriculum is to affirm students' identity, to increase they engagement, interest and motivation in learning, with the ultimate outcome being increased achievement. Few models exist that specifically

address ways to modify curriculum (Ford & Harris, 1999).

Banks (1999; Ford & Harris, 1999) discussed four levels of integration of multicultural content into the curriculum. In level 1, the *Contributions Approach*, educators focus on heroes, holidays, and discrete elements. This is the most frequently adopted and extensively used approach to multiculturalism in the schools. An important characteristic of this approach is that the traditional ethnocentric curriculum remains unchanged in its basic structure, goals, and salient characteristics. Students are introduced to culturally diverse heroes, such as Caesar Chavez, Martin Luther King, Jr., and Booker T. Washington. Furthermore, individuals

who challenged the predominant cultures' ideologies, values, and conceptions and who advocated radical social, political, and economic reform are often ignored in this approach. As a result, Martin Luther King Jr. is more likely to be discussed than Malcolm X; and Booker T. Washington is more likely to be discussed than W.E.B. DuBois. Subsequently, students acquire a distorted or incomplete view of history and reality.

Another characteristic of this low-level approach is that cultural traditions, foods, music, and dance may be discussed, but little or no attention is given to their meaning and significance to culturally diverse groups. Also, ethnic content is limited primarily to special days, weeks, and months related to culturally diverse groups. Students learn little to nothing about the occasion, group, or individuals being "celebrated." The contributions approach is cosmetic; it provides teachers with a quick, non-threatening way to "integrate" the curriculum, and teachers themselves can adopt this approach without knowing much about racially and culturally diverse groups. It also reinforces stereotypes about culturally diverse groups, while using safe, non-threatening heroes found acceptable to the mainstream.

In the *Additive Approach* (level 2), the content, concepts, themes, and perspectives of culturally diverse groups are added to the curriculum without changing its structure. For instance, teachers may add a book, unit, or course to the curriculum that focuses on diverse groups or topics. While the content changes slightly, there is little restructuring of the curriculum relative to purposes and characteristics. Culturally diverse students learn little of their own history, and White students learn little of the history and contributions of other racial and cultural groups to American society. For instance, students reading *Amazing Grace*, *The Autobiography of Malcolm X*, *Roll of Thunder*, *Hear My Cry*, *The Bluest Eyes*, *The Invisible Man*, *I Know Why the Caged Bird Sings*, *The Color Purple*, or *Native Son*, often lack the concepts, content background, and emotional maturity to understand, appreciate, respect, and cope effectively with the concepts and issues discussed in the books. The additive approach fails to help students view society from diverse perspectives and to understand the ways in which the histories of the nation's diverse racial, cultural, ethnic, and religious groups are interconnected (Banks & Banks, 1995, p. 202). This superficial approach requires

little time, effort, training, and rethinking of curriculum and instruction.

In the third level, the *Transformational Approach*, the structure of the curriculum is changed to enable students to view concepts, issues, events, and themes from the perspectives of culturally diverse groups. This is a fundamental, substantive change from the previous two levels; one now sees changes in the basic assumptions, goals, nature, and structure of the curriculum. The fundamental goal of the transformation approach is to help all students to feel informed and empowered. According to Banks and Banks (1995), the curriculum must focus on how the common U.S. culture and society emerged from a complex synthesis and interaction of the diverse cultural elements that make up the U.S. This approach requires extensive curriculum revision, changes in teacher preparation, and much time, effort, and commitment.

In level 4, the *Social Action Approach*, students make decisions on important social issues and take action to help solve them. Students are not socialized to accept mainstream ideologies, practices, and institutions. Instead, students feel empowered and are proactive; they are provided with the knowledge, values, and skills necessary to participate in social change. Student self-examination becomes central in this approach through value analysis, decision making, problem solving, and social-action skills. For example, students examine issues surrounding prejudice and discrimination, and they develop ways to improve race relations. This approach is least likely to be adopted by educators, primarily because teachers lack formal training, experience, understanding, and personal knowledge of other racial and cultural groups (e.g., histories, values, beliefs, customs) (Ford & Harris, 1999) (see Figure 3.3).

At the highest levels, the models described by Banks (1999) and Banks and Banks (1995) require extensive philosophical and curricular changes. Certainly, the most important reasons for multicultural education are its benefits to students. Multicultural education helps all students to accept their culture as an essential component of their personal development. While increasing their knowledge about cultural and racial diversity, students acquire an ethic of social justice—their sense of personal independence, social interdependence, personal responsibility, and social responsibility increase

interest, as does motivation and learning (Gay, 1995).

Figure 3.3: Approaches to Integrating Multicultural Content.

APPROACH	CONTRIBUTIONS	ADDITIVE	TRANSFORMATIONAL	SOCIAL ACTION
DESCRIPTION	Heroes, cultural components, holidays, and other discrete elements related to ethnic groups are added to the curriculum on special days, occasions, and celebrations.	Consists of additions to the content, concepts, themes, and perspectives to the curriculum without changing its structure.	The basic goals, structure, and nature of the curriculum are changed to enable students to view concepts, events, issues, problems, and themes from the perspectives of diverse groups.	Students identify important social problems and issues, gather pertinent data, clarify their values on the issues, make decisions, and take reflective actions to help resolve the issues or problem.
EXAMPLES	Famous minorities are studied only during certain times. Little attention is devoted to the cultures in which the artifacts are embedded.	Adding books and materials without reconceptualizing the unit or giving the students the background knowledge to understand the books or materials. Adding a unit on an ethnic group without focusing on the group in other units. Leaving the core curriculum intact but adding an ethnic studies course, as an elective.	Units describe the meaning of events, issues, etc., to all groups involved. All voices are heard.	Students study prejudice and discrimination in their school and take action to improve race relations. Students study the treatment of culturally diverse groups and take action to redress inequities.
STRENGTHS	Provides a quick and easy way to put ethnic content into the curriculum. Gives ethnic heroes visibility in the curriculum, alongside mainstream heroes. Most frequently adopted in schools.	Makes it possible to add ethnic content into the curriculum without changing its structure. Requires little change and staff development. Can be implemented within the existing curriculum.	Enables students to understand the complex ways in which diverse groups participated in the formation of the U.S. society and culture. Helps reduce racial and ethnic encapsulation. Enables diverse groups to see their cultures, ethos, and perspectives in the school curriculum. Gives students a balanced view of the nature and development of U.S. culture and society. Helps to empower culturally diverse groups.	Enables students to improve their thinking, value analysis, decision-making skills, and social-action skills. Enables students to improve their data gathering, social-actions, and problem-solving skills. Helps students to develop a sense of political efficacy. Helps students to improve their skills in working with diverse groups.
PROBLEMS	Results in a superficial understanding of ethnic cultures. Focuses on the	Reinforces the idea that ethnic history and culture are not integral parts of the U.S. mainstream culture. Students view	Requires substantial curriculum revision, in-service training, and the identification and development of	Requires a considerable amount of curriculum planning and materials. Longer in

	lifestyles and artifacts of ethnic groups; reinforces stereotypes and misperceptions. Mainstream criteria used to select heroes and cultural elements for inclusion in the curriculum.	ethnic groups from a Eurocentric perspective. Fails to help students understand how the dominant culture and ethnic cultures are interconnected and inter-related.	materials written from the perspectives of diverse groups. Staff development for the institutionalization of this approach must be ongoing.	duration than more traditional teaching units. May focus on problems and issues considered controversial. Students may be unable to take meaningful actions that contribute to the resolution of some social issues and problems.
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Ford, D. Y. & Harris, J. J. (1999). *Multicultural gifted education*. New York: Teachers College Press. Used with permission.

Multicultural Instruction – Modifying Process

Boykin (1994), Saracho and Gerstl (1992), Shade, Kelly, and Oberg (1997), and others have presented convincing research supporting the notion that culture influences learning styles and thinking styles. In his Afro-centric model, Boykin identified nine cultural styles commonly found among African Americans, namely, spirituality, harmony, oral tradition, affective, communalism, verve, movement, social time perspective, and expressive individualism (see Figure 3.4). Movement refers to African Americans being tactile and kinesthetic students who show a preference for being physically involved in learning experiences. They are active students who are engaged when they are physically and psychologically involved; otherwise, they may be easily distracted and off task. Harmony refers to an ability to read the environment well; to read non-verbal behaviors proficiently. Thus, students who feel unwelcome in their classes may become unmotivated and disinterested in learning. Communalism refers to a social, extraverted, cooperative, interdependent style of living and learning such that competition (especially with friends) is devalued. Thus, students with this learning preference may be unmotivated in highly individualistic and competitive classrooms, preferring instead to learn in groups rather than in isolation.

Accordingly, teachers should learn to modify their teaching styles to accommodate different learning styles. For example, to accommodate students' preference for communalism, teachers can use cooperative learning strategies and place students in groups when working on assignments; they might also need to decrease competition between students and encourage social or cooperative learning. To accommodate oral tradition, verve and movement, teachers

can give students opportunities to write and perform skits, to give oral presentations, and to participate in debates.

Culturally Responsive Learning Environments – Modifying Environment

A culturally responsive learning environment is inclusive of multicultural curriculum and instruction, as just described. When these needs are addressed in a positive and proactive manner, the environment will be more respectful of and value student differences along cultural lines. Teachers who foster learning environments that are culturally responsive are responsive, first and foremost, to the cultural needs of their students. They develop policies and rules that promote appreciation of differences so that all students, particularly culturally diverse students, feel safe, valued, and respected. At a minimum, when a classroom is culturally responsive, the following are present:

1. Biased, stereotypical, or insensitive materials and language are avoided, or interrogated if used;
2. Assessment or evaluation materials/tools are examined for potential biases and avoided if found;
3. All subject areas are infused with multicultural content and topics;
4. Teachers adapt their teaching styles to students' learning and/or cognitive styles; students are not penalized for differences in learning or cognitive styles;
5. Teachers do not let student differences interfere with teaching and learning; they try to consider these differences in planning lessons and activities, and in choosing topics and projects;
6. Teachers believe that students' self-concept, self-esteem and racial identities

- are important to the learning process and try to create an identity-affirming climate.
7. Multiple perspectives are discussed on issues and events; no single point of view dominates;
 8. Literature includes multicultural titles;
 9. Materials are multicultural (e.g., flesh colored crayons, paper, band-aids, etc.);
 10. Culturally diverse persons or groups are consistently discussed in all subject areas;
 11. Disrespect of fellow students is not tolerated and is followed up with consequences;
 12. Students feel comfortable discussing issues of diversity;
 13. A sense of family, community, and interdependence is present; and
 14. Teachers are comfortable working with students who are culturally diverse.

Figure 3.4: Boykin’s Afrocentric Cultural Characteristics.

Cultural Characteristic	Description
Spirituality	Belief in a non-material force that influences all of life; religious; faithful; optimistic; resilient.
Harmony	Keen observation skills as demonstrated by: (1) ability to read the environment well and (2) ability to read people well (reads non-verbal cues and body language well); quickly notices injustices and discrepancies in what is said and what is done, as well as how students are treated.
Affective	Sensitive and emotional; often impulsive -- may react before thinking. Easily angered; loves strongly.
Movement	Enjoys being mobile and active; tactile and kinesthetic learners; dislikes being sedentary -- prefers to be physically and mentally engaged.
Verve	High levels of energy; easily excited; physically active when engaged and mentally stimulated.
Communalism	Strong need to belong; strong need for affiliation; group oriented; social and interdependent; extraverted – people oriented. Want to be liked, appreciated, and respected by others.
Expressive Individualism	Creative; risk taker; dares to be different; dramatic; clever; original; dramatic.
Oral Tradition	Prefers to communicate orally; blunt with comments and feedback; likes playing with words (jokes, puns, riddles, proverbs, analogies, etc.).
Social Time Perspective	Time is not seen as a limited commodity; time is social; time should be enjoyed; can do more than one thing at a time; may have difficulty with managing time and organization.

Profiles of Multicultural Teachers

Many educators have been noted for their work in promoting equity and excellence in teaching students of color. Like Davidman and Davidman (1994) and Ford and Harris (1999), we are particularly interested in the works of Philip Uri Treisman, James P. Comer, and Jaime Escalante, each of whom demonstrated that excellence and equity can co-exist in harmony, and that high expectations are powerful components of multicultural teaching.

Philip Uri Treisman. Treisman, a professor at the University of Texas, Austin, and a former

math educator, dramatically improved the academic achievement of Black students after analyzing and studying the differential math achievement of two different racial groups. In 1975, while working with teaching assistants at the University of California at Berkeley, Treisman found that 60% of the Black students were failing freshman calculus compared to 12% for Chinese students. His search for an explanation of this large discrepancy led to a doctoral dissertation in which he observed and videotaped 20 Black and 20 Chinese students in their dorms and other settings as they worked on math assignments.

After 18 months of observation and interviewing, Treisman discovered that the major difference in their pattern of success was the way students interacted with each other when studying. The majority of the Black students (18 out of 20) never studied with other students and attributed their success to studying in isolation, that is, separating studying from socialization. Conversely, 13 out of 20 Chinese students adopted support-oriented study patterns that included socialization.

Based on these findings, Treisman developed and refined an equity workshop strategy that allowed students to study math under the guidance of a skilled teacher and within a community of peers. Results indicated that the 60% failure rate of culturally diverse students dropped to four percent, and that, over the last decade, the culturally diverse students in the workshops have performed better than other students. Thirty colleges and universities have adopted the workshop in such courses as physics, chemistry, engineering, and math.

Treisman personifies multicultural teaching by not accepting the failure rates of culturally diverse students and by taking active steps to reverse the failure rates. By not accepting the students' failure, and by seeking to understand the outcomes, Treisman attributed poor outcomes to external rather than internal factors.

James P. Comer. Three decades ago (1968), Comer noted that two Black elementary schools ranked near the bottom in terms of achievement and attendance out of 33 New Haven elementary schools. Further, teacher attrition was among the highest in the state, with 25% leaving per year, and parents were described as dejected, angry, distrustful, and alienated. Within seven years, Comer and his colleagues at Yale University developed a prevention and intervention plan, which included mental health professionals, parents, administrators, and teachers. Like Treisman, Comer did not blame children for their failures; they did not perceive the major problem as low achievement, low attendance, and low morale. Instead, these variables were perceived as symptoms of the problem. Comer's team diagnosed the major problem as the schools' failure to pay attention to the psychological development of students, and the lack of positive relationships between the school and home (i.e., cultural discontinuity). Having identified the problems and symptoms, Comer developed a governance and management team

that included all stakeholders in the decisions affecting students; hence, all partners had a sense of ownership in the school and its operations. By 1979, the students who had ranked the lowest in achievement among the 33 schools had caught up to their grade level by the fourth grade; by 1984, students in the fourth grade ranked third and fourth highest on the Iowa Test of Basic Skills.

Functioning from a multicultural perspective, Comer noted that race, culture, SES, and self-esteem were powerful variables in the learning process. Equally important, he recognized that socio-cultural forces, including a mismatch between the home and school, can wreak havoc on culturally diverse students' achievement. This cultural discontinuity resulted in student failures and conflicts. Comer was able to see the cultural nature of the problem from a proactive view rather than adopting a cultural deficit perspective.

Jaime Escalante. Escalante was a mathematics teacher. When he began teaching in Los Angeles, Escalante worked with a predominantly Latino student body. Approximately three-fourths of the students were eligible for free or reduced lunch. Most students failed to pass the AP calculus exam in 1977. One year later, four in seven students passed; by 1989, 66% passed -- no comparable high school in the nation performed as well.

In raising test scores and operating from a multicultural perspective, Escalante addressed the goals of educational equity and the creation of collaborative, empowering relationships among parents, teachers, and students. Escalante sought to demonstrate, to prove, that Mexican-American students whose parents had low educational levels could perform as well as middle-class students with highly educated parents. Escalante also adopted the role of mentor and role model. Escalante was available prior to school, during lunch hours, and after school; he provided educational services, with parental permission, to students up to three hours after school ended, without additional pay. For Escalante, student achievement was the reward. He urged students to think about how good they would feel when they could tell others about what they had accomplished academically. The primary message communicated to students was high expectations and self-affirmation.

Where Do We Go From Here?

As advocates of students with exceptional and diverse needs, we must more actively and more proactively address the unique and special needs of our students; but to do so requires a broadened and comprehensive notion of gifted students. Stated another way, a colorblind or culture blind philosophy – ignoring, negating, or minimizing cultural differences – has failed to identify and serve students who are gifted and culturally diverse. As just explained, African American, Hispanic American, Native American, and Asian American gifted students have cognitive, affective, and instructional needs like White gifted students, but they also have different needs. To ignore, negate, or minimize these differences is to ignore these students. In essence, our field exists because of student differences; the rationale for the field of gifted education has been the need to address the different needs of students who are different. *If gifted students were like all other students, there would be no need for gifted education.* And just as we are willing to address gender and economic differences to better identify and serve gifted students, we must be willing – eager no less – to acknowledge and address cultural differences.

In the previous pages, we built upon bodies of work on gifted students by describing promising practices for working with students who are not only gifted, but also culturally diverse. Our model or framework is as simple as our position: in meeting the needs of culturally diverse gifted students it is essential that we do so by considering their different needs as students who are gifted and as students who are culturally diverse. Thus, we maintain that the most effective way to teach and reach gifted students is to consider the combined needs associated with being gifted on the one hand and being diverse on the hand. In effect, we have bridged two fields—gifted education and urban or multicultural education—to meet the dual needs of our culturally diverse gifted students. The pedagogical clock is ticking for all students. Let us use our time – and our students' time – wisely. A mind is a terrible thing to waste; a mind is a terrible thing to erase (Ford & Harris, 1999).

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Chapter Four

Case Studies of Exemplary Gifted Education Programs

Christine J. Briggs and Sally M. Reis

As part of an initiative to gather information on gifted education programs and their success with CLED students, in-depth case studies were conducted in the seven programs described below. These programs represent diverse geographic regions and all grade levels:

Program	Location	Grade Level
Hope Academy	Denver, Colorado	Pre-K to K
Project College Bound	Van Nuys, California	Secondary
Rockwood TREASURES	Ellisville, Missouri	Elementary
Euclid High-Ability Magnet	Los Angeles, California	Elementary
Mentor Connection	Storrs, Connecticut	Secondary
Young Scholars	Annandale, Virginia	Elementary
Project Excite	Evanston, Illinois	Elementary

Hope Academy

The Hope Academy Gifted Program in Denver, Colorado, is part of the Hope Center, a community-based agency dedicated to meeting the needs of individuals with developmental disabilities or developmental delays and persons in need of specialized educational or vocational services. These services are provided to develop, maintain, and enhance the functioning of every enrollee. The Hope Academy Gifted Program is part of the Hope Center and its focus is to provide appropriate services for students, ages 3 through 5, identified as possessing gifted potential.

The Hope Academy began 5 years ago with a goal of identifying and educating inner-city children with advanced intelligence. The director of the Hope Center, a 35-year program dealing with disabled youth, founded the gifted program to meet the needs of culturally diverse, high-ability students living in urban Denver. He believes that there are just as many culturally diverse high functioning students as there are in the lower functioning group. His first step was to

approach the Hope Center Agency Board to propose the development of a pre-Kindergarten gifted program in addition to the established pre-school program (Colorado Pre-School Program –CPP).² This board meeting led to the creation of a mission statement and an 18-month needs assessment was subsequently conducted. A committee was formed that included members of the agency board, community members, health-care professionals, educational commission members, and community citizens. The committee's goal was to establish the criteria for the Hope Academy Gifted Program project.

During the development process, the director of the Hope Center believed "If you build it, they will come," meaning that if a gifted program was offered in the community, large numbers of students would be lined up to enroll. Unfortunately, this did not turn out to be the case. Parents in the community were not well informed about the characteristics of giftedness,

² This past year, the program added a kindergarten class because the public schools do not begin gifted programming until the first grade.

how their child might be identified, and the level of financial commitment required to attend the academy. The idea of gifted children in this urban area was new to the community and the director believed that parents needed to understand giftedness and consider how they could afford to send their children to this program. Door-to-door neighborhood recruitment by the director as well as program brochures and advertisements were used to address these concerns and inform parents about the Hope Academy and how it could benefit their children. The program brochure encourages parents to think about their children in a different way by considering questions such as: Does your child make up stories, invent things, seem to be in constant motion, and use big words?

The Program Goals of Hope Academy include the following:

- Provide children the opportunity to become excited about learning, with high self-esteem, and equipped with basic academic skills and knowledge that will help them to continue to thrive and reach their potential
- Provide parents with knowledge and understanding regarding raising and educating their gifted child, and information on other available resources
- Assess students at the end of Kindergarten for future placement in public school gifted offerings

Identification

The Colorado Pre-School Program (CPP), housed in the Hope Center building, serves as one source for talent spotting for the Hope Academy program. CCP teachers nominate students based on their performances in the traditional classroom setting. Parents receive notification that their child has demonstrated characteristics of high ability and a form requesting their permission to screen their child for the gifted program. Parents must pay a fee for their child's assessment. The Early Childhood Rating Scale (ECRS), used to screen potential 3, 4, and 5-year-olds for the program, assesses cognitive language, and produces a quantitative score. The director selected this specific assessment scale to provide a quantitative measure for increased credibility in the identification process. He believes that the rating scale can be used to document student

abilities for use in subsequent gifted programs, schools, experiences, and students' academic life. He indicated that a high correlation between this screening scale and the Wechsler Pre-school Primary Scale of Intelligence (WPPSI) for identifying gifted students has been demonstrated through follow-up testing of program students at a later age. The director expressed his belief for the need to identify gifted students early. While the academy tests assess cognitive ability, the focus of the program is not necessarily verbal precocity. While students' vocabulary may not be advanced when they enter the program, the program teachers have found that it increases during students' participation in the program.

Program Services

The Hope Center provides 4 programs for the community in one brightly lit building. Different hallways are used for each program: child care, Colorado Pre-School Program, the program for developmentally delayed children, and the Hope Academy Gifted Program. All programs offered in this facility are student focused, and have qualified teachers, inviting classrooms, and parental involvement. Program coordinators collaborate to meet the needs of all students. For example, the child-care service provides additional care for students whose parents work later than school hours, and the Colorado Pre-School provides academic and enrichment to students and often recommends students for the gifted program.

Student-Focused Curriculum

The traditional school year curriculum at the Hope Academy focuses on 4 M's; multidisciplinary, multiple intelligences, multi-lingual, and multicultural. Class sizes are small and teachers develop individual educational plans for each student, enabling each to develop at his/her own pace. Curriculum guidelines have been developed for literacy, multi-linguistics, mathematics, social studies, geography, science, classical music, arts, and social skills. All instruction incorporates respect for diverse cultures including exposure to different languages and cultural celebrations

Summer camp is an additional academic program, offering extensions beyond the traditional school year curriculum in the areas of math and science. A state college math and computer science professor developed the curriculum for the summer camp, which is

available to all identified gifted students, ages 3-8, in the community for a small fee for the one-week program. Each year the camp provides a selection of topics enabling students to choose areas of interest such as Things that Fly, Dinosaurs, Under the Sea, The Circus/Big Top, and Space and Astronauts. Learning experiences involve student access to advanced information, the development of projects, and the use of vocabulary in the science field.

Teacher Qualifications

Two gifted classrooms are in place at Hope Academy, one for pre-school and one for kindergarten students. The teachers of these students are certified in early childhood education and have either completed gifted training or attend classes and collaborate with a mentor in gifted education. The assistants, one in each classroom, are encouraged to obtain their associates degrees and they learn to work with gifted students. The administration of the Academy strives to keep cultural diversity in the teaching staff and the adults in classrooms represent three cultural groups.

Classroom Environment

The classrooms in the Center are neat, colorful, and inviting. Teachers establish a respectful, culturally responsive climate for the students through the display of students' family pictures, with both English and Spanish provided in all written displays, and student work is visible in all rooms. This safe environment provides structure while enabling students to express their thoughts and ideas.

Parental Involvement

Parents are viewed as an important part of the provision of gifted services to the students. Through the efforts of the director and staff, parents have gained an increased awareness of how giftedness is displayed, as well as the strategies to use with their child, and parents display a comfort level while in the building. Parents were observed helping in classrooms, supporting programs through volunteer work, and attending parent information nights. Parent information nights are offered in conjunction with the Colorado Pre-School Program. These monthly meetings are well attended and they provide information about parenting, as well as displays of books and materials available for parents to borrow. Dinner is provided for the entire family and childcare is available during the meeting.

Program Effectiveness

The Hope Academy director reports that approximately 80% of its former students have graduated to attend other gifted programs in private and public schools. Although the program is only 5 years old, the program enrollment has doubled in the past 2 years. While no longitudinal data is currently available, plans have been made to follow former students throughout their educational careers. Teachers and the director recommend students for public schools in the community that have a history of quality gifted programs. Parents' positive experiences in the Hope Academy usually indicate that they follow these school recommendations. One parent, who explained that she had been identified for gifted programs during her school career, indicated during an interview that her own experiences were disappointing. When she was identified as gifted, she had to leave her home school to receive gifted services. When she arrived at the new school, she was the only Hispanic student there. Reflecting upon this experience, she explained that she was glad that her child received gifted services and worked in classes with other students who "look like her." Changes in community awareness are becoming evident, as there has been less of a need to advertise the program because parents now call regularly to inquire about the availability of this program for their child.

Future Plans

The director dreams about creating a gifted program for pre-K-8 students in one campus in the future. He has selected a location and has an architectural drawing for the proposed school. The process of developing an entire school may take time but the director is dedicated to making a difference for these urban students and providing access to continuous, quality gifted programming.

Project College Bound

Project College Bound within the Los Angeles Unified School District began as a program developed to assist students in the college application and financial aid process over a 3-year period, during grades 10-12. Through the efforts of Project College Bound, high-potential students gain the knowledge necessary to pursue college opportunities.

Identification

In this program, cohorts of students are identified for the program during the fall of their sophomore year in high school. The program director culls district records in eight high schools to identify culturally diverse students from low socioeconomic families who qualify for free or reduced lunch. Most of the students were identified as gifted and talented in elementary or middle school, are on a college track, and have a minimum GPA of 3.0. Once identified for the program, students' names are given to the college guidance counselors at their high school and they are invited to participate.

Program Design

Identified student cohorts receive monthly informational and support opportunities to assist the college application process. These students are monitored monthly for scholastic progress and eligibility for competitive colleges, especially those 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. These meetings include presentations by the program director, college admission personnel, and the district technology staff. Topics for these workshops involve such areas as how to complete admissions applications, admission essays, test preparation, financial aid, the state community college transfer program, and other sessions as needed. Seniors 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 checklists to monitor college information, and information on summer residential opportunities for rising eleventh-grade students. In addition, a one-day conference is held for rising twelfth-grade students and their parents.

An understanding of the unique needs of 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 address the cultural diversity of the district. For example, representatives from colleges invited to present workshops are often Hispanic and one representative conducted the entire workshop in Spanish. The program director's knowledge of cultural values of the families in the community helps to address concerns related to college choices. The director also works with the high school college guidance counselors to address multicultural counseling issues with these high-potential students.

Program Goals

- Increase the number of culturally diverse gifted and talented students who are competitively eligible for admission and graduation from competitive colleges and universities.
- Provide students with opportunities to learn more about the competitive college admissions and financial aid process.
- Involve parents as active partners in the college admission process.
- Provide the local high school college counselor with data on student performance and a list of students to target for college support.
- Establish a network of counselors who have experience meeting the social, emotional, and academic needs of students who are referred for gifted education services.

Program Effectiveness

The first graduating group identified for Project College Bound included 273 students and almost all enrolled in college, with 70 attending a University of California (UC) campus. The number of culturally diverse students from the program who attended the UC system increased dramatically from the prior years. The number of African American students from the program who attended a UC campus showed an increase of 150% and the number of Latinos increased by 31%. This cohort also had 4 admissions to Ivy League Schools and very competitive colleges including Harvard, Princeton, University of Chicago, Yale, University of Michigan, and Stanford University.

The Rockwood Gifted and Talented Program-TREASURES

The Gifted Program of Rockwood Public Schools in Ellisville, Missouri, provides services to gifted and talented students from kindergarten through high school and uses different organizational components as well as curricular and instructional methods at different grade levels. Many visitors come to see the TREASURES Program, which won a state award and has been designated as an exemplary practice in the state of Missouri. As an integral part of Rockwood's gifted program, TREASURES helps to find, identify, and serve underrepresented gifted students in the district, including those who are culturally diverse, economically disadvantaged, and/or physically disabled, and those who speak English as a second language.

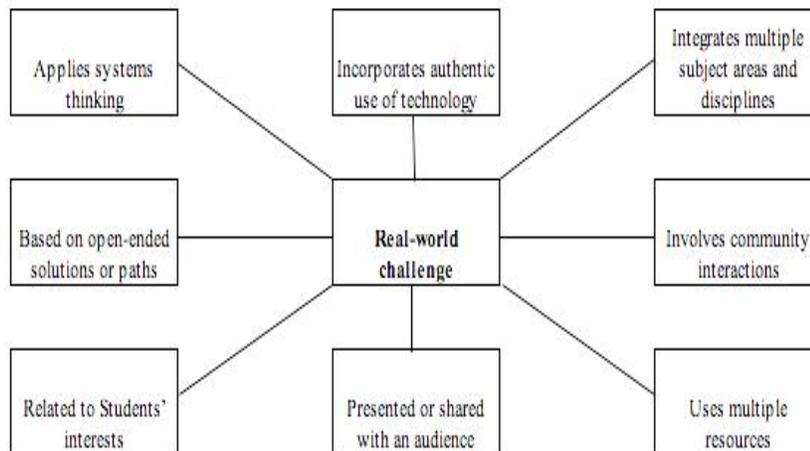
An Overview of the K-12 Gifted Program in Rockwood

The Rockwood program provides a series of different types of services. Elementary students attend the Center for Creative Learning one day each week. Middle School students participate

in Academic Stretch in which they meet once each day during a scheduled class. Elementary and middle school students can participate in challenging units of study developed and taught by gifted education teachers. All studies are interdisciplinary and are developed using the Rockwood Gifted Program Curriculum Model. Each study is theme based and focuses on a real-world challenge, such as ozone depletion in the atmosphere, pollution, world hunger, or communication. Technology is integrated into every unit, as is acceleration of content.

The Rockwood program focuses on student choice in developing a solution or product for real-world challenges. When researching and developing curriculum, teachers integrate unit goals that are two to three years above grade level into Rockwood School District's core conceptual objectives. Unit goals, daily assessments, and student portfolios relate to each other and to information processing, problem solving, critical thinking, communication, and responsibility. These five specific skill areas are prominently displayed in each classroom in the elementary and middle school classrooms (See Figure 4.1).

Figure 4.1: Rockwood Gifted Program Curriculum Model.



High school students also receive services from a resource teacher who provides direct and indirect services including the arrangement of mentorship and internship programs. High School teachers help students develop a four-year plan that includes independent study, compacting, and differentiated curriculum.

The Elementary Center

The Elementary Center is in a separate building in the district with colorful classrooms of graded groups of identified students who are bused to the Center from all over the district. The Center employs 36 full-time teachers, two counselors, two psychometricians, and a nurse. Among the teachers are two art specialists and a physical education teacher, who provides thoughtful opportunities for physical activity combined with thinking skills and problem solving. Throughout the center, it is obvious that students are engaged in learning and that active hands-on learning opportunities are provided throughout each day.

Colorful classrooms that are tastefully decorated with learning activities, learning centers, and opportunities for exposure to new ideas are the norm in this building and computers are found in every classroom, hall space, and work section throughout the school. The director of TREASURES explained that 350 computers are available throughout the Center. In every classroom, students appear to be engaged in hands-on work in science, math, and technology, and the curriculum taught by each teacher is carefully selected to be of high interest to students, including topics such as world hunger, oceanography, architecture, and technology.

Children who are bused, one day per week, to the Elementary Gifted Center spend from 9:00 a.m. until 4:00 p.m. at the Center. During the morning session, each student attends a 2 ½-hour class of advanced content in areas as previously mentioned. In the afternoon, students select two sessions based on individual interests and preferences.

The TREASURES Program

The TREASURES Program (To Recruit, Educate, And Service Under-Represented Exceptional Students) began 5 years ago as part of a concerted effort by faculty and administrators to enable the gifted program to become more culturally diverse. Teachers

believed that it was essential for the program to reach culturally diverse, poor, and learning-disabled children, as well as children who speak English as a second language. The theories used to broaden the base were based on the work of Joseph Renzulli, Mary Frasier, and Jack Naglieri.

The need for the TREASURES Program was obvious, as 10 years ago only 10 students from culturally diverse backgrounds were identified and placed in the elementary pull-out program. That number has grown dramatically, and currently 202 students or 7.3% of the population of identified gifted students are identified through the TREASURES Identification Procedures. Identification for TREASURES relies on case study procedures. Traditional identification in the district had followed a protocol, but so few culturally diverse or twice-exceptional children were identified that the identification process was modified. The traditional identification process included three steps, including a nomination by a teacher, counselor, or parent, followed by a review of achievement and grades, a rating scale completed by teachers and parents, an intelligence test, and in some cases, a creativity test. The TREASURES identification includes three steps that determine eligibility for the program including a review of intelligence test scores, achievement test scores, and scores from qualitative instruments that are believed to demonstrate giftedness.

The identification system took over two years of research, discussion, and teacher training to develop. The administrators and staff studied other programs that districts had implemented and reviewed guidelines and procedures from all over the country. The resulting identification case study process enables program personnel to collect and analyze a wide range of information and data to systematically understand individual student's academic abilities and needs. This approach enables the program coordinator and faculty to use a wider range of standardized assessment instruments, the opportunity to meet individually with candidates and their parents or teachers, and the option to evaluate student work and other potential indicators of giftedness. Collecting and processing these data is more time intensive than traditional identification approaches.

Goals of the TREASURES Program

1. To identify underrepresented students for the gifted program.
 - Determine better identification instruments to use when testing students for the gifted program. These tests need to comply with state and district standards.
 - Increase nominations through training of district staff regarding characteristics of underrepresented gifted student populations.
 - Determine a way to use district test scores to identify a pool of possible underrepresented candidates for the program.
2. To provide opportunities and curriculum that will enable the students to acknowledge and develop their giftedness.
 - In-service gifted program for teachers regarding learning characteristics of underrepresented populations.
 - Review all gifted curriculum to better meet the needs of students from under-represented populations.
 - Educate gifted program counselors regarding special needs of TREASURES students.
3. To provide communication with and support and education for district staff regarding underrepresented gifted students.
 - Provide ongoing in-service training at district schools and during summer workshops regarding nomination, identification, curriculum, and teaching of underrepresented students.
 - Have the TREASURES facilitator attend yearly district counselor's meetings to provide ongoing input and communication regarding the TREASURES component.
4. To provide communication with, and support and education for, families of identified students.
 - Regularly communicate with parents regarding the TREASURES program.
 - Institute a parent group to help new parents, answer questions, and be advocates for the TREASURES component.

Program Effectiveness

The TREASURES Program is now in its seventh year and is considered very successful. It has won a state award in Missouri and is considered a state model for a way to increase the successful participation of diverse students. Reasons for success are varied, but include the following:

- The case study approach did not replace traditional identification, making the time commitment more reasonable in a large district.
- A staff member is designated to work as a part-time consultant in this model. Since the case study is more time-consuming than traditional identification procedures, it is essential that someone have time allocated to do this.
- The identification procedures are widely published, and parents and teachers clearly know and understand the guidelines for identification. These guidelines were carefully designed and clearly indicate how each student can be identified and served.
- In-service and staff development are provided to faculty, and parents are provided with information about identification and programming on a regular basis.
- Support is provided by a variety of personnel. The nurse, cook, counselor, physical education teacher, and principal all provide support. Students identified through TREASURES always have someone that they know at the center. Resource teachers are also sent to teach in home schools in the morning and then come back to the center in the afternoon during another day of each week, allowing them to provide transition support. Two half-time counselors provide social-emotional support of children and families.
- Relationships are developed between program teachers and TREASURES candidates. A 45-minute interview is held as part of the case study, which creates a special bond, as students are able to discuss any of their concerns. One person does all of the interviews with the TREASURES candidates and is subsequently available to help with transitions and serve as an advocate for

each admitted child.

- Diversity of content and faculty is made available to all TREASURES students. They are all exposed to many different teachers and many different types of content as well.
- Nuances of cultural understanding have emerged in teachers. Teachers have come to understand the cultures from which students come to the program. For example, initially many teachers would assign certain types of homework that the students could not always complete because of home chores and other issues, such as distance from the Center. The teachers had to understand the culture of the family and the background of each child. They also came to understand that urban children are bused to their home school, then bused to the Center, and then sent home in a cab. Teachers have expanded their understanding and have included collections of culturally diverse student books, artifacts, and unit discussions in each unit. Each unit has some type of impact upon the audience.
- Teachers have learned to make changes to curriculum units for increased awareness of culturally diverse students.
- Retention in gifted programming for TREASURES students is higher than for all other students. The staff and teachers design modifications and unobtrusive help is provided if it is needed. The faculty and staff in the Center make numerous attempts to help the TREASURES students feel a part of the program.
- The TREASURES Resource teachers communicate and work with home school classroom teachers to deal with the fact that children will be pulled out for a day. Careful planning goes on so that the pull out is not disruptive. Since classroom teachers are the nominators of the TREASURES students, they have ownership and believe that this program will benefit the child, so that encouragement is provided both in the Center and in the Classroom.
- The Elementary Program is followed by middle and high school programs, which provide strong support for the

TREASURES students in critical time periods of their academic lives.

- The TREASURES Program emphasizes the uniqueness of every individual child so that respect and loving support is offered to each student. The program emphasis is on individual children, and teachers accept each child for his or her individual talents and gifts and what he or she brings to the school.

The Euclid Avenue Gifted/High-Ability Magnet

The Euclid Avenue Gifted/High-Ability Magnet is located in a neighborhood school in the Boyle Heights area of Los Angeles and serves students in grades 1-5. The magnet program is housed in the Euclid Avenue School and 352 of the 800 students enrolled in the school participate in the gifted/high-ability magnet program. The magnet program has existed for 15 years and is based on the work of Dr. Sandra Kaplan from the University of Southern California, with the goal of increasing levels of depth and complexity in curricular challenges.

The magnet program exists as a “school within a school.” The school population and the magnet program is 98% Hispanic. In the magnet program, only one child is African American and only a few are European American. The Title I program operates schoolwide and 100% of the students in the magnet program are on free or reduced lunch. The Euclid Avenue Gifted/High-Ability Magnet is one of 15 magnet elementary programs in the Los Angeles Unified School District and is the only program providing bilingual programming in Spanish and English. Magnet classrooms in grades 1-3 are limited to 20 students and to 27 students in grades 4-5. Enrichment opportunities are available during the summer as the school serves as a demonstration site in the summer using Dr. Kaplan’s approach for adding depth and complexity. Last summer, 100 second through sixth-grade students participated in the summer program.

Identification

Student access to the gifted/high-ability magnet begins with an application process. Parents complete an application form for the program. If the student has already been identified as gifted and talented, he or she is automatically accepted into the magnet program. If a student has not been formally identified as gifted, a case study is completed, including additional data gathering. For example, teachers of nominated students are asked to share information about a student’s grades and motivation. All data are considered in placement decisions.

Curriculum

The gifted/high-ability magnet uses Kaplan’s

approach to depth and complexity, with universal themes identified for each grade level. Teachers examine their district curriculum materials, Open Court Reading Program, and their math program to select universal themes that encompass both curriculum foci. This examination process enables classroom teachers to become masters of universal themes, teaching themes across content areas to ensure interdisciplinary and deep understandings. Grade level themes include change in grade 2; order in grade 3; relationships in grade 4; and power in grade 5.

Magnet teachers use the same materials as teachers in traditional classes but gain very different outcomes by facilitating students’ examination of depth and complexity elements, using questioning skills and creativity opportunities.

Different classroom options are available based on each teacher’s interests and talents. For example, a second-grade teacher was very interested in the arts. In her class, students have opportunities to learn the artistic processes and skills used by practicing artists. The teacher’s interest in the arts was used to escalate the level of advanced learning in the classroom. Differentiated questioning skills, tasks, and products, along with high levels of teacher input and creativity were observed in magnet classrooms. The program works within a three-day instructional pacing schedule, enabling teachers to move more efficiently through required content more, with the remaining two days to add additional opportunities to explore content in greater depth and complexity.

Cultural identity is celebrated in this program with bilingual students encouraged to share their culture in classrooms. An example of incorporating diversity is evident through a decision made for the entire school. The Euclid school chose to implement America’s Choice School Reform, part of the National Center on the Economy and Education (NCEE) with a literacy focus. Since 1987, NCEE has worked to develop policies, tools, professional development, and technical assistance to support district and communities’ attempts to increase benchmarked academic standards. A literacy coach is assigned to each participating school to implement the yearly literacy goal, such as Writer’s Workshop. As part of Writer’s Workshop, a book of the month is selected for all students in the school to read, with each book reflecting very different points of view. During this year, two of the books of the month were

Amazing Grace by Mary Hoffman and *It Could Always be Worse* by James Stevenson. The use of these books reflect efforts to make the curriculum more culturally responsive by reflecting different cultural points of view, making connections for students, inspiring students' writing tasks, and stimulating discussions.

Observations in program classrooms indicated students actively learning in a rich environment with observed classrooms sharing common characteristics. The classrooms had at least eight computers, all with Internet access. Each classroom contained evidence of the grade-level theme and depth and complexity icons. In one classroom, students were engaged in an art lesson, actively using the icon ideas to discuss their work. In another classroom, fifth-grade students worked with big ideas, trends, and different points of view as part of their study of the Aztecs and the Incas. The twenty-eight students were divided into 5-6 groups. Each group was a product of flexible grouping as students worked on tasks by groups. Within each group, students worked with the depth and complexity icons, identifying different elements of depth and complexity within their social studies assignment. Occasionally, the groups referred to the depth and complexity icon poster, the chalkboard, and a large poster that explained the work of professionals in three fields, sociologist, historian, and anthropologist, as follows:

- Sociologists study people, culture, traditions, families, religion, celebrations, and food.
- Historians study history, traditions, cultures of the past, ancestors, family trees, and relations.
- Anthropologists study physical characteristics, the way people look and what they do, and how actions affect our heritage.

Students used the displayed scaffolding materials to help their discussion on the change over time in the decline of the Incas and debate unanswered questions and different points of view. Classroom order and control were not issues during the observation.

Teacher Preparation

Teacher preparation to facilitate/teach in the gifted/high-ability magnet program begins with summer in-service offerings. Here, teachers learn how to move above and beyond the traditional curriculum and extend to high levels

of depth and complexity. This summer training is provided under the auspices of Dr. Kaplan. Approximately 80% of the magnet school faculty attends the summer training and 75% of the teachers attend district gifted education training during the summer as well.

Program Goals

- Provide a dual-language model.
- Provide diverse academic opportunities for children to develop their talents in two languages while gaining English proficiency.
- Develop creative and critical-thinking skills.

Program Effectiveness

No formal evaluation has been conducted on this program, but several indicators of program effectiveness suggest levels of success. First, the magnet program has almost 100% retention rate at the elementary level. Second, second-language learners in the magnet program demonstrated high levels of transition from Spanish to English, with the majority reclassified as English speakers while attending the magnet program. Third, 75% of the magnet students continue in gifted programming at the middle school level. Parents must apply for the middle school magnet and the high retention rate during the transition from elementary to middle level indicates parental satisfaction. Many of these students choose to attend the gifted/high-ability center or the math, science, and technology centers. Finally, parental support is seen in the magnet program. Many parents view identification for the program as a symbol of their child's intelligence, are knowledgeable about the magnet, and volunteer in classrooms and assist with field trips. Parent informational meetings are offered 3-4 times a year at different daytime meeting times, such as after school and morning.³

³ Evening meetings are not regularly scheduled, as the neighborhood area is not considered safe after dark.

The Mentor Connection

The Mentor Connection is a 3-week summer program for rising high school juniors and seniors on the University of Connecticut Storrs campus, which has been held for the past 7 years. This program provides high school students the opportunity to explore a long-term interest in-depth, prepare for college life, and help sort out their academic interests. The rationale for this program is the recognition that students' interest, abilities, and motivation are important to learning and provide opportunities for students to manifest their talents at high levels of creative productivity. The program is based on The Enrichment Triad Model and the following beliefs underlie the program philosophy.

- Above-average ability, creativity, and task commitment can be developed and nurtured.
- Creative productivity results from the interaction of above-average ability, creativity, and task commitment.
- All social contexts, including school, the home, and the community can influence the incidence of creative productivity.
- Creative and productive individuals exist in every ethnic and cultural group and across all socioeconomic levels.

Each summer, Mentor Connection offers approximately 30 mentorship sites. Participants can select one of the offerings or request one in their specific interest area. Scholarships are available for urban students in the state of Connecticut.

Identification

High school juniors and seniors complete an application to participate in the Mentor Connection. The application includes personal descriptive information, an essay describing prior experiences with an interest area and why they would like to work at a particular site, teacher recommendations, and a high school transcript with grades of B or higher. The Mentor Connection Coordinator contacts school counselors, honor society leaders, and state agency heads to share program information and encourage potential students for the program. The program is advertised on a web site and a mass mailing of information and applications go to high schools in Connecticut and across the nation. Special attempts are made to recruit

students from culturally diverse groups, and in 2002, one quarter of Mentor Connection participants were from diverse groups, with 6 African American, 5 Latino, 8 Asian American, and 2 Native American students.

Curriculum

During the 3-week program, students work with a professional at their mentor site, assuming the duties of a professional and learning how to perform the work tasks of a field. Students work at their site from 9:00 a.m. - 4:00 p.m. each day. The type of work done at each site is based on the course description and the field selected, as outlined in the following examples of site descriptions.

Brain Power: Unraveling the Development of the Cerebral Cortex: Have you ever wondered how the most sophisticated computing device on earth, the brain, is assembled? Or how a small, simply organized group of cells in the developing embryo grows and develops into the billions of cells that make up the complex circuits of the human brain? If you select this mentorship site, you will become part of a team of UConn undergraduate and graduate students working on experiments aimed at defining the signals that direct the formation of a major part of the mammalian brain, the cerebral cortex. As part of this team, you will participate in technologies, electrophysiology, histology, and cell structure. Background experiences or course work in biology would be beneficial for participation in this site. If you are interested in a career in biology or the life sciences, you shouldn't miss this opportunity.

Advertising 2003: The Dynamics of Advertising in the 21st Century: Have you ever wondered what goes into creating television commercials, radio spots, print ads, or web banner ads? Do you want to know if subliminal advertising really does work? In addition to covering many other interesting topics, this mentorship site addresses these questions. Advertising 2003 provides the opportunity to learn the intricate details of creating an advertising campaign from scratch, to participating in brainstorming sessions, to the creation of actual storyboards. In this site, we will apply communication theory to the real world of advertising, we will develop group advertising campaigns, and we will create PowerPoint presentations for these ad campaigns. We will tour television production studios, radio stations, and advertising agencies. Advertising 2003

offers an outstanding opportunity for you to experience the world of advertising, and for you to consider whether or not advertising is a career for you.

Archaeology in Your Backyard: Digging with the State Archaeologist: The state archaeologist travels across the region to preserve archaeological sites that may be destroyed by economic development projects. If you choose to work with Dr. Bellantoni, the state archaeologist, your experiences will vary according to current emergency situations. Underlying all activities at this site, however, will be archaeological excavation of endangered sites, as well as laboratory analysis. You will learn about archaeological field techniques including site grid development, mapping, recovery, and recording data, and laboratory work including artifact identification, conservation, and cataloging methods to preserve sites prior to construction activities. You will work with a team of college students, volunteers, and professional archaeologists in a practical approach to the science of archaeology. You will experience how archaeological sites are preserved in the wake of modern development projects, and in some cases, take part in rescue operations to remove significant sites prior to bulldozer activity. Your learning at this site will be valuable should you be considering a career in archaeology, history, geology, ecology, anthropology, or museum studies.

Puppet Arts: Have you ever wondered how the puppets on Sesame Street were designed and made? Look no further! Many were designed and made by the alumni of the Puppet Arts program at the University of Connecticut, which is led by Bart Roccoberton. If you choose this site, you will have the opportunity to work with Mr. Roccoberton and his students in a number of different areas related to puppetry. You may become involved with collections housed at UConn's own Ballard Museum of Puppetry and learn how museum curators catalogue artifacts and plan exhibits, plus you will spend plenty of time in the puppet labs and assist with the production of puppets for future performances. You will even construct your own puppet to take home after the program is finished! The Puppet Arts program is unique; UConn is the only university in the country that offers three different degrees in the art of puppetry. Graduates of the program go on to perform in

and design theaters around the world; build for and manage internationally recognized TV programs and film; teach children; and direct prominent schools and museums. Don't miss this opportunity to explore a career in the creative and varied field of puppetry.

Water, Water Everywhere, But Is It Safe to Drink? Do you ever wonder what happens to the water that you flush down the toilet? Are you interested in protecting and preserving the environment? The Water Quality Laboratory in the Department of Natural Resources Management and Engineering may be for you! We conduct a wide range of assessments on fresh water and fresh water quality. As part of the research team in the Water Quality Laboratory, you will be involved in both field and laboratory work. In the field, you will take water samples, maintain hydrological equipment, such as rain and stream gauges, and measure stream stage levels. Furthermore, you will have the opportunity to use computers and other state-of-the-art technology to assist you in making and recording your field observations. In the laboratory component, you will be analyzing water samples. Some of the procedures you will use are designed to identify chemical substances in the water, such as nitrogen and phosphorous. You will perform other analyses related to the number and types of bacteria in the water samples. This mentorship site is definitely hands-on and important for anyone who is considering a career in environmental science or natural resource management.

Adventures in Teaching: This mentorship at the UConn/Windham Summer School will provide would-be teachers as well as those interested in child psychology with opportunities to create learning activities and teach children with diverse cultural, language, and learning backgrounds. The Windham Professional Development Center is a cooperative venture between the University of Connecticut's Neag School of Education and Windham Public Schools, and provides the setting for summer school. Over 250 Windham students, pre-K through grade 9, attend summer school from 9:00 a.m. - 12:30 p.m. Many of the students are bilingual and have a wide variety of learning needs. You will work closely with teams of professional teachers, school psychologists, social workers, speech/language technicians, and administrators to develop interesting lessons revolving around an environmental

theme. Then you will actually team teach summer school students and reflect, collaboratively with teaching professionals, on your instructional techniques. Some of the questions you may try to answer are: What instructional techniques are most successful? Which instructional techniques need refining? In what ways might the techniques be refined to increase students' engagement with learning? There will be an opportunity, in a small seminar format, to discuss issues surrounding education such as inequities in education, behavioral problems, alternate education, and future rewards and challenges. If you foresee a career as a teacher, school psychologist, or social worker, this site is definitely for you!

Teacher Preparation

The mentor site teachers/facilitators are professors and professionals working in the field who are open to mentoring students interested in their area of expertise. Prior to working with students, mentors receive information on the overall program design and goals, an explanation of the 3-week mentorship schedule, expectations for the site and student experiences, participant information, and how students can earn college credit during their mentorship. The dorm/life staffs provide supervision and programming after work hours, attend training on first aid, and diversity, and are responsible for dealing with minors and work schedules.

Program Goals

- To recruit highly motivated, academically talented teenagers from throughout the nation who can benefit from a stimulating summer program.
- To allow participants to achieve to their highest potential by participating in experiential research projects that provide direct, apprentice-based involvement with faculty members and advanced graduate students who are conducting research.
- To increase participants' awareness about their personal strengths and options to nurture their talents.
- To demonstrate that high-level potential can be found and developed across cultural, ethnic, and socioeconomic groups.

Program Effectiveness

Mentor Connection provides its participants with opportunities to work in a passion interest area, which can influence their future lives and careers. Students reflect on their experience at Mentor Connection as "life changing." Students' journal and verbal reflections indicate the effect of their experience, as exemplified in this excerpt:

After my junior year of high school, I was looking for something unique to do with my summer. The University of Connecticut Mentor Connection was the first thing that came up, and it looked much better than the other options. I liked the idea of an experience that would help prepare me for the future, both for social and academic university life. During Mentor Connection, I got excited by the idea of research. It was quite exciting for a high school student to be able to interact with respected and talented faculty. After that experience, I knew that a career in lab science was suited to me.

From the Mentor Connection experiences, other students learned that an area of interest might not be their future career choice. The opportunity to find out more about a topic at an early stage can clarify students' academic and career plans and help them avoid pursuing fields that might not be right for them. "It was a great experience because we were doing the same quality of work as the grads were doing."

Approximately 30% of Mentor Connection participants have decided to attend the University of Connecticut because of their experience and connections made during the program.

It was a great experience to be in the chemistry lab, and to learn about DNA and how to find mutations. We worked with a graduate student who showed us her experiments on the ways different lights can find different cancerous substances in dyes. I really bonded with a graduate student I met and still say 'hi' to her to this day.

Student Case Study

The Mentor Connection provides students with opportunities to explore areas of sustained interest and work as a practicing professional in

that field. One example of this process is former Mentor Connection participant, Ian Spain. As a high school junior, Ian studied with Robert Veith, research scientist/mentor in the Biotechnology Center at the University of Connecticut. As part of Ian's learning experience, he worked with research scientists examining why insects were found in the stomachs of dead hummingbirds in Chile. Ian and his fellow research scientists developed the hypothesis that the birds were eating insects to compensate for a decreased concentration of glucose in the nectar of a certain flower on which they typically fed. Ian's tasks in the study included identifying the type and amounts of sugars found in nectar samples using a high-performance liquid chromatography machine. At the culmination of Ian's 3-week study experience, he presented his research findings to his colleagues and program visitors. As a result of Ian's research contributions to this study, he was invited to spend 2 weeks in the southernmost area of Chile to continue his study. His goal for this research trip was to collect more nectar samples for additional analyses and to learn more about the concentration of the sugars and how they are distributed.

Because of these two learning experiences, Ian reports he is more focused on his future and plans to attend college at the University of Connecticut. Ian is one example of how Mentor Connection provides unique learning experiences for high-ability high school students and offers special opportunities for these students to connect with the people and the work of their chosen field of study.

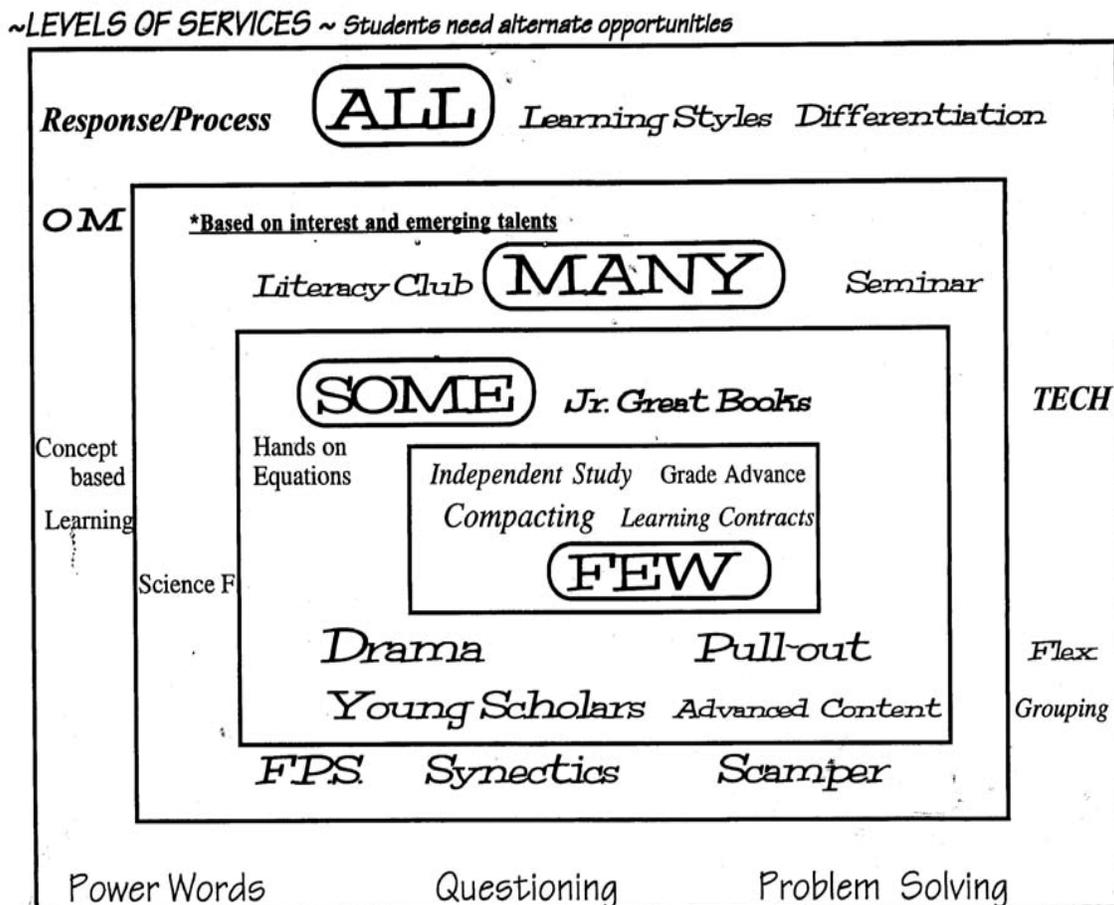
Young Scholars Initiative

Gifted programs in Fairfax County (VA) Public Schools are developed using the philosophy that children who have been identified as gifted and talented have the potential to achieve high levels of accomplishment, and that this potential needs to be addressed. In order to meet these students' needs and develop their abilities, a differentiated curriculum providing advanced learning opportunities is required. Gifted Centers in the district were originally the educational setting that provided services to identified gifted elementary students in the county. Identified students, beginning in grade 3, were bused daily to a center for instruction. Culturally, linguistically, and ethnically diverse students were not equitably represented in these centers.

The Young Scholars Initiative (YS) was implemented to address the needs of CLED

students with gifted potential with the goal of providing educational challenges at an early age to help develop students' potential. Currently, the district has four levels of service for gifted students at the elementary level, including instructional strategies for all students such as differentiation, flexible grouping, questioning, and concept-based learning. The next level of service provides opportunities for many students, including literacy club, seminars, science fair, Future Problem Solving (FPS), and creativity strategies. The third level of service provides strategies for high-potential students with school-based programs including pull-out classes, and advanced content. The highest level-of-service strategies are provided for a smaller number of gifted students and they include: gifted center programs, learning contracts, grade-level advancement, independent study, and compacting (See Figure 4.2).

Figure 4.2: Levels of Service.



K. Price, Riverside Elementary School, Used with Permission

Overview of the Young Scholars Initiative

All schools in the district have a school-based gifted program. At the primary grade level, lessons are provided to all students to strengthen their critical/creative thinking and help them to make connections to the district program of studies. These lessons provide an opportunity for students to develop their emerging giftedness; they may be subsequently identified for differentiated instruction in the regular classroom setting that provides more challenging content and the opportunity to be involved in instructional grouping.

In the upper elementary grades, school-based services are provided through the use of a collaborative model, in which gifted specialists work with classroom teachers to design differentiated lessons that challenge students to learn at a faster rate, think at higher levels, and study complex content by extending the district curriculum. Elementary school principals can choose whether they want to incorporate the Young Scholars Initiative into their building's levels of services; not all schools participate.

The Young Scholars Initiative began as one K-2 service model to address the underrepresentation of culturally, linguistically, and ethnically diverse students in the district's gifted programs. This initiative began in six high-poverty schools and has spread to more than 25 elementary schools in the county with the goals of identifying CLED students at an early age, nurturing students' potential, and preparing them to engage in challenging subject matter and rigorous courses in future educational settings. The Young Scholars Initiative is one component of the Fairfax County Gifted Programs that is based on 5 guiding principles.

- Identify early (grades K, 1, 2), differentiate instruction, and build on student strengths.
- Cluster, guide, and support students (grades K-6).
- Provide ongoing staff development opportunities for teachers.
- Offer enriched and challenging learning experiences; Summer School/After School/Intercession.
- Involve guidance counselors, parents/guardians, parent liaisons, and community members.

Young Scholars was started in response

to the superintendent's desire for a program that would close the achievement gap and raise the bar for CLED students. During an initial teachers/principal meeting, a list of program ideas and needs were developed including area of county in greatest need, grade levels, and potential pilot program locations. At this meeting, a principal and teacher from a high-poverty school requested the first summer offering be held at their school. Three teachers, with expertise in gifted and early childhood education, volunteered to create and teach the pilot. During the pilot summer session, 30 children attended the program, and not one missed a single day of class.

From this initial success, 16 other schools began a K-2 summer program, incorporating the strategies used during the pilot to help students demonstrate gifted potential. Teachers from each school chose to become the building's Young Scholars teacher, and they attended a summer institute, created an action plan, and developed curriculum, with assistance from the gifted education specialists. Each summer school site had a theme such as communication, conservation, or systems; provided exposure experiences (field trips); used hands-on activities; and made connections between the content and the students' lives. From this beginning, 25 school sites will provide future services and other schools that use a year-round calendar will provide these services during inter-sessions.

The summer school sessions serve as the foundation for the academic year of the Young Scholars (YS) program. YS identified students are served during the school year through one of the following programming designs: clustering small groups of students in classes; creating multiage groups; flexible grouping strategies; and looping. School administrators choose the design which best fits their school environment. The YS program is currently expanding to include grades 4-6 as an extension of the school-based program offerings.

Identification

Students are identified for YS using a variety of assessment tools, and an individual case study is developed that includes anecdotal notes based on student observations, portfolios including student work and self-reflection, teacher-made tests assessing comprehension of information taught, learning logs/journals

demonstrating student process and thinking in new learning experiences, work sample folder reflecting student performance, completion and demonstration of skills, and a Gifted Behaviors Rating Scale (GBRS). Teachers use anecdotal records notes to gather data on students' verbal, non-verbal, social/emotional, and intellectual behaviors during response lessons. All K-2

classrooms provide Response Lessons that address state standards and provide students with opportunities to think about the lesson, make connections to the real world, use creative/productive thinking, and help students consider solutions to a specific problem (See Figure 4.3).

Figure 4.3: Sample Response Lesson.

Recycling

POS/SOL Objective: SCI 1.8
The student will investigate and understand that natural resources are limited.

Materials: Juice can filled with pencils
Optional: Accumulated trash

GRADE 1

CONTENT AREA SCI

Please record behaviors in the following categories on the Blue Card:

.....

SENSE	<p>HELP STUDENTS BEGIN TO THINK ABOUT THE LESSON.</p> <p>I have recycled this juice can. Can you tell me what recycled means? Can you think of other things that have been recycled?</p>	<p><i>Exceptional Ability to Learn</i></p> <p style="text-align: center;">.....</p>
LINK	<p>HELP STUDENTS MAKE CONNECTIONS TO THE REAL WORLD.</p> <p>What does your family do with clothes, toys, furniture and other things you don't use any more? Use your imagination. What could you do with an old shoe? An old basketball that won't hold air anymore?</p>	<p><i>Exceptional Application of Knowledge</i></p> <p style="text-align: center;">.....</p>
EXPLORE	<p>HELP STUDENTS THINK ABOUT MANY POSSIBILITIES, REAL AND IMAGINARY.</p> <p>Pretend that you are an empty soda can. What would you like to be recycled into? How could you be used again?</p>	<p><i>Exceptional Creative/Productive Thinking</i></p> <p style="text-align: center;">.....</p>
FOCUS	<p>HELP STUDENTS CONSIDER A NEW SOLUTION TO A SPECIFIC PROBLEM.</p> <p>Build a model or draw a picture of a new way to use something you usually throw away. OR Explain to students that in Fairfax County many people make more than 6 pounds of trash each day. Draw pictures showing ways that people could use less trash.</p>	<p><i>Exceptional Motivation to Succeed</i></p> <p style="text-align: center;">.....</p>
PROCESS	<p>SUMMARIZE THE LESSON with the students by asking what the lesson was about and making applications to their studies and/or their lives.</p>	

These response lessons provide opportunities for students to demonstrate gifted characteristics that might otherwise have been missed. Portfolios include examples of students' efforts and achievements in the areas of curriculum. Teacher-made tests are formative assessments used to identify the areas that students still need to learn and determine instructional methods that will ensure student success. Rubrics are used to assess student work on a given assignment or performance.

All data are collected and evaluated to determine the identification of students for Young Scholars. No formal assessments are used and the focus is on how students' perform when given the opportunity to work with challenging curriculum.

Curriculum

The curriculum model used in the Young Scholars Initiative was developed using *Understanding by Design* (McTigh & Wiggins, 1999) and *Concept-Based Curriculum and Instruction* (Erickson, 2002). Teachers developed curricula focusing on a theme such as systems, and this served to guide connections within and between content areas.

Gifted education specialists supported the classroom teacher in the development of curriculum, providing scaffolding to teachers' development efforts and ensuring that units provided challenge. Individual schools and classrooms differ in thematic focus but all students work toward deeper understanding of content. All curricula include state standards, concepts, principles/generalizations, understandings, essential questions, knowledge, and skills required for the unit, assessment, and descriptions of learning activities. The learning activities may also include graphic organizers, tiered assignments, double entry journals – content, response, and different perspectives, learning contracts where students choose from a menu of learning activities, RAFT (role, audience, format, and topic), cubing, learning stations, and independent study. The intent of the various strategies is to provide students with opportunities to learn content more in-depth and make connections to other content areas and to their own lives.

Teacher Preparation

The gifted program office provides support for teachers through extensive professional development offerings. Every summer the

district offers a summer institute, providing teachers with information and strategies for their classrooms. YS teachers and all teachers of the gifted are required to complete a gifted education endorsement within 5 years. These courses are offered in conjunction with University of Virginia and the district pays the tuition. During the school year, each school has the opportunity to send teachers to hear guest speakers and a lecture series. The district pays for two substitutes for each building and some school principals use building funds to send additional teachers. Many of the YS teachers and gifted specialists are National Board Certified, demonstrating their dedication to the field of education. Additional in-service training is offered during the school year. Gifted specialists provide voluntary course offerings on different strategies for teachers in the district. Teachers receive high levels of continuing education offerings and have the freedom to choose training offerings to best serve their school and students. During interviews, teachers displayed extensive knowledge of gifted educational strategies and curriculum development, and sophistication with these strategies was observed during classroom visits and lessons.

A two-day, district institute will be offered to support differentiation for academic diversity, as a result of the collaboration of numerous district departments including Gifted Education, Elementary Education, Special Education, ESOL, Title I, Early Childhood, and the Office of Minority Student Achievement. Each school will be invited to send a team of 8 teachers to develop expertise in meeting the diverse needs of all students. Topics will include developing awareness of the need to recognize student potential, building knowledge of best practices to serve underrepresented populations, and providing the opportunity for the school team to develop plans for their school to implement these best practices. All district professional development offerings have strong administrative support, reflecting a district commitment to meet the needs and develop the potential of all students in the district.

Administrative Support

All gifted program services receive strong support at every level of the administration, beginning with the assistant superintendent who has served as a continual support mechanism for YS through financial support of the initial pilot and throughout the growth and change of the

initiative. The gifted office provides support in various ways including the distribution of an informational newsletter for teachers and principals in YS schools, sharing books, strategies, highlighting program successes, and announcing in-service education opportunities. During visitations, each building principal knew the G/T director and discussed personal issues as well as proposed new ideas, such as using military base bus service to transport students whose families live on base to the base school summer program. This provided tangible evidence of the support and leadership qualities demonstrated by building principals.

The administrators interviewed appeared to be dedicated to empowering their teachers, supporting their work, and developing their strengths, even if it meant the teachers would receive a promotion and leave the building. The principals demonstrated knowledge of all aspects of their school. In one school, the principal guided the visit by praising the efforts of the teachers, and during one classroom observation, this principal took over instruction, leading a lesson or reading to the class, giving the teacher the opportunity to explain teaching strategies and evidence of student growth to the researcher.

The change process used in the YS initiative is based on principles of systematic change outlined by Allington and Walmsley (1995):

- Change comes from within
- Change will not necessarily cost more money
- There are no quick fixes
- There is no single best way

The adoption of these principles was evident as each school administrator discussed the support and empowerment of their staff, patience for growth and systemic change, and flexibility and openness to new ideas. One example of these qualities occurred when the G/T director asked 3 principals for permission to pilot screen all kindergarteners using the Naglieri Non-verbal Ability Test. Each of the principals was receptive to this suggestion and demonstrated their openness to change. Administrative efforts to hire diverse staff were evident in each of the four schools visited. All principals and gifted specialists in these schools were African

American and all served students from predominantly diverse cultures.

Initiative Goals

The YS Initiative developed specific goals to address the underrepresentation of CLED students in district gifted programming. The goals supplement the district's goals for gifted service options for gifted and potentially gifted students.

- To identify students with high academic potential who may not be considered for gifted programs using traditional methods of identification.
- To increase the academic challenge provided to students in grades K-3.
- To nurture the student's potential and develop the skills necessary to engage in challenging subject matter and rigorous courses in upper elementary school and beyond.

Program Effectiveness

The Young Scholars Initiative targets serving traditionally underrepresented populations in gifted programs. The YS initiative, in 16 elementary schools, has provided CLED primary students with opportunities to raise personal expectations and participate in more challenging curriculum. An increase was found in the number of CLED students who participated in gifted programming at various levels of service as indicated in Tables 4.1 through 4.3.

Students have shared their impressions of the YS program and how it affected them, and examples of their statements follow:

"Young Scholars has helped me to believe in myself and know that I can do anything."

"I have learned to be independent and to bring out my true brain power."

"I have learned to love thinking."

"Young Scholars has helped my mind progress faster than usual."

Table 4.1: Demographics of Students Currently Identified for Young Scholars.

<i>Grade</i>	<i>White</i>	<i>Black</i>	<i>Hispanic</i>	<i>Native American</i>	<i>Asian</i>	<i>Multiracial</i>	<i>Undesignated</i>	<i>Total</i>
K	26	34	24	2	12	0	2	100
1	34	56	25	3	21	6	5	147
2	43	68	30	3	34	1	4	184
3	14	29	8	0	7	0	7	65
4	2	4	0	0	0	0	0	6
5	0	2	1	0	1	0	0	4
6	1	3	0	0	0	0	0	4
Total	117	196	88	8	75	17	18	510

Note: Students are formally identified gifted at the end of grade 2.

Table 4.2: Young Scholars in Second Grade Screening Pool for G/T Center Program.

	<i>White</i>	<i>Black</i>	<i>Hispanic</i>	<i>Native American</i>	<i>Asian</i>	<i>Multiracial</i>	<i>Undesignated</i>	<i>Total</i>
Eligible	3	11	6	0	2	0	1	23
Ineligible	2	0	0	0	0	0	0	2

Table 4.3: Young Scholars Referred and Eligible for School-based G/T Services (Grades 4-6).

<i>Grade</i>	<i>White</i>	<i>Black</i>	<i>Hispanic</i>	<i>Native American</i>	<i>Asian</i>	<i>Multiracial</i>	<i>Undesignated</i>	<i>Total</i>
4	9	20	10	2	9	0	8	58
5	3	1	2	0	1	0	0	7
6	2	1	2	0	0	0	0	5
Total	14	22	14	2	10	0	8	70

Note: School-based Identification requires 9+ on behavior rating scale, achievement scores ranging from 120+ on Otis-Lennon, CogAt, or NNAT; 90%+ on Stanford 9; 540+ on SOL in any subject.

Project Excite

Project Excite resulted from the collaborative efforts of the Evanston School District and Northwestern University to address the disparity between the numbers of culturally, linguistically, and ethnically (CLED) diverse 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. The Center for Talent Development at Northwestern University staff proposed a way to help to increase the number of CLED students who were prepared for Advanced Placement courses at the high school. This collaboration began with elementary district 65, the Evanston Township High School District 202, and Northwestern University's Center for Talent Development.

Project Excite was designed to prepare students at the elementary level for Advanced Placement courses in math and science in high school. Third-grade students participate on alternating weeks and fourth and fifth-grade students attend 3 separate 8week sessions during Fall, Winter, with an optional Spring session for sixth graders preparing for the pre-algebra placement assessment. A summer session is offered to grades 3-8 with the majority representing students in grades 7-8.

The program has 28 adults and 8 high school mentors who support Project Excite including 2 coordinators, 10 advisory board members, 5 school liaisons, 8 Project Excite instructors (elementary and high school teachers), 2 psychologists, 8 high school student mentors, and 1 coordinator for Hispanic students (Spanish speaking, elementary teacher).

Identification

Students participating in the Project Excite Program share some common characteristics, such as:

- Are in the third through ninth grades and are underrepresented minorities.
- Have potential to achieve at high levels as demonstrated by their ability to think critically and engage in problem solving.
- Demonstrate the ability to work beyond their current grade level.

- Demonstrate a high level of interest, curiosity, and enthusiasm for learning mathematics and science.
- Come from families with limited experience with higher education, i.e. they would be first generation college attendees.

Classroom teachers recommend students for Project Excite using a recommendation form developed by staff at the Center for Talent Development. Teachers rate students' achievement, work and study habits, degree of home support, interest and enthusiasm for math and science, and problem solving and analytical/reasoning skills as compared to other students their age. Students are selected from five K-8 elementary schools in District 65 using individual school's nomination procedures. The Naglieri Non-verbal Ability Test is given to all nominated students in either an after-school or in-school assessment session. Students can be admitted to the program by fulfilling criteria in one of the two manners:

Pathway 1

- Score at or above the sixth stanine on the Naglieri Non-verbal Ability Test, and
- Receive positive recommendations from the school regarding work habits and interest in math and science.

Pathway 2

- Score at the fifth stanine on the Naglieri Non-verbal Ability Test,
- Receive positive recommendations from the school regarding work habits and interest in math and science, and
- Earn test scores on the Iowa Test of Basic Skills or the district online test indicating above-grade level achievement.

All student information is reviewed by a selection team consisting of representatives from each of the partner institutions. Using these pathways, 43% of the students nominated for Project Excite were accepted into the program.

Curriculum

The content specific goals for students completing the elementary Project Excite program are to accelerate course work to enable them to be successful in advanced level math and science classes in high school (See Table 4.4).

Table 4.4: Mathematics and Science Curriculum for Grades 6-9.

<i>Grade Level Expectation</i>	<i>Mathematics</i>	<i>Science</i>
Goal by the end of grade 8	Algebra I Honors or Algebra I and Geometry	Lab based courses, with experiments, exposure to Chemistry, Physics, and Biology concepts
Curriculum grades 6-8	Pre-Algebra and Algebra I Honors	Lab-based science courses
Grade 9 course	Algebra II or Geometry	Chemistry, Physics, or Biology

Project Excite curriculum stresses hands-on activities in science and math, 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 the elementary teachers, building on the strengths of both teacher groups. The elementary teachers bring the hands-on focus and the high school teachers bring the high content levels and together they build better enrichment sessions. The one-hour, after-school classes are held at the high school in the physics lab, providing access to a real lab experience. Students complete a written problem sheet after completing each hands-on session and students take home activities to support their learning after each lab session. One session focused on oscillation, the scientific method, and graphing skills. Students conducted an experiment using springs and weights, and physics vocabulary. Students made predictions about how far the springs would stretch, and time used for each “bounce,” worked with calculating rates, recorded data on a data sheet, and graphed their results. The take-home activity that was to be shared with parents involved a slinky, provided by the program. Another take-home activity involved amplitude and pendulums, and students were to suspend a provided pendulum and time 10 swings, and divide by 10 to calculate the period of the swing.

For the second part of this experiment, students made predictions as well as asked their parents to predict if the period would be longer

or shorter if the weight was pulled further out. Students had to set up the experiment, make predictions, record data, and report findings at the next after-school session.

The Saturday and Summer Enrichment Program portion of Project Excite is held at Northwestern University, exposing students to the university community, and tutoring is provided as part of this program to support students struggling with other content areas.

Parental Involvement

Efforts are made to collaborate with parents to support students in the program. Periodic parent meetings provide parents with general information about the Project Excite Program. These meetings may be led by a psychologist or an expert in gifted education, depending on the meeting agenda. Based on their needs, parents determine the types of information and expert advice they need to help their child.

In order to build a parental community to support the students and the program, the home schools organize Project Excite parents into small groups, each with a group leader/contact person who facilitates phone communication about the program. Parents work together to plan and organize social events within their small groups and selected parent representatives attend after-school student activities.

To further connect Project Excite and the home, each fifth-grade student receives a desktop computer with Internet access to use at home. These gifts were from an area business

and parents and students participate in sessions to learn how to use the computer and software.

Program Goals

The program goals were developed to address the following achievement gap issues: low expectations for high achievement on the part of teachers, poverty, low-quality schools, perceived negative ramifications of achieving, lack of access to extracurricular programs and “tacit knowledge” about education, and lack in belief in oneself. Project Excite sought to address the achievement gap between minority and non-minority children in the Evanston School District. The specific goals include

- To identify minority children in early elementary school who have talent and ability in mathematics and science, and to provide supplemental educational opportunities to help them fully realize their abilities. Specifically, one goal was to prepare and provide support to students over a 7-year period, through their freshman year of high school, so that they can enter and succeed in advanced math and science tracks at Evanston High School.
- To provide increased support for high achievement and talent development through significant and sustained interactions with older student role models and with teachers and other adults. Contact with such individuals can reinforce students’ beliefs in their abilities, help them sustain motivation in times of stress, and help them negotiate important transitions such as the move to middle or high school.

- To create a positive peer culture in the elementary and middle school by encouraging the formation of a supportive group of peer program participants.

Program Effectiveness

The school district assessment for students is based on a cumulative textbook assessment, which 81% of the Project Excite students passed. The 2003 school year is the first time Project Excite students are eligible to take the pre-algebra exam at the end of grade 5. This benchmark provides additional information on the effectiveness of the program. As the program continues, attendees will be monitored to check to see if their enrollment in advanced level math and science classes is achieved, accomplishing one of the program’s goals. Currently, 19 fifth graders and 15 fourth graders attend Saturday Project Excite classes. Twenty-six third-grade students participate in the Project Excite after-school program.

Classroom teachers complete a report on each of their Project Excite students. They report the student’s level of performance in math and science, including turning in homework and quality of the work, homework and school work, rating student’s interest and enthusiasm for math and science, perceived student interest in Project Excite, and teacher satisfaction with program-to-teacher communications (See Figure 4.4). At the close of the academic year, the participants’ classroom teachers were asked to indicate each student’s level of performance and interest/enthusiasm in mathematics and science since school started in September. The average ratings for the 2001 and 2002 Project Excite participants are given below. Several of the questions asked on the end-of-year teacher assessment were identical to those asked on the teacher nomination form. In these instances, both pre- and post-program average ratings are reported:

Figure 4.4: Project Excite Third-Grade, End-of-Year Teacher Assessment for 2 Cohorts.

<i>Question</i>	<i>Mathematics</i>	<i>Science</i>
1. Please record this student’s score (percentage) on the end-of-year math test.	81.74	----

2. Please indicate this student's general level of performance on tests, quizzes, and assignments since school started? (1=strong performance, 3=needs improvement)	1.54	1.45
3. If you were to give this student a grade in this subject for the academic year, what would it be? (1=A, 5=F)	1.67	1.57
4. How often is the student turning in his/her homework? (1=always, 4=rarely)	1.67	3.48
5. Please rate the quality of this student's completed homework if this subject (1=excellent, 5=very poor)	1.71	3.95
6. Does the student get help with homework at home? (1=yes,2=no)	1.41	1.88
7. Please rate the <i>quality</i> of the student's daily work in this subject? (1=excellent, 5=very poor)	1.74	1.6

The programs included in this chapter reported success in improving the identification and services for culturally diverse, high-ability students but expressed the need for additional efforts. Their efforts to date and continued focus on improvement are commendable and are instructional for others.

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- McTighe, J., & Wiggins, G. (1999). The understanding by design handbook. Alexandria, VA: Association for Supervision and Curriculum Development.

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Chapter Five

Gifted Programs of Note for Culturally Diverse Learners

Christine J. Briggs

Despite increased attention to the issue of underrepresentation of culturally, linguistically, and ethnically diverse (CLED) gifted students, few educators have made widespread attempts to change this situation. Sparse research documents any current efforts in gifted programs to increase the successful participation of these groups, and few research-based guidelines are available to assist program developers in their attempts to increase the identification and participation of CLED, high-potential students in programs for the gifted and talented. Little research suggests the specific curricular practices in different program designs that would effectively meet the unique needs of CLED/G/T students. To address this information void, an examination was conducted of interventions and practices in gifted programs that have successfully improved the representation of CLED students.

This chapter presents brief synopses of gifted and talented programs that represent diversity of geographic representation and program design and evidence of program success.

Adobe Acres – Quest Program

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Program Goals

- Provide challenging, engaging, and relevant learning opportunities to culturally diverse gifted students
- Strengthen active partnerships among home, school, and community
- Ensure a safe, caring school environment
- Promote and model positive character traits by providing positive role models from within the student's culture
- Develop the skills necessary for autonomy in learning and personal goal setting

Program Delivery System

Adobe Acres G/T Quest Program provides services to a diverse population of students, including African American, Hispanic, and Native American students, through pull-out classes for 50% of the day.

Grade Level Served

The program serves students at the elementary level. The Albuquerque Public School District provides a continuum of services at the middle and high school levels.

Curriculum Emphasis or Programming Model

The G/T Quest Program focuses on individualized instruction, acceleration, and enrichment opportunities using the Autonomous Learner Model. Two trained G/T teachers provide services in pull-out classrooms, and in the traditional classrooms to teach challenge lessons for all students. The G/T teachers model best practices for classroom teachers, as well as provide professional development to staff on identification and needs of gifted learners. The content focus in the G/T Quest program is on language arts and math. Enrichment, differentiation, and acceleration of curriculum are provided to students according to their individual educational plan (IEP). Activities, which are tied to the Albuquerque Public Schools' Strands of Gifted Curriculum and the New Mexico State Standards include: (a) Future Problem Solving, (b) Mars Mission Project (U. S.

Air Force Research Laboratory), (c) College of William & Mary Language Arts units, (d) Lexicology, (e) Pre-algebra, Challenge Math, Math compacting of regular education curriculum, (f) Stock Market Game (On-line sponsored by New Mexico State University), (g) Wrinkle Writing Project sponsored by the University of New Mexico Department of Theatre and Dance, (h) Career Investigations Project, (i) Psychology for Kids, (j) Philosophy for Kids, and (k) Field Trips and Guest Speakers.

Identification

The state of New Mexico has mandated strict rules for identification of gifted and talented students. In an effort to identify underrepresented populations from culturally/linguistically diverse backgrounds, the State has recently passed legislation that allows "an accurate assessment of a child's actual ability may be affected by the following factors: cultural background, linguistic differences, socioeconomic status, or disability condition(s)." In addition to the IQ scores and considerations, students must demonstrate giftedness in one of the following areas: achievement, creativity, or critical thinking. These may be demonstrated through standardized assessment measures, student portfolio, or other state-approved sources.

The informal identification process begins with classroom teachers using the Kingore Observation Inventory (KOI) to "bubble up" those students who can meet the challenges of a rigorous curriculum. Teachers observe students in advanced language, analytical thinking, meaning motivation, perspective, sense of humor, sensitivity, and accelerated learning. Creativity is embedded in each of the categories. These students are observed for a period of approximately 6-8 weeks. Those who meet the challenge are referred to the school's support team for the formal evaluation process.

The formal evaluation process begins by screening students using the Naglieri Non-Verbal Ability Test, followed by parent and teacher checklists, achievement test scores, portfolios, and IQ testing. This data is reviewed by the multidisciplinary evaluation team (MDT)

at the school, consisting of representative teachers from regular education, special education, and parents. This team determines eligibility.

Evaluation Measures

Parents evaluate the G/T Quest program 4 times each year. Teachers provide feedback to the parents about their child's strengths, areas for improvement, and supports needed to help the student to be successful.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

Parents are active participants in this program and help to get students involved in the community. Diverse enrichment experiences provide dual opportunities for both students and parents, as many parents have not taken advantage of the resources available in their community and volunteer to go on the field trips. By chaperoning and driving to field trip locations, parents receive enrichment and experience a collaborative relationship between the teacher, the school, and themselves. In this manner, parents learn to be proactive on behalf of the needs of their children for accessing learning experiences within the community.

Clayton County Public School's Gifted Education Services

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Gifted Education Goals

- Identify gifted students and provide services that enable students to develop their potential to become evaluators, problem solvers, innovators, and leaders

Gifted Education Service Delivery System

Clayton County provides services to students in pull out classes, self-contained classes, and within traditional classrooms. Full time resource specialists serve students in each of these service options.

Grade Level Served

This program provides gifted education services to identified students in grades K-12, system-wide.

Curriculum Emphasis or Programming Model

A certified gifted education teacher provides service delivery to identified gifted education students (K-12). The elementary service, focusing on research, problem solving, critical thinking, and creative-thinking skills, and self-science learning, is primarily delivered via a resource (pull-out) class. Additionally, some elementary schools offer cluster groupings in general education classrooms where the teacher is also certified in gifted education. Some elementary gifted education teachers also offer an introduction of advanced content delivered in "focus groups" based on student need. The secondary gifted education service delivery offerings include resource, advanced content, and cluster group settings at the middle school level. High school service delivery is provided to students via advanced content courses, i.e., Advanced Placement (College Board), Honors, and Gifted Education classes.

Identification Criteria

The district conducts a comprehensive talent search each year, reviewing performance data on all students in the school system. Standardized test data are retrieved from the district data base and provided to each gifted education teacher. Students who score at the

90%-ile in total reading, total math, or composite on the standardized test are automatically reviewed for need of service. Planned Experiences are implemented system-wide in grades K-1 as a means of eliciting a 'gifted' response. In addition, general education classroom teachers in grades 2-8 are provided with lists of characteristics of giftedness and after two weeks of observational data on students. Teachers meet and review data with grade-level teams or In-School Review Teams to discuss students' needs for modified curriculum. The meeting results in one of the following recommendations for each student:

1. No modification required
2. Modifications implemented by the general education classroom teacher
3. Refer student to Gifted/Talented education teacher for formal identification process to determine need for service

The Formal Identification Process

The state requires 4 multiple-criteria assessments- [1 normed assessment/ 1 performance], and this program uses

- Mental Abilities- [Cognitive Abilities Test]
- Achievement Test- [performance- ITBS or Stanford]
- Creativity Test- [GIFT, grades K-3] [Product/performance, grades 4-12]
- Motivation- [Structured Performance Assessment, grades K-3] [CAMI, grades 4-8]

Evaluation Measures

As part of a continuing improvement plan for gifted education services, parent, teachers, and students complete evaluation/feedback surveys on a five-year cycle; results are compiled and are used to examine and modify gifted education services.

Clayton County student participation in the Governor's Honors Program is an additional evaluation tool. The students participating in this program are considered the best students in

Georgia during the current school year, 2002 - 2003. Currently, Clayton County Schools has 87 semi-finalists being considered for participation and 60 of these were CLED students.

Uniqueness of the Program for Talent Development of Culturally, Linguistically, and Ethnically Diverse Students

One characteristic contributing to the uniqueness of this service is all of the teachers serving G/T students are certified in gifted education via Georgia's Professional Standards Commission, having completed college courses in G/T. Teachers use a wide variety of instructional materials including Great Books, Figure It Out, Problem Solving, William & Mary Problem-Based Learning Curriculum, Interact, and Foss Science Kits. In the identification process, culturally diverse, low SES, and students with learning differences are given the opportunity to demonstrate their abilities through alternative assessments, e.g., Otis-Lennon, TOMAGS, and Naglieri Non-verbal Ability Test.

Connecting Worlds/Mundos Unidos Gifted and Talented Dual Language Immersion Program

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Program Goals

- Provide gifted services to second language learners in a two-way dual language model
- Develop high levels of bilingualism and bi-literacy in Spanish and English
- Provide students with a gifted curriculum enriched with depth and complexity
- Identify and serve underrepresented populations
- Integrate parents as an important part of the program
- Develop positive cross cultural appreciation and respect in students

Program Delivery System

The Connecting Worlds Program provides services to diverse students in self-contained classrooms with certified bilingual and gifted and talented teachers.

Grade Level Served

The program serves students in the elementary and middle school grade levels. The program will expand to the high school level in 2003-2004.

Curriculum Emphasis or Programming Model

The *Connecting Worlds/Mundos Unidos* program was implemented in response to parents' desire for their gifted children to learn two languages and began with one teacher for students in grades 1, 2, and 3 in 1997. In this program, Spanish Language Learners and English Language Learners identified as gifted and talented are assigned to a self-contained classroom for two-way dual language instruction in Spanish and English. Instruction is conducted 50% in English and 50% in Spanish. Students work together to support one another in both languages, building a learning community and developing independent learner skills. The original team of program teachers was trained in dual language and gifted and talented strategies. In addition, they received training on

the Schoolwide Enrichment Model and the Junior Great Books inquiry reading program. Over the past two years, the program model has been expanded to include Kaplan's model of depth and complexity, and curriculum projects have initiated alignment to themes and generalizations.

At the middle school, dual language instruction is provided in the Humanities gifted and talented program classes that integrate English, history, fine arts, and technology. Students work with materials in English and Spanish and they develop projects in both languages. The projects require in-depth research and skills that demonstrate advanced student learning. For example, sixth-grade students create a historically-based newspaper in both languages; seventh-grade students write their own books in either language and illustrate them as a *Written and Illustrated By* project; eighth graders design a literary magazine that includes selected writings in both languages by all the students. The projects are shared with other Humanities students throughout the district.

Plans are in place to expand the middle school program to dual language math and science classes for the Connecting Worlds/Mundos Unidos students in 2003-2004. The first cohort of students, currently in eighth grade, have enrolled in Pre-AP Integrated Physics and Chemistry and Pre-AP Geometry classes that will be taught in both English and Spanish at El Paso High School in the 2003-2004 school year. In addition, the students tested out of Spanish II and have enrolled in a Spanish III class that will be taught by a teacher certified in French and Spanish and working toward a Masters degree in dual language at the University of Texas at El Paso.

The stakeholders of the *Connecting Worlds/Mundos Unidos* program believe that gifted English and Spanish-language learners can achieve academic excellence, dual language proficiency, and cultural appreciation. Formal evaluations have affirmed a system in

which there are no achievement gaps between minority and Anglo, limited English proficient and English dominant, economically disadvantaged and advantaged, and male and female students.

Identification

Students are identified with multiple efforts to consider equal access. A letter is sent to parents announcing the availability of the program and parents, teachers and students participate in the nomination process. Formal identification of giftedness is based on 5 criteria:

- Raven Test Scores
- Behavioral Checklist Log – completed by the teachers
- Grade Point Average
- Parent Survey
- Classroom Activity Observations

An identification matrix that includes ranges of scores for qualification is completed on each student. The gifted and talented screening committee at the school reviews each student to determine appropriate program placement . Some students may be placed in the program for a probationary period, or the committee can request a portfolio of student to provide additional information for review. If a student is Spanish dominant, an oral proficiency test score may also be used as one of the criteria.

Evaluation Measures

An external evaluator of the program has provided evaluation feedback annually, using qualitative data (observations, interviews, and parent and teacher surveys) and quantitative data (state assessment scores and Terra Nova and Supera scores) to evaluate program effectiveness. Students take state assessments in both English and Spanish, and most students have demonstrated academic success in both languages (see Tables 5.1 & 5.2).

The statistical results are expressed in terms of Normal Curve Equivalents (NCEs), an interval scale that permits mathematical operations on the data, such as division, in order to establish statistical parameters, such as means and standard deviations.

Table 5.1: Achievement on Tests in Spanish, 2002

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Supera Reading NCE 2002	130	20	99	55.09	18.176
Supera Language NCE 2002	130	20	99	55.78	19.539
Supera Math NCE 2002	130	30	99	67.29	13.781
Valid N (listwise)	130				

The means in Supera Reading and Supera Language are equivalent to percentiles 59 and 60 on national norms. The Supera Math's mean NCE of 67.3 is at the 79th percentile nationally.

Table 5.2: Achievement on Tests in English, 2002.

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Terra Nova Reading NCE 2002	131	33	99	70.97	15.344
Terra Nova Language NCE 2002	131	32	99	70.64	15.033
Terra Nova Math NCE 2002	131	43	99	75.69	14.011
Valid N (listwise)	131				

The national percentile equivalents for the mean NCEs in Terra Nova Reading, Language, and Mathematics scores are, respectively, the 84th, the 84th, and the 89th. All three tests in English are significantly higher than their counterparts in Spanish (the Supera tests). But note that for the fifth year in a row, the CW/MU students' highest area of performance was in mathematics, be it measured in Spanish (Supera) or in English (Terra Nova). The low scores in Spanish Reading and Language have made by only a handful of students who seem to resist instruction in the marked language, Spanish. This has been a concern expressed during the last two years by the teachers and the external evaluator, and steps are being taken to ensure that the native speakers of English who are selected for the program have an open attitude to acquiring a second language.

From program implementation in the 1997-98 school year, the number of students participating in the program has grown from 34 to 148 students, with an average of 43% of those students identified as Limited English Proficient. With the EPISD Board of Trustees' approval of the program as a magnet program for the district, the Connecting Worlds/Mundos Unidos program is expected to continue to grow annually.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

This program supports high potential and talented students representing two language cultures and seeks to develop deeper understanding of content and language for all participants. Teachers working in the program are specially selected and are committed to the program design. A vast amount of dual language

materials are available for working with students and all computers include English and Spanish software. Students acquire knowledge of the required content objectives and experience enrichment opportunities as well as the opportunity to communicate in two languages. As part of the curriculum, students can learn about different cultures and gain appreciation for learning new languages. For example, the traditional content requires students to learn about different cultures but the *Connecting Worlds/Mundos Unidos* students move well beyond learning facts about cultures as students learn with deeper awareness and appreciation of diverse cultural groups. The students have formed a real community in each classroom. Moreover, all four characteristics of gifted education—pacing, depth, complexity, and innovation—are evident in the project classrooms in both languages.

Encounters Gifted and Talented

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Program Goals

- Provide subject specific gifted program services in math, language arts, science, and social studies
- Provide a continuum of services to support gifted and talented students' success in advanced placement courses and dual credit courses.
- Support student development of advanced, professional quality products, as result of participation in our continuum of services.

Program Delivery System

The Encounters Gifted and Talented Program drew on the work of Dr. Dorothy Sisk's Project Step-Up, utilizing staff development to acquaint teachers with Project Success and raise student achievement through the differentiation work of Samara and Curry. A district-wide effort emerged as a result of one school successfully piloting Project Step-Up, using an open-door policy providing the opportunity for all teachers to earn 30 hours of gifted and talented strategies and training to nurture the talent of all students. The district supports a well-articulated accelerated program for qualified students where accelerated/honors students have the opportunity to be identified for the gifted and talented program.

Grade Level Served

The program provides services to students in grades K-12.

Curriculum Emphasis or Programming Model

The Encounters Program curricular emphasis is on acceleration and differentiation in the four core content areas. Dr. Sandra Kaplan's work and gifted training at the state level supports the curriculum differentiation in the areas of content, process, product and an evaluation tool for curriculum development. Gifted and talented programs in Texas school districts provide identified gifted and talented students with opportunities to explore and

develop depth and complexity using the state guidelines. Students demonstrate learning through the development of products or performances. The work of Dr. Bertie Kingore supported the development of an evaluation rubric, blending teachers' instructional strategies, for depth and complexity, with the levels of student outcomes from the strategy selected.

Identification

The foundation for services is based on the work of gifted education specialists' research advocating that poor and minority children can be identified gifted using traditional methods. Students are identified through varied use of assessments including Iowa Test of Basic Skills and Aprenda, a standardized achievement test in Spanish. Student portfolios are also used to document strengths and interests and teacher and parent surveys are used for further information. In the area of fine arts, students are identified through 3 criteria; portfolios, teacher nomination (art or music teacher), and presentations, defenses, or interviews.

Students not formally identified through these procedures may be placed in an acceleration opportunity. Students identified for the accelerated program often qualify for G/T identification following this group experience. Thirty-five to 40% percent of the students in the accelerated group are LEP.

Evaluation Measures

Having our identification process in place, we want to assess our program and services and are participating in the state department's performance standards assessments for gifted and talented students. We want to integrate quantitative and qualitative data in a meaningful manner when we look at students for identification and ongoing assessment of student development.

Researchers at the University of Houston studied the program for growth, using 7 years of data including the PEIMS report (mastery levels

of student performances.) Students' growth is assessed through test data and portfolios. In 1992, only 2.8% of district students were identified as gifted, with the majority Anglo. This prompted efforts to make change by the undertaking the task of increasing the number of students identified, using traditional methods, and reflecting the district demographics. Between 1993 and 1998, the percentages of participating African American and Hispanic students increased by 30% and 80%, respectively.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

The program serves students in different delivery systems at each level; elementary, middle, and high school. The state department of education mandates that gifted students must be given some time during the school day to work with their intellectual peers, and this program provides a broad range of instruction for G/T students, but does not group homogeneously for extended periods.

At the elementary level, students have access to accelerated content and G/T identified students are required to complete self-selected projects. All students have access to the accelerated content as their need require. Students who are not formally identified may complete projects. Students at the middle and high school levels receive services in G/T classes or accelerated classes.

Over the past 11 years, the Encounters Program provided numerous staff development options to support teachers' knowledge and understanding of gifted programming. Staff development included subject-specific training to meet specific the specific of the teachers. While every campus in the district has a school-wide Title I program, each campus also has a gifted and talented program and students and teachers benefit from the resources and services of both programs.

Because a large number of our parents cannot provide resources and knowledge, our schools makes every effort to provide all students with technology, materials, skills, teacher mentors, community mentors, university support, and business partners.

GATEway Project

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Program Goals

- Increase the number of gifted and talented students identified from traditionally underrepresented groups in targeted schools
- Implement an instructional framework that is aligned to the student's strengths and culture
- Increase student achievement in reading and writing for identified students

Program Delivery System

Services are provided through differentiation in traditional classrooms for all students, assisted by resource teachers. Resource teachers co-teach, coach traditional teachers in using the GATEway framework, and provide materials to support the differentiation process. The project is funded by a federal Javits-program grant.

Grade Level Served

The GATEway Project provides gifted services to students in grades 1-8.

Curriculum Emphasis or Programming Model

The program is based on the GATEway Framework to Achievement and strives to address learner characteristics described in Gardner's multiple intelligences. Learning accommodations are provided based on student strengths, and opportunities are provided to promote thinking and creativity skills, use high-level questioning strategies, provide culturally responsive learning opportunities, and support skill and process learning in all students. GATEway also provides professional development for traditional teachers to broaden their perspectives of giftedness in students, and help them to understand the process of moving from potential to achievement.

Classroom teachers receiving professional development from the resource teachers were asked to create lessons or units using the GATEway Framework to Achievement as a

basis. They were to take any lesson that focused on literacy and adjust it to reflect one or more of the aspects of the Framework – learner characteristics in the Multiple Intelligences, creativity, thinking skills, questioning strategies, strength-based strategies, or cultural responsiveness. One fourth-grade teacher's reading class (homogeneously grouped, above-level readers) had read stories about disasters. They invited a Red Cross worker to their class to talk about disaster response. Their assignment was to think about what an emergency shelter might look like and need to be stocked with. Students used critical thinking in their work, and engaged in creative thinking to describe the synthesis of their ideas.

Identification

Identification procedures are accomplished through the use of both formal and talent pool identification. The GATEway talent pool is comprised of students who score two or more ratings of "Definitely" on the foundation criterion for identification, the DISCOVER Assessment Process (Maker, Nielson, and Rogers.) Students are observed during performance tasks, which involve problem solving in the Multiple Intelligences, by trained observers, then their observed behaviors are checked against known behaviors of outstanding problem solvers in the same areas. Additional criteria are used for formal identification, including IQ scores (rarely available), student achievement, creative thinking, leadership, arts, parental referral highlighting behavioral characteristics, leadership, and teacher recommendation, Renzulli-Hartman scales for motivation and leadership and the Kingore observation inventory. The GATEway project includes a talent development plan that takes into account student strengths. The multiple criteria process increases teacher awareness of different ways giftedness could look. As a result, 48% of the identified students are non-white.

Evaluation Measures

Goals are assessed through daily observations, classroom teachers conferencing with resource teachers, and resource teachers providing coaching to support traditional teachers' work. The observations utilize the National Research Center on the Gifted and Talented classroom practices observation form recommendations and Maker's DISCOVER framework. The increase in under-represented students in gifted services through the talent development plan serves as an evaluation point. All the grant schools are highly impacted. In a demographically similar control school not participating in the grant, no students were identified during the past year while in the grant schools, 20 students were identified as gifted or high potential.

Student achievement is evaluated through various measures of reading level and writing scored with common rubrics.

Uniqueness of the Program for Talent Development of Culturally, Linguistically, and Ethnically Diverse Students

The GATEway project delivers gifted services through an instructional framework used to observe student motivation and effort. The desired outcomes for the framework were to assist traditional teachers learning how to move students from potential to achievement, address obstacles, and deepen understanding of multiple intelligences. Teachers receive student profiles for all students identifying student strengths. Learning experiences may include the introduction of unknown problems to allow students to demonstrate problem-solving behavior. Teachers learn how to accommodate student learning preferences, developing materials to allow visual spatial students to learn literacy in their preferred style. The resource teachers working in the grant schools support the development of these accommodations through different strategies such as thinking skills within the content area, questioning strategies, and creativity – what it is and isn't.

The resource teacher positions are funded by the grant and another goal that the resource teachers pursue is to provide traditional teachers with knowledge, strategies, and unit plans to support students after the grant is over.

Learning Unlimited

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Program Goals

- Develop high-level reasoning skills
- Provide enrichment and pull-out opportunities for gifted students to explore and strengthen unique talents and interests
- Enhance opportunities for acceptance of unique qualities and unusual academic passions of gifted students
- Develop each child's strengths to their potential
- Provide assistance to teachers for making in-classroom curricular and instructional accommodations for gifted students

Program Delivery System

Learning Unlimited provides services to students in both pull-out classes and in traditional classrooms. At the Kindergarten level, a gifted specialist provides high-level learning opportunities in regular classrooms. Elementary students are served in a regularly scheduled pull-out class. Sixth-grade students are served in self-contained classes and 7th and 8th graders may choose a G/T class as an elective. High school students may attend an independent study class to pursue individual interest areas.

Grade Level Served

This program provides services to students in grades K-12.

Curriculum Emphasis or Programming Model

Learning Unlimited is an inclusive talent development program and follows the principles of the Schoolwide Enrichment Model. At the elementary level, all students have the opportunity to learn higher-order thinking skills. Any student demonstrating advanced vocabulary, sensitivity, thinking skills, and/or a particular interest area may be included in pull-out offerings. At the secondary level, students can choose to attend enrichment offerings as

elective classes to explore individual interests and develop products.

Identification

Traditional formal gifted identification is not used for the Learning Unlimited program. Instead, student observations are used to better recognize gifted behaviors and identify students for the program. Prior to any formal identification, all students at the Kindergarten level receive instruction in thinking skills by the G/T teacher in each Kindergarten class. Two goals are accomplished through these learning opportunities: students are given a chance to work at high levels and classroom teachers have the opportunity to watch their students and better understand their potential. This opportunity is also used as part of the identification process. Teachers watch carefully for indications of advanced vocabulary, sensitivity, and critical and creative-thinking skills. Teachers document their observations using the Kingore Observation Inventory. At the end of the year, teachers and the G/T coordinator tally their observations and select students to participate in the 1st grade pull-out class. No formal identification tools are used except the performance characteristics. Admission is rolling and students can be added at any time in any grade level if there is agreement from teachers, the G/T coordinator, and the principal.

Evaluation Measures

The program has increased the number of Native American students participating in G/T programs using this new identification process. Currently of the 1,648 students in the school system, 467 are Native American, and 12% of these students are identified for G/T services. At the high school, 19 Native American students are identified as gifted and 16 of these have taken the elective G/T course while in high school and/or while in junior high school. During the past 2 years, the school began data gathering process to document the increase in

diverse student representation and achievement. Conclusive information is not yet available.

Uniqueness of the Program for Talent Development of Culturally, Linguistically, and Ethnically Diverse Students

The Learning Unlimited program is unique in both identification procedures and service delivery model. The identification procedures are observational, screening carefully to find students who demonstrate gifted behaviors; and no quantitative data (test scores) are gathered. This method removes any test bias concerns for culturally, linguistically, and ethnically diverse students.

The gifted specialist in the district works with all grade levels. Efforts focus on the early grades as the gifted specialist provides enrichment by going into traditional classes to work with students, and efforts focus on the upper grades as these students pursue their interests in Advanced Studies. Because there is only one gifted specialist, students become well acquainted with her throughout their educational experiences. Likewise, the gifted specialist becomes equally well acquainted over the years with the G/T students and their needs.

At the secondary level, the middle school does not offer any honors courses but the school will begin next year to cluster students for math and language arts. High school students can take AP English classes and are grouped by ability in math into appropriately challenging classes.

The identification process design enables the district to take into account the ways gifted Native American students differ from the gifted European American students. Native American students are generally quieter, call less attention to self, more group-oriented, rarely dominate, and aesthetically sensitive and creative. Some of the Native American students in the Independent Study class have chosen to learn more about their history, culture, tribe, or language, providing the only real opportunity to explore these topics in the school setting.

Diversity Initiative for Gifted Students

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Program Goals

- Facilitate academic talent development among traditionally underrepresented populations of gifted students by partnering with urban school districts and foundations to identify, recruit, and support urban, minority G/T students
- Increase the diversity of the student population in the Gifted Education Resource Institute's talent development programs by developing model minority recruitment and scholarship programs

Program Delivery System

The Diversity Initiative for Gifted Students (DIGS) serves students from 2 regional school districts in Saturday and summer programs for talented youth sponsored by the Gifted Education Resource Institute on the Purdue University campus. Students in grades 3-8 may attend a Saturday enrichment program for 9 weeks in the fall. The summer enrichment program on the university campus, offers a day camp for younger children ages 4-5 and residential campus in one-week sessions for students in grades 5-6 and a 2-week sessions for students in grades 7-12.

Grade Level Served

The program serves students in grades 3-12.

Curriculum Emphasis or Programming Model

All of the classes in Purdue talent development programs are based on the Purdue Three-Stage Model. The Purdue Three-Stage Model integrates advanced content with learning processes that stress creative and critical thinking, complex problem solving, and the creation and sharing of independent projects. All GERI talent development programs provide high-ability students with exposure to advanced topics not usually covered in the K-12 curriculum, with particular emphasis on topics in math, science, and technology. The Super

Saturday program focuses on exposure and enrichment by offering a wide variety of classes to students in grades P-8 for nine Saturdays each fall and spring. Super Summer provides similar classes in a one week, half-day format in the summer. GERI summer camps provide challenging learning of advanced topics, social and emotional growth, and career development experiences in a fun, enrichment-oriented, residential environment serving ability students in grades 5-12.

Identification

The DIGS school districts use district procedures to identify students for participation in GERI talent development programs. These procedures are designed to find diverse students who will benefit from and be successful in GERI classes. For example, Gary, Indiana, schools select the top students from their self-contained gifted program. These students have already been identified as gifted by a multiple criteria selection process and have been participating in gifted programming since kindergarten. Indianapolis Public Schools does not have consistent, district-wide gifted education programs so they collect data on students including Indiana STEP scores and Terra Nova, requiring scores at or above the 95th percentile and strong GPAs for program participation. Once the district has selected the students, meetings are scheduled with school district staff, GERI staff, the nominated students and their families to answer questions about the program and finalize participation decisions. Efforts to increase minority student participation have been successful: the percentage of African American students participating increased from 2% to 17% between 1998 and 2002. Students who agree to participate are provided with full scholarships. The funds for the scholarship have come from a variety of sources including the Indiana Department of Education, the Tobias Foundation, the Indianapolis Public Schools, and the Davidson Foundation.

Evaluation Measures

The programs are evaluated through the use of up to 5 sources of information. These include student, counselor, and teacher evaluations, outside evaluator observations of the program, and parental responses to the program. Findings from three years of evaluation data indicate that participating students have been successful in the program both academically and socially. Return rates from year to year have been exceptionally high indicating that students enjoy the program and want to continue to participate.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

Both program offerings provide interest-based, enrichment exposure to all participants. Efforts are made to acknowledge and support students from diverse backgrounds through the representation of diversity in program teachers and counselors in the program and multicultural training for all staff. The program also takes advantage of diversity resources on the Purdue campus such as the Purdue Black Cultural Center and encourages the celebration of diverse talents through activities like talent shows. In addition, GERI talent development programs seem to be particularly appropriate for integrating diverse students because they emphasize enrichment, intrinsic motivation, interest-based learning, creativity development, and collaborative problem solving rather than on individualistic, competitive, high-stakes performances.

The Ohiyesa Program (The Winner)

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Program Goals

- Increase Native American academic success
- Increase referrals of Native American students for and eventual placement in the school's gifted education program
- Increase self-esteem in Native American and non-Native American participants
- Increase parent and family participation in the school community
- Increase cultural pride

Program Delivery System

The Ohiyesa Program provides services to students through an after-school and summer program.

Grade Level Served

The program provides services to Native American students in grades 3, 4, and 5.

Curriculum Emphasis or Programming Model

The Ohiyesa Program focuses on providing learning experiences in the areas of science and technology, math, career exploration, leadership, cultural pride and awareness, and social skills development. The program features the Schoolwide Enrichment Model, Vygotsky's theoretical research on social learning systems, Daniel Goleman's work in the area of Emotional Intelligence, and Howard Gardner's work in the area of Multiple Intelligences.

Identification

Any third, fourth, or fifth-grade Native American and non-Native American student already identified as gifted are eligible to participate. The state requirements for identification as a gifted student includes an IQ of 130 or above and a score of 95% or above on a test in one or more of the following areas: academic achievement, critical thinking, and/or creativity. The district also realizes factors that may affect test results and allows the IEP team to consider factors such as a second language, socioeconomic status, an identified disability,

and other when determining eligibility for special education and gifted program services.

Evaluation Measures

The Ohiyesa Program has received the New Mexico Quality of Education Award as the best elementary school program in the state. A recent report focusing on the underrepresentation of diverse populations indicated that while Native American students comprised 10% of the state's total general student population, only 2% of the state's gifted population was considered as Native American. The Ohiyesa's home school's gifted education program experienced an increase of Native American students from 0 (zero) to 21 over a six-year period. The program continues to recognize an increase in the numbers of Native American students being referred for gifted programs. Students, teachers, and parents complete a yearly survey on the program. This information is used to plan and make any needed changes to the program. Attendance is kept on a weekly and yearly basis. Students continue to participate in leadership and academic activities in the schools. Building principals have expressed satisfaction with the program because they have documented improvements in their schools in the areas of evidence, grades, and parent involvement. In summary, it is clear that the Ohiyesa Program has helped to increase the number of Native American students who successfully participate.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

The program is named Ohiyesa (o-yeh-sa), which is Dakota Sioux for "Winner." This is the Indian name of Dr. Charles Eastman, who was believed to be one of the first American college educated medical doctors (Boston University). He was also a prolific author and mover and shaker in the late 1800's in both the White and Indian communities. He is the role model for our program and for our students. We encourage the need to explore and learn and to treat one another with respect and dignity.

We instill Native American cultural pride in many of our activities. We often ask Native professionals to present to our students. We often ask storytellers, potters, and artists from the many nearby pueblos to work with our students. This instills pride but it also gives them the confidence that they can also succeed in whatever endeavor they desire, whether it be to become a lawyer, painter, medicine man, or a teacher.

An example of a unit that was used during one summer program session focused on "Our Dreams." The students worked with a female Native American psychologist who was also an expert in the area of dream research. The students kept a personal daily dream journal. Their dreams were shared and discussed from both a "western" and Native American point of view. The students concluded the unit by creating a dream catcher.

Celebrations are also very important. Each student creates his/her own coupe stick, which is based upon a Plains Indian tradition. Students are given feathers to hang on their sticks for good report card grades and conduct marks. Students also participate in ceremonies outside the school such as the annual Gathering of Nations Pow Wow at the University of New Mexico.

Open Doors

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Program Goals

- Target the special needs of intellectually gifted children and provide necessary instructional modifications to increase student skills in and capacity for autonomous learning, creative/productive thinking, metacognition, love of learning, developing and maintaining healthy, positive, enriching relationships, and develop appropriate expectations for and understanding of the self
- Provide an environment that enables students of similar ability levels to learn from and interact with one another
- Provide a curriculum that addresses the unique needs of the gifted, balancing cognitive and affective experiences
- Employ multiple instructional strategies to honor and accommodate individual learning differences

Program Delivery System

The Open Doors program provides services through pull-out classes.

Grade Level Served

The program targets students in grades 2-6.

Curriculum Emphasis or Programming Model

The Open Doors program is based on the Mississippi State Department of Education Suggested Outcomes for Intellectually Gifted Program, published by the Department's Office of Gifted Education. These guidelines were adapted from a number of gifted curriculum models and emphasize analytical thinking skills, creative problem-solving, research, leadership, and affective/personal growth skills. Students who qualify for the program spend at least 5 hours per week in the Open Doors pull-out classes and must maintain their traditional class work as well. Instructional strategies include simulations, service learning, group and

individual projects and presentations, concept units, arts, and experiments.

Identification

The process begins with nominations for screening by teachers, parents, community members, social workers or student self nomination. These nominations may be made at any time during the school year but a blanket screening of all first-grade students is completed to ensure no child is overlooked.

Assessments are completed using the Otis Lennon School Aptitude Test and/or the Raven Standard Progressive Matrices. A score in the 90%-ile on one of these assessments is required for further IQ testing as the state requires an IQ score for identification. District personnel gather information on all nominated students including results from the norm referenced group IQ tests, norm-referenced group or individual achievement tests, characteristics of giftedness checklists, leadership checklist, and demonstration of exceptional achievement in academics, leadership, or creativity.

Parents are required to provide signed permission for additional assessments and to complete a checklist about their child's thinking style, learning pace, concentration level, shyness, problem solving strategies, and native language. Teachers complete a similar checklist for each child. These checklists are combined with student achievement data, evidence of cultural or economic disadvantage, and the breakdown of the Otis Lennon or Raven assessment to create an individual student profile. Further assessment choices are made for individual students by psychometrists after reviewing student profiles, and every effort is made after reviewing student profiles to match the best assessment tool for each child. Students are assessed with a variety of instruments including the Universal Non-verbal Intelligence Test, Stanford-Binet Fourth Edition, Leiter-R, Weschsler Intelligence Scales for Children (WISC-III), or the Kaufman Assessment Battery for Children (KABC) All completed student profiles and assessment results are

submitted to the gifted program office and the district screening team reviews the data and determines eligibility or ineligibility for gifted programs and services.

Services begin in grade 2 and all identified students are re-evaluated at the close of each school year by the local school committee to determine whether it is appropriate to continue placement in the gifted program during the following year.

Evaluation Measures

Currently, the program does not undergo a formal diversity evaluation. The teachers, parents and students evaluate the success of the program in meeting its goals through completing surveys. The program has been successful in increasing the numbers of students served (see Table 5.3).

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

The curriculum in the pull-out class provides a wide range of learning opportunities including thinking skill training, project-based learning, and creative arts. Students work on research projects, using Creative Problem Solving strategies or service learning.

The service learning component is unique as it is directed by the students who identify community problems, research the problems, create plans of action, raise money to support their work, collect any necessary signatures for their project, and present their proposal and outcomes to an authentic audience. Some of the projects have included

- Collect can goods for food bank
- Collect organ donor cards
- Create and market art projects for world hunger relief

The goal of the service learning experiences is for the students to learn the importance of being involved in their community and to increase students' ability to identify real problems.

The Open Doors program has improved the representation of CLED students in gifted programs in direct proportion to their enrollment. The second phase of the process is finding the best ways to meet the needs of all students. Experts in the field of gifted education and diversity provide professional development offerings to help achieve this goal.

Table 5.3: Diversity Increase Over the Past Five years (216%).

Feb. 1997	595 CLED students in the program
Feb. 2002	1881 CLED students in the program
Feb. 2003	2250 CLED students in the program

Note: Funding cut backs eliminated funding for secondary students in 2003, reducing the number of students.

Perry Elementary TAG Program

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Program Goals

- Develop gifted standards that can be infused into schoolwide standards
- Utilize multiple assessments for identification
- Increase parental involvement
- Provide continuous staff development

Program Delivery System

The Perry TAG program provides services to students in grades 1-3, in the traditional classroom by the enrichment specialist. Beginning at grade 4, students are cluster grouped into their classrooms, and the enrichment specialist provides services to all students within these classrooms.

Grade Level Served

The program serves students at the elementary level.

Curriculum Emphasis or Programming Model

The instructional model emphasizes differentiation in the traditional classroom serving a large number of students. All students at the primary level receive enrichment opportunities in their classrooms provided by the enrichment specialist. Study teams develop a variety of differentiation strategies for use in the traditional classrooms, with acceleration being one of the options.

Identification

In 2000, the elementary school had 950 students (40% Latino) and while 39% of each grade level's general population was identified for the program, no diverse populations were identified and served. With a broader identification plan, the program now serves

approximately 10-12% of each grade level's population of diverse students.

The identification process begins at grade 3 with recommendations of students by parents, teachers, students, and administrators. The criteria for identification include Iowa Basic Skills Test scores that are available for all students. After a student is nominated, two additional data points are gathered, the Naglieri Non-Verbal Ability Test and Kingore Observation Inventory checklist.

A selection committee consisting of teachers, counselor, administrators, TAG teacher and G/T coordinator assesses all nominated students' data. They seek to learn more about the academic, creativity, and leadership strengths of the students to determine who will have access to the program.

Evaluation Measures

Formal evaluations are completed through an area education agency consultant using a total school evaluation plan. Schools are scored using a rubric and placed in categories; Ideal, Acceptable, and Needs Attention. Currently there is not a specific evaluation method to assess the gifted program or its success with culturally, linguistically, and ethnically diverse students.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

Identified students are cluster grouped in classrooms: 2+ classrooms at each grade level beginning at grade 4. The cluster grouping design benefits all students in the classroom as well as those identified.

Primary Talent Development

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Program Goals

- Model best practices of learning experiences that enable all K-2 children to have opportunities to develop advanced learning capabilities
- Identify strengths of students and collect observational data over time to build student profiles, guide instructional decisions, and recognize students who may be in need of gifted and talented educational services
- Provide enrichment and differentiation for students who traditionally have been underserved in gifted and talented education programs
- Provide primary teachers with practical resources and staff development for implementing differentiated and performance-based instruction that extends and enriches grade level curriculum

Program Delivery System

The program provides services in traditional classroom settings through the use of modules and differentiated instruction at each grade level.

Grade Level Served

The Primary Talent Development Program serves students in grades K-2.

Curriculum Emphasis or Programming Model

Students are provided with a different series of open-ended, science based, constructivist approach modules at each grade level with students having opportunities to learn through open-ended problems. Teachers have autonomy and make decisions about matching the needs of their students. Learning experiences occur over time and teachers have the freedom to choose how they will lead their students to any experience offered. All instruction integrates best practices in gifted education and early childhood, including pacing within the traditional classroom and observation

of student behaviors within the learning environment. Each module is designed to stand alone but questioning and brainstorming strategies are embedded in all of the modules. The primary purpose for these modules is as an entry point for teachers to provide a different learning environment for all students. The PTD modules seek to change from a remediation model to an enriching, accelerated model where students can have access to higher-level thinking projects even if their "skills" are not as well developed. The program is predicated upon expanded views of intelligence and theoretical models including Vygotsky's Zone of Proximal Development and Piaget's Study of Child Thought.

Identification

Access to Primary Talent Development program services does not require testing or a screening process. Access is available to all K-2 students in district schools choosing to use the PTD curriculum models. Teachers provide differentiated instruction for their students and document the demonstration of certain behaviors in all of their students. The behaviors are communication, creativity, inquisitiveness, perception, resourcefulness, leadership, and persistence. Anecdotal data is gathered on students, as work samples. This data is evaluated using a continuum including readiness, emergent, progressing, and independent. This process occurs during primary education years and creates a cumulative documentation of students' learning behaviors. Formal gifted identification occurs in the third grade and PTD data is an important contributor to this process.

Evaluation Measures

The Primary Talent Development program was developed as a strategy to address the underrepresentation of minority students in the district's gifted and talented education program. In 2001–2002, G/T minority enrollment in Grade 3 increased 2% over the previous year. A

researcher specializing in the identification of gifted, diverse students reviewed the Primary Talent Development as part of a district evaluation of a gifted handbook and provided very positive feedback on the program design and goals. No formal evaluation of the program has been completed at this time.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

This program provides early access for all students to higher-level thinking and problem-based learning. Opportunities for enriching experiences are provided to all students. Curriculum modules are designed to enable students to have a broad range of ways to demonstrate their learning. In addition to the PTD program, a summer science program is offered for students completing grade 2. Students who participate in this early exposure program gain access to complex science curriculum during the following school year. The modules seek to change instruction from a remediation model to an enriched, accelerated model in which students have access to higher-level thinking processes, even if their “skills” are not as well developed.

Program for Artistically Gifted Middle School Students

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Program Goals

- Ensure an equitable school environment that maximizes learning for all students
- Support student achievement as demonstrated by district-wide assessments in reading, math, and science

Program Delivery System

The program for Artistically Gifted Middle School Students serves sixth and seventh-grade students and was designed to address the underrepresentation of culturally diverse and economically disadvantaged students in district gifted programs. The traditional G/T program operates concurrently with the Artistically Gifted Program. The goal is to meet the needs of visual-spatial gifted students through services provided in a pull out, elective art course offering.

Grade Level Served

The program serves sixth and seventh-grade students at the middle school level.

Curriculum Emphasis or Programming Model

TAG art classes meet every other day for the entire school year. The program instructional strategies emphasize the development of artistic technical skills, art criticism, art history, personal reflection, and aesthetics. The curriculum used for the program was developed by the TAG art specialist and revised to meet the needs and achievement of students from year to year. The curriculum is based on the philosophy of differentiation allowing students to work on different projects, with all activities differentiated based on their needs.

Identification

Screening for the TAG art program begins with a nomination process by parents, teachers, peers, and students. Data are gathered for nominated students including CAT achievement test scores, grades, academic record, and an art

assessment to identify artistic abilities and creativity. The academic data is used more for diagnostics and to provide the TAG art teacher with a complete profile of a student, but does not affect access to the TAG art program. The art assessment provides insight about the student's originality, fluency, creativity, and artistic development. The scored assessment, along with the nomination, enables the staff to identify students for the program.

Evaluation Measures

Three data points are used for assessing this program: parent and student questionnaires, student portfolios, and district assessment that measure student gains. The test results have shown student improvement in reading as indicated by the district measurements. In addition, program data indicates that discipline referrals have been reduced and attendance is improved for TAG art students. Several of the TAG art students have received art awards in state and regional competitions.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

The development of artistic technical skills, art criticism, art history knowledge, and aesthetics are enhanced in this program to develop leadership qualities, improve motivation, and encourage independent work. The TAG art teacher develops the curriculum and modifies it to meet the specific needs of the students. The TAG art program supports the core content areas while teaching art elements. One strategy is the use of vocabulary flip cards in which each student has a ring of vocabulary cards divided into 4 quadrants. Quadrant one contains the word and its definition. In quadrant two and three, the student writes a synonym and antonym. For quadrant four, the student illustrates the word. During the TAG art class, one might observe a small group of students working on flip cards, writing about their art project, or creating an art project. Students are

comfortable with the varying assignments and know they will have the opportunity to do each of the activities.

A recent art project required the students to create a series of activities based on their creating a portrait displaying emotion. Students begin the project using the digital camera to take a black and white picture, focusing on portraying an emotion. Second, students create a portrait of emotion using charcoal. The goals of this project are to utilize the students' artistic talents and interests, strengthen critical-thinking skills, and work critically and creatively. Finally, they are required to write about an event when this emotion has occurred in their life experience. Students may use paper and pencils, laptops, or record their ideas on tape.

Project Explore

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Program Goals

- Project Explore is one program in a four-pronged initiative of the county designed to increase the number of minority student in gifted programs and increase enrichment programs in school buildings.

Program Delivery System

Project Explore is a summer program developed to decrease the underrepresentation of minorities in advanced classes. In four years, as a result of the initiatives, the African American population has increased from 19 to 150 participating students.

Grade Level Served

The program serves students from elementary and middle grades from Title I schools. A high school program has been approved for 2003.

Curriculum Emphasis or Programming Model

The program curriculum focuses on changing the effects of poverty on student achievement and works as a mediated learning program through hands-on experiences, thematic units, New Games, technology, and other activities that are designed to increase cognitive skills of children who live in poverty. Students receive enrichment opportunities through exposure to local and regional people, places, and events that relate to the current year's theme. Project Explore is funded by Title I and small grants. All curricular and programming decisions are based on our belief in the theory of cognitive modifiability and mediated learning as espoused by Feuerstein and Vygotsky.

Identification

Students are selected for participation in the program in their home schools, using criteria such as: achieving at the top of their class, enjoying learning, maximizing potential, pursuing opportunities provided to them, and success in spite of less than optimal environments.

Evaluation Measures

The program is evaluated using a summative evaluation. The following models are incorporated into the evaluation: management-oriented, expertise-oriented, and participant-oriented including intuitionist-pluralist evaluation and the objectives-oriented approach. This evaluation is used to plan for future program decisions, validate specific curricular approaches and teaching techniques as they relate to the theories of Feuerstein and Vygotsky. Measurement tools used include outside observations, structured interviews with students, teachers, and parents, GATES, and Terra Nova scores (standardized testing).

The Project Explore coordinator reports an increase in the number of minority students eligible as gifted, from 19 in 1998 to 161 to date (4/1/03). Teachers report what they consider a significant increase in cognitive skills, level of motivation, alertness, and general enthusiasm for the program for students who have attended for more than two years. Although, by the nature of the program it is difficult to show statistical data supporting the program, the students came into Project Explore as high-ability learners and therefore traditional measures of increased levels of achievement are not statistically significant. However, parent, student, and teacher enthusiasm has grown almost geometrically as Title I teachers have returned to their schools implementing mediated learning strategies. We will continue to try to more accurately quantify the program's effectiveness, but the sheer increase in minority students within the system, indicates that Project Explore is effective.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

Three underlying ideas comprise the uniqueness of the program: actualizing ability, improving teacher's perceptions and instructional practices, and providing support to families.

The first underlying idea can be described in a metaphor. Let us imagine that an egg

represents the intellectual ability of a child. That egg must be broken or cracked when the child is young in order for their ability to be actualized. For many children who live in poverty, that egg is not broken. In fact, its shell becomes harder and harder, fossilizing the child's ability inside the shell. The second underlying idea is that we can change perceptions about the abilities of students from poverty and that through the training and experience we provide in Project Explore, teachers will return to their building with improved instructional practices. The third underlying idea is that parents can be supported to believe that their children do not have to remain in poverty.

EDITOR'S NOTE: As of May 2009 the Hamilton County Department of Education reports that Project Explore has been cut from the school budget.

School District of Palm Beach County, Florida

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Program Goals

- Increase the number of historically underrepresented students who successfully participate in gifted education programming options

Program Delivery System

The school district of Palm Beach County provides services through one of three methods:

- Full time centers – self-contained classrooms with gifted education endorsed teachers
- Resource – students pulled out of traditional classes; times vary by school
- Inclusive – Gifted instruction provided within the traditional classroom

Each school within the district can design a program to meet their demographic needs

Grade Level Served

Services are provided to students grades K-10.

Curriculum Emphasis or Programming Model

Each of the 10 pilot schools chooses the content focus and program design. There are 3 program design options. The first is a full-time center where students are served in gifted classes with a G/T certified teacher for the entire day. The second is a resource design. For this option, students are sent out of their traditional classes for 1 - 1.5 hours per day. The final option is an inclusive design where students are served within their traditional classrooms.

Identification

The new state identification procedure is divided into two paths, Plan A and Plan B. Student populations who had traditionally been adequately identified for G/T programs used Plan A with a required IQ score of 130, Reading or Math achievement scores at the 90% level, and a gifted characteristics checklist. Plan B is based on the use of a different matrix and includes 8 criteria, non-verbal IQ test, math achievement, reading achievement, written

language report card, reading grade (report card), math grade, checklist, and portfolio. For example, in place of using the Weschsler or the Stanford-Binet to assess IQ, Plan B assessed students' cognitive ability using one of the following

- Naglieri Non-Verbal Ability Test (NNAT)
- Universal Non-Verbal Intelligence Test (UNIT)
- Leiter International
- Differential Abilities Scale (DAS)

Another criteria used in Plan B is an individual portfolio that can include sections from a menu of examples of student past performance. Some of the options include

- Reading Running Records
- English Language Proficiency Tests
- Florida State Assessments for grades 3-5, 6-8, 9-10
- Writing Samples
- Other Test Scores
- Creative Projects
- Individual Projects

A student's portfolio is evaluated by the Child Study Team using a rubric.

A G/T characteristics checklist must also be completed. This was developed by the district through modifications to the original G/T checklist and cross-referencing the stems with research on checklists for underrepresented groups. The findings showed validation of the district stems.

In addition to the two identification plans, educators in the district created an additional component for kindergarten students. Because kindergarten students do not have previous performance information available, an achievement checklist was developed to assess students' knowledge of areas including letter recognition, numbers, and shapes.

Once all of the data are gathered, a Child Study Team meets to determine eligibility for the program. If a student received 30-40 points (75%), and it is important to note that all criteria

have equal weight, they were eligible for the program services. In the Fall of 2002, the state board eliminated any race-based nomination or referrals. The only groups receiving any special consideration are those who receive free or reduced lunch or are identified as limited-English proficient.

A talent pool was developed in the 10 pilot schools using the screening program that considers every K-2 student for gifted potential. This new process helped to identify more culturally, linguistically, and ethnically diverse students for gifted services.

Evaluation

In 1998, an external evaluator considered to be an international expert in the area of program evaluation was hired to conduct a comprehensive evaluation. The evaluation team reviewed program philosophy, student identification and assessment, staff development, curriculum and instruction, and program design. The evaluation resulted in a 47-page report that served as a basis for program improvement. Student performance contributes to program evaluation as 97% of the students participating in the G/T program scored at grade level or higher on the state assessment.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

The pilot schools raised the identification of underrepresented students (see Table 5.4). Most of the students found in the pilot schools shared a background that is in vast contrast to those in White or upper-middle-class students. This does not necessarily mean that they are not eligible for public school programs serving gifted students. Our numbers demonstrate that hard work and commitment to equity and access had paid off. More than 400 students have gone through a comprehensive nomination, screening, and testing process to become eligible for gifted education.

It is very likely that these students would have never had the opportunity if not for the decision to impact those participating schools. The gifted programs have transformed the schools themselves. Moving from the stereotype of having students who cannot learn, to the reality of have a program that offers hope and encouragement to their most able students.

Table 5.4: School and G/T Enrollment.

School Year	African Americans % in GT / % in District		Latino % in GT / % in District		European American % in GT / % in District	
1994-1995	6.02	/ .95%	5.44	/ 1.89	83.62	/ 6.63
1998-1999	6.76	/ 1.07	8.45	/ 2.54	77.22	/ 7.09
2001-2002	11.61	/ 2.03	12.25	/ 3.37	66.11	/ 7.29

SEM Gifted Services

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Program Goals

- Provide a comprehensive, flexible plan for providing gifted and talented service
- Challenge students in their strength areas on a regular basis
- Strive to enable underachieving students to reach their potential

Program Delivery System

The SEM program in St. Paul Public Schools serves students through pull-out classes, small group Type II and III, academic competitions and in collaboration with the traditional classroom. The program design differs in each of the 65 schools providing services.

Grade Level Served

The program serves students in grades K-8.

Curriculum Emphasis or Programming Model

The program is based on the Schoolwide Enrichment Model. Programming services are based on student interests and strengths and a continuum of services is provided at each school. The goal is to provide all students with enrichment opportunities and support them in their explorations and product development. Specifically, talent development and curriculum differentiation opportunities are available to challenge high ability, high-potential students. SEM specialists are trained in the model and use a common enrichment language.

Identification

The district uses the Naglieri Non-verbal Abilities Test as its formal identification assessment and offers the assessment starting at the Kindergarten level. The district has a G/T

magnet requirement of an NNAT score for admission, as well as a portfolio review process. For students remaining in the SEM schools, some students are formally identified for state documentation purposes, but other students are identified for services through the portfolio review process and on their interests and strengths. All students are reported to the State as either Identified or Served.

Evaluation Measures

Currently, program evaluation is not conducted formally. There have been formal evaluations done in the past. There are plans to develop a rubric to evaluate the services offered and program results but nothing is available at this time. The SEM specialists frequently discuss and evaluate the strengths and needs of their individual programs and parental comments expressing their pleasure in what students have accomplished are available.

Uniqueness of the Program for Talent Development of Culturally, Linguistically and Ethnically Diverse Students

This program serves diverse populations, including limited English-proficient, African American, Hispanic, and Muong students, through an inclusive model. Students have access to services based on interests and areas of strength. SEM specialists make no distinction between those students formally identified and those identified based on the topic offered. While the numbers of gifted students served in the district must be reported to the state, the SEM specialist provides services to students interested in topics presented, identified gifted or not.

STARGATE (Supporting Targeted-Audience Referrals to Gifted and Talented) Mathematics

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Program Goals

- Support students referred for gifted and talented education through an environment that provides validation and affirmation of students' strengths, affiliation with students with similar strengths, and affinity through challenge
- Provide students with opportunities to enhance achievement behaviors in the dimensions of facing challenges, accepting responsibility, valuing the importance of achievement, developing independence, and demonstrating respect for self and others
- Provide academic challenge for students
- Actively involve parents as program partners
- Provide the local school with data on student performance
- Establish a network of teachers who have experience meeting the social, emotional, and academic needs of students who are referred for gifted education services

Program Delivery System

STARGATE Mathematics program provides services to students during a summer session.

Grade Level Served

Students served in the program are between the third and fourth grade.

Curriculum Emphasis or Programming Model

The STARGATE program is based on a constructivist approach and built around math concepts, specifically multiplication, division, fractions, geometry, and includes manipulative problem solving and open-ended questions. The curriculum seeks to "fill in the holes" in students' math knowledge and provide opportunity for students to take their math thinking beyond traditional requirements.

Identification

An in-school PACE math program serves as the starting point for identifying students to attend the STARGATE program. In the 24 schools participating in this program, teachers recommend students using observations and completing a checklist. They watch and document the following behaviors: gifted characteristics, leadership, curiosity, problem-solving skills, and the ability to work from concrete to abstract. The teachers focus on students who are doing well in math but not necessarily identified as gifted. From this data at least 10 students are selected from each of the 24 schools to attend STARGATE. All nominated students are invited to attend.

Evaluation Measures

The evaluation of the STARGATE program involves a number of data sources to determine program effectiveness including student questionnaires, student performance assessments, student evaluations (journals), teacher evaluations (behavioral checklists, anecdotal records, and G/T recommendations), parent questionnaires, student academic growth (rubrics and performance tasks), leadership and motivation (district's achievement behavior checklist.)

All students who attend STARGATE are tested prior to entering the program and at the conclusion with questions about math enjoyment and word problems to qualify growth. Eighty-seven percent of the students attending the STARGATE program increased their posttest scores by 12 % points or more. 82% of the STARGATE students were identified for fourth-grade G/T math in the fall, creating an increased participation in gifted math classes. The students and teachers involved in this program are very positive. When teachers begin to teach a new concept during the school year, students reflect on their STARGATE experiences with comments such as "I remember the way we learned this in STARGATE and it makes math easy."

A total of 74 students attended STARGATE Math in 2001. Of this total, 58 (78%) were recommended for screening by their home school for grade 4 Gifted and Talented Math. At the end of grade 4, of the 58 who were recommended for screening, 43 (74%) had successfully completed G/T 4 Math. The 5 students from one school who were recommended were never screened by the home school, and 6 students who were recommended for screening are no longer attending a Baltimore County Public School.

A total of 45 students attended STARGATE Math in 2000. Of this total, 30 (66%) were recommended for screening by their home school for Grade 4 Gifted and Talented Math. At the end of grade 5, of the 30 who were recommended, 14 (47%) had successfully completed G/T 4 and G/T 5 math. There were 6 (20%) students who no longer attended a Baltimore County Public School.

Uniqueness of the Program for Talent Development of Culturally, Linguistically, and Ethnically Diverse Students

STARGATE instruction focuses on math concepts, manipulative problem solving, and open-ended questions. Team work is emphasized and at the beginning of each summer program, students are divided into teams and throughout the 2 weeks of the summer program, these teams work for rewards. Rewards are given to teams who demonstrate characteristics of achievement and work well as a group. Many culturally diverse students have never had their learning abilities affirmed, nor have they been in a classroom where risk taking is encouraged and even rewarded. STARGATE does both. Also, research has shown that culturally diverse students learn better when they can work cooperatively on open-ended, untimed questions, an important component of the content and delivery of STARGATE.

Chapter Six

Exemplary General Education Programs for Culturally Diverse Learners

Cindy A. Strickland

The 13 programs that follow are a sampling of exemplary general education programs that appear successful in their quest to guide culturally diverse and/or students from low-economic backgrounds to improved academic success. The programs range in the age span served, from preschool to college, and in the type of programming emphasized, comprehensive reform or single subject-focused. The majority of these programs operate during the school day, but a few are designed to provide tutoring and/or mentoring support to supplement school offerings.

The programs selected for inclusion in this work have repeatedly surfaced in the research conducted in preparation for the literature review in Chapter Two and that had credible evidence available to support their claims of increased student achievement and/or satisfaction. Contact information for these programs is provided at the end of this chapter.

An Achievable Dream

Grade Level Served: K-12

Program Goal: To give children who are at risk of failure in school, due to socioeconomic factors, a chance to succeed.

Program Description: An Achievable Dream (AAD) is a partnership between the business community and Newport News (VA) Public Schools that serves over 1,000 students in a K-8 magnet school and a high school component. The program is designed to offer students a nurturing environment in which they form a strong relationship with caring adult. AAD students have the opportunity to engage in enrichment activities both during and outside of school through an incentive program supported in part by the business community. A strong emphasis on discipline, including both character and moral development, is designed to teach students to focus on setting goals and on the personal and decision-making skills needed to meet those goals. AAD provides students with a curriculum that challenges students and encourages them to have high expectations. The curriculum includes a major focus on reading, business English or "speaking green" (the color of money), accelerated math courses, and etiquette. Students are required to take tennis instruction as a vehicle for teaching discipline, fairness, and other life skills needed to succeed. Classes are small, with low student-teacher ratios. Tutoring is provided for those students who need it.

Evaluation Measures and Results: An Achievable Dream has received several honors, detailed on their website. Other indicators of success:

- On the 2001 Virginia Standards of Learning (SOL) tests, Achievable Dreamers (96% are African American) closed the achievement gap to just 8 percentage points.
- Preliminary results on the 2002 SOL tests indicate that An Achievable Dream Academy will meet the state's standards for "full accreditation."

AVID: Advancement Via Individual Determination

Grade Level Served: Middle and High School

Program Goals:

- To support students who are capable of a rigorous college preparatory program such as honors and advanced placement classes, but who would not normally choose to enroll in such a program
- To provide high expectations, encouragement, day-to-day help, and guidance in how to navigate through the system.
- To help students develop the social as well as academic habits and skills necessary to success, including good study habits and academic survival skills
- To foster positive attitudes toward higher education; a vision of college as attainable
- To enroll 100% of AVID graduates in colleges and universities, with 80% of these at four-year institutions

Program Description: Students are placed in advanced classes alongside high-achieving students and are provided the help they need to support their success in this setting through an AVID elective class that meets every day. The AVID class provides instruction and encouragement in the development of academic survival skills and college entry skills, provides scheduled tutoring time in a variety of subject areas, and offers motivational activities to support college and career exploration. The class stresses a collaborative approach to learning, an emphasis on the skills and habits of inquiry, and writing as a tool for learning. Teachers and students work together to provide a strong sense of community that expects and rewards hard work, perseverance, and academic achievement. Adults in the program both nurture and support students as well as advocate for them in the school setting. Students and parents are required to sign a contract agreeing to program requirements.

The strength of the AVID program appears to be its emphasis on supporting students socially and academically once they enroll in college preparatory courses. The required AVID class ensures that students meet every day with caring adults and a peer group with whom they can share their challenges and celebrate their successes. AVID programs serve 85,000 students each year across 23 states and 15 countries. Students are admitted based on the following criteria:

Ability: Academic potential to succeed in college preparatory courses and college (with support); usually a C-B+ grade average in middle or high school

Desire and determination: Desire to attend college; willingness to undertake demanding academic program

Membership in an underserved group (historically unlikely to attend college):

Low-income households as defined by eligibility for free or reduced price lunch; first generation in family to attend college

Evaluation Measures and Results: The AVID website lists numerous articles that provide information about research studies involving AVID programs and sites. Both internal and external research is included. Sample research findings:

- AVID increases the enrollment of underserved students in colleges and universities
- AVID students overcome the negative effect of parental income and education on student achievement
- AVID helps school personnel raise the level of expectation that they have for these students
- AVID students are less likely to drop out of school
- AVID students are successful in college

Bright Beginnings

Grade Level Served: Pre-K (4-year-olds)

Program Goals:

- To support the school district's goal to have 85% of third-grade students reading at or above grade level.
- To provide a rich, child-centered, literacy-focused program to ensure that all children in Mecklenburg County enter kindergarten ready to learn.
- To provide experiences, especially in the areas of language and early literacy development, that lay the foundation for early school success.

Program Description: Bright Beginnings currently serves approximately 3,000 students in 157 classrooms in the Charlotte-Mecklenburg (NC) School System. The program has detailed goals in the following areas:

- Social and personal development
- Language and literacy
- Mathematical thinking
- Scientific thinking
- Social studies
- Creative arts
- Physical
- Technology

Bright Beginnings operates on a set of beliefs that recognize that cognitive, social, emotional, and physical development are interrelated in young children, and all developmental areas must be addressed according to the unique needs of individual children.

Evaluation Measures and Results:

- In a district comparison study, 1997-98 Bright Beginning Participants outperformed eligible non-participants.
- End-of-grade test scores in literacy and math show significant and sustained benefits from participation in the program.

Coca Cola Valued Youth Program

Grade Level Served: Elementary - Middle School

Program Goals:

- To set up and coordinate a tutoring program in which secondary students tutor elementary students
- To have a positive impact on students, tutors, families, and schools
- To help schools and communities see the inherent value and potential of each child.

Program Description: The Coca Cola Valued Youth Program is an in-school mentoring program that targets middle school students who are at risk of dropping out and pairs them with elementary students at least four years younger who need tutoring. The tutoring experience is set up to increase the self-esteem of the tutors and their sense of self-efficacy and connection to school. Tutors work four days a week at an elementary site, a commitment that encourages school attendance. On the fifth day, they attend a special class that focuses on building their general literacy skills, self-awareness and pride, and expertise in tutoring. Students receive a stipend for participating in the program and include field trips and guest speakers. The program is based on the following tenets:

- All students can learn.
- The school values all students.
- All students can actively contribute to their own education and to the education of others.
- All students, parents and teachers have the right to participate fully in creating and maintaining excellent schools.
- Excellence in schools contributes to individual and collective economic growth, stability and advancement.
- Commitment to educational excellence is created by including students, parents and teachers in setting goals, making decisions, monitoring progress, and evaluating outcomes.
- Students, parents, and teachers must be provided extensive, consistent support in ways that allow students to learn, teachers to teach, and parents to be involved.

The program is currently in more than 240 schools in 25 cities across the United States. Since its inception in 1984, the program has kept more than 11,500 at-risk students in school.

Evaluation Measures and Results: The Coca Cola Valued Youth Project has received numerous awards and honors. Internal evaluations are conducted yearly to provide both formative and summative feedback.

Evaluations consist of quantitative and qualitative measures. Selected findings that benefit tutors:

- Improved grades, achievement test scores, attendance, self-concept, and attitudes toward school
- Fewer disciplinary referrals
- A less than 2 percent dropout rate for its participants

Cognitively Guided Instruction

Grade Level Served: Elementary

Program Goals:

- To improve elementary mathematics instruction and achievement
- To develop student problem solving in the early elementary grades

Program Description: The Cognitively Guided Instruction (CGI) model was developed by the Wisconsin Center for Education Research. CGI combines high standards for student achievement in mathematics with professional development for teachers. CGI focuses on helping teachers understand how primary-grade students solve mathematics problems and use reasoning for learning. Professional development helps teachers learn about the ways in which young children think about mathematics and how they go about solving problems. Teachers are taught to recognize the strategies students are using and then encourage their acquisition and use of more advanced strategies.

Evaluation Measures and Results: CGI has a strong research base, particularly concerning its use with students at risk. Access to specific internal and external research studies are available through the CGI website. Selected results:

- Teacher change in practices and attitudes concerning math instruction; less reliance on textbooks, more on observation of student thinking
- Increased student basic skills knowledge, problem solving and reasoning skills, and self-confidence.
- Significantly better math achievement scores, particularly in solving advanced problems

Core Knowledge

Grade Level Served: K-8

Program Goals: To provide access to a specific sequenced body of shared and lasting knowledge that should form the core of a Preschool-Grade 8 curriculum.

Program Description: The Core Knowledge Program is in use in 30 states, and is especially strong in Colorado with over 50 schools using the curriculum. The program asserts that in order to ensure academic excellence, fairness to all students, and higher rates of literacy, schools need access to a solid, specific, shared core curriculum that helps them establish strong foundations of knowledge at each grade level. Detailed grade-by-grade sequences are offered in language arts, social studies, science, mathematics, visual arts, and music.

Evaluation Measures and Results: Numerous internal and external studies have been carried out to determine direct and indirect effects of the Core Knowledge program. Selected results:

- Core Knowledge fosters equity and excellence
- Significantly better achievement scores on both norm and criterion based standardized tests
- Increased teacher satisfaction
- Increased student enthusiasm for learning
- Improved coordination and consistency of curriculum across grade levels

Different Ways of Knowing (DWOK)

Grade Level Served: K-12

Program Goals: Improve student achievement by improving classroom practices

Program Description: Different Ways of Knowing (DWOK) is an initiative of the Galef Institute in Los Angeles that provides a range of field tested and research-validated services to schools. Those services vary according to the needs of individual schools or districts. Services typically include assistance in conducting a comprehensive self-study, staff development opportunities (including leadership training for administrators), onsite coaching, and access to classroom resources. The program, which has worked with more than 600 schools since 1989, is grounded in six best practices designed to increase student achievement:

- Use of “big ideas” to ground curriculum
- Focus on inquiry and self-directed learning
- Reading, writing, and math strategies designed to close the achievement gap
- Integrated arts component
- Partnerships with communities and families
- Leadership training

Evaluation Measures and Results: DWOK prides itself on a solid research base aided by outside evaluations. Selected findings:

- Significant gains in reading, math, science, and social studies
- Increased student achievement and motivation
- Increased opportunities for students to engage in creative and critical thinking

Graduation Really Achieves Dreams (Project GRAD)

Grade Level Served: K-16

Program Goals:

- Improved grades, achievement scores, and attitudes toward school.
- Improved teacher training and ongoing support
- Increased parent involvement
- Reduced disciplinary referrals
- Increased college enrollment
- Improved access to financial aid and scholarships for college.

Program Description: Project GRAD is designed to work in the lowest performing schools in low-income neighborhoods to improve the academic achievement and college enrollment rates of students. Over 90 percent of the students in Project GRAD schools meet the federal poverty guidelines for special assistance. Project GRAD is set up to encompass a high school and all the feeder schools for that high school, providing both horizontal and vertical consistency of program for students and teachers. A number of components make up the Project GRAD curriculum. MOVE-IT math is a program that emphasizes student discovery, reasoning, and communication centered on math concepts. Success-For-All is a research-based reading and writing program of intervention and acceleration to ensure all students succeed in reading in elementary school. Consistency Management and Cooperative Discipline provide a research-based management system that emphasized consistency of classroom organization and student self-discipline. Communities in Schools provide community outreach, dropout prevention, and social service supports through the provision of full-time case workers and project managers. The high school program adds activities and services to prepare students to apply and succeed in college.

Project GRAD has recently expanded to a total of five feeder systems in Houston that enroll more than 50,000 students in 74 schools. Project GRAD also has sites in Atlanta, Brownsville, Cincinnati, Columbus, Akron, Knoxville, Los Angeles, Newark, and Roosevelt, New York, serving a total of more than 130,000 children in 198 schools.

Evaluation Measures and Results: Project GRAD undergoes both internal and external evaluations. Selected results:

- By the end of 2-3 years of implementation, in most feeder schools, Project GRAD produced significant evidence of measurable impact on student achievement, including improved test scores in reading and math
- Since 1992, college enrollment for Project GRAD students at Houston's Davis High school increased 62% versus the district average of 13%

High School Puente

Grade Level Served: High School and Community College

Program Goal: To increase the number of educationally underrepresented students who enroll in four-year colleges and universities, earn degrees, and return to the community as leaders and mentors.

Program Description: The Puente Program offers focused, supportive, and culturally sensitive learning services in the areas of accelerated writing, academic counseling, and community mentoring. It currently serves almost 100 schools throughout California. Students in the program have access to a counselor who helps them define and set goals pertaining to college admission and navigate the process. Students also take a rigorous English class that includes a focus on Latino literature and experiences, meet regularly with role models/mentors, and take field trips to college campuses and workplaces. The program also offers year-round training for teachers, counselors, and mentors. Parents are also encouraged to participate in a variety of events.

Evaluation Measures and Results: Internal and external evaluations have found that Puente leads to:

- Increased enrollment at four-year colleges and universities, and
- Increased term-to-term retention rates

High Schools that Work

Grade Level Served: High School

Program Goals:

- To raise the achievement of all students in all classes
- To encourage students to take challenging coursework
- To graduate students who have completed a challenging academic core curriculum with a concentration in an academic or technical area

Program Description: High Schools That Work (HSTW) is a school improvement initiative sponsored by the Southern Regional Education Board. It provides a framework of goals, key practices, and key conditions for accelerating learning and setting high standards. The initiative targets high school students who are seldom challenged due to unengaging instruction and/ or low expectations. The program aims to encourage students to take challenging courses, to provide them with teaching that motivates them to learn the rigorous content in these courses, and to provide the necessary extra help and attention that will enable students to succeed in that environment. Currently, there are more than 1,100 HSTW sites in 27 states. Key practices include:

- High expectations for students
- Increased access to challenging vocational and academic studies
- Integrated school-based system of work and school-based learning
- Organizational structure to encourage collaboration between vocational and academic faculty
- Guidance and advising system for students and parents
- Extra help for students lacking necessary background for success

Evaluation Measures and Results: HSTW uses both student assessment and internal and external program evaluation data to continuously improve their programming. Selected findings:

- Significantly increased percentages of seniors who meet the HSTW achievement goals in mathematics, science and reading and the percentages of students in their senior classes who completed the HSTW-recommended program of study.
- Increased use of best practices by teachers.

Project SEED, Inc. Students Discovering Mathematics Successfully

Grade Level Served: Elementary – Middle School

Program Goals:

- To increase the number of at-risk urban youth majoring in, and pursuing careers in, mathematics and related fields by exposing them to advanced, conceptually oriented mathematics
- To increase students' academic self-confidence, develop their problem solving and critical-thinking skills, and raise their mathematics achievement levels.

Program Description: Project SEED: Discovering Mathematics has four key components:

- Classroom instruction base on a non-lecture, Socratic, group-discovery format.
- Staff development to train teachers in the curriculum and in communication and management skills.
- Family involvement that includes workshops to help families learn how to reinforce the curriculum at home.
- Curriculum developed by Project SEED staff that is tailored to the needs of the adopting school district.

Project SEED classes are conducted by project staff and supplement regular mathematics instruction. The classroom teacher participates in the lesson along with the students, allowing them to observe quality instructional methodology. Workshops and one-on-one consultation add to the professional development component.

Evaluation Measures and Results: Project SEED has received many honors and has undergone both internal and external evaluations. Selected results:

- Increased scores on standardized tests that was cumulative and persistent
- Enrollment in more upper division mathematics courses in high school
- Fewer retentions

Success for All

Grade Level Served: K-5

Program Goal: To ensure that virtually all children can read and write at or above grade level by grade 5.

Program Description: Success for All (SFA) is a comprehensive approach to restructuring elementary schools to ensure the success of every child. Success for All schools are typically those with a high percentage of minority students, students designated as economically disadvantaged, and/or students with limited-English proficiency. The SFA program includes the following components:

- Reading and writing programs
- Eight-week assessments
- Tutors
- Early learning (preschool and Kindergarten)
- Cooperative learning
- Family support team
- Facilitator
- Staff support teams
- Professional development
- Leadership academy
- Experienced sites conferences

At the heart of the SFA program is a 90-minute block of uninterrupted daily reading instruction. Students are grouped cross-grade by reading level and frequent assessments ensure that adequate progress is being made and student placement remains appropriate.

Schools must apply to the SFA program. Requirements include a staff fully aware of what the program entails, the availability of resources to implement the program successfully, and a serious commitment to implementation of the program. The Success for All Foundation currently serves about 1,500 schools in 48 states, as well as assisting related projects in five other countries.

Evaluation Measures and Results: The Success for All reading program has been evaluated in over 20 studies at eight research institutions. Links to numerous research reports are available at the SFA website. Selected findings:

- SFA students generally perform 3-12 months ahead of control group peers in grade equivalency measures; achievement effects seem to be particularly strong for students in the lowest quartile.
- Fewer special education placements among SFA students.
- A narrowing of the achievement gap between Whites and African Americans.

Program Contact Information

An Achievable Dream

P.O. Box 1039
Newport News, VA 23601
(757) 599-9472
www.achievabledream.com

AVID: Advancement Via Individual Determination

9246 Lightwave Ave Suite 200
San Diego, CA 92123
858-380-4800
www.avidonline.org

Bright Beginnings

Julie Babb
Charlotte-Mecklenburg Schools Education Center
700 Marsh Rd
Charlotte, NC 28209
(980) 343-5946
www.cms.k12.nc.us/cmsdepartments/ci/pre-k/services/pages/schoollist.aspx

Coca Cola Valued Youth Program

Linda Cantu
Intercultural Development Research Association
5815 Callaghan Road, Suite 101
San Antonio, Texas 78228-1190
(210) 444-1710
www.idra.org

Cognitively Guided Instruction

Comprehensive Center – Region VI University of Wisconsin- Madison
1025 W. Johnson Street
Madison, WI 53706
(888) 862-7763
www.wcer.wisc.edu/ccvi

Core Knowledge Foundation

Gerald Terrell
801 East High Street
Charlottesville, VA 22902
(434) 977-7550
<http://www.coreknowledge.org>

Different Ways Of Knowing (DWOK)

Lin Shakir, National Director
The Galef Institute 5670 Wilshire Blvd, 20th Floor
Los Angeles, CA 90036-5623

(800) 473-8883, ext 115
www.differentways.org

Graduation Really Achieves Dreams (Project GRAD)

Robert Rivera
4265 San Felipe, Suite 900
Houston, TX 77027
(713) 986-0444
www.projectgrad.org

High School Puente

The Puente Project University of California
Office of the President
300 Lakeside Drive, 7th Floor
Oakland, CA 95612-3550
(510) 987-9548
www.puente.net

High Schools that Work

Gene Bottoms
Southern Regional Education board
592 Tenth Street,
NW Atlanta, GA 30318-5790
404-875-9211
www.sreb.org

Project SEED, Inc. Students Discovering Mathematics Successfully

Helen Smiler
(Bay Area Project SEED)
2530 San Pablo Ave, Suite K
Berkeley CA 94702-2013
540-644-3422
www.projectseed.org

(See website for Project SEED information in the following cities: Baltimore County, Compton, Dallas, Detroit, Indianapolis, New Jersey/Philadelphia, San Francisco Bay Area)

Success for All Foundation

200 West Towsontown Blvd.
Baltimore, MD 21204-5200
(800) 548-4998
www.successforall.net

Chapter Seven

Conclusions and Recommendations

Carol Ann Tomlinson and Christine J. Briggs

This publication shares perspectives from General Education, Gifted Education, Multicultural Education, and from practitioners in the front lines of daily educational practice. While vantage points differ somewhat among those groups, there are nonetheless common themes that seem critical to enabling high-potential learners from culturally and economically diverse groups to become energized, high-achieving students. Following are key principles we have abstracted from the various perspectives represented in this volume. Each is evident in multiple places in the monograph.

For students from culturally diverse and low economic groups to be served well in schools:

1. Educators must share an unwavering intent to make school work for these learners. Greater opportunity and success for these students will not just happen. It is inevitably the result of explicit intentionality and persistent action on the part of educators on behalf of students from culturally diverse and low-economic groups.
2. There must be deep and growing understanding on the part of all staff of the impact of culture on teaching and learning. Students learn from a cultural base. Teachers teach from a cultural base. When those bases differ, there will be mismatches with negative implications for many students unless teachers and other educators understand how to bridge the differences in ways that work for learners from all cultural backgrounds.
3. It is necessary to have strong, informed, courageous, consistent leadership that provides a vision of such possibilities and ensures persistent action toward realizing the vision.
4. Program support, including meaningful, action-oriented staff development, continually guides educators at every level in making necessary changes.
5. Parents and community members are valued resources in understanding learners, the communities in which they live, and the needs and goals of both.
6. Broad cultural representation of cultural groups among teachers and administrators contributes to an enriched and shared understanding of the nature and needs of individuals from the full range of cultures represented in a school.
7. Identification of high potential is implemented in ways that are boldly inclusive of a broader range of abilities in a broader range of cultural groups.
8. Early intervention in students' schooling ensures that they engage in high-challenge learning with simultaneous support to develop high competency in fundamental skills, and attention to culture via content, materials, learning environment, and modes of teaching and learning. It is critical that this profile typify the student's school experience and have year-to-year coherence throughout their years in school.
9. Educators practice the belief that high-level curriculum can be a mechanism for identifying student

potential as well as for developing it.

10. Schools develop broad support systems for students to ensure opportunities for advanced learning, encouragement to accept the opportunities, support for success in high-expectations settings, envisioning a productive future, planning for that future, and transition into post-secondary settings that further support student success.
11. Educators examine and modify structures, policies, and procedures in schools that discourage full access to educational equity and excellence.
12. Educators regularly evaluate all elements of school for their effectiveness in recognizing and contributing to capacity in culturally and economically diverse learners.

Each of these principles challenges old habits, beliefs, and ways of “doing school.” To enact them is to accept that what has been standard in schools has failed too many students who, by necessity and hope, must spend the majority of their waking hours as young people in those schools. To enact the principles is also to be a participant in making the vision of education as the route to possibility a birthright for all our citizens.

Meet the Authors

Christine J. Briggs, Ph.D., worked in the public schools for 15 years, as a teacher, teacher coach, and a district administrator. She is an assistant professor in curriculum and instruction at the University of Louisiana at Lafayette and is co-chair of the NAGC Curriculum Studies Division curriculum awards program. Her research interests include gifted education and diverse populations, multicultural education, and curriculum development. Most recently her article, A national view of promising program practices for culturally, linguistically, and ethically diverse gifted and talented students, was published in *Gifted Child Quarterly*.

Donna Y. Ford, Ph.D., is a Professor of Education and Human Development at Vanderbilt University. She conducts research primarily in gifted education and multicultural/urban education. Specifically her work focuses on recruiting and retaining culturally diverse students in gifted education; multicultural and urban education; minority student achievement and underachievement; and family involvement. Dr. Ford has authored more than 100 articles and book chapters and is also the author of *Reversing Underachievement among Gifted Black Students* and co-author of *Multicultural Gifted Education*. She has served on the Board of Directors of the National Association for Gifted Children and on numerous editorial boards, including *Gifted Child Quarterly*, *Journal of Negro Education*, and *Roeper Review*. Dr. Ford presents extensively at professional conferences and consults with school districts and educational organizations locally and nationally in the areas of gifted education and multicultural/urban education.

Sally M. Reis, Ph.D., is the Distinguished Professor and Teaching Fellow of the Educational Psychology Department at the University of Connecticut where she also serves as Principal Investigator of the National Research Center on the Gifted and Talented. She was a teacher for 15 years, 11 of which were spent working with gifted students on the elementary, junior high, and high school levels. She has authored more than 130 articles, nine books, 40 book chapters, and numerous monographs and technical reports. She has traveled extensively across the country conducting workshops and providing professional development for school districts on gifted education, enrichment programs, and talent development programs. She is co-author of *The Schoolwide Enrichment Model*, *The Secondary Triad Model*, *Dilemmas in Talent Development in the Middle Years*, and a book about talent development in females entitled *Work Left Undone: Choices and Compromises of Talented Females*. Dr. Reis serves on the editorial board of the *Gifted Child Quarterly*, and is a past president of the National Association for Gifted Children.

Cindy Strickland is pursuing her doctorate in Educational Psychology with an emphasis in gifted at the University of Virginia. She has been a teacher for 25 years and has worked with students of all ages, from kindergarten to master's degree. A member of the ASCD Differentiation Faculty Cadre, Cindy works closely with Carol Ann Tomlinson and has coauthored several books and articles with her. In the past eight years, Cindy's consulting work has taken her to 46 states, five provinces, and three continents where she has provided workshops on topics relating to differentiation, the *Parallel Curriculum Model*, and gifted education. Cindy's publications include *Staff Development Guide for the Parallel Curriculum*; *The Parallel Curriculum Model (2nd Ed.)*; and *The Parallel Curriculum Model in the Classroom: Applications Across the Content Areas*.

Carol Ann Tomlinson, Ed.D., has been a faculty member at the University of Virginia's Curry School of Education, for 18 years, where she is Professor of Educational Leadership, Foundations and Policy. Dr. Tomlinson's career as an educator includes 21 years as a public school teacher, including 12 years as a program administrator of special services for struggling and advanced learners. Special interests throughout her career include curriculum and instruction for struggling learners and advanced learners, effective instruction in heterogeneous settings, and encouraging creative and critical thinking in the classroom. She is a reviewer for eight journals and a section editor for one. She is author of over 200 articles, book chapters, books, and other professional development materials. She has authored seven books in conjunction with ASCD including *How to Differentiate Instruction in Mixed Ability Classrooms* and *The Differentiated Classroom: Responding to the Needs of all Learners*, a professional inquiry kit on differentiation, and facilitator's guides for four video staff development sets. Dr. Tomlinson is a co-author of *The Parallel Curriculum Model: A Design to Develop High Potential and Challenge High Ability Learners*. She is a past president of the National Association for Gifted Children.