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THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED

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Toward a New Paradigm for Identifying Talent Potential

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ABSTRACT

In passing the Jacob K. Javits Gifted and Talented Students Education Act of 1988 (P.L. 100-297), Congress reasserted the belief that youngsters with talent potential are found in all cultural groups, across all economic strata, and in all areas of human endeavor. The Javits Act reaffirmed the conviction that in every population there are individuals with potential for outstanding achievement who are in environments where this aptitude may not be recognized nor nurtured. Such individuals are most likely to come from racial/ethnic minority or economically disadvantaged groups.

The under-inclusion in programs for the gifted of economically disadvantaged and minority children has been well documented. In recent years, there have been significant and continuing increases in both the number and proportion of racial/ethnic minority and economically disadvantaged children in the school population. Yet, those students are consistently underrepresented in programs for the gifted while being disproportionately represented in special education programs.

This monograph contains six sections which provide practitioners with a useful paradigm for identifying giftedness among all groups of young people. First, a review and critique of traditional identification approaches is provided to highlight the limitations the tests may have for identifying talent potential among those currently underrepresented in gifted programs. Second, the values and environmental influences of several cultures are examined. Specifically, cultural and environmental values, which are different from mainstream values, are underscored to illuminate the additional challenges posed to high achieving, ethnically diverse students. Within-group cultural differences are also illuminated because they are often as great or greater than differences among subgroups. The third section concerns the results of an exploratory study designed to examine the characteristics of economically disadvantaged and limited English proficient gifted students. In the fourth chapter behaviors that characterize gifted performance are examined. Simply put, research suggests that there may be well-known, "absolute" behaviors which characterize high performance cross-culturally, as well as specific attributes or behaviors which manifest themselves in particular cultural contexts or settings. These specific behaviors are not as well known as the absolute behaviors and can be used by practitioners to identify the talent potential among racial/ethnic minority or economically disadvantaged groups. Emerging insights from the Javits Gifted and

Talented Students' Education Act are addressed in the fifth section of this monograph. Finally, all insights are synthesized in the last chapter. Five elements that will feature in a new paradigm of giftedness are presented and discussed. These elements include: new constructs of giftedness, absolute and specific behaviors, cultural and contextual variables, authentic assessment, and identification through learning opportunities.

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EXECUTIVE SUMMARY

Introduction

In its 1950 statement on the education of the gifted, the Educational Policies Commission (EPC) asserted that "the educational needs of individuals who have superior intellectual capacity and of those who possess special talents in high degree differ in some important respects from the needs of other individuals" and that "gifted members of the total school population constitute a minority which is too largely neglected" (p. iii). Furthermore, the Commission deplored America's waste of talent noting: "That a large amount of human talent possessed by individuals now living is lost through stultification and isolation can be convincingly demonstrated—although admittedly the precise dimensions defy measurements" (p. 14).

The EPC contended it was important to know the causes—economic, social, psychological, and educational—as well as the groups in which the waste occurred. Pointing to discriminatory practices to which minorities are exposed, the Commission observed:

> Lacking both incentive and opportunity, the probabilities are very great that, however, superior one's gifts may be, he will rarely live a life of high achievement. Follow-up studies of highly gifted young Negroes, for instance, reveal a shocking waste of talent—a waste that adds an incalculable amount to the price of prejudice in this country. (p. 33)

Two decades later, the *Marland Report* (1971) commented on the low priority that the federal, state, and local government assigned to the education of the gifted: "Existing services to the gifted and talented do not reach large and significant subpopulations (e.g., minorities and disadvantaged) and serve a very small percentage of the gifted and talented population generally" (p. xi). That report asserted that "the problems of screening and identification are complicated by assumptions that talents cannot be found as abundantly in certain groups as in others—with the emphasis heavily in favor of the affluent" and speculated that this may account for the meager research and identification among minority and disadvantaged groups (p. II-8).

The *Marland Report* flatly declared that: "Since the full range of human talents is represented in all races of man and in all socioeconomic levels, it is unjust and unproductive to allow social or racial background to affect the treatment of an individual" (pp. II-9 and II-10). Almost two decades later when passing the Jacob K. Javits Gifted and Talented Students Education Act of 1988 (P.L. 100-297), Congress reasserted the conviction that youngsters with talent potential are found in all cultural groups, across all economic strata, and in all areas of human endeavor.

The under-inclusion of economically disadvantaged and minority children in programs for the gifted has been so well documented over the years that it hardly needs recounting. Simply put, the significant and constant increases in both the number and proportion of racial/ethnic minority and economically disadvantaged children in the public school population are not reflected in programs for the gifted and talented.

Improving the Identification of the Gifted in Minority and Disadvantaged Populations

The 1993 Department of Education report, *National Excellence: A Case for Developing America's Talent*, argues that: "Schools must eliminate barriers to participation of economically disadvantaged and minority students with outstanding talents" and "must develop strategies to serve students from underrepresented groups" (p. 28). To do this, the report asserted, identification of students with talent potential and their inclusion in programs for developing their potential, must be given a high priority for schools and communities.

The most widely accepted explanation for underrepresentation of disadvantaged students in programs for the gifted is the ineffectiveness and inappropriateness of the identification and selection procedures that have traditionally been and continue to be used. Youngsters who are not selected for programs are seldom provided with the needed opportunities to nurture and develop their talent potential.

This monograph (a) reviews traditional identification practices, (b) examines the environmental and value differences among several cultural subgroups, (c) describes the results of an exploratory study of the characteristics of disadvantaged and limited English proficient gifted students, (d) explores gifted behaviors as they relate to specific populations, (e) synthesizes insights emerging from the Javits Gifted and Talented Students Education Act, and (f) presents elements which can be used to construct a new paradigm of giftedness.

Assumptions Underlying Traditional Identification Procedures

Twelve postulates or assumptions underlie the critique of the traditional programs and processes that have guided identification procedures and guide thinking about new models or paradigms:

1. There exists no single accepted "theory of giftedness."
2. Academic achievement is an important indicator of giftedness, but cannot be the sole determinant in identification procedures.
3. Cultures may differ in terms of those talents recognized and rewarded; no culture or population has a monopoly on any talent potential, whatever its nature.
4. The aptitudes, attributes, and characteristics that are associated with talent potential are culturally imbedded.
5. The talents of minority and economically disadvantaged students are not of a different order nor of a lower standard.
6. The purpose of identification is to locate students who can then be provided with appropriately differentiated educational opportunities.
7. Screening, identification, and the consequent cultivation of talent potential can only be improved and enhanced if insights into the nature of talent potential and the contexts in which it is nurtured are understood.
8. The concept of "disadvantaged" has meaning only if it is understood, not in terms of deficiencies, but rather as differences.
9. The problems of underrrepesentation of minority and economically disadvantaged gifted students are intrinsically related to the more general problems of education and schooling of these populations—the fact that these students are more likely to be in schools and classes that are segregated or racially imbalanced and that have poorer facilities, fewer instructional resources, larger classes, fewer programs for the gifted, more inexperienced teachers, and other factors that contribute to limited or unequal educational opportunities.
10. Since decisions about giftedness in children are never more than predictions, wide nets should be thrown in the early stages of selection to increase the power of those predictions.
11. The concept that talent potential is culturally imbedded and impacted by environmental factors applies to all populations. Focusing on improving talent identification and development in a particular target population could well lead to better insights about talent identification and its nature more generally.
12. Valid assessment procedures and strategies that would more effectively identify talent potential of minority disadvantaged populations must deal with both the actual and perceived problems of traditional methods. They must encourage and support the efforts of various minority groups to examine the concept of giftedness within their own cultural and environmental contexts and provide the basis for recognizing talents, without apologies for differences, where these exist, in their expression and performance.

A Review and Critique of Traditional Identification Approaches

Since Terman's "Genetic Studies of Genius" was begun in 1925, a narrow definition of giftedness—limited to intelligence, academic aptitude, and academic achievement—has guided identification procedures. Standardized tests of intelligence, aptitude, and achievement were widely, often exclusively, employed with preset cut-off points or percentages determining which children were to be included in programs for the gifted. Psychometric constructs of giftedness have traditionally guided identification and programming.

Through the years, there have been advocates for definitions of giftedness that go beyond high intellectual or academic ability. In 1971, the *Marland Report* broadened the definition, defining gifted children as those with demonstrated achievement and/or potential ability in general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and psychomotor ability. The report urged casting wider nets to identify children with a broader spectrum of talent potential.

Although the definition of giftedness has broadened in the past two decades, intellectual ability and academic aptitude still dominate identification processes as well as programming. Psychometric identification models are widely used despite research findings that lead to characterizing giftedness as a complex, multifaceted phenomenon, requiring the use of a variety of objective and subjective techniques and procedures if it is to be effectively assessed. A survey by Coleman and Gallagher (1992) found that "all 49 of the states which have state level policies related to gifted education use some form of standardized IQ and achievement test in their identification process. However, a variety of other sources are often included" (p. 16).

While this psychometric approach to identification of giftedness may have succeeded in identifying children who are good test takers, high academic achievers, and members of the dominant or majority population, it is widely acknowledged that the approach has not worked effectively in identifying talent potential among students from economically disadvantaged families and communities, those from racial or ethnic minority groups, and those with limited English proficiency. Moreover, the psychometric approach has not proved useful in relating identification assessment information to programs, curricula, counseling activities, and evaluation with most populations, but especially with underrrepresented populations. There are other populations—e.g., children with dyslexia, attention disorder, or learning disability—who do not perform well on tests and whose talent potential may go unrecognized as well.

Concern with the limitations of the psychometric construct of giftedness has led to two distinct but related developments:

- There has been the ongoing search for better means to identify minority and disadvantaged students within the psychometric concept of giftedness—i.e., recognition of the under inclusion and under selection of

disadvantaged populations using the customary instruments and procedures and of the need to search for more effective techniques and procedures. Three thrusts are aimed at enlarging the pool of intellectually able minority students: (a) Modifying or adapting traditional criteria or standards for participation in programs for the gifted; (b) Using alternative procedures with target populations such as culturally specific checklists, aggregation of data from varied sources, and quotas; and (c) Employing "dynamic assessment" procedures in which learning potential is assessed by measuring cognitive learning modifiability during active learning tasks.

- There has been a shift from psychometric constructs of giftedness to psychological constructs, a shift from test-driven models to ones that focus on traits, aptitudes, and behaviors as defining giftedness.

A number of concerns have been raised regarding assessment procedures and techniques used in the traditional identification paradigms. Two aspects of the identification process—limited nominations and referrals and test bias and inappropriateness—are the focus of much of the questioning and criticisms of the traditional paradigms.

Limited Nominations and Referrals

Referrals usually constitute the first step in an identification process and studies show consistent limitations on nominations and referrals of disadvantaged populations. Two factors contribute to underreferral: teacher attitudes toward minority students and the type of schools such students are likely to attend.

Minority and other disadvantaged students are less likely to be nominated for or included in an identification or screening process because of the low expectations educational professionals have for culturally and linguistically diverse students, their low levels of awareness of cultural and linguistic behaviors of potentially gifted minority students, their insensitivity to the differences within and among groups, and their inability to recognize "gifted behaviors" that minority students exhibit.

Minorities and economically disadvantaged children are found in disproportionately large concentrations in school environments that are often described as "impoverished educational environments"—poorly equipped, often overcrowded, segregated, or racially imbalanced. Such schools and classrooms tend to provide fewer higher learning opportunities, chances to engage in enriched experiences, and fewer occasions to exhibit gifted behaviors. Since such schools have fewer provisions for identifying and nurturing talent potential, nominations and referrals are limited.

The concentration on the perceived or alleged deficiencies of disadvantaged populations has diverted attention from understanding the characteristics, behaviors, and attributes of minority students who have achieved, such as their positive self-esteem, attitudes toward school and school-related experiences, positive motivation, identify with healthy role models, and family relationships.

Three actions seem to hold promise for increasing nominations and referrals from minority and disadvantaged groups:

- Develop greater understanding of cultural differences in the ways gifted characteristics, traits, and attributes are manifested or exhibited in diverse settings so that they will be recognized more readily by teachers and other staff members.
- Expand the numbers and types of persons involved in the process to include self- and peer-nominations as well as referrals by parents and community leaders.
- Provide a rich educational environment that will stimulate students and enable them to demonstrate the kinds of behaviors and performances that will facilitate the recognition of their talent potential.

Test Bias and Inappropriateness

The limitations of standardized tests, particularly tests of intelligence and academic aptitude which constitute the linchpins of most identification programs, have long been cited. The content, construct, and predictive or criterion-related validity of tests of mental ability have long been questioned. It has been argued that standardized tests discriminate against minority and economically disadvantaged students and those whose linguistic and perceptual orientation, cognitive styles, learning and response styles, economic status, and cultural or social background differ from the dominant groups used to norm such tests—i.e., White, middle-class populations.

In addition to numerous technical criticisms of standardized testing—their validity, design, development, norming, and interpretation—there is a serious charge of bias attributed to institutionalized racism. Cummins (1989), for example, asserts that the structure for classrooms has been "legitimized by the assumption that IQ tests were valid indicators of minority students' academic abilities, and that their school failure was an inevitable consequence of mental inferiority due to . . . genetic inferiority, bilingualism, linguistic deficiency or cultural deprivation" (p. 96).

The issues regarding the value and validity, bias, and appropriateness have been debated for a good many years, but only recently have a variety of actions have been taken to deal with the many concerns and problems attributed to the centrality of standardized testing in the identification process. Actions include the modification or adaptation of traditional standards and the use of alternative procedures and strategies. Examples of such actions include:

- Some schools have banned the use of standardized group intelligence tests, sometimes substituting surrogate tests, such as reading tests.
- Most commercial test makers now review test items for bias, norm their tests using more diverse populations and, in a few instances, provide separate norms for various sub-populations.

- Test makers have designed or promoted the use of already existing nonverbal tests (touted as "culture-free") on the presumption that such measures are less biased and more fair for minority and disadvantaged populations.
- Test makers have designed a number of multimodal assessment indices.
- The administration, scoring, and interpretation of results of some standardized tests have been modified to isolate patterns of strength among subgroups.
- A few tests—e.g., the *Black Intelligence Test for Children*—have been designed selecting items that are biased toward the knowledge and information a minority population is more likely to have acquired.
- Some school districts have set special cut-off scores for target populations even though this procedure often raises problems for identified minority students by stigmatizing them as being included on the basis of lower standards.
- Multiple criteria and non-traditional measures—i.e., instruments other than or in addition to IQ tests—are being used to enhance the opportunities for minority students to be considered in the identification procedures.
- Matrices, inventories, and rating scales have been developed, some of which aggregate data from several sources in order to deal with the perceived inadequacies of standardized tests alone.

Harris and Ford (1991) have contended that:

The difficulty of defining, identifying, and nurturing gifted Black Americans lies in the current overreliance upon standardized tests, the reification of intelligence and the IQ, and the use of unidimensional instruments to assess the multidimensional construct called intelligence. This overreliance on, misuse of, and perhaps even abuse of standardized tests is confounded by the *inadequate attention paid to the influence of context—namely, environment and culture— upon the development and manifestation of giftedness in different racial groups*. (p. 4) [Emphasis added]

The task educators of the gifted face is twofold—with both tasks calling for greater understanding of which cultural differences make a difference with respect to talent potential and its development and how these can be behaviorally observed:

- To improve the traditional identification approaches by designing, adapting, modifying, and extending strategies and procedures to take into account the influence of race, culture, caste, and socioeconomic status.
- To shift to other constructs of giftedness that focus on "gifted behaviors" and respond more vigorously to cultural and environmental differences as influences on the display of talent potential.

Understanding and Attending to Cultural Influences Affecting Talent Identification and Development

The concern with underrepresentation of minorities and disadvantaged in programs for the gifted is with inadequate selection for and participation in those areas of talent that society recognizes and rewards. There are not talent areas that are especially reserved for or allotted to African Americans or Hispanics or any other minority group. Minority gifted students often bring unique strengths to particular contexts as a consequence of their cultural experiences in the family, the community, and the school.

The goal for gifted culturally diverse students is not unlike that for gifted in general—it is to enable them to enter and participate fully in mainstream society; to succeed at a high level academically; to enter and succeed in college where they can acquire high-level specialized training; and to become leaders, mathematicians, scientists, historians, medical researchers, lawyers, writers, performing artists, and every other area of specialized talent.

Although there is consensus that cultural variables affect talent identification and its development, a number of issues need be considered in designing new approaches.

Conflict in Values

One issue raised is the conflict between the cultural and sub-cultural values on the one hand and the mainstream (i.e., White middle class) values on the other—a conflict that is particularly significant in that academic success and achievement in most recognized areas of specialized talent are usually the means for entering the mainstream. The challenge for minority gifted is one of maintaining the values of one's culture while acquiring or developing the values of the dominant culture that affect performance in an area of talent.

Gifted children from all groups, especially adolescents, confront values-driven attitude problems with their peers as represented by a number of pejorative terms—e.g., *nerd, egghead, brain*, to cite a few. As a consequence, "some adolescent peer groups within a culture may reject school achievement in a reaction to negative stereotyping by classmates and perceived inaccessibility to the American dream" (Kitano, 1991, p. 8). In the case of gifted minority and disadvantaged youth, there is considerable risk of being ostracized and isolated by their peers if they achieve. Such youth may choose to underachieve rather than hazard being accused of "acting white," or of being "raceless," or of rejecting their own culture.

Within-group Cultural Diversity

Within-group cultural differences are often as great or greater than the differences among the four major "minorities"—African Americans, Hispanics/Latinos, Asian Americans, Native Americans/American Indians. These difference include socioeconomic status, especially poverty levels; first language or mother tongue and

English proficiency; residency in an urban/suburban/rural or inner-city environment; recency of immigration or migration; and a variety of other factors. Still, within groups that one would expect to be at risk, "there are many well-adjusted, well-cared for children even in inner city environments who are reinforced in their intellectual pursuits" (Frasier, l989, p. 222).

In addition to the within-group diversity within minority populations, many changes in the demographics of American society affect all groups, including majority groups. Among these are the deterioration of urban centers in which minorities are often concentrated; the changing nature and stability of family structures affected by, among other factors, single-parent families and one or both parents working outside the home; increased number of families living below the poverty level; concentrations of communities in which a language other than English is the first language; growth in schools and classes segregated by race, ethnic background, or socioeconomic status, to name a few. All of these affect the cultural experiences with which children come to school and affect the climate of the school as well.

Differential Cultural and Environmental Influences on Giftedness

Knowledge and insights regarding cultural differences are emerging from the search for talent potential among groups who have been traditionally underrepresented. Cultural differences studies deal with such topics as the group's perception of giftedness, family structure and child-rearing patterns, cognitive functioning and information processing strategies, family and community values, and peer responses to achievement.

Two kinds of research have been helpful for understanding cognitive strength—studies on characteristics of achievers and underachievers and comparisons of achievers from different cultural groups. Attention needs to be given to gifted females on two levels—as gifted women in the general population and as a subgroup within a racial or ethnic minority group. Different cultures treat gifted female achievers distinctively, and those variations are usually part of the overall pattern of that culture's perception of females.

In sum, family structure, child-rearing patterns, values, socialization patterns, and resources together with community values, relationships, and resources, exercise powerful influences on the behaviors of children and youth. As Passow (1986) has asserted:

> When students are black, red, or brown, are culturally different, are non- or limited-English speaking, have non-standard dialects, or are poor, those who are gifted or talented among them are especially disadvantaged because of the attitudes and expectations toward the population of which they are a part. We must first discard group stereotypes and view each child in terms of his or her individuality as part of a cultural group. We need to understand how cultural differences impact both positively and negatively on the cognitive and affective development of individuals. (p. 155)

Gifted Attributes and Gifted Behaviors

Over the years, researchers have identified characteristics—traits, aptitudes, and behaviors—that appear to be common to all gifted students and that distinguish them from students not considered gifted. Typically, lists of characteristics include references to such traits, aptitudes, and behaviors as the gifted child's: (a) facility in manipulating abstract symbol systems, (b) early language interest and development, (c) unusually well developed memory, (d) ability to generate original ideas, (e) precocious language and thought, (f) superior humor, (g) high moral thinking, (h) independence in thinking, (i) emotional intensity, (j) high levels of energy, (k) early reading and advanced comprehension, (l) logical thinking abilities, (m) high levels of motivation, (n) insights, and (o) advanced interests.

Many writers suggest that such traits, aptitudes, or behaviors can be considered *general/common attributes of giftedness*. Leung (1981) calls such characteristics *"absolute attributes of giftedness"* since they appear to be "universal and cross-cultural" in contrast to *"specific behaviors"* or manifestations of those attributes in particular contexts or settings. Clearly such traits, attributes, and behaviors are not absolute in the sense that every gifted individual always exhibits or manifests every one of them. Rather, they are attributes that seem to be ascribed to children who have been identified as being gifted. An apparent implication that can be drawn from this distinction is that *the search for better identification procedures for gifted economically disadvantaged and culturally diverse students should focus on ways of recognizing the specific behaviors or manifestations of these attributes in various cultural, contextual, and environmental settings.*

The task for educators is to understand how these characteristics are manifested in the specific behaviors of individuals from diverse cultural and economic backgrounds. For example, do economically disadvantaged Hispanic or African American children "manipulate abstract symbol systems" differently from middle-class White students, the populations on whom most studies of behavioral characteristics have been done? If so, in what ways. The specific behavioral differences need to be observed, recognized, and acted upon within a specific context or environment.

Examples are provided of how behavioral differences might ensue from the interaction of cultural values with attributes of giftedness. These examples call attention to how some absolute attributes of giftedness might be displayed by individuals with particular cultural backgrounds, recognizing that there will be diversity and variations within each group and subgroup. Some of the efforts to develop culture-specific checklists and rating scales based on the particular behaviors of gifted minority students are reviewed. Each of these rating scales, checklists, and observation forms is aimed at directing attention to gifted behaviors as exhibited by minority and/or economically disadvantaged gifted students.

Emerging Insights From the Javits Gifted and Talented Students Education Act

The purpose of the Jacob K. Javits Gifted and Talented Students Education Act of 1988 "is to provide national leadership for efforts to identify and serve gifted and talented students, especially those who are economically disadvantaged, are limited English proficient, or have disabilities." Under the provisions of the act, dozens of programs have been funded focused on identifying and nurturing the talents of economically disadvantaged and LEP students. Many of these programs represent efforts to deal with the inadequacies of the traditional paradigms in identifying talent potential.

Callahan, Tomlinson, and Pizzat (n.d.) identified 11 programs that have attempted to deal with the question of equity and the issues relating to the identification of economically disadvantaged and limited English proficient students using innovative approaches. Their review led them to identify some "commonalities and themes" that were displayed to different degrees and clarity:

- Acceptance of intelligence as multi-faceted.
- Recognition of multiple manifestations of giftedness.
- Emphasis on authentic assessment tools and assessment over time.
- Development of a philosophy of inclusiveness rather than exclusiveness.
- Strong links between the identification process and instruction.
- Use of identification to enhance understanding.
- Early and on-going plans and procedures to evaluate the process.

Toward a New Paradigm for Identifying Talent Potential Amongst Culturally Diverse Populations

The models and paradigms that have dominated the search for talent potential, primarily psychometric and test-driven, have been justly criticized because of the drastic and unconscionable underrepresentation of culturally different, economically disadvantaged and limited English proficient gifted students. Although the traditional paradigms seemed to have worked somewhat better with the non-minority middle-class groups, even with that population they have neither adequately nor satisfactorily identified the range and variety of talent potential.

The search for new paradigms that would enhance the search for talent potential has been ongoing, one that has intensified over recent years as educators and others have become increasingly concerned with underrepresentation of economically disadvantaged and minority students in programs for the gifted.

This review of the issues and the efforts regarding the assessment of talent potential of children from diverse cultures makes clear the fact that the problems of identifying and nurturing talent potential are not resolved by formulating constructs of giftedness solely for minority and economically disadvantaged students that differ from

those for the majority populations, or by watering down criteria or standards for excellence or outstanding performance, or by seeking different areas of talent in various populations. On the other hand, the review makes clear that cultural and environmental contexts have a significant impact on behavior and performance and must be attended to if the search for talent potential is to succeed.

The challenge is one of creating paradigms that take culture and context into account in order to enhance the possibilities for identifying talent potential of many kinds in all populations so that appropriate opportunities and conditions can be provided for nurturing potential to talented performance. New paradigms will consider the following elements differently from the traditional psychometric models:

1. **New Constructs of Giftedness.** Giftedness is being reconceptualized and redefined to encompass a broad range of cognitive and affective traits and qualities that are dynamically displayed as potential to be nurtured and developed. New constructs of giftedness reflect multifaceted, multicultural, multidimensional perspective and are defined by traits, aptitudes, and behaviors to be nurtured rather than by static test performance.

    Although certain talent areas may have greater value and relevance in some cultures than others, the basic elements of the gifted construct are similar across cultures. Culturally diverse, economically disadvantaged, and limited English proficient groups do not value broadly defined concepts of intelligence and aptitude any less than a middle-class group, although they may not give the same value to a standardized test score that conveys a narrow view of intelligence. By defining giftedness dynamically, the possibilities from demonstrating potential by individuals from all groups are markedly increased.

2. **Absolute Attributes and Specific Behaviors**. Although it has long been understood that culture and environmental contexts play a significant role in the display of talent potential, educators have been slow in implementing and applying those understandings. There is consensus that there are *absolute attributes of giftedness*—traits, aptitudes, and behaviors that are universally associated with talent potential and performance—and *specific behaviors* that represent different manifestations of gifted potential and performance as a consequence of the social and cultural contexts in which they occur. Dynamic assessment focuses on the specific behaviors, the ways the absolute attributes are displayed in a particular context.

    In various settings, traits or aptitudes might be displayed differently. It is the specific behaviors that must be assessed as manifestations of attributes of giftedness. The identification process must facilitate the display of these specific gifted behaviors.

3. **Cultural and Contextual Variability**. To acknowledge that cultural variables significantly affect behavior both positively and negatively is only a first step toward improved identification processes. Generalizations can be made about a particular culture's child-rearing patterns, family structure and relationships, community values, educational aspirations, cognitive functioning and information processing strategies, peer relationships, socializing mechanisms, and other aspects of a group's social and psychological functioning. However, their application to specific individuals in particular contexts can vary considerably.

   Specific knowledge about every cultural or ethnolinguistic group cannot possibly be acquired. Nevertheless, educators must increase their sensitivity to and understanding of culturally determined and environmentally affected behaviors and to recognize and interpret such behaviors in the context in which they are displayed. Behavioral and performance indicators of talent potential, self-perceptions of ability, teacher attitudes and insights, familial characteristics, environmental features of people or services that hinder the development of potential—all of these are relatively focused when considered in a particular setting. That is, there are overall understandings and insights regarding cultures and there are knowledge and insights regarding the specific populations within which talent potential is being sought and nurtured.

4. **More Varied and More Authentic Assessment**. The use of multiple criteria and non-traditional measures—instruments and assessment tools other than intelligence and achievement—is now widely advocated. Authentic assessment involves data collection that is derived, in part, from observing the interaction of students with learning opportunities. For example, many of the checklists and observation forms developed for Javits programs use such techniques to guide the teacher's search for gifted behaviors.

5. **Identification Through Learning Opportunities**. Economically disadvantaged and limited English proficient students are more likely to be in schools and classrooms where they have fewer opportunities for the display of gifted behaviors. The concept of self-identification takes on considerable meaning and importance for this population. It involves the creation of environments that will make it possible for students to engage in rich learning opportunities as a means of displaying gifted behaviors and talent potential.

Conclusion

New paradigms are needed that reconceptualize the giftedness construct, focus on gifted behaviors, design dynamic approaches to assessing gifted and talented behaviors

within the students' sociocultural context, and integrate identification processes with learning opportunities. In forging new paradigms, strategies need to be employed that consider a variety of factors that impact on the behaviors of gifted economically disadvantaged and limited English proficient students, looking at these factors within and across various cultural groups and diverse environmental contexts.

In coming to grips with more effective approaches to the identification and development of talents among minorities, the promise is that *educators will better understand how to identify and nurture talent potential among all learners.*

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Toward a New Paradigm for Identifying Talent Potential

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CHAPTER 1: Introduction

Writing some four decades ago, Bristow, Craig, Hallock, & Laycock (1951) asserted:

> Giftedness appears in many different forms in every cultural group at every level of society. It is the source of power which has contributed most to progress at all times and in all places. Yet, like other human resources, it remains a potentiality until it has been discovered and developed. (p. 10)

A year earlier, the influential Educational Policies Commission (EPC) (1950) had observed that "the educational needs of individuals who have superior intellectual capacity and of those who possess special talents in high degree differ in some important respects from the needs of other individuals" and that "the gifted members of the total school population constitute a minority which is too largely neglected" (p. iii). Reflecting on the changes in American society following the end of World War II—"the closing of the frontier, the urbanization and mechanization of American life, the increased complexity of our economic life and our culture"—the Commission declared:

> The public schools can, and should, seek to diminish the force of such handicaps [i.e., limited financial resources] *by giving all* gifted children and youth—*and particularly those who are handicapped by disadvantageous family background*—the kind of education, the guidance, and the incentive that they need in order to prepare themselves for roles of leadership in American life. (p. 5) [Emphasis added.]

The Commission deplored America's waste of talent noting: "That a large amount of human talent possessed by individuals now living is lost through stultification and isolation can be convincingly demonstrated—although admittedly the precise dimensions of loss defy measurements" (p. 14). The Commission contended that in shaping policy to reduce waste of talent potential, it was important to know the causes—economic, social, psychological, and educational—as well as where such waste occurs most often—in low-income groups, rural groups, and minorities. Pointing to discriminatory practices to which minorities are exposed, the EPC report observed:

Lacking both incentive and opportunity, the probabilities are very great that, however superior one's gifts may be, he will rarely live a life of high achievement. Follow-up studies of highly gifted young Negroes, for instance, reveal a shocking waste of talent—a waste that adds an incalculable amount to the price of prejudice in this country. (p. 33)

As America became increasingly concerned with its waste of talent potential, the Commission on Human Resources and Advanced Training asserted:

The democratic ideal is one of equal opportunity; within that ideal it is both individually advantageous and socially desirable for each person to make the best possible use of his talents. But equal opportunity does not mean equal accomplishment or identical use. . . . Along with moral and legal and political equality goes respect for proper use of excellence. (Wolfle, 1954, p. 6)

Examining the potential talent supply in terms of how much was not being developed and what insights could be acquired about human capabilities that the nation was failing to acquire, the Commission on Human Resources report concluded that:

. . . there is no evidence of a significant difference in ability between White and Negro children at early ages. As they grow older, White children tend to make higher scores on intelligence tests than do Negro children. *But most of the evidence indicates that this difference can be explained by the differential schooling, opportunity, and social and cultural conditions which affect the two groups. A smaller percentage of Negro than of White children of the highest ability get the kinds of education, encouragement, and intellectual stimulation which permit them, as adults, to work at the level of their high potential.* If America is wasting a portion of its intellectual potential in talented White youth, it is wasting an even larger percentage of the Negro potential. (Wolfle, 1954, p. 169) [Emphasis added.]

Commenting two decades later on the very low priority that the federal, state, and local levels of government assigned to differentiated education for the gifted and talented in general, the *Marland Report* (1971) noted: "Existing services to the gifted and talented do not reach large and significant subpopulations (e.g., minorities and disadvantaged) and serve a very small percentage of the gifted and talented population generally" (p. xi). The report stated that "the problems of screening and identification are complicated by assumptions that talents cannot be found as abundantly in certain groups as in others— with the emphasis heavily in favor of the affluent" and speculated that this may account for the meager research and identification among minority and disadvantaged groups (II-8). The report further asserted that: "Since the full range of human talents is represented in all races of man and in all socioeconomic levels, it is unjust and unproductive to allow social or racial background to affect the treatment of an individual" (p. II-9 and 10).

In passing the Jacob K. Javits Gifted and Talented Students Education Act of 1988 (P.L. 100-297), Congress reasserted the conviction that youngsters with talent

potential are found in all cultural groups, across all economic strata, and in all areas of human endeavor. The Javits Act reaffirmed that in every population there are individuals with potential for superior or outstanding achievement who are in environments where this aptitude may not be recognized or nurtured. These individuals are most likely to come from racial/ethnic minority or economically disadvantaged groups.

Clearly it is a tragedy for both the individuals whose talent potential goes undeveloped as well as for society. The under-inclusion of economically disadvantaged in programs for the gifted has been so well documented over the years that it hardly needs further recounting. Since the 1950s, studies have found a fairly consistent 5:1 ratio for participation in programs for the gifted and talented between middle-class White children and children from other cultural groups such as African Americans, Hispanics, and Asians (see such studies as Alamprese & Erlanger, 1989; Baca & Chinn, 1982; Gay, 1989; Zappia, 1989).

Even with the significant and constant increases in both the numbers and proportions of racial/ethnic minority and economically disadvantaged children in the public school population that have occurred in recent decades, underrepresentation of these students in programs for the gifted and talented has not changed substantially. At the same time, their consistent disproportionate representation in remedial, compensatory, and other special education programs continues. Richert (1987), for example, reported that Blacks, Hispanics, and Native Americans were *underrepresented* in 30 to 70 percent of the nation's programs for the gifted and talented and *disproportionately represented* by 40 to 50 percent in special education programs.

Alamprese and Erlanger (1988) conducted a study to identify programs and strategies that "provide our most promising disadvantaged students with opportunities to develop their academic potential, especially in the areas that affect our nation's ability to compete internationally in a global economy" (p. 1) and found that:

> Minority students are underrepresented in programs designed to serve gifted and talented students. Although minorities make up 30 percent of public school enrollment, they represent less than 20 percent of the students selected for gifted and talented programs;

> Whereas students from low-income backgrounds comprise 20 percent of the student population, they make up only 4 percent of those students who perform at the highest levels on standardized tests (those who score at the 95th percentile or above);

> High school seniors from disadvantaged families (in which the mother did not complete high school) are less than half as likely to have participated in gifted and talented programs as more advantaged seniors; and

> Disadvantaged students are far less likely to be enrolled in academic programs that can prepare them for college and are about half as likely to take coursework

in advanced math and science than more advantaged students. Only 2 percent of high school seniors from poor families take calculus, whereas approximately 7 per cent of those from more advantaged backgrounds do. (p. v)

The 1993 Department of Education report, *National Excellence: A Case for Developing America's Talent*, recommended that: "Schools must eliminate barriers to participation of economically disadvantaged and minority students in services for students with outstanding talents" and "must develop strategies to serve students from underrepresented groups" (p. 28). To do this, the report asserted, identification of students with talent potential and their inclusion in programs for developing their potential, must be given a high priority for schools and communities.

CHAPTER 2: Improving the Identification of the Gifted in Minority and Disadvantaged Populations

Understanding the causes for the acknowledged underrepresentation of minorities and dealing with them programmatically have been the focus of considerable research and reflection. The most widely accepted explanation for underrepresentation of disadvantaged students in programs for the gifted is the ineffectiveness and inappropriateness of the identification and selection procedures that have traditionally been and continue to be used. Youngsters who are not selected for programs are seldom provided with the needed opportunities to nurture and develop their talent potential.

This paper reviews the issues related to assessing the talent potential of children and youth from diverse cultures and low socioeconomic backgrounds. The review provides the basis for proposing a framework or paradigm for more effectively identifying the gifted in those populations in order to provide them with adequate and appropriate educational experiences. The focus is on what appears to be the root causes of the failure to adequately identify minority gifted students and the barriers to improving selection processes. The discussion is based on research, theory, practice, and advocacy literature. It aims at presenting a framework that takes explanations and criticisms into account so that talent potential in these populations will be more fully recognized and nurtured. A new paradigm or framework is important because it can suggest posing different questions for research and practice, questions that take into account culture, race, class, and caste in the search for talent potential.

The focus of this discussion is on children who are characterized by racial/ethnic cultural group membership (e.g., African Americans, Hispanics, American Indians, and Asian Americans); by language differences or limitations (e.g., mother tongue other than English or limited English speaking); by low socioeconomic status (e.g., poverty-level subsistence qualifying, for example, for free or reduced lunch); and by geographic location (e.g., rural or inner-city areas, barrios, or reservations). Many, if not all, of the issues surrounding the identification of high talent potential females generally are similar to those of racial/ethnic minority and economically disadvantaged populations. However, this paper will limit discussion to the special problems of minority female gifted students and not with female gifted populations generally.

It must be acknowledged and emphasized that the various cultural and socioeconomic groups of concern are hardly homogeneous populations. There are tremendous ranges and diversity both within and among these groups. Few societies, if any, are actually homogeneous and America is surely not. America consists of a myriad of subgroups with differing cultural norms, languages, ethnic backgrounds, values, family structures, and levels of education and income. These differences raise a number of issues with respect to what talents are valued, are to be sought and identified, are to be cultivated and developed, and are to be rewarded. The disregard of the diversity within and among the various cultural and socioeconomic groups contributes significantly to the difficulties encountered in identifying their full talent potential.

Moreover, while there is considerable overlap between various minority populations and disadvantaged conditions, the terms are not synonymous even though they are frequently interchanged. There are many students who are members of racial and ethnic minority cultures who are neither economically nor educationally disadvantaged. These individuals may be achievers yet, because of their cultural backgrounds, they often encounter discrimination and biases not unlike those of the disadvantaged members of their group. It is the diversity with respect to all characteristics and traits that must be understood and considered in dealing with issues of talent identification and development.

Some Guiding Postulates

Twelve postulates or assumptions guide this discussion.

1. There exists no single accepted "theory of giftedness" but rather there are many concepts, most of which view the phenomenon as complex, multifaceted, multidimensional, and nurtured in particular social and psychological contexts. Even those traditional constructs that have focused on high intelligence or academic aptitude no longer construe those characteristics or traits in simple, unidimensional terms.

2. To argue that concepts of giftedness should not be limited to high intelligence and academic aptitude, does not mean that academic achievement is unimportant. In all modern societies, formal education that often includes postsecondary and graduate education, is crucial in the development of specialized talents that are valued. Thus, identification and nurturing of what is sometimes called "schoolhouse giftedness" constitutes an integral component of nurturing talent potential of many kinds and levels.

3. The notion that "giftedness appears in many different forms in every cultural group at every level of society" (Bristow, et al., 1951, p. 10) means precisely that. Cultures may differ in terms of those talents they recognize and reward more than others, but this does not suggest that the talent potential of those populations is culturally restricted. No culture or population has a monopoly on any talent potential, whatever its nature.

4. As with all individual traits, the aptitudes, attributes, and characteristics that are associated with talent potential are culturally imbedded, that is, they may be manifested differently within different cultural contexts. A culture can encourage or inhibit an individual's behavior by its rewards or its sanctions. Whether and how a particular characteristic or trait will be manifested depends on the context in which it exists and is exercised.

5. The search for talent potential crosses all cultures and subgroups in the same ways, that is, the talents of minority and economically disadvantaged students are not of a different order nor of a lower standard. By its very nature, any culture or subculture can encourage or inhibit an individual's behavior by the rewards or sanctions it provides. Whether and how a particular characteristic or trait will be manifested depends on the cultural context in which it exists and is exercised. Understanding this means comprehending the significance of a culture and of the cultural context on talent potential in ways that avoid bias and prejudice and the ascription of negative stereotypes to any culture or subculture.

6. The purpose for identification is to locate students who can then be provided with appropriate differentiated educational opportunities. Identification is a necessary first step in providing for relevant educational experiences. While there may be some overlap, the problems and issues involved in identifying the talent potential among gifted disadvantaged students are not the same as those that surface in nurturing that potential. The insights gained in the identification process provide leads for the development processes. The identification of talent potential and the cultivation of that potential must be viewed as integrated processes.

7. Screening, identification, and the consequent cultivation of talent potential can only be improved and enhanced if insights into the nature of talent potential and the contexts in which it is nurtured are understood. In the process of searching for talent potential, the sociocultural context must be taken into account. It is these understandings concerning the effects of culture on talent potential and its manifestation that add significant new dimensions to program and practice.

8. The concept of "disadvantaged" has meaning if it is understood, not in terms of deficiencies, but rather as differences. The persistent and overall underachievement of minority and poor children has been "explained" in terms of their impoverished environments, lack of motivation, the impact of caste, language defects, and other conditions that blame defects in the individual as the basis for poor performance. On the other hand, minority underachievement has been attributed to societal prejudices and discriminatory practices, incompatibilities between learning styles of minorities and the strategies schools use, irrelevant curricula, low expectations, and a variety of other allegations that blame teachers, schools and society in general for underachievement. Despite decades of debate, some based on research and others mainly on rhetoric, the controversy continues and no definitive rationale has been provided for the clearly existing disadvantaged status of minorities and poor children. Since all sides can muster support for their positions, the search for talent potential will be fostered, not by seeking single explanations, but rather by

understanding the interactions of culture and environment with individual performance and striving to make those more positive and nurturing.

9.   The problems of underrepresentation of minority and economically disadvantaged gifted students are intrinsically related to the more general problems of the education and schooling of these populations—the fact that these students are more likely to be in schools and classes that are segregated or racially imbalanced and that have poorer facilities, fewer instructional resources, larger classes, fewer programs for the gifted, more inexperienced teachers, and other factors that contribute to limited or unequal educational opportunities. There are significant differences in the educative resources available in schools and the communities that serve a predominantly disadvantaged population than those which serve advantaged students and in the climate and the learning environments as well. The affective impact of these environments and conditions cannot be ignored in any consideration of identifying and nurturing disadvantaged gifted. Being a member of a minority group in an advantaged school has an affective impact that may be similar in some respects to that in a disadvantaged environment but, that situation has other kinds of influences as well. For example, even a middle-class African American or Hispanic student, who is one of a small number of such students in a predominantly White, middle-class school, will experience certain affects that are not unlike those experienced by students in predominantly disadvantaged school environments because of perceptions about cultural differences.

10.   Decisions about giftedness in children are never more than predictions. Consequently, wide nets should be thrown to increase the power of those predictions, erring on the side of over-inclusion rather than exclusion, especially at the early stages of selection.

11.   Many of the same shortcomings and weaknesses concerning constructs of talent and talent potential, its identification and nurture, apply to both the advantaged and disadvantaged populations. The concept that talent potential is culturally imbedded and impacted by environmental factors applies to all populations, not just minority and economically disadvantaged populations. Nevertheless, focusing on talent identification and development in a particular target population could lead to better insights about talent identification and its nurture more generally.

12.   Valid assessment procedures and strategies that would more effectively identify the talent potential of minority and disadvantaged populations must deal with both the actual and the perceived problems of traditional methods. They must encourage and support the efforts of various minority groups to examine the concept of giftedness within their own cultural and environmental contexts and provide the basis for recognizing talents,

without apologies for differences, where these exist, in their expression and performance.

These postulates or assumptions underlie the critique of the traditional programs and processes that have guided identification procedures and guide thinking about new models or paradigms. They will be expanded and explicated in the discussion that follows.

CHAPTER 3: A Review and Critique of Traditional
Identification Approaches

For decades, and certainly since Terman's "Genetic Studies of Genius" was begun in 1922, a narrow definition of giftedness—one limited to intelligence, academic aptitude, and academic achievement—guided identification procedures. Standardized tests of intelligence, aptitude, and achievement were widely, often exclusively, employed with preset cut-off points or percentages determining which children were to be selected for inclusion in programs for the gifted.

Traditionally, psychometric constructs of giftedness have guided identification and programming. Decisions made using these models are generally based on students performing at or above a pre-determined level on a standardized test of intelligence and/or aptitude. For example, the gifted are considered those above a particular IQ score (e.g., 120, 135, or 140), or a specific percentile (e.g., 99th, 98th, or 95th percentile), or a definite proportion of the student population (e.g., top 1%, 2%, or 5%). These operational definitions are all test centered and test dependent and carry with them a number of assessment problems, especially with disadvantaged populations.

Through the years, there have been advocates for definitions of giftedness that go beyond high intellectual or academic ability. For example, even though Hollingworth defined gifted children as those "who are in the top 1 percent of the juvenile population in *general intelligence*" in 1931, she wrote:

> By a gifted child, we mean one who is far more educable than the generality of children are. This greater educability may lie along the lines of one of the arts, as in music or drawing; it may lie in the sphere of mechanical aptitude; or it may consist in surpassing power to achieve literacy and abstract intelligence. It is the business of education to consider all forms of giftedness in pupils in reference to how unusual individuals may be trained for their own welfare and that of society at large. (Pritchard, 1951, p. 49)

A number of other educators of the gifted have pointed to the limitations of intelligence tests as the sole or prime basis for defining and identifying the gifted. As far back as 1940, for example, Witty wrote:

> If by gifted children we mean those youngsters who give promise of creativity of a high order, it is doubtful if the typical intelligence test is suitable for use in identifying them. For creativity posits originality, and originality implies successful management, control, and organization of new materials and experiences. Intelligence tests contain overlearned materials. . . . The content of the intelligence [test] is patently lacking in situations which disclose originality or creativity. (Pritchard, 1951, p. 81)

More recently, the *Marland Report* (1971) defined gifted children as those with demonstrated achievement and/or potential ability in general intellectual ability, specific

academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and psychomotor ability. The report urged casting wider nets to identify children with a broader spectrum of talent potential.

While the definition has broadened, intellectual ability and academic aptitude still dominate identification processes and programming. Psychometric identification models are widely used despite research findings that lead to characterizing giftedness as a complex, multifaceted phenomenon, requiring the use of a variety of objective and subjective techniques and procedures if it is to be effectively assessed (Gardner, 1983; Renzulli, 1978; Richert, Alvino, & McDonnel, 1981; Sternberg, 1986; Treffinger & Renzulli, 1986). A 1992 survey by Coleman and Gallagher found that "all 49 of the states which have state level policies related to gifted education use some form of standardized IQ and achievement test in their identification process. However, a variety of other sources are often included" (p. 16).

Although it is generally agreed that this psychometric approach to identification of giftedness may have succeeded in identifying children who are good test takers, high academic achievers, and members of the dominant or majority population, it is widely acknowledged that the approach has not worked effectively in identifying students from the target populations including, among others: (a) children who, for one reason or another, regardless of gender, socioeconomic status, or racial/minority status, do not perform well on standardized tests; (b) students from economically disadvantaged families and communities; and (c) children with limited English proficiency (LEP). Moreover, this approach has not been useful for relating identification assessment information to programs, curricula, counseling activities, and evaluation procedures with most populations but especially with underrepresented populations. There are other populations that do not perform well on standardized tests because of some kind of disability or handicapping condition—such as dyslexia, attention disorder, or learning disability—whose talent potential may go unrecognized as well.

The traditional approach is one that raises questions regarding the basic construct of giftedness and the procedures used to assess talent potential, its effectiveness as an interactive system, and its value in providing direction for addressing curriculum and programmatic needs. The psychometric construct of giftedness, one that is essentially limited to above-average intelligence and/or academic achievement, has fostered two distinct, but related, developments:

- There has been the ongoing search for better means to identify minority and disadvantaged students within the psychometric concept of giftedness—i.e., recognition of the fact of under inclusion and under selection of disadvantaged populations using the customary instruments and procedures and of the need to search for more effective techniques and strategies. This thrust has been aimed at enlarging the pool of intellectually able minority students through three approaches: (a) modifying or adapting traditional criteria or standards for participation in programs for the gifted—e.g., special cut-off points, special scoring techniques, or using

only portions of standardized tests; (b) using alternative procedures with target populations: e.g., culturally specific checklists, aggregation of data from varied sources, and quotas; and (c) employing "dynamic assessment" procedures in which learning potential is assessed by measuring cognitive modifiability during active learning tasks (Feuerstein, Rand, & Hoffman, 1979). All of these developments aim at yielding more minority and disadvantaged students who qualify for inclusion as potentially intellectual or academically able learners.

- There has been a shift from psychometric constructs of giftedness to psychological constructs, a shift from intelligence and academic achievement test-driven models to ones that focus on traits, aptitudes, and behaviors as defining giftedness. For example, sixteen different conceptions of the giftedness construct are presented and discussed in Sternberg and Davidson's (1986) *Conceptions of Giftedness*, and all of them include and go beyond high intelligence.

These developments indicate a dual concern with increasing the representation of minority and disadvantaged students in the traditional pools of talent potential—i.e., high intelligence and academic aptitude—and an equal, or even greater concern with broadening the overall concept of talent potential and to search for its existence among minority and disadvantaged students. Both thrusts underscore the notions that: (a) giftedness involves much more than high intelligence, although above-average intellect can be a necessary but not sufficient determinant of the phenomenon; (b) efforts to include more minority and disadvantaged students are not aimed at identifying capabilities unique or exclusive to those populations but rather to enlarge talent pools generally; and (c) what is learned about identifying giftedness and talent potential among minority and disadvantaged populations more effectively will have general applicability for improving identification of the advantaged as well as the disadvantaged.

The issues related to the psychometric concept of giftedness have been well-rehearsed over the years and have spurred efforts to design other gifted constructs or paradigms that will enhance the search for giftedness and talent potential. The task is not one of redefining giftedness simply to increase the numbers of minority students in programs for the gifted but rather to enhance understanding of the nature of talent and improve the processes by which the potential for outstanding achievement is uncovered so that it can be nurtured to talented performance more effectively in all populations.

Concerns With Traditional Identification Paradigms

The traditional identification paradigms have defined giftedness in terms of above-average intelligence and high academic performance and have centered on standardized and teacher-made tests as the chief strategies for identification, even when other techniques and procedures are employed. Such models acknowledge that there are different target populations—various racial, ethnic, cultural, and economically

disadvantaged groups—that must be accommodated to the traditional view of giftedness through the use of alternative approaches and procedures. Many of these alternatives aim at increasing the representation of minority and disadvantaged students in the talent pools by correcting what are perceived as problems with tests and testing.

A number of concerns have been raised regarding assessment procedures and techniques used in the traditional identification paradigms. These concerns focus on the validity and reliability of assessment instruments and strategies, the cultural goodness-of-fit, and the relevance of the idea of "disadvantaged."

Two aspects of the identification process—limited nominations and referrals and test bias and inappropriateness—are the focus of much of the questioning and criticisms of the traditional paradigms. (For a fuller review of assessment issues in identifying disadvantaged gifted students, see Frasier and Garcia, 1993.)

Limited Nominations and Referrals

Referrals usually constitute the first step in an identification process and studies show consistent limitations on nominations and referrals of disadvantaged populations (Clark, 1993; Davis & Rimm, 1989). As High and Udall (1983) point out, two factors contribute to this underreferral: teacher attitudes toward minority students and the type of school such students are likely to attend. Minority and other disadvantaged students are less likely to be nominated for or included in an identification or screening process because of the low expectations educational professionals have for culturally and linguistically diverse students, their low levels of awareness of cultural and linguistic behaviors of potentially gifted minority students, their insensitivity to the differences within and among groups, and their inability to recognize "gifted behaviors" minority students exhibit (Frasier, Hunsaker, Finley, & Martin, 1993).

Minorities and economically disadvantaged children are found in disproportionately large concentrations in school environments that are often described as "impoverished educational environments"—poorly equipped, often overcrowded, segregated, or racially imbalanced. Such schools and classrooms tend to provide fewer higher learning opportunities, chances to engage in enriched experiences, and fewer occasions to exhibit gifted behaviors. Since such schools have fewer provisions for identifying and nurturing talent potential, nominations and referrals are limited. School reform efforts aimed at improving the quality of educational opportunities by creating "learning communities" that provide greater access to high quality curricula, learning experiences, and instructional resources for all children in such schools, including the very able and potentially gifted, would improve the nomination and referral rate.

Research indicates that teachers and other professionals, as well as students themselves, have low academic expectations for culturally and linguistically diverse students (Dusek & Joseph, 1983; Haller, 1985; Jones, 1988; Levin, 1988; McCarty, Lynch, Wallace, & Bennally, 1991; Snow, 1987). Low expectations that often stem from

a widespread belief that talent potential is simply not present in a disadvantaged population, especially in a school that has high concentrations of minority and economically disadvantaged students, lead to limited referrals (Clark, 1993; Gallagher & Kinney, 1974; Kitano & Kirby, 1986; Pendarvis, Howley, & Howley, 1990). This attitude results in a restricted pool from which youngsters can be selected for next steps in an identification process.

The concentration on the perceived or alleged deficiencies of disadvantaged populations has diverted attention from understanding the characteristics, behaviors, and attributes of minority students who have achieved, such as their positive self-esteem, attitudes toward school and school-related experiences, positive motivations, identity with healthy role models, and family relationships.

Three actions seem to hold promise for increasing nominations and referrals from minority and disadvantaged groups:

- Develop greater understanding of cultural differences in the ways gifted characteristics, traits, and attributes are manifested or exhibited in diverse settings so that they will be recognized more readily by teachers and other staff members.
- Expand the numbers and types of persons involved in the process to include self- and peer-nominations as well as referrals by parents and community members.
- Provide a rich environment that will stimulate students and enable them to demonstrate the kinds of behaviors and performances that will facilitate the recognition of their talent potential.

Test Bias and Inappropriateness

The limitations of standardized tests, particularly tests of intelligence and academic aptitude which constitute the linchpins of most identification programs, have long been cited. It has been argued that since talent is a multidimensional phenomenon, an intelligence test alone cannot assess all aspects of giftedness and must be supplemented by other procedures. The content, construct, and predictive or criterion-related validity of tests of mental ability have all been questioned.

Gallagher and Kinney (1974) contend that:

The use of traditional IQ tests as exclusive identification tools, such as the Stanford-Binet or Wechsler Intelligence Scales, tends to restrict gifted program selection to those children whose mental skills are developed solely in the direction that the mainstream society sets for approved achievement and success. Until new ways of identifying the gifted are incorporated into school practice, it is unlikely that programs which aid culturally different gifted children will be highly developed. (p. 6)

With respect to minority and economically disadvantaged students, it has been argued that standardized tests discriminate against students whose linguistic and perceptual orientation, cognitive styles, learning and response styles, economic status, and cultural or social background differ from the dominant norm group—White, middle class populations.

Reynolds and Kaiser (1990) point out six possible causes for standardized test bias: (a) inappropriate content, (b) inappropriate standardization sample, (c) examiner and language bias, (d) inequitable social consequences, (e) measurement of different constructs, and (f) differential predictive validity.

Linguists, such as Taylor and Lee (1991), assert that "incongruencies between the communicative behavior or language of the test giver (or test constructor) and the test taker can result in test bias" (p. 67). They cite five areas of culturally-based communication and language-biased communication and language bias in standardized tests: (a) *situational bias* that occurs when there is a mismatch between the test-taker and the tester caused by social rules of language interaction; (b) *linguistic bias* that occurs when non-Standard English speakers err when responding to test items written in Standard English even though they have the required knowledge; (c) *communicative style bias*, which refers to errors made when test takers are required to respond in ways that are socially and culturally different from their accustomed communication style; (d) *cognitive style bias* that occurs when individuals from different cultural groups demonstrate their abilities in ways that are incompatible with the required style; and (e) *test interpretation bias* that occurs when a test taker's response is compared with that of a norming sample with different phonological, morphological, and syntactical rules. These biases can only be dealt with if standardized tests are revised to reflect new response-elicitation procedures, methods of evaluation, and variation in the types of behavior chosen as representative of language competencies.

In addition to the technical criticisms of standardized testing—their validity, design, development, norming, and interpretation—there is a serious charge of bias attributed to institutionalized racism which Cummins (1989) describes as "ideologies and structure that are used to systematically legitimize unequal division of power and resources (both material and non-material) between groups that are defined on the basis of race or ethnicity" (p. 95). Cummins asserts that the structure for classrooms has been "legitimized by the assumption that IQ tests were valid indicators of minority students' academic abilities, and that their school failure was an inevitable consequence of mental inferiority due to . . . genetic inferiority, bilingualism, linguistic deficiency or cultural deprivation" (p. 96).

Criticisms of standardized tests are not without controversy—the charges of test bias, inappropriateness, irrelevance, and racism are all contested. However, the controversies have resulted in psychometricians, psychologists, and policy makers becoming more attentive to the need for designing instruments that more fairly and accurately assess the capabilities from diverse cultural backgrounds. As Reynolds and Kaiser (1990) have observed, "societal scrutiny and ongoing sentiment about testing have

without question served to force the psychometric community to refine its definition of bias further, to inspect practices in the construction of nonbiased measures, and to develop statistical procedures to detect bias when it is occurring" (p. 646).

A variety of actions have been taken to deal with the issues and problems attributed to the centrality of standardized testing in the identification process. While many of these issues have been raised by the underrepresentation of minority, economically and linguistically disadvantaged students in programs for the gifted, many are equally related to the identification process more generally.

Approaches aimed at dealing with these problems include the modification or adaptation of traditional standards and the use of alternative procedures and strategies. Examples of these approaches follow:

- Some school districts have banned the use of standardized group intelligence tests, sometimes substituting surrogate tests, such as reading tests.
- Most test makers now review test items for bias, norm their tests using more diverse populations, and, in a few instances, provide separate norms for various sub-populations.
- Test makers have designed or promoted the use of already existing nonverbal or "culture-free" tests on the presumption that such measures are less biased and more fair for minority and disadvantaged populations. Examples of such instruments include the *Raven Progressive Matrices*, the *Cartoon Conservation Scales*, the *Cattell Culture-Fair Intelligence Series* (Richert et al., 1981). Studies regarding the effectiveness of these instruments in increasing the number of minority and disadvantaged gifted students have been mixed.
- Test makers have designed a number of multimodal assessment indices such as the *Guilford Structure of Intellect Test,* the *System of Multicultural Pluralistic Assessment (SOMPA)*, the *SOI-Learning Abilities Test*, and the *Sub-Cultural Indices of Academic Potential* (Harris & Ford, 1991). As with the culture-fair tests, effectiveness study results have been mixed.
- The administration, scoring, and interpretation of results of some standard tests have been modified to isolate patterns of strength among subgroups. For example, Bruch (1971) selected items from the *Stanford-Binet Intelligence Test* to develop an *Abbreviated Binet for the Disadvantaged (ABDA)*.
- A few tests—e.g., the *Black Intelligence Test for Children*—have been designed and the authors select items that are biased toward knowledge and information a minority population is more likely to have acquired.
- School districts have used special cut-off scores for target populations— e.g., if an IQ score of 130 is required for inclusion in a program, a lower score of 120 might be set for minority populations. Procedures for modifying criteria usually raise problems for all identified minority

> students by stigmatizing them as being included on the basis of lower standards, even when they meet the higher criteria.

- Multiple criteria and non-traditional measures—i.e., instruments other than or in addition to IQ tests—are being used to enhance the opportunities for minority students to be considered in the identification procedures. Coleman and Gallagher (1992) reported that "46 states incorporate outside school activities, work samples, or products, 43 include measures of creativity, and many states permit input from teachers, parents, students, and other sources to assist with the decision making" (p. ii).

- Matrices, inventories, and rating scales have been developed, some of which aggregate data from several sources—including scores from several kinds of tests, such as intelligence, achievement, special aptitude, and creativity; teacher grades, classroom observations; and ratings from other sources—to deal with the perceived inadequacies of standardized tests alone. The *Baldwin Identification Matrix* and the *SOMPA* exemplify this approach. The *Scales for Rating the Behavioral Characteristics of Superior Students* exemplifies an instrument that directs the observer to rating different kinds of behaviors and traits. Among the criticisms expressed regarding the matrices are questions regarding the validity and the meaning of aggregating different kinds of data into single scores.

Some years ago when the issues concerning the testing of minority group children were raised, a committee of the Society for the Psychological Study of Social Issues concluded that "tests are among the most evaluative and prognostic tools that educators have at their disposal" but, unfortunately, are too often misinterpreted or misused as indicators of "fixed levels of either performance or potential" rather than as diagnostic tools (Fishman, Deutsch, Kogan, North, & Whiteman, 1964, p. 1445). The committee urged that tests be used properly together with various other procedures for diagnosis of student potential rather than being completely discarded.

Summary

Harris and Ford (1991) view the problems of the psychometric approach to identifying minority disadvantaged gifted as follows:

> The difficulty of defining, identifying, and nurturing gifted Black Americans lies in the current overreliance upon standardized tests, the reification of intelligence and IQ, and the use of unidimensional instruments to assess the multidimensional construct called intelligence. This over-reliance on, misuse of, and perhaps even abuse of standardized tests is confounded by the *inadequate attention paid to the influence of context—namely, environment and culture—upon the development and manifestation of giftedness in different racial groups.* (p. 4) [Emphasis added]

This reminder of the importance of cultural differences and environmental influences on talent identification and development has relevance, of course, for *all racial, ethnic, and socioeconomic groups*. Cultural influences impact on the exhibition and nurturance of talent potential of all kinds and in all populations, sometimes in similar ways and sometimes quite differently. Focusing on the ways cultural differences influence the performance of minority and disadvantaged gifted can enhance understandings of the importance of culture and climate for all talent identification and development efforts.

As psychometric identification paradigms come under scrutiny for their under-selection of minority gifted students, alternative approaches are being introduced or advocated that do attend to the nature and influences of cultural and environmental contexts. Many of the procedures listed above are aimed at enlarging the representation of minority gifted populations in talent pools through strategies or instruments that take cultural differences into account. Various efforts to deal with the under-referral of minority disadvantaged students and with test inadequacies and test bias evidence the adoption, at least in principle, of "a multicultural, multimodal, multidimensional view of giftedness" (Harris & Ford, 1991, p. 7) that is now beginning to be reflected in identification strategies.

Educators have sought ways to remedy identification assessment inequities found in the referral processes, the tests and testing procedures, and data sources considered in selection. Where cultural and environmental contexts have been attended to, have occurred to increase in the proportion of minority and disadvantaged gifted students.

Psychometric constructs of giftedness and testing-dominated identification procedures have guided program and practice over the years. These have apparently successfully identified many youngsters for whom educational experiences are differentiated and whose talent potential is nurtured. But, these constructs and procedures have failed to identify many kinds of talent potential in America's diverse populations, not only among youngsters who are members of racial minorities and economically disadvantaged groups but many other groups as well.

The task educators of the gifted face is twofold: (1) To improve the traditional identification approaches by designing, adapting, modifying, and extending strategies and procedures to take into account the influences of race, culture, caste, and socioeconomic status; and, (2) To shift to other constructs of giftedness that focus on "gifted behaviors" and respond more vigorously to cultural and environmental differences as influences on the display of talent potential. Both tasks call for greater understanding of *which* cultural differences make a difference with respect to talent potential and its development and how these can be behaviorally observed.

CHAPTER 4: Understanding and Attending to Cultural Influences Affecting Talent Identification and Development

Kirschenbaum (1988) contends that "definitions of giftedness and talent should not be contingent on the cultural characteristics of any ethnic group. The manifestations of giftedness and talent in students, however, do depend on the ethnic and environmental background of students" (p. 91). Although there is consensus that cultural variables significantly affect talent identification and its development, a number of issues need be considered in designing new approaches.

Conflicts in Values

The concern with the underrepresentation of minorities and disadvantaged in programs for the gifted is with their inadequate selection for and participation in those areas of talent that society recognizes and rewards. There are no talent areas that are especially reserved for or allotted to African Americans or Hispanics or any other minority group. Minority gifted bring unique strengths to particular contexts as a consequence of their cultural experiences in the family, the community, and the school.

There are educators who argue that the purpose of identifying talent potential in minorities and disadvantaged population is to enable the nurturing of traditional talent areas that the dominant society values and supports. In most programs, the goal for gifted, culturally diverse students is not unlike that for gifted in general. This goal is to enable them to enter and participate fully in mainstream society; to succeed at a high level academically; to enter and succeed in college where they can acquire high-level, specialized training; and to become leaders, mathematicians, scientists, historians, medical researchers, lawyers, writers, performing artists, and every other area of specialized talent to which more advantaged, middle-class, White children and youth aspire and for which programs for the gifted have been designed.

The issue raised is one of the conflict between the cultural and sub-cultural values on the one hand and the mainstream (i.e., White middle class) values on the other—a conflict that is particularly significant is that academic success and achieving in most recognized areas of specialized talent are usually the means for entering the mainstream. The challenge for minority gifted is one of maintaining the values of one's culture while acquiring or developing the values of the dominant culture that affect performance in an area of specialized talent.

Tannenbaum (1990), commenting on what he calls the non-intellective talents—personality variables "including motivation, ambition, value priorities, problem solving orientations, and the like"—questions whether giftedness in minority and disadvantaged children can be nurtured without affecting their cultural identities. He suggests that "there is ample reason to believe that when minorities succeed in achieving excellence as defined by the majority, they take on, or start out with some of the personality coloration of the majority as well" (p. 85). Tannenbaum asks whether, "in a society where domains

and idioms of excellence are dictated by the majority culture with its clearly Western tastes," it is possible for minorities to maintain their cultural identities (p. 85). Other writers maintain that gifted minority students can deal with the pressures and, in fact, some researchers see this capability as a unique strength (Udall, 1989).

Many economically disadvantaged Black and Hispanic students report having to make external and internal adjustments as they move between predominantly white affluent school environments and their impoverished neighborhoods and communities. In making this transition, many experience frustration, confusion, anguish and even depression. A Department of Health, Education, and Welfare Task Force (1970) described the general problem of conflict of values as follows, noting a cultural strength in the coping strategies the disadvantaged child develops:

> Daily, [the child] must thread his way through the set of values which the school espouses and the set which he lives with and has learned from his family and neighborhood. He must develop and carry out strategies which permit him to survive in both worlds without being overwhelmed by the conflict diverse values can produce. The extent to which he survives as a whole human being with a strong and stable self-concept and a sense of worth will be dependent on the quality and reality orientation he employs. (p. 39)

Much of the research has focused on differences between achieving and underachieving gifted students from cultural minorities and the conflicts they encounter. Gifted children from all groups, especially adolescents, confront values-driven attitude problems with their peers as represented by a number of pejorative terms—e.g., nerd, egghead, brain, to cite a few. As Kitano (1991) observes, "some adolescent peer groups within a culture may reject school achievement in a reaction to negative stereotyping by classmates and perceived inaccessibility to the American dream" (p. 8).

A number of researchers have written about the problems of gifted African American youth who risk being ostracized and isolated by their peers if they achieve, choosing instead to underachieve rather than hazard being accused of "acting white," or of being "raceless," or of rejecting their Black culture (Ford & Harris, 1991; Fordham, 1988; Fordham & Ogbu, 1986). Ford, Harris, and Schueger (1993) suggest that "gifted Black students may experience more psychological and emotional problems than do Black students who are not identified as gifted . . . when the cultural expectations of their indigenous groups are in conflict with those of the dominant group" (p. 409). A study by Lindstrom and San Vant quotes "a gifted Black student who said, 'I had to fight to be gifted and then I had to fight because I am gifted" and another "who stated, 'I'm not White and I'm not Black. I'm a freak" (Ford et al., 1993, p. 409).

Udall (1989) asserts that: "Movement between the two cultures creates tremendous pressure on the Hispanic student, and affects achievement, self-concept, and behavior patterns. The ability to adapt successfully to such demands is a key distinction between the gifted and nongifted Hispanic student" (p. 43).

Kirschenbaum (1988) observes that able American Indians "must decide to what degree their way of thinking is to be determined by cultural traditions and myths, and how much their lives are to be influenced by new associates, professional training, and bureaucratic job responsibilities. How are the old ways to be synthesized with the new, technological, and economic realities?" (p. 93).

Bradley (1989) has described the attainment of success for gifted American Indian youth as a double-edged sword: "Success can cut deep and do irreversible damage to feelings of self-worth and ethnic identity if success (or to be successful) is not favorably valued or perceived by individuals and/or significant others in their world (e.g., success that is confined to educational or academic achievement" (p. 134). She puts the conflicts and confessions as follows:

> When American Indian children enter the world of academia, they enter a new world, a different world. They are no longer asked to be quiet, but to be assertive, vocally inquisitive, and independent. They are taught to question, to excel individually, and to see the value of books and productivity for the betterment of self, not necessarily, others. Gifted and talented American Indian youths may begin to experience frustration, anxiety, confusion, and low self-worth as they recognize a conflict between the two value systems. (p. 135)

Minority gifted youth sometimes underachieve simply to avoid feelings of isolation from their peers. Researchers have reported that African American students, for example, often underachieve to avoid being accused of "acting white," rejecting their Black culture, or being "raceless" and thus being ostracized by peers and other members of the community (Ford, 1993). To be successful in school and life, Ford asserts, gifted Black students have been required to be bicultural, bicognitive, and bidialectical.

The conflicts or differences in cultural values are at the core of controversies regarding the identification and nurturing of talent potential among minority and disadvantaged groups. There are those who argue that while there are certainly cultural differences among various racial and ethnic minority groups, to advocate alternative strategies and procedures is to demean and patronize those gifted; if provided with equal access to enriched learning experiences, they will exhibit the same talent potential. On the other hand, there are those who argue equally strongly that differences in cultural values dictate different approaches to identification and development of talent potential and even searching for different talents. Put another way, there are those who contend that no special strategies are needed for identifying gifted minorities, only the elimination of discrimination and bias. On the other hand, there are those who argue that having to fit the mold of the dominant mainstream is itself a form of discrimination and that very different strategies are needed.

Within-Group Cultural Diversity

Within-group cultural differences are often as great or greater than the differences among the four major "minorities"—African Americans, Hispanics/Latinos, Asian Americans, Native Americans/American Indians—or the differences between those minorities and the equally diverse dominant majority. These differences include socioeconomic status, especially poverty levels; first language or mother tongue and English proficiency; residency in an urban/suburban/rural or inner-city environment; recency of immigration or migration; and a variety of other factors. Still, within groups that one would expect to be at-risk, Frasier (1989) notes, "there are many well-adjusted, well-cared for children even in inner city environments who are reinforced in their intellectual pursuits" (p. 222).

Kitano (1991) asserts that while there is agreement that between-group variables contribute to differences in achievement and talent development, research findings are unclear because of a failure "to consider within-group differences as well as complex societal and ecological phenomena" while using "models that reflect prevailing social stereotypes—i.e., predicting school failure for African Americans and school success for Asian Americans" (p. 5).

Frasier (1989) points to the diversity among African Americans on the basis of socioeconomic status, citing at least four socioeconomic environments with resulting differences in supportive intellectual climates, extensiveness and richness of experiences and resources provided, self-concepts, aspirations, and cohesiveness. In addition, there are cultural, language, and/or dialect differences among African Americans who have migrated relatively recently to the United States from Caribbean or African regions and those who are descendants of Africans who were brought to the United States involuntarily as slaves or who have migrated from rural areas of the South to northern inner cities.

The cultures of the various Hispanic/Latin American groups vary with the country or region of origin—Puerto Rico, Mexico, Dominican Republic, Central America, or South America, for instance—with within-group diversity as well. Even Spanish is spoken differently by various Hispanic groups. A study of high school students all of Mexican descent, Matute-Bianchi (1986) identified five groups differing in expressed values, language, and group identification. Castenada (1976) identifies six factors that differentiate Mexican-American groups: (a) their length of residency in the USA, (2) the distance they lived from the border, (c) the degree of urbanization or inner-city residency, (d) the Mexican-American community's economic and political strength, (e) their identity with Mexican and/or Mexican-American history, and (f) the nature and degree of prejudice they experienced.

Maker and Schiever (1989) call attention to other dimensional differences among Hispanics: (a) students with Hispanic surnames with backgrounds otherwise like middle-class majority students; (b) bilingual students who learn English in school while speaking Spanish at home; and (c) newly arrived students who experience language difficulties not

unlike other bilingual students together with differing cultural expectations at home (p. 1). Living at or below the poverty level, many Hispanics are affected by the deprivations that are a consequence of economic disadvantage. There are Mexican-American families that can trace their roots in the United States for generations, who may or may not have retained their Spanish language, and whose values and experiences are not unlike those of the majority population that is itself a diverse group culturally.

As Kitano (1990) has observed, "Asian Americans represent a vastly heterogeneous group. More accurately, the term "Asian Americans" has been used to include a wide diversity of subgroups which in turn manifest broad intra-group differences" (p. 23). Major differences are found among the populations from the various countries of origin—Japan, China, Korea, Philippines, Vietnam, Thailand, Laos, India, Pakistan, Cambodia, and Indonesia, to name just some. To these groups, Pacific Americans—Hawaiians, Samoans, Guamanians, and Marshallese—must be added. Asian Americans differ on such factors as culture, education levels, language, family and community structure, group cohesiveness, recency of immigration or length of residency, refugee status, and socioeconomic status.

Chen (1989) contends that the belief needs to be dispelled "that Asian Americans always do well in school. . . . The fact is, not all Asian Americans are alike. They have many intergroup differences, as well as intragroup racial, ethnic, and linguistic differences. As a group, Asian Americans share many sociocultural problems with other ethnic minorities in their attempt to assimilate into the mainstream of American life" (p. 161).

Tonemah (1987) notes that the U.S. Government officially recognizes 177 different American Indian (Native) tribes, "each having its own culture (language/traditions/religion) plus varying degrees of traditionalism (tribal heritage retention) and acculturation (off reservation/urban residency, intermarriage) and educational levels" (p. 182). He points out that American Indians have unique and special treaty relationships with the U.S. Government that legally set them apart from other minority groups. Despite significant differences among and within the tribes, Tonemah notes that there are common overall basic concerns that impact on survival as tribal entities for all American Indians—e.g., protection of land and treaty rights, economic development, provision of social welfare services (e.g., housing and care of elderly), and provision of educational services.

Pfeiffer (1989) observes that:

American Indians are complex and diverse in their economic, linguistic, cultural, social, political, and religious concerns . . . [and] are similar in areas such as kinship orientation, reservation status, unique trust relationships with state and federal governments, traditions of child-rearing practices, customary law, and tribal government. (p. 103)

In addition to the cultural differences within the minority populations, many changes in the demographics of American society affect all groups, including the so-called majority populations. Among these demographic changes are the deterioration of urban centers in which minorities are often concentrated; the changing nature and stability of family structures affected by, among other factors, single-parent families and one or both parents working outside the home; increased number of families living below the poverty level; concentrations of communities in which a language other than English is the first language; growth in schools and classes segregated by race, ethnic background, or socioeconomic status, to name a few. All affect the cultural experiences with which children come to school.

Within-group values conflicts are often exacerbated by a concentration of a racial or ethnic minority. A study by Orfield indicates that the segregation or isolation of the nation's Black students in 1993 exceeds the levels of 1970 and that the concentrations of students in predominantly Hispanic schools is even greater and growing (Schmidt, 1994). Perceptions of giftedness and display of outstanding performance are affected by the nature of the peer groups and climate of the school and the community in which it functions.

Differential, Cultural, and Environmental Influences on Giftedness

Montgomery (1989) has pointed out that "the richness of any single culture lies in its inherent differences from other cultures. Along with these natural differences comes the implication that different groups will view the world with unique perspectives" (p. 79). Seldom do individuals live in a "single culture." The Census Bureau, for example, reports an increase in intermarriage among various cultures implying that many individuals live bicultural or multicultural lives while others make choices to live predominantly in one culture. Moreover, television and other media have "homogenizing" effects on certain aspects of culture.

Facts such as these complicate assessing cultural values. Clearly, caution must be exercised to avoid overgeneralizing, stereotyping, or misreading behaviors while still recognizing that there are cultural differences. Sue and Sue (1990) have observed that, while there is agreement that Asian Americans, African Americans, Hispanics, and American Indians represent distinct cultural heritages, the view that all members of a specific cultural group are alike must be avoided. Moreover, a monolithic view of minority group attitudes and behaviors must also be avoided.

Given the complexities of among-group and within-group cultural differences, Kitano (1990) submits that it is not reasonable to expect that teachers "acquire specific knowledge about every ethnolinguistic group. However, they can learn to become analytic observers of children's informal learning processes, to reflect on their own cultural behavior, and to integrate their observations with their teaching practice" (p. 26).

Knowledge and insights regarding cultural differences are emerging from the search for talent potential among groups who have been underrepresented. These studies often employ ethnographic approaches, usually focus on a single minority group, and commonly treat the group in macro rather than micro fashion. The cultural differences studied deal with such topics as the group's perception of giftedness, family structures and child-rearing patterns, cognitive functioning and information processing strategies, family and community values, and peer responses to achievement. Two kinds of research have been helpful for understanding cognitive strengths—studies of characteristics of achievers and underachievers and comparisons of achievers from different cultural groups. With all of the complexities noted above, the caveat needs to be made that these are generalized characteristics and may or may not apply to specific individuals in a particular minority.

Attention must be paid to gifted females on two levels—as gifted women in the general population and as a subgroup within a racial and ethnic minority group. Different cultures treat gifted female achievers distinctively, and these variations are usually part of the overall pattern of that culture's perception of females. For example, Yong (1992) points out that "the literature is replete with reports on the various socio-cultural, environmental, and intrapersonal factors that seriously hamper women and ethnically diverse individuals from pursuing mathematics and science-oriented careers" (p. 36). In a study of attitudes of middle-grade gifted African Americans, however, Yong's findings contradicted other studies that suggested that females downplay their intellectual abilities:

> African American female students did not have stereotypic gender role expectations regarding mathematics as a male domain. . . . African American female students perceived that they had good intellectual capacity, did not exhibit fear of success toward mathematics, and were more apt to learn the subject. (p. 139)

Whether or how particular cultural characteristics are displayed depends in part on the ethnic, racial, and socioeconomic composition of the classroom and the school as well. Some behaviors will be exhibited if the individual is part of a majority, others if he/she is in the minority, and still others if the classroom has a heterogeneous composition. Studies have shown that, while this is true generally for gifted students, there are compounding factors that affect gifted minority students due to particular cultural values brought into the classroom.

Some examples of reported cultural characteristics of the major racial and ethnic groups follow. In light of the tremendous diversity that exists within any group, these are only macro or general characteristic descriptors—whether or not particular cultural values, characteristics, or behaviors apply in a specific instance can only be determined by observing an individual child. These characteristics contribute to behavioral differences in school and community.

Hispanics/Latinos

As noted above, the fastest growing minority group, Hispanics or Latinos, constitute a very diverse population. Many studies of Hispanic cultural characteristics focus on one of the two largest subgroups—Puerto Rican or Mexican-American. Many Hispanics are native Spanish speakers or bilingual or simply have limited English proficiency, while many others have excellent command of all aspects of the English language.

According to Ruiz (1989), the term "education" is conceived of and defined differently by Hispanics:

> To be *educado* goes far beyond school, or may not involve school at all; it means to be well mannered, respectful, considerate, and knowledgeable about practical things. In schools, these may be recognized as admirable qualities, but not as talents. For their part, Hispanics may resist school programs that are merely cognitive in orientation—programs, in their terms, that may add to one's "schooling" but not to one's "education." (p. 62)

Udall (1989) asserts that individuals from both Hispanic and Anglo-American "cultures value the home, school, the role of the individual, work, and religion" differently and that "these differing values influence how each culture manifests behaviors indicating giftedness" (p. 42). Drawing on Nazzaro's work, she contrasts some of the values of the Hispanics and Anglo-Americans as follows:

> Being rather than doing vs. Doing rather than being; Limited stress on material possessions vs. Material well-being; Present time orientation vs. Future orientation; Simple patterns of work organization and group cooperation vs. Individual action and reaction; Central importance of the family, personal relations vs. Impersonal relations; Fatalism, accommodation to problems and Man's mastery over the universe; Tradition vs. Change. (p. 43)

Based on extensive surveys in Texas, Bernal (1979) reported "that Mexican Americans value those cognitive and linguistic abilities in children that are manifested in pragmatic alertness, sensitivity to others, leadership, related interpersonal skills (for example, maturity, expressive style, charm, humor), and bilingual fluency" (p. 398). Among the cognitive and personal traits exhibited by gifted Hispanic students in their home and schools, Bernal (1978) found the following: (a) the ability to acquire English language skills once exposed to the language and given an opportunity to use it expressively, (b) an enjoyment of intelligent (or effective) risk taking behavior, often accompanied by a sense of drama; (c) the ability to keep busy and entertained, especially by imaginative games and ingenious applications, such as getting the most out of a few simple toys and objects, and (d) the ability to understand and remember detailed instructions when given the first time; (e) ability to exercise exceptional leadership; and (f) the ability to "make it" in the Anglo society.

Among the cultural values Maker and Schiever (1989) ascribe to Hispanics are the following: traditional language of family; *abrazo*, a physical or spiritual index of personal support; family structure and dynamic-male dominance; nuclear and extended family closeness valued; and collaborative rather than competitive dynamic.

Studies suggest that "the Puerto Rican family values a nurturing environment for its children and has established an 'enmeshed' pattern of interactions, encouraging independence and discouraging values that appear to be self-centered in nature regardless of other home variables that seem to influence academic performance" (Soto cited in Hine, 1993, p. 158). The values of Puerto Rican and Anglo families differ along many dimensions, Nine-Curt asserts, such as: "the Anglo value of 'competition' with the Puerto Rican 'supportive' demeanor, Anglo 'individualism' with Puerto Rican 'affiliation to family,' and Anglo 'self-motivation' to Puerto Rican 'family motivation'" (Nine-Curt cited in Hine, 1993, p. 158).

From her study of the home environment of Puerto Rican students identified as gifted, Hine (1993) found two factors—"family bond" and "discomfort with cultural stereotypes/reactions to teacher and community expectations"—appeared to be unique to the Puerto Rican subgroup. She concluded that:

> The Puerto Rican culture is committed to maintaining a strong linguistic, family-centered identity. Family pride and loyalty are fundamental values which lead to more 'supportive' and less 'competitive' behaviors . . . strong family bonds and a family-centered drive to build a better future were factors that nourished the students' high achievement. (p. 173)

From his review of research dealing with the achievement of Puerto Rican children, Hébert (1993) reported that Puerto Rican families living in the United States are distinguished by a strong sense of cultural identity as Puerto Ricans, a strong sense of family membership, with a strong caring element among members of the nuclear family, a desire for more education, and a traditional view of gender roles. These findings supported the Hispanic cultural value known as *familism* which emphasizes interdependence over independence, affiliation over confrontation, and cooperation over competition. Hispanic families have often been characterized by their focus on the collective, with the needs of the family taking precedence over the needs of its individual members.

With respect to the education of their children, Hébert (1993) noted that parental education, high socioeconomic status, an educational environment in the home, and parental involvement all were related to high achievement. Discordance between mainstream and Puerto Rican cultures, low socioeconomic status and poverty, low educational level of parents, and conflict between parents and their children were all related to low achievement. Although the family was one of the significant sources of strength, living in the United States often represented a stressful challenge that sometimes contributed to the weakening of the highly valued extended family network.

Blacks/African Americans

A number of writers including Ford (1992) have observed that the cultural values of African Americans often conflict with those of the dominant culture consequently hindering the educational process and subsequent achievement. She notes that "the interrelated dimensions of the Black culture include spirituality, harmony, movement, verve, affect, communalism, expressive individualism, oral tradition, and social time perspective" (pp. 130-131).

Much of the literature on gifted African American children, especially that which appeared in the 1960s and 1970s, focuses on the impact of economic disadvantage. Maker and Schiever (1989) argue that poverty and discrimination—"a common heritage of denied opportunities"—are the important factors affecting Black achievement. They conclude that poverty, bigotry, and the cultural values of low socioeconomic status groups "continue to hinder the development of a strong cultural identity" (pp. 210-211). While most other writers, especially African American researchers, would argue that there is no absence of a strong cultural identity, there is consensus that poverty, discrimination, and severely limited access to opportunities have had an especially strong impact on African Americans.

Much has been written about the Black family—its strengths and weaknesses— and the effects of economically disadvantaged homes and communities on achievement. As Baska (1989) and other researchers have pointed out, "parents play a dominant nurturing role in the school achievement of their children" and the "variables critical to high achievement are less related to being Black than to the positive psychological, emotional, and expectational environment of the family" (p. 232).

A study by Ford (1989) of families of high-achieving African American children suggests characteristics, most of which have been identified in the families of achievers from other cultural groups:

1. The home atmosphere is neat and orderly with a variety of educational and recreational equipment.
2. The parents are achievement-oriented, as evidenced by their school-related experiences; they place high value on education.
3. The parents not only read to their children but also read extensively themselves.
4. The parents are knowledgeable about what efforts they should put forth in assisting their children to do well in school.
5. While few Black-awareness materials are in the home, evidence indicated that families prefer and listen to Black music. (p. 255)

Based on Shade's review of studies of African American academic achievers, Frasier (1989) reports characteristics that apply to achievers generally:

They were goal oriented, possessed of great self-confidence, felt positive about themselves, felt in control of their destiny, had high levels of aspirations, and possessed confidence in their ability to accomplish their goals. While they were portrayed as demonstrating a need to be cautious, controlled, less trusting, and constricting in their approach to their environment, they also were highly original and creative in their ideas and tended to be shrewd in the manipulation of situations in which they found themselves. (p. 223)

Reviewing studies of "resilient Black youth," Ford (1993) found that African American achievers exhibit such characteristics as autonomy, competence, independence, and self-sufficiency, internal locus of control, positive sense of self, feelings of empowerment, good coping skills, motivation, and determination. Resilient Black youth also "tend to participate heavily in religious affairs, have positive school experiences, and strong family values" as well as "positive and strong peer relations" (p. 5).

According to Baldwin (1978), a number of common descriptors can be applied to Black intellectually gifted children affected by cultural diversity, socioeconomic deprivation, and/or geographic isolation. These include common behaviors such as: communication and learning styles (e.g., language rich in imagery, persuasive language, sensitivity and alertness to movement, intuitive grasp of situations); heightened sense of awareness regarding social situations (e.g., social intelligence and feeling of responsibility for the community, rebellious regarding inequities); group affiliations (e.g., loyalty to peers, understanding compromise); skill in dealing with their environments (e.g., physical resiliency to hardships encountered); intellectual characteristics (e.g., logical reasoning, planning ability, pragmatic problem solving ability, academic-retentive memory, and insight); creative strengths (e.g., tolerance for ambiguities, inventiveness, revolutionary ideas, flexibility of thinking, fluency), and interests and activities (e.g., special aptitudes in music, drama, and creative writing).

Hilliard (1976) has suggested that gifted Black students exhibit such qualities as alertness, energy, confidence, humor, expressiveness, experimentation, social control, verbal creativity, and risk-taking.

Much has been written about the psychological difficulties of gifted African American students, such as the conflict they experience "relative to supporting the beliefs, values and norms of the dominant culture as opposed to their parent culture" (Ford, et al., 1993, p. 410). Some high-achieving Black students assume a "raceless" facade, emptying "themselves of their culture, believing that the door of opportunity will open if they stand raceless before it" (p. 410).

American Indians/Native Americans

The importance of considering "the collective American Indian self—the tribe or tribes involved" has been stressed by George (1989) who argues that "the process of defining and maintaining 'self' is the challenge that American Indians have faced in all the political, economic, social, and cultural realities of the past two centuries" (pp. 107-

108). Pfeiffer (1989) notes the centrality of the tribe and of tribal culture means that "gifted American Indian students must develop self-understanding; that is, knowing one's roots (history, culture, language; recognizing one's intellectual abilities and talents; accepting one's responsibilities within the extended family structure; and pursuing self-actualization" (p. 106).

Based on interviews of tribal members, Abbott reported that the "Navajo way . . . the set of cultural beliefs and rules for behavior and ceremony" was central to their conception of giftedness:

> The gifted Navajo person demonstrates good thought by speaking, acting, and approaching life according to the precepts of Navajo teachings and philosophy which comprise the Navajo way . . . the gifted student is recognized to be a child who can very quickly learn the Navajo way and tries to do the right thing according to its precepts. . . . Being gifted and talented for a Navajo means doing things that are constructive and responsible, helping your family, and learning quickly how to do things and doing them well. (Cited in Kirschenbaum, 1988, p. 56)

A key behavior for Navajos is what Abbott calls *active listening*, a skill that "can be observed and giftedness inferred from its presence" (Cited in Kirschenbaum, 1988, pp. 56-57). Although skill in active listening is obviously not restricted to Navajos, because of differences in their environmental and experiential backgrounds, Navajo and White children develop different knowledge bases and skill repertoires. As Kirschenbaum (1988) points out: "This illustrates how gifted and talented children from very different cultures demonstrate similar information processing skills which manifest themselves differently depending on the cultural milieu which provides very different types of information and problems" (p. 57). Moreover, the child's experience will differ depending on how traditionally Navajo the family's lifestyle is.

An understanding of the common cultural characteristics of American Indians provides a context in which to interpret the behavior of American Indian students in the classroom. Garrison (1989) contrasts American Indian culture with the mainstream society on several characteristics:

1.   **Use of language.** Although gifted children are usually perceived as very verbal, studies of American Indian students indicate that they are less verbal than other students, often feel overwhelmed and intimidated, are reluctant to join in activities and may distance themselves from other students. This is sometimes incorrectly interpreted as "low level intelligence, passive, unsociable, and unwilling to adopt any reasonable values, attitudes, and ways of doing things" (p. 118).
2.   **Home and school teaching styles.** In American Indian cultures, the main mode of instruction is through modeling—teachers or elders perform or model a skill to be learned and students learn by observation with only minimal verbal explanation and little or no questioning. In a classroom,

American Indians are traditionally uncomfortable with asking or being asked direct questions. When American Indian students avoid responding to classroom questions, "they are acting in a culturally appropriate manner, but their silence is often interpreted out of context as hostile or passive aggressive behavior" (p. 119).

3. **Competition versus cooperation.** Competition and cooperation play different roles in most American Indian cultures from the mainstream Anglo society. Within the tribe or clan, "cooperation is of utmost importance while competition is reserved for one's enemies" (p. 119). Reluctant to compete in classroom activities because of the possible loss of face accompanying defeat, the American Indian student may deliberately withdraw from classroom competitions by noncompliance. Quiet noncompliance is culturally an appropriate response for American Indians.

4. **Group versus individual.** The group, not the individual, is what is of value to the American Indian: "To separate from the group and try to rise above others is only to bring shame on oneself. In American Indian culture, tasks are given to and accomplished by a group, and when the task is fully completed and credit is given, it is given to the whole group" (p. 120).

5. **Loss of cultural identity.** Since, to be successful in a program for the gifted, an American Indian student has to adopt a mainstream interaction and communication style, his/her ethnic identify may be jeopardized.

6. **Cyclical versus linear view of time.** In contrast to the mainstream perspective of time as linear and sequential, the American Indian views time as cyclical. While the mainstream classroom teacher thinks in blocks of time and tasks to be completed in each block, the American Indian teacher "synchronizes the students to themselves and the rest of the class instead of the clock" (p. 122).

In the Indian world, Bradley (1989) observes, the traits and characteristics prized and appreciated are tribe oriented:

Quick learning skills; resourcefulness; acute awareness of the sensitivities and the importance of American Indian rituals; readiness; and, possibly eagerness to learn the songs, dances, traditions, tribal arts and crafts, and sacred prayers and rituals, are attributes that can make the gifted and talented American Indian youth valued and sought after. Superior memories, long attention spans, and keen knowledge of how to perform and conduct the various aspects of the cultural, social, or religious activities are valued and recognized. . . . (p. 136)

Some researchers report cognitive differences between American Indians and White, particularly in their information processing strategies. Reviewing studies of the cognitive strengths of American Indians, Davidson (1992) found consistent reference to high visual and spatial abilities and to learning in a holistic manner, starting with the whole and then moving to the details, in contrast to White children who tend to process

information in a linear, sequential fashion. However, while her own study comparing American Indian and White students on the Kaufman Assessment Battery for Children (K-ABC) found some differences in Simultaneous Processing (favoring American Indians) and Sequential Processing (favoring Whites), "the greatest number of individual students in both groups . . . did not significantly favor either type of processing over the other" (p. 114). American Indians did score significantly higher than Whites on three sub-tests involving visual and spatial abilities.

Asian Americans

Some writers have cautioned against the "myth of the successful Asian," observing that while Asian Americans tend to be well represented in gifted programs, many gifted Asians are not identified, particularly those who are economically disadvantaged, living in crowded, inner-city communities, and those who are new immigrants. As with other minorities, Asians are an extremely diverse group, and caution needs to be exercised in expressing generalizations.

Maker and Schiever (1989) ascribe such cultural values to Asians as the following: *argama* or *akirame* (mature self-control or resignation); Confucianist ethic—people can be improved by proper effort and instruction; family honor and tradition, personal responsibility; conformity, correctness, respect for and obedience to authority; and educational achievement, the work ethic" (p. 152). Of course, Confucianism is only one of the many religions practiced by Asians and each provides ethical guidance and sets of values.

With regard to the behavioral characteristics of gifted Asian American students, Chen (1989) reported variability with some students exhibiting "individual, introvertive behaviors such as stability, maturity in being able to take responsibility, ability to work independently, high internal motivation to achieve, taking initiative, perseverance at a task until its completion, self-criticism, assertiveness, and acting appropriately" while others displayed "social, extrovertive behaviors such as working well with others, demonstrating leadership qualities, being outgoing, showing enthusiasm in class discussions, and communicating effectively" (p. 156).

Within the larger Chinese culture, specific factors affect Cantonese-speaking Chinese students, according to Wong and Wong (1989):

> The influence of Confucianism is seen in the interdependence of the child with parents and teachers . . . a high premium is placed by the family on student academic performance and school success. Beyond Confucianist traditions of valuing an education, most parents view education more practically as a means of self-advancement in American society. (pp. 182-183)

Wong and Wong (1989) note that Cantonese Chinese parents are strict advocates of the work ethic and believe that individual effort is a more significant factor in success than innate intelligence or talent, saturating their children with "this philosophy of effort

righting all things" (p. 184). Based on traditional Confucianist values, Chinese immigrant parents raise their children with a deep sense of responsibility to the family, teaching them that "the family group's well-being is more important than personal liberty, and that a hierarchy of authority exists within relationships and has predominance over personal voice" (p. 184). This home training, Wong and Wong contend presets a "disposition toward structure and defined limits, self-discipline and self-motivation," together with an unquestioning attitude toward teachers and assignments (p. 184). In sum, Wong and Wong assert:

> Cantonese-speaking gifted students have the value of education instilled in them at home. These students are expected to work diligently, expending time and energy to the fullest; they have responsibility not only to themselves, but also to their family. Great respect for the teacher leads these students to emulate the teacher without question. . . . Motivation for academic success is evident; however, less emphasis is placed on social development than on academic success in the home. . . . (p. 188)

Bilingual Students

Bilingualism and bilingual education constitute "one of the most contentious issues in education today" (Baker, 1990, p. i). Included under this rubric are youngsters who speak a language other than English and who have only limited English proficiency; others who speak English very proficiently and are labeled bilingual only because of their surnames; and students who are fluent in both English and their mother tongue. Many so-called bilingual children are, in fact, actually monolingual—either in a non-English language or English.

Students who are considered bilingual or having Limited English Proficiency (LEP) are actually a very diverse population that can be found among many different racial and ethnic cultures—including African American, Hispanic, Asian, and American Indian. LEP or bilingualism is not limited to Hispanics although that minority represents the largest group of speakers of a language other than English.

Because limited English proficiency and bilingualism cross many cultures, insights into the characteristics and behaviors of bright language-minority students represent another level of cultural and environmental influence. Teachers need to understand the level of proficiency, the ability to communicate, and the degree of comfort in English and one's mother tongue if it is other than English.

Barkan and Bernal (1991) argue that:

> . . . programming for bright, language-minority students must be linguistically and culturally inclusive, building on the assets a child brings to school rather than denigrating the LEP child's first language or implicitly attempting to replace one language and culture with another, as happens when a child can qualify for a gifted program only by passing an IQ test administered in English. (p. 146)

Among the assets the intellectually gifted bilingual child may bring to school is linguistic precocity sometimes in one language and sometimes in two. Jackson and Lu (1992) observe that the skill patterns of bilingual "precocious reading of English is a form of giftedness demonstrated by some young bilingual children" (p. 119). They note that bilingual children may read English much better than they speak it and that lack of fluency in oral English may be mistaken for lack of reading skill.

Although bilingual and limited English proficient are terms that have legislative and policy definitions at the national and state levels, there are other aspects of language that affect the identification and programming of youngsters with talent potential. For example, the issues concerning standard and non-standard English and of "Black English" have not been resolved and often impact on gifted programming.

Economically and Educationally Disadvantaged

All children of racial and ethnic minorities are not economically or educationally disadvantaged, but minorities are found in disproportionate large numbers in those populations. The consequences of a poverty or near-poverty existence permeates the lives of many, but certainly not all, minorities. That the economically disadvantaged— those who live in poverty—have differential access to educational opportunities is seldom disputed. However, there is considerable disagreement as to the validity of the deficit-based explanation of low academic achievement of minorities.

In the 1960s, the notion of "cultural deprivation" became the prevalent paradigm for explaining the underachievement of minority children and those who lived in poverty. This focus on deficits made recognition of the strengths of minority children difficult and, in addition, detracted from needed structural changes in schools and the manner in which they operated (Banks, 1993). Moreover, the stress on deficits diverted attention away from minority students who had achieved or were achieving.

Glaser and Ross (1970) identified 14 factors or traits as prevalent in the lives of individuals who had risen successfully from disadvantaged backgrounds including: a questioning orientation; awareness of alternative paths; supportive, inspiring relationships; and freedom from conditioning.

Arroyo and Sternberg (1993) observe that:

Among disadvantaged children, giftedness is reflected in qualities in addition to and sometimes other than measurable intellectual capacity. It includes behaviors that allow disadvantaged students to cope with social and economic deprivation. Because these adaptive behaviors are themselves governed by cognitive abilities that constitute intelligent behavior, it is reasonable to assume that the behavioral characteristics displayed by some disadvantaged children are reflective of giftedness. (p. 29)

Reflecting on data suggesting that gifted disadvantaged children are very conscious of the constraints inflicted by their environments and struggle to create lives that will provide them with success, Arroyo and Sternberg (1993) see "the disadvantaged gifted and talented individual as one who maximizes his or her intellectual potential and transcends the impositions of a disadvantaged environment by creating alternative prospects that enrich both his or her personal life and the future lives of others" (pp. 29-30).

Underachieving Students

Studies of economically disadvantaged and limited English proficient achievers—students who have succeeded—compared and contrasted with non-achievers from the same cultural group in the same school settings provide important insights into the cultural and environmental factors that appear to be operating and significantly affect performance. Most studies of high ability underachievers focus on elements in the student's culture that contribute to poor academic performance.

Conflicts between the "mainstream" school culture values and those of culturally different groups, between various subgroups within cultures, between school and home, and between school and community—all contribute to achievement and underachievement. Adolescent cultures have a profound effect—positive and negative—on individual behaviors. School climates contribute to nurturing or impeding achievement. Gallagher and Kinney (1974) observe that:

> Being gifted is itself wrought with the implications of being different. Being gifted *and* culturally different places these students in a double bind . . . gifted children often may be deterred from seizing opportunities or even allowing their special talents and abilities to show because of their desire to blend in with their classmates and friends. Peer pressure may be an especially strong deterrent to the gifted in social systems when intellectual development and superior performance are devalued. (p. 11)

A number of school-based studies support this observation. For example, studies by Fordham and Ogbu (1986) and Fordham (1988) of African American students in a high school in the District of Columbia found that high achievers were willing to identify with or adapt what are perceived as the cultural beliefs and value systems of the dominant White culture. Fordham (1988) observed that:

> . . . given the Black community's penchant for collectivity, what kind of support from peers can be expected by Black adolescents whose behaviors and values in the school context appear to be at odds with the indigenous social organization of Black people? At Capital High School, there is not much support for students who adopt the individualistic ethos, because succeeding in school is invariably associated with movement away from the community and it is seen as a sign of having coopted by the dominant society. Hence, even those high achievers who camouflage their efforts at academic excellence are viewed with suspicion. . . . (p. 81)

Hébert (1993) studied six high ability achievers (one African American, three Hispanics, and two Whites) and six high ability underachievers (two African Americans, one Hispanic, and three Whites) at a Connecticut high school. Compared with underachievers, the high ability achievers exhibited a strong belief in self; a sentimental, intuitive, and caring quality that enabled them not to "follow the traditional cultural patterns dictated by a macho society"; an appreciation for cultural diversity; aspirations for higher education and professional careers; an inner will and internal motivation to succeed in their urban environment; strong family support; and supportive, inspiring teachers in the elementary and middle school years. In addition to inappropriate curricular experiences and guidance services, high ability underachieving students reported problems with siblings, with inconsistent role models and value systems within the family, and family dysfunction. High ability achievers seemed to find support systems in their families, at school, and in the community. Underachievers, on the other hand, "saw the environment as part of their problem and many admitted they chose a peer group that negatively influenced them and led them into disciplinary trouble" (p. 274).

Diaz (1994) investigated the views of three male and three female Puerto Rican high ability underachievers as related to their families, culture, school, and classroom. The families of the students seemed to share the following characteristics: (a) low-income conditions, (b) low parental educational attainment and/or formal education, (c) parents working in low-skill occupations, (d) mother as the dominant figure, (e) parental view of schooling as important, and (f) parental aspiration to have their children succeed in school and life in general. However, all of the subjects experienced to different degrees or levels of impact the following difficulties within their families:

> (1) strained relationship with one or both parents and/or siblings, (2) tense home climate, (3) minimal parental academic guidance or support, (4) inconsistent parental monitoring of students' achievement-oriented activities at home, and (5) inappropriate parental expectations. (p. 114)

The students all reported that "easy curricular experiences in elementary school comprised the major school-related factor underlying their underachievement" (p. 125). Other school factors for these underachieving students included: inappropriate curricular experiences, dearth of opportunities to develop and/or improve school work discipline or study skills, negative interactions with teachers resulting in less caring and less supportive experiences, an unrewarding boredom-producing curriculum, and questionable counseling experiences.

Diaz's subjects believed a major contributor to their poor academic performance was the surrounding hostile environment and a community "plagued with gang-related conflicts, [ethnic] prejudice, and precarious opportunities for entertainment" so that they felt "unsafe, bored, and uncomfortable with their social life conditions" (p. 142). The students felt both loneliness and confusion towards their community and, while sensing a need to belong, "also wanted to escape from their immediate, potentially dangerous situation" (p. 146). As for personal factors that contributed to underachievement, the students identified difficulty in persevering, a low sense of efficacy, and confusion about

their own levels of ability and competence, and inappropriate coping strategies to deal with "painful family, school, social, and personal experiences" (p. 152).

Diaz noted that while Puerto Rican high ability/gifted adolescents experience a strong need for autonomy and independence, they experience difficulties "because their culture fosters family unity, interdependence, and even dependency of older children on parents" (p. 164). Consequently, these Hispanic families seemed less likely than non-Hispanic White families to cultivate the type of independence that improves academic performance. Diaz calls for proactive measures to avoid or diminish underachievement among Puerto Rican students including discarding negative stereotypes and recognition of the positive cultural strengths.

Other Nations, Other Cultures

Literature from other countries underscores the need for and importance of attending to the cultural contexts. For example, discussing New Zealand's Polynesian (Maori and Pacific Island) gifted, Reid (1993) makes a case for "a more enlightened and flexible approach to the education of children with special abilities which embraces broader conceptions of giftedness" and "that acknowledges and appreciates cultural diversity" (p. 237). He argues that underrepresentation of those groups stems from over-reliance on IQ tests and that "Such a notion is outmoded and overly narrow, emphasizing as it does those traits valued by the dominant culture of monolingual, mainly middle-class Europeans and that frequently rejects, or ignores, other characteristics relevant to and valued by members of minority cultures" (p. 243-244).

Reid (1993) notes that the majority culture in New Zealand recognizes and values some talents among Polynesians such as: athletic ability requiring skill, stamina and psychomotor skills; visual arts abilities that use new, different, non-traditional materials and approaches; talents in the field of poetry and literature and a rich body of Maori verse and music. He observes that when judged by European standards, there is an absence of an academic tradition and an unstimulating and a barren environment. Yet, "Maori children are exposed to aural and visual stimulation of kinds not acknowledged by those brought up in a culture that stresses the written word" (p. 249). Stressing a dominant group's attitude not unlike that found in the USA, Reid contends:

> Such children cannot be regarded as 'disadvantaged' in the strict sense of the term. Clearly they possess an array of behaviors, skills and competencies which enable them to function perfectly adequately in the cultural context in which they are growing up. But, their accomplishments are somewhat different from those of middle-class European children. Again, cultural difference is viewed as cultural disadvantage by dominant culture members who reject or ignore characteristics relevant to and valued by minority cultures. (p. 250)

Other writers have discussed the cultural strengths of disadvantaged gifted populations in very similar terms in such countries as Brazil, Indonesia, Israel, Korea, the Marshall Islands, Nigeria, and South Africa (Wallace & Adams, 1993). These strengths

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are not necessarily ones that will contribute to success in school and these writers suggest that:

> Disadvantaged learners need to systematically develop a repertoire of cognitive and affective tools which they can bring to bear on problems in their personal lives, in school and within the community. . . . Their leadership potential needs to be harnessed to long-term goals: they need to have access to and acceptance of their own cultural identity, to be aware of choices in their lives and to develop the ability to cope. (p. 5)

Summary

Family structure, child-rearing patterns, values, socialization patterns, and resources, together with community values, relationships, and resources exercise powerful influences on the behaviors of children and youth. To agree with Harris and Ford (1991) and others that more adequate attention be paid "to the influence of context—namely, environment and culture—upon the development and manifestation of giftedness in different racial [and ethnic] groups" (p. 4), is only a first step. As Passow (1986) has asserted:

> When students are black, red, or brown, are culturally different, are non- or limited-English speaking, have non-standard dialects, or are poor, those who are gifted or talented among them are especially disadvantaged because of the attitudes and expectations toward the population of which they are a part. We must first discard group stereotypes and view each child in terms of his or her individuality as part of a cultural group. We need to understand how cultural differences impact both positively and negatively on the cognitive and affective development of individuals. (p. 155)

CHAPTER 5: An Exploratory Study of Characteristics of Economically Disadvantaged and Limited English Proficient Gifted Students

Rogoff and Morelli (1989) have suggested that:

Not only is the diversity of cultural backgrounds in our nation a resource for the creativity and future of the nation, it is also a resource for scholars studying how children develop. To make good use of this information, cultural research with minorities needs to focus on examining the processes and functioning of the cultural groups around the world as well as down the street. [The promise] lies in its challenge to our present systems of assumptions and in the creative efforts of scholars to synthesize knowledge from observations of differing contexts of human development. Such challenge and synthesis is fruitful in the efforts to achieve a deeper and broader understanding of human nature and nurture. (pp. 346-347)

An exploratory study of "Giftedness in Economically Disadvantaged and Limited English Proficient Students" was undertaken by the University of Georgia site of The National Research Center on the Gifted and Talented under the direction of Mary Frasier. The purposes of the study were: (l) to investigate the characteristics of gifted economically disadvantaged and limited English proficient (LEP) students and (2) to use these findings, together with other studies, to propose ways of improving the identification of underrepresented groups in programs for the gifted.

The goal of the study was to understand giftedness better within and across cultural groups, especially the talent potential of students traditionally excluded from programs for the gifted by standardized tests and poor academic performance. An underlying assumption was that there are significant numbers of students who do not meet the traditional criteria for gifted programs, but who may possess cognitive, motivational, artistic, or creative potentials that enable them to participate in programs designed to develop and nurture gifted behaviors.

A Qualitative Case Study Design

A case study approach was used to collect data from multiple sources, including "data" provided by students, teachers, parents, and other family members. Target subjects included economically disadvantaged students from African American/Black, Hispanic, American Indian/Native American, Asian American, Hawaiian, and White groups. Some of these students were also limited English proficient and some were from isolated rural areas.

A search of the literature was conducted to guide the data collection procedures. From the literature, a number of questions were posed to help direct the data collection, including the following:

1. What are the self-perceptions of ability held by these students? How do their parents perceive their ability?
2. What role have these self-perceptions played with regard to their patterns of academic achievement?
3. What are significant behavioral and performance indicators of their intellectual potential?
4. What is the nature of the home environment of potentially gifted economically disadvantaged and students with limited English proficiency?
5. Are value or other personal conflicts between the school culture and the home culture affecting identification of gifted economically disadvantaged and limited English proficient students (e.g., conflicts about competition or achieving at the expense of others)?
6. Are teacher perceptions of the students affecting their nomination into gifted and talented programs?
7. How do the perceptions of the subjects (emic) compare with findings cited in the literature (etic) on economically disadvantaged and limited English proficient gifted children who are identified for gifted and talented programs?

Data were collected under four broad categories: (1) behavioral and performance indicators of gifted potential, (2) environmental factors (features/services/people) that support or hinder the development of gifts and talents, (3) familial characteristics that support or discourage achievement, and (4) self-perception data or personal judgments of competency and adequacy. Individual case studies were developed using qualitative methods and a phenomenological approach.

Schools were selected and invited to participate on the basis of their potential for providing a subject for the study in one or more of the categories of racial or ethnic minority, economically disadvantaged and/or limited English proficient.

Researchers with proximity to the sites were selected and invited to collaborate on the project. Those who accepted then joined a panel of experts at the University of Georgia for a three-and-a-half day training program. The program involved discussions of qualitative approaches to research; training in specific procedures for data collection; study and review of materials and instruments for collecting data; discussions of procedures for nominating students for participation; and instruction and practice in conducting interviews with target populations.

At each participating school site, the collaborative researcher determined how specifically to collect the data combining the guidelines and instruments from the training session with the needs and constraints of the cooperating school district. Some collaborative researchers collected the data themselves while others used field researchers under their direction.

Subjects

Purposeful sampling was used to select individuals from the target populations for case studies. Subjects were selected from children who were members of African American, Hispanic, American Indian, Native Hawaiian, Asian American, and low socioeconomic White groups who shared the following common characteristics: (1) Each was nominated as a bright child who was not currently being served by a gifted program unless that program identified students through nontraditional methods and (2) Each was eligible for free or reduced lunch, thus qualifying as economically disadvantaged. All children were from inner-city urban or isolated rural backgrounds and some had limited English proficiency. In collaboration with local educators, subjects were selected by the researchers on the basis of one or more of the following criteria: exceptionally intelligent or bright, good grades, creativity, leadership, and/or test scores that were perceived as inaccurate reflections of ability. Informed consent for participation in the study was secured for each student identified by these criteria.

Although the intent was to sample each ethnic group equally, this was only realized with respect to the gender distribution—36 females and 37 males. The racial/ethnic backgrounds of the students identified was as follows: 32 African Americans, 12 Hispanics, 11 American Indians, 11 Hawaiians, 3 Alaskan Eskimos, 2 Asian Americans, and 2 Whites. Forty-six students were from urban areas, 18 from rural areas, and residential data were not specified for nine students. Seventy-three case studies were completed on the following subjects:

African Americans	16	Females	16	Males	Total=	32
Hispanics	7	Females	5	Males	Total=	12
American Indians	5	Females	6	Males	Total=	11
Hawaiians	5	Females	6	Males	Total=	11
Alaskan Eskimo			3	Males	Total=	3
Asian Americans	2	Females			Total=	2
White	1	Female	1	Male	Total=	2
Totals	36	Females	37	Males	Total=	73

The subjects ranged in age from 7 to 19 years and were enrolled in grades 2 through 12. Twenty-eight students were in the elementary grades, 17 in middle school grades, and 28 at the high school level. With the small uneven-sized sample, there was not equal representation of all groups at all grade levels.

Data Collection Procedures and Instruments

A number of procedures and instruments were employed in the data collection process in order to obtain the best image of the subjects' gifted behaviors. Data sources included interviews with the students, parents, and teachers; school records; self-perception inventories, tests of creative thinking; and a future scenario completed by the students.

1. Demographic data included information regarding the student's ethnicity, age, gender, location of home and school, school grade, primary caretakers, educational level of primary caretakers, basis or reason(s) for being selected, and school record information.

2. Interviews of the student, teacher, and parents were recorded and transcribed. Based on the collaborative researchers' request that they be permitted to use their knowledge and familiarity with the target population in conducting the interviews, a guide was provided to assure that critical topics and issues were raised without providing a structured interview schedule. Based on their request to use their knowledge and experience, interviewers were given freedom to create a format and include content to facilitate the search for gifted behavioral indicators within the particular cultural and environmental context. Some researchers used audio or videotapes to record the interviews. Observations made by the collaborative researchers during the interviews were recorded in field notes and included journal entries and personal observations of events, activities, and experiences relevant to the study.

    The interview guide provided the collaborative researchers with nine "construct descriptions to formulate interview questions with students, teachers, and parents/guardians" including: motivation and interest, communications, humor, memory, problem solving, inquiry, insight, reasoning, and imagination. For example, the suggestions regarding the "Communication Construct" were as follows:

    > We are interested in describing how these students communicate. Keep in mind that communication is both receptive and expressive. Therefore, please interpret this construct in its broadest sense, e.g., with words, with body language, with pictures, with other visual stimuli, or in other ways that we have not thought of. This construct represents what is meant by Relevant Checklist Indicators such as use of language, expressiveness of gestures, articulateness in storytelling, originality, and profoundness of expression, and the like. (Frasier, 1991)

    The goal of the student interviews was to ascertain what insights could be gained regarding the exhibition of significant behavioral and performance indicators of intellectual potential among target students.

3. Self-report questionnaires and parallel teacher questionnaires were used to assess student self-perceptions and for comparative teacher reports. The *Pictorial Scale of Perceived Confidence and Social Acceptance in Young Children* (Harter & Pike, 1983) assesses self-concept by measuring the child's cognitive competence, physical competence, maternal acceptance, and peer acceptance. The *Self-Perception Profile for Children* (Harter,

1985) assesses similar parameters, focusing on the students' scholastic competence, athletic competence, behavior, and global self-esteem. In addition to these areas, the *Self-Perception Profile for Adolescents* (Harter, 1988) also takes into account the students' close friendships, romantic appeal, and job competence. The *Scale of Intrinsic Versus Extrinsic Orientation in the Classroom* (Harter, 1980) assesses motivation through the students' preference for challenge or easy assignments, for their own curiosity or doing what the teacher requires, independent mastery or dependence on the teacher, independent judgment or reliance on the teacher's judgment, and internal criteria of success or failure or external criteria.

4.   The *Torrance Tests of Creative Thinking (Figural)* were administered by the collaborative researchers to the students individually or in groups. The TTCT has been used extensively with multicultural populations in the United States and abroad to identify creatively gifted students and assess growth in creative thinking. The test is designed to measure four aspects of creative ability: fluency, flexibility, elaboration, and originality and to assess 13 "creative strengths," as well as the individual's resistance to closure and abstract titles. It has been positively and significantly correlated with creative achievement criteria.

5.   From the students' cumulative school records, data were gathered on school grades and grade point averages, standardized test performance, IQ scores, and teacher comments. The *Scales for Rating the Behavioral Characteristics of Superior Students* (Renzulli, Smith, White, Callahan, & Hartman, 1976) were completed by teachers and used as indicators of perceived gifted capabilities.

6.   The *Future Scenario*, an instrument developed by the University of Georgia's Future Problem Solving Program to explore and predict possibilities for the future, was administered in classrooms, providing data from the subject and his/her peers. The goal of the scenario response was to examine the student's (a) view of him/herself as an achiever; (b) self-perception as an achiever related to interactions with others; (c) goal orientation or personal ambitions; and (d) planning ability or the perspective he/she has on how the goals could be achieved. Students were asked to develop future scenarios given a paragraph prompt that asks the respondent to dream about his/her future and ends with "Tell your story of your future in any way you want."

The *Achievement Motivation Scale (AMS), Research Edition* (Torrance & Safter, in press) was used to review future scenario responses, not for the purposes of providing a score but to arrive at a consensus regarding the essence of the writer's message regarding the future in the writing sample. The AMS consists of 13 items divided into two sections. Points are given each time a response reflects an item or the item is repeated.

To establish the process for achieving consensus in assessing the scenarios, three were randomly selected and read. The ratings (85% consensus) were discussed. Three more scenarios were reviewed and the 90% acceptable agreement reached. The reviewers then read and individually assessed each of the scenarios after which they again compared results.

Findings

A case study file was developed for each subject with all of the data available concerning that individual. For a variety of reasons, none of the case studies included complete data from all six sources. For example, cumulative records were made available for only half of the sample (36 students), sometimes because the school would not release them. Only 42 scenarios were usable—one from Asian Americans.

Since none of the instruments or data sources were available for every subject and the sample was unequal with respect to racial/ethnic backgrounds, the case files do not lend themselves to a comparative analysis. However, as an exploratory study, the findings do provide leads to the characteristics of gifted economically disadvantaged and limited English proficient students, leads that can provide guidance for the design of further studies. The findings cannot be generalized beyond the students on whom data were gathered.

Interviews

The interview data coding took place in three phases: (l) Independent reading of transcripts; (2) Meeting of interviewers to determine agreements and disagreements in coding and to identify emerging themes and patterns; and (3) Re-reading of the transcripts with the emerging themes in mind to confirm those themes or to find additional themes and patterns.

The themes that emerged from the student interviews (N=23) responses as patterns were the following:

- Clear notions about what they can do and cannot do well.
- Want to, able to, and desire to figure things out for themselves.
- Willing to work hard to achieve.
- Mature approach to expressing ideas; uses explanations that are mature for age.
- Know what they like and don't like.
- Advanced, deep, sensitive, awareness of self and others; a strong sense of altruism.
- Confidence in own ability to achieve; tend to rely on and to determine own standards.
- Looked up to by others.
- Awareness of being different.

- High self-esteem.
- Grasps concepts/ideas quickly; able to size things up quickly; able to "pick up on" or "know things" without being told.
- Knows a lot of things; surprises others with what they know; eager about learning; strong desire/need/want to learn.
- Interested in a lot of things.
- Goal/task oriented; know what they want to do.

The themes that emerged from the parent interviews (N=16) were the following:

- Awareness of child's relationship with others—almost all of the parents described their children as preferring to be by themselves when they played or preferring the company of adults to children of their age.
- Awareness of child's abilities and multiple interests.
- Knowledgeable about child's independent nature.
- Notices, questions, asking orientation; curious nature.
- Aware and amazed at knowledge child has about different topics.
- Supportive of the child's aspirations.

Important insights were gained from the teacher interviews that told a good deal about their perceptions of the abilities of the target students. On the one hand, all of the teachers who were interviewed had nominated the students as "good candidates" for the study. On the other hand, there were great variations in what they actually knew about the students. Some had abundant knowledge about their students and had very clear ideas regarding their evaluation of their abilities. Others appeared to know relatively little about the student. While teachers were aware of the child's abilities, they were also concerned about the environment in which the child lived and the extent of support provided by the parent.

Among the traits that teachers identified were the following: has an independent nature, displays in-depth information on topics of interest, is recognized by peers for exceptional abilities, is a perfectionist, grasps concepts quickly, exhibits exceptional reasoning skills, has exceptional intelligence, is verbally proficient, demonstrates higher order thinking skills, shows exceptional insight, displays keen perceptions, is self-confident in ability to achieve, sees relationships, and can make generalizations.

Some of the reasons the teachers (N=13) gave for having nominated the child were:

- He caught onto material quickly and was one of the brightest in the class.
- Amazed at the amount of information the child had about magnets.
- Child caught on quickly, was quiet, and could easily be overlooked.
- Very good in math, could watch him go through the process in his head.
- His question-asking skills are definitely at a higher level than other students in the class.

- Gave evidence of exceptional intelligence though it is hidden beneath her somewhat hostile exterior.
- Knows student is bright even though she does not do well in school because of the contempt she has for her teachers.
- Subject's language was better than average and that she had a good vocabulary.
- Verbally, she's very curious. She asks a myriad of questions.
- Although classified as a special education student, he asks very probing questions and has shown remarkable insight.
- Very bright student who learned to speak English quickly.
- Very verbal, creative, a high academic achiever and very sociable.
- Very curious and eager to learn.
- Student daydreams a lot, is creative, is bright, independent, an individual.
- She taught herself how to read standard English. Even though she has not had any formal training in reading standard English, she was able to decode and comprehend instructions in a game book on her own.

Teacher Grades

Across all grade levels, teacher grades (N=38) that started out as As, Bs, and Ss showed marked decreases after Grade 4 to Cs and Ds. Once in high school, female students tended to show an increase in grades while males showed a decrease. Only at one of the high schools was there evidence of students changing from regular courses during the first two years to honors courses the last two years of school.

Standardized Test Performance

While there was a great deal of variance in the scores from student to student, in general they tended to be depressed. Among those elementary school students for whom data were available (N=34), reading scores tended to cluster within the 20th to 30th national percentile range; math scores ranged from the 20th to the 60th national percentile. However, all elementary students who took the MAT-6, received indicators of "high" in the higher order thinking skills report. Among bilingual students, scores were higher when tests were administered in Spanish and English than only in English.

Three patterns emerged from teachers' comments in students' cumulative records:

1. Students whom teachers felt were working to their potential were characterized as "student works hard," ". . . is improving," ". . . is motivated."
2. Students whom teachers did not feel to be working to their potential were characterized as ". . . not working to potential," ". . . does not try," ". . . negatively influenced by peer groups and gangs."
3. Students felt to have academic potential, but who were enrolled in special education or remedial classes, were generally described as being there for behavior reasons or because of academic weakness in written expression.

> Comments made by teachers included phrases such as "school work has improved," "needs to develop self-control," "does not react well to criticism," "sometimes has explosive temper."

Self-Perception Scales

Three scales were administered to assess students' self-perceptions and teacher-perceptions of abilities, each designed for a different age level.

The three second graders who completed the *Pictorial Scale of Perceived Competence* saw themselves as competent, especially on the cognitive competence subscale. There were some discrepancies between the teachers' views of social acceptance by peers and that of the student; otherwise the views were quite congruent. The students scored below the median on the "social acceptance by parent" scale, but a lack of acceptance was not evident in any of the parent interviews for these children. Each of the parents had expressed evidence of great concern for the welfare of each child.

The seven students in Grades 3-6 that responded to the *Self-Perception Profile for Children* reported medium-to-high degrees of positive self-perceptions on the Behavioral Conduct and Global Self-Worth subscales, but did not exhibit such positive perceptions of themselves in the area of Scholastic Competence. They seemed to consider themselves to be less popular with their peers than would be expected based on their more positive perceptions of their own behavior. These responses were consistent with comments in student and parent interviews in which parents reported that their children preferred to be by themselves and students indicated that they were their own person and did not particularly depend on peers for their identity. Overall, the five girls had more positive perceptions of themselves than did boys.

The individual profiles for the 14 students in Grades 9-12 on the *Self-Perception Profile for Adolescents* were generally above the median with the highest self-perception ratings in the areas of Global Self-Worth, Scholastic Competence, and Social Acceptance. The six females showed consistently higher positive self-perceptions than did the eight males in all subscale areas.

The 20 subjects in Grades 3-12 who completed the *Intrinsic vs. Extrinsic Motivation Scale* tended to show higher intrinsic orientation than did the norm groups. High scores on the challenge, curiosity, and mastery subscales indicates that the child is intrinsically motivated to engage in the mastery process. A high score on the independent judgment and internal criteria subscales indicate that children can make rather autonomous judgments about what they know, on what basis they make decisions, and how much they have learned about the rules of the game called school. There were a few exceptions—the Grade 6 scores on the judgment subscale and Grades 5 and 9 scores on the criteria subscale. The more extrinsic-oriented score on the judgment subscale indicates greater reliance on the teacher's opinion and judgment about what to do. The more extrinsic-oriented score on the internal criteria subscale suggests less autonomous student behavior.

Future Scenarios

The *Achievement Motivation Scale, Research Edition* is not a norm-referenced measure nor is it intended to yield a score although points are awarded each time a response reflects one of the 13 items that comprise the scale. The *AMS* is essentially a guide for analyzing the perceptions of the students of themselves in the future, their awareness of the steps needed to accomplish goals, and their career aspirations.

Of the 402 comments extracted from the scenarios completed by 45 students, over half (205) related to three items—the desire and will to succeed, looking forward to success, and what would happen as a result of their succeeding. Many of the children saw themselves as "influential in a world made better by their contributions." The students expressed no discomfort with the idea of competing with others as a part of the process of achieving. A number of their comments were about personal standards of excellence that they would set for themselves. Their projections of the "unique accomplishments" they saw for themselves in the future ranged from simply serving well as a teacher, doctor, programmer, or some other capacity in one's own community where there is a real need—e.g., "black (female) doctor . . . not many around."

Student scenarios indicated their awareness of the long-term involvement that would be required to accomplish their goals. In general, students had very positive, future-oriented views of themselves. Not only did they express satisfaction with themselves, with their abilities, and with their performance, but they also reported a strong desire to help others. Some two-fifths of the students made comments about their desire to assist others.

The respondents indicated no signs of apathy—instead there was strong evidence that these children believed that they can make a difference. There were many instances where students indicated their awareness of the plans that needed to be made to accomplish their goals with almost half of the respondents describing actions they would take or that were planned in order for them to achieve their goals.

For the most part, the future scenarios were upbeat and optimistic although a few scenarios could be considered philosophical musings and others expression of despair: ". . . why dream before one can live . . . what if, whys and whos, . . . achievements, goals, denials all are words of the future."

The scenarios indicated some 38 occupations as being in the students' futures—most of them conventional such as doctor, teacher, lawyer, engineer, business owner. Among the more unique or esoteric occupations mentioned were a music purifier, or a person who would punish individuals who sample or steal songs; owner of advertising skyscrapers; and savior (of people, world, the universe).

Interestingly, references to the students' racial, ethnic, or socioeconomic background were more limited than anticipated. Surprisingly few respondents made reference to their cultural background. "I don't dream about the future . . . I will believe

in life . . . love be the light to show me the way" were expressions included in a scenario in which the student also predicted that she would be "the first Black woman to make it in the world."

In sum, the student future scenarios indicated that they had no fears about competing with others as part of achieving a high level of success; they held high standards of excellence for themselves; they would pursue numerous goals, some very unique; and they were aware of the length of involvement that would be required to accomplish their goals. There were several indicators of the behaviors associated with task commitment: capacity to persevere, determination; willingness to engage in hard work to accomplish goals; a belief in their ability to carry out important work; the drive to achieve; and the ability to set high standards for their work. Their future images tended to be very positive, and they expressed a lot of confidence in their ability to achieve their goals. Contrary to notions often expressed in the literature, these respondents all seemed to have very positive self-concepts, despite the less-than-encouraging environments in which many of them lived. An overall picture emerged of children who, as Torrance, Weiner, Presbury, and Henderson, (1987) put it, have a good sense of who they are and a strong notion about who they will be.

Torrance Tests of Creative Thinking (TTCT)

TTCT protocols (figural) were available for 44 students, 21 females and 23 males, ages eight to 19, representing each of the target populations. Overall, the creativity index scores ranged between standard scores of l00-125 or the 50th to the 87th percentile. Two students achieved index scores of 144, more than two standard deviations above the mean.

The range of the percentile scores on the norm-referenced measures indicated considerable variability: from 1 to 97 on fluency; l to 97 on originality; 1 to 99 on abstractness of titles; 1 to 99 on elaboration; and 1 to 98 on resistance to premature closure.

Summary and Discussion of Findings

A number of interesting themes emerged from the data. These themes are summarized with the caveat. Because of the small size of the sample, it is not possible to make any valid generalizations. It is, however, possible to use the findings as a basis for formulating leads that might be followed in further studies.

The strongest themes emerging from the student interviews had to do with their confidence in their ability to achieve and their awareness of themselves as capable learners. They expressed a strong desire to learn and were willing to work hard to achieve success. The view of themselves as competent, knowledgeable, and capable individuals was evident throughout the interviews. The videotapes, for example, showed that their body language exuded a sense of confidence, not apathy. Many of the students

realistically appraised the negative potential of distracting forces in their lives such as negative peer influences, gangs, and drugs, but did not see these distractions as insurmountable and appeared willing to do whatever was necessary to achieve.

There were many examples of the students' display of gifted behaviors—instances where they indicated their ability to grasp concepts quickly and ask profound questions. They evidenced their capacity to acquire, retain, and bring forth information in the solution of problems and attested to their exceptional reasoning abilities, memory, and insight into complex issues. They demonstrated advanced levels of maturity in their thinking. Overall, their sense of altruism, goal orientation, multiple interests and curiosities, high degree of motivation, and ability to function independently clearly suggest many of the attributes associated with gifted individuals.

There was a good deal of similarity between the information provided by students and the observations made by their parents or guardians. For instance, student responses regarding their questioning orientation and sense of curiosity about a myriad of topics were often supported by parents' examples indicating their awareness of the child's desire to know and excitement about learning. Parent descriptions of the independent nature of their children were consistent with the many expressions of an independent nature expressed by students.

Not only were parents aware of their children's aspirations, but they were also supportive of them, although parents varied in their belief as to whether they could help their children succeed. Some parents seemed to be aware of strategies and steps they could take to help, while others could only offer encouraging words.

Teacher comments ranged from insightful observations about the children's potential to discouraged views about the impact of negative or unsupportive environments and family situations. The attributes most frequently mentioned by teachers included the students' in-depth information on topics of interest to them, exceptional reasoning, and oral verbal skills, the ability to acquire information at a rapid pace, and the ability to grasp concepts quickly. There were many instances where teachers commented on the children's confidence in their ability to achieve and their high levels of motivation and interest in various topics. Negative aspects that teachers mentioned included perceived deficiencies in the environment and the belief that a move to a more middle-class or educated area was needed to enhance achievement; having "too high aspirations" for someone from the child's cultural group; test scores being lower than one expected even though the child seemed to be a "sponge for information"; and limited support received from the home; and the resilience of some of the children despite negative home situations. It was not always clear as to the basis for these teacher comments—i.e., whether they were based on observation and experience or were attitudinal.

The cumulative records that were available indicated less than impressive test scores and teacher grades that tended to decline the longer the student stayed in school. Teacher comments in the files tended to focus on classroom behaviors and ranged from

positive comments about student work habits to concerns about the negative influence of peer groups and gangs.

A strong altruistic sense was noted in both the scenarios and the student interviews with frequent mentions of wanting to achieve so that the world could be made a better place. The notion of being one's own self and setting one's own standards emerged. Although there was no fear expressed regarding competing with others, self standards to determine whether one has achieved were voiced. Although the literature on economically disadvantaged children often ascribes present-orientation to them, these students not only had definite images of themselves in the future, they also expressed confidence in their potential for achieving their goals.

Various manifestations of unusual ability are apparent in individual case studies. Student, teacher, and parent interviews often reported situations involving the child or described characteristics that indicated gifted behaviors. For example:

- A Native American male who was often observed harshly judging his own scholastic, social, and behavioral characteristics.
- A Black male who was described by a teacher as "always taking things to a higher level."
- A Native Hawaiian male described by his mother as having a good sense of humor, especially in difficult situations.
- A Black male whose teacher commented: "It frightens me to think of him in a gang with his intelligence and leadership ability."
- A Black female described as having a good sense of humor and being quite ambitious.
- A Native American male, identified as having a creative sense of humor, as popular but independent, and desiring to become a lawyer.

Much of the literature regarding the self-perceptions of economically disadvantaged students focus on low self-esteem or poor self-concepts as correlates of poor achievement. The students in this study differed in that they scored high on the self-perception scales and evidenced positive self-concepts and high intrinsic motivation. However, taking the limited sample into account, the developmental trend of a systematic shift toward a more extrinsic orientation on the preference for challenge, curiosity/interest, and independent mastery subscales paralleled that found in the norming group.

There were few markedly different themes between the various culturally different ethnic and racial groups. A few leads do appear that warrant following up. For example, the data for this sample suggest that:

- Black males were often referred to as leaders with a strong sense of independence and autonomy. They often have above-average social skills and value achievement.

- Black females were often described as ambitious and outgoing, with a good attitude toward school and a good sense of humor. At the same time, they often have poor or inconsistent grades and unusually high rates of absenteeism.
- Hispanic females were often fluent in English even though they lived in non-English speaking households with parents who had not completed high school. In addition, they were usually ambitious about their future careers, even though their families were less supportive.
- Black males and females identified school, and especially mathematics classes, as motivating them, and they showed evidence of curiosity about their world.
- Native Hawaiian students, as a group, expressed interest in art and drawing and had good memories.
- Native American students seemed to have interests in science, history, art, and music. These students seemed to have a robust sense of humor, good memory, good problem-solving ability, and imagination.
- Black males, mainly from urban settings, displayed traits of independence and autonomy, usually combined with achievement orientation and autonomy. These characteristics may have facilitated the student's continuing academic pursuits in a culture where it was not deemed "masculine" or ethnically proper to study or to display academic success.

Three conclusions emerge from this exploratory study:

1.   Teachers and parents are able to identify economically disadvantaged and limited English proficient gifted and talented students who did not meet the traditional criteria for inclusion in their schools' programs. Teachers and parents do this by attending to gifted behaviors—i.e., manifestations of giftedness—rather than by relying on the usual identification means such as tests, grades, and other formal procedures.
2.   The characteristics of the economically disadvantaged and limited English proficient students identified as gifted were similar to those of the students who have been traditionally identified as gifted. They seem to possess the same cognitive, affective, and social characteristics that, like the majority gifted students, distinguish them from students who are not gifted.
3.   Teachers and parents seemed to display sensitivity to recognizing unfamiliar expressions of gifted behaviors as they are shaped in different cultures and environments. This sensitivity may well be more intuitive than taught. For the most part, neither teachers nor parents communicated the cultural "signs" or behaviors that they perceived as part of the recognition process.

Seven questions were posed at the outset to help direct the data collection that occurred under four broad categories. This exploratory study suggests that overall, these are useful and productive data sources. However, in further studies, more attention needs to be paid to two data categories: determining the specific environmental factors

(features/services/people) that support or hinder the development of gifts and talents and the familial as well as community characteristics that support or discourage achievement. Structured guides to be used by all interviewers with parents, teachers, community persons, and students themselves with specific questions that probe more deeply into the functioning of cultural and environmental factors in a particular setting are needed. What specific aspects of a culture are reflected in the behavior of a particular child? This exploratory study provides leads for a more comprehensive study.

CHAPTER 6: Gifted Attributes and Gifted Behaviors

Arguing that giftedness is not a directly observable trait, Hagen (1980) suggests that it be viewed as a psychological construct, a characteristic that is abstracted from a variety of behaviors, but which is presumed to have educational or psychological meaning. Hagen observes that: "Inferences about giftedness will be accurate to the extent that the characteristics or behaviors we choose to observe are relevant to the construct and are validly and reliably appraised" (p. 1). She proposes developing a clear statement of the behaviors that exemplify the giftedness construct.

Over the years, researchers have identified characteristics—traits, aptitudes, and behaviors—that appear to be common to all gifted students and that distinguish them from students not considered gifted. Gallagher and Kinney (1974), for example, suggest that, whatever their cultural background, gifted children hold certain mental abilities in common, even though their expression or display may vary from one culture to another. These include:

- The ability to meaningfully manipulate some symbol system held valuable in the subculture.
- The ability to think logically, given appropriate data.
- The ability to use stored knowledge to solve problems.
- The ability to reason by analogy.
- The ability to extend or extrapolate knowledge to new situations or unique applications. (p. 16)

Typically, lists of characteristics include references to such traits, aptitudes, and behaviors as the gifted child's: (a) facility in manipulating abstract symbol systems, (b) early language interest and development, (c) unusually well developed memory, (d) ability to generate original ideas, (e) precocious language and thought, (f) superior humor, (g) high moral thinking, (h) independence in thinking, (i) emotional intensity, (j) high levels of energy, (k) early reading and advanced comprehension, (l) logical thinking abilities, (m) high levels of motivation, (n) insights, and (o) advanced interests (Clark, 1993; Davis & Rimm, 1989; Kitano & Kirby, 1986; Renzulli, Hartman, & Callahan, 1971; Sternberg, 1986; VanTassel-Baska, 1989).

Many of the characteristics and traits that emerged from the exploratory case study data are similar to those ascribed to gifted and talented children generally—e.g., grasps concepts quickly, exhibits broad knowledge base, excels in oral expression of ideas, evidences fantasy and imagination, exhibits high degrees of originality and abstraction, is boundary breaking on tests of creative thinking, evidences creative strengths that may be viewed negatively by peers, evidences high self-esteem, and appears to resist peer pressure.

Checklists and rating scales used to identify giftedness among advantaged or disadvantaged students often include similar traits. For example, the Renzulli et al. (1976) *Scales for Rating Behavioral Characteristics of Superior Students* includes such

traits as "has quick mastery and recall of factual information," "has a ready grasp of underlying principles," and "can make valid generalizations about events, people, or things." When depicting the strengths of gifted Hispanic students, Bernal (1978) describes their "ability to understand and remember detailed instructions when given the first time" and to "learn things more quickly than other children do." In his checklist of attributes of gifted Native American students, Tonemah (1987) includes the concept of "listening well and remembering things that are heard." Baldwin (1984) refers to "good memory" as a characteristic to look for among culturally diverse, economically disadvantaged, and geographically isolated children. All of these authors seem to be dealing with essentially the same trait.

In Table 1, 10 traits, aptitudes, or behaviors are listed that many writers suggest can be considered *general/common attributes of giftedness*—general or common in the sense that they are usually included in any list of attributes ascribed to the gifted. Each characteristic is described and the general description is followed by examples of how the behavior might be displayed (Clark, 1993; Renzulli et al. 1976).

Leung (1981) calls these characteristics "absolute attributes of giftedness" since they appear to be "universal and cross-cultural" in contrast to "specific behaviors" or manifestations of those attributes in particular cultural contexts or settings. Clearly, these traits, aptitudes, and behaviors are not absolute in the sense that every gifted individual always exhibits or manifests every one of them. Rather, they are attributes that seem to be ascribed to children who have been identified as being gifted. An apparent implication that can be drawn from this distinction is that the search for better identification procedures for gifted economically disadvantaged and culturally diverse students should focus on ways of recognizing the specific behaviors or manifestations of these attributes in various cultural, contextual, and environmental settings.

For example, there is consensus that all gifted children exhibit a "high motivation to learn." However, the manifestation of "high motivation to learn" by an economically disadvantaged African American child in an inner-city classroom or a Navajo child on an isolated reservation will differ from the way a middle-class White child in a suburban school might display this attribute. The opportunities to display high motivation, the conditions and the climate in which motivation is stimulated, the responses or reactions to highly motivated behavior may well differ in diverse environments. Similarly, motivation to compete varies with different cultures. In some cultural groups, competition is perceived as a negative behavior, while cooperation is viewed positively. "High motivation to learn" is perceived as an absolute attribute of giftedness, but its behavioral manifestations vary with context.

Table 1.

Traits, Aptitudes, and Behaviors Contributing to Giftedness Construct

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Trait, Aptitude or Behavior	General Description	How It May Look
Motivation Evidence of desire to learn.	Forces that initiate, direct and sustain individual or group behavior in order to satisfy a need or attain a goal.	Demonstrates persistence in pursuing or completing self-selected tasks (may be culturally influenced); evident in school or non-school activities. Enthusiastic learner; has aspirations to be somebody, to do something.
Interests Intense, sometimes unusual, interest.	Activities, avocations, objects, etc. that have special worth or significance and are given special attention.	Unusual or advanced interests in a topic or activity; self-starter; pursues an activity unceasingly beyond the group.
Communication Skills Highly expressive with words, numbers, or symbols.	Transmission and reception of signals or meanings through a system of symbols (codes, gestures, language, numbers).	Unusual ability to communicate (verbally, nonverbally, physically, artistically, symbolically); uses particularly apt examples, illustrations, or elaborations.
Problem-Solving Ability Effective, often inventive, strategies for recognizing and solving problems.	Process of determining a correct sequence of alternatives leading to a desired goal or to successful completion or performance task.	Unusual ability to devise or adopt a systematic strategy to solve problems and to change the strategy if it is not working; creates new design; inventor.

Table 1.

Traits, Aptitudes, and Behaviors Contributing to Giftedness Construct (continued)

Trait, Aptitude or Behavior	General Description	How It May Look
Memory Large storehouse of information on school or non-school topics.	Exceptional ability to retain and retrieve information.	Already knows; 1-2 repetitions for mastery; has a wealth of information about school and non-school topics; pays attention to details; manipulates information.
Inquiry Questions, experiments, explores	Method or process of seeking knowledge, understanding, or information.	Asks unusual questions for age: plays around with ideas; extensive exploratory behaviors directed toward eliciting information about materials, devices, or situations.
Insight Quickly grasps new concepts connections; senses deeper meanings.	Sudden discovery of correct solution following incorrect attempts based primarily on trial and error.	Exceptional ability to draw inferences; appears to be a good guesser; is keenly observant; heightened capacity for seeing unusual and diverse relationships, integration of ideas and disciplines.
Reasoning Logical approaches to figuring out solutions.	Highly conscious, directed, controlled, active, intentional forward-looking, and goal-oriented thought.	Ability to make generalizations and use metaphors and analogies; can think things through in a logical manner; critical thinker; ability to think things through and come up with a plausible answer.

Table 1.

Traits, Aptitudes, and Behaviors Contributing to Giftedness Construct (continued)

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Trait, Aptitude or Behavior	**General Description**	**How It May Look**
Imagination/Creativity Produces many ideas; highly original.	Process of forming mental images of objects; qualities, situations, or relationships which aren't immediately apparent to the senses; problem solving through nontraditional patterns of thinking.	Shows exceptional ingenuity in using everyday materials; is keenly observant; has wild, seemingly silly ideas; fluent, flexible producer of ideas; highly curious.
Humor Conveys and picks up on humor well.	Ability to synthesize key ideas or problems in complex situations in a humorous way; exceptional sense of timing in words and gestures.	Keen sense of humor that may be gentle or hostile; large accumulation of information about emotions; capacity for for seeing unusual; uncommon emotional depth; openness to experiences; sensory awareness.

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Each and every characteristic or trait on lists of attributes of giftedness will not necessarily be exhibited by each and every gifted child, but understanding how these characteristics are manifested in the specific behaviors of individuals from diverse cultural and economic backgrounds should become the focus for study. Do Hispanic or African American children, for example, "manipulate abstract symbol systems" differently from middle-class Anglo-American students, the populations on whom most studies of behavioral characteristics have been done? Specific behavioral differences need to be observed, recognized, and acted upon within a specific context.

Writing about Hispanic children, Zappia (1989) recommends that a variety of data collection procedures be used in order to assess the exhibition of specific behaviors:

The child should be observed in as many situations as possible to determine language preference, proficiency, and use patterns (in both languages) in school, home and community. Sociocultural background, level of acculturation, degree to

which the child maintains traditional cultural values, and socioeconomic status and composition of the child's family also are variables to examine. (p. 25)

The specific behaviors to be observed, among others, include language preference and proficiency of youngsters who may or may not be bilingual, display of traditional Hispanic cultural values, and family support patterns.

Kirschenbaum (1988) suggests "to identify gifted Indian students, one should attempt to determine the degree to which a student is intelligent, resourceful, attentive, able to handle new situations, able to solve problems, a quick learner, self-sufficient and dependable, knowledgeable, insightful, and able to distinguish underlying meaning" (p. 55). These are all absolute attributes of giftedness that one should look for within the context of tribal life—i.e., the specific behaviors would differ although the traits and aptitudes are absolute attributes.

How behavioral differences might ensue from the interaction of cultural values with attributes of giftedness is illustrated in the following table adapted from Maker and Schiever (1989). In Table 2, Maker and Schiever have selected some absolute attributes of giftedness (e.g., "high level of verbal activity") together with some cultural values that seem to be characteristic of Hispanics and American Indians (e.g., "traditional language of family") and have provided examples of specific behavior differences that might occur as a consequence of cultural values (e.g., "communicates fluently with peers and within community, even if using nonstandard English"). The examples call attention to how some absolute attributes of giftedness might be displayed by individuals with particular cultural backgrounds. The characteristic cultural values ascribed are, of course, generalized considering the diversity and variations within each of the groups.

Baldwin (1985) asserts that economically disadvantaged and culturally diverse gifted students make adaptive responses to environmental circumstances and exhibit specific behaviors. For example, "a language rich in imagery and symbolism" may be caused by "a need to use subterfuge in environment to get message across; a lack of dominant language skills; a need to fantasize through language; acute awareness of environment due to its effect on individuals" (p. 232). Baldwin suggests that in identification, "a language rich in imagery and symbolism" actually is a display of "fluency, flexibility, ability to elaborate, good memory, and ability to think systematically" (p. 233). The task is to recognize rich imagery and symbolism when expressed in nonstandard or nontraditional ways.

Table 2.

Characteristics of Giftedness and Cultural Values of Hispanics and American Indians and
the Behavioral Differences Resulting From Their Interactive Influence
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"Absolute Aspects" of Giftedness	Characteristic Cultural Values	Behavioral Differences
Characteristics of Hispanics		
High level of verbal activity	Traditional language of family	Communicates fluently with peers and within community, even if using nonstandard English
Emotional depth and intensity	Abrazo, a physical or spiritual index of personal support	Requires touching, eye contact, feeling of support to achieve maximum academic productivity
Unusual sensitivity to feelings	Family structure and dynamic male dominance	Personal initiative, independent thought, verbal aggressiveness often inhibited in females
Conceptualize solutions to social and environmental problems	Nuclear and extended family closeness valued	Often assumes responsibility for family and/or younger siblings
Unusual retentiveness; unusual capacity for processing information	Traditional culture	Adapts to successful functioning in two cultures
Leadership	Collaborative rather than competitive dynamic	Accomplishes more, works better in small groups than individually
Characteristics of American Indians		
Unusual sensitivity to expectations and feelings of others	Collective self—the tribe	Is a good mediator
Ability to generate original ideas and solutions		Figures out strategies to help group or team project

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Table 2.

Characteristics of Giftedness and Cultural Values of Hispanics and American Indians and the Behavioral Differences Resulting From Their Interactive Influence (continued)

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"Absolute Aspects" of Giftedness	Characteristic Cultural Values	Behavioral Differences
High level of language development		Communicates effectively collective idea of tribe
Idealism, a sense of justice, and advanced levels of moral judgment		Has personal and religious integrity
Leadership; strongly motivated by self-actualization needs		Accepts responsibility and discipline of leadership
High expectations of self and others		Encourages others to explore and develop abilities while developing own abilities
Creativity in endeavors	Traditions, heritage, beliefs	Makes up stories or poems
Extraordinary quantity of information, unusual retentiveness		Recalls old legends about landmarks, etc.
Creativity in various areas of endeavor		Reproduces traditional designs or symbols in a variety of media

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Adapted from Maker and Schiever, 1989, pp. 4 and 78.

Efforts have been made to develop culture-specific checklists and rating scales, based on the particular behaviors of gifted minority students. Some examples follow:

- Hilliard's (1976) "WHO" and "O" checklists were developed from a review of literature dealing with the assessment of intelligence, cognitive and behavioral style, culture, and world-view, and indepth interviews with experts "who have had on-going, intensive contact with children in their daily practice, primarily Afro-American children" (p. 88). The resulting checklists reflect Hilliard's view that African Americans exhibit a synthetic-personal or relational style and:

1. tend to view things in their entirety and not in isolated parts,
2. seem to prefer inferential reasoning to deductive or inductive reasoning,
3. appear to focus on people and their activities rather than objects,
4. tend to prefer novelty, personal freedom, and distinctiveness,
5. tend to approximate space, number, and time instead of aiming for complete accuracy,
6. have a keen sense of justice and quickly perceive injustice, and
7. in general tend not to be "word" dependent, but are proficient in non-verbal as well as verbal communication (p. 36).

In his exploratory investigations to develop these checklists, Hilliard reported that they had "no test re-test reliability, but the high factor loadings and expert judgment by staff and consultants of the internal consistency and face validity of the factors seem[ed] to indicate that the factors identified [were] substantive" (p. 86).

• Gay's (1978) *Comparative Characteristics of Giftedness* is based on her belief that "giftedness in Blacks is frequently manifested in other ways than [are] generally characteristic of the gifted in the mainstream culture" (p. 353). On the basis of her classroom experience, Gay modified traditional checklist items to reflect different manifestations of gifted behaviors in Black children. An example of a modification: "Picks up more quickly on racist attitudes and practices; may feel alienated by school at an early age" for the more traditional "Keen observation."

• The *American Indian Gifted and Talented Assessment Model (AIGTAM)* (Tonemah, 1987) was designed to take into consideration tribal cultural influences on specific gifted behaviors. A survey was conducted among tribal people asking them to list the tribes' characteristics of gifted and talented students. The characteristics of gifted American Indian students were classified into four categories: *aesthetic abilities* (e.g., artistic talent and creative expression), *acquired skills* (e.g., language and technological), *tribal/cultural understanding* (e.g., knowledge of tribal traditions and ceremonies), and *personal/human qualities* (e.g., intuitive, intelligent, leadership, and creativity)—all compatible with the viewpoint of the gifted as superior learner and problem solver. A 33 item Likert-format scale was developed to assess the Tribal-Culture Understandings of Navajo students.

• The *Gifted Attitudes Inventory for Navajos (GAIN)* (Abbott, 1983) is a self-report instrument based on the values of the Navajo tribe derived from interviews with tribal members. Students choose from each of 66 pairs of statements the one that best represents their own feelings, attitudes, and opinions. There appears to be little correlation between the *GAIN* and

measures of intelligence or achievement, but higher correlations are reported with some measures of creativity.

- *Torrance's Checklist of Creative Positives* (1977) is an observational tool based on a number of abilities, skills, and motivations that his studies suggest gifted Blacks demonstrate at high levels including: ability to express feelings and emotions; ability to improvise with commonplace materials; articulateness in role playing and story telling; enjoyment of and ability in visual art; enjoyment of an ability in creative movement, dance, and dramatics; expressive and colorful speech; fluency and flexibility in nonverbal media; enjoyment of and skill in small group (cooperative) learning and problem solving; responsiveness to the concrete; responsiveness to the kinesthetic (movement); expressiveness of gestures and body language; humor; richness of imagery in informal language; originality of ideas in problem solving; invention; problem centeredness; emotional responsiveness; quickness of "warm up" (Torrance, 1975, pp. 2-3).

  The characteristics that Torrance has identified are hardly unique to African Americans, but he argues that they are specific behaviors that are likely to be exhibited by Blacks stimulated by cultural and environmental factors and that the display of these "creative positives" should guide the search for gifted Black students.

- The Los Angeles Unified School District Gifted/Talented Programs' *Screening and Instructional Program for Able Underachieving Students from Diverse Backgrounds* "was adapted to reflect how culture and language impact on the expression of giftedness in Hispanic students and to reflect the learning strategies that best capitalize on the Hispanic culture in developing learning potential" (Perrine, 1989, p. 5). The checklists of characteristics consist of intellectual, linguistic, and social indicators that are considered absolute attributes of giftedness. A section titled "Background Factors Contributing to Underachievement" calls for school personnel to:

  - State to what degree the student has had exposure to educational, social, and/or cultural resources at home and in the community and explain the effect on the student's achievement.
  - Explain how family disorganization (due to divorce, death, unemployment, or other factors) has affected the student's achievement.
  - Cite family conditions that may be affecting the student's achievement.

  The "educational, social, and/or cultural resources at home and in the community" are not specified, but the instructions direct the respondent to

consider the cultural and environmental contexts that affect specific behaviors of underachieving Hispanic children.

- The *Frasier-Talent Assessment Profile-F-TAP* (1990) uses Likert Scale, stanines, percentiles, and standard deviations to compare disparate information across a number of categories: Academic Aptitude/Achievement, Motivation Self-Report/Observations, Leadership Aptitude/Achievement; The Arts Aptitude/Achievement, and Creativity Aptitude/Achievement. The profile is aimed at getting "beyond the notion of adding points together" and looking "at a number of things relative to personal characteristics, special language considerations, and certain mediating factors such as one's environment, and how they might impact whether a child is gifted or not" (p. 9).

- The *Baldwin Identification Matrix (BIM)* (Baldwin, 1984) displays an array of objective and subjective assessment techniques on a checklist that can be completed by teachers, parents, and other persons in the school and/or the community. The information provides a profile of data dealing with cognitive, psychosocial, motivation, creativity, and psychomotor abilities.

There are other examples of efforts to develop rating scales, checklists, and observation forms that aim at directing attention to gifted behaviors as exhibited by economically disadvantaged minority youngsters. The ways and the extent to which they have been studied and evaluated vary considerably. Some are used extensively, others hardly at all. Each has its supporters and critics.

CHAPTER 7: Emerging Insights From the Javits Gifted and Talented Students Education Act

The purpose of the Jacob K. Javits Gifted and Talented Students Education Act of 1988 "is to provide national leadership for efforts to identify and serve gifted and talented students, especially those who are economically disadvantaged, are limited English proficient, or have disabilities." Under provisions of the act, dozens of programs have been funded focused on identifying and nurturing the talents of economically disadvantaged and limited English proficient (LEP) students. Many of these programs represent efforts to deal with the inadequacies of traditional paradigm in identifying talent potential.

Many of the procedures used to identify economically disadvantaged and LEP gifted students in the Javits programs involve the adaptation of familiar instruments and techniques while, others entail the design of new procedures or approaches. Most have combinations of adaptations and different applications of traditional procedures. There are a number of Javits programs that are contributing to the search for better ways of identifying minority and economically disadvantaged gifted so that the examples that follow are illustrative only and are not meant to convey either a comprehensive analysis or an assessment of the quality of the approaches used in the dozens of projects.

- **Program for Identifying Young Underserved Gifted Students** (Montgomery County, MD) is aimed at identifying, in addition to traditional gifted behaviors, the multiple intelligences proposed by Gardner (1983). The first layer employs the county identification procedures involving both subjective and objective information with teachers encouraged to be advocates for students whose test data may not support inclusion but who have exhibited potential in other ways.

  A second layer applies the Program of Assessment, Diagnosis, and Instruction (PADI) which is a battery that includes both verbal/language and performance tasks, bypassing basic skills of reading and writing while assessing thinking, reasoning, and creative abilities. The PADI Diagnostic Battery consists of seven assessment activities: *DeAvila's Cartoon Conservation Scale*, Diagnostic Thinking Tasks, Peer Interviews, Rating Student Potential Checklist, Circles Activity, *Draw-a-Person*, and *Raven's Test of Progressive Matrices* (Gregory, Starnes, & Blaylock, 1988). School standards of performance are computed for each of the seven activities and students demonstrating performance at one or more standard deviations above the mean on three or more activities are placed in special full-time nurturing classes.

  A third identification layer employs a Multiple Intelligences Teacher Checklist that guides observations of student behaviors in Gardner's seven Multiple Intelligence areas.

Montgomery County's is "an approach to the assessment of student strengths that the project calls 'identification through teaching.' " Unlike the fixed nature of identifying gifted students at a particular point in time, PADI instruction enables staff to redefine their judgments about individual students based on observation of their ability to meet the cognitive demands of the program over time" (Johnson, Starnes, Gregory, & Blaylock, 1988, p. 418).

- **Project Synergy** (New York, NY) is designed to generate new ways to identify and nurture young, economically disadvantaged, potentially gifted students based on the assumption that "the human being is the identification instrument of choice" (Borland & Wright, 1993, p. 6). The identification process consists of three phases: (1) screening, the goal of which is to form a pool two or three times larger than the cohort that will be finally identified; (2) diagnostic assessment involving the collection of additional data in individual sessions with each child in the pool; and (3) case study and placement decision, involving the creation of an individual talent development plan and parent seminars. Both traditional and non-traditional procedures were used in each phase.

  In Phase I, the nontraditional procedures include the following: (1) classroom observations of free-play and structured academic activities during which each behavior is recorded for later determination as to whether it suggests potential giftedness; (2) multi-cultural curriculum-based enrichment activities which involves the reading of a story with African American characters or, in the bilingual class, a story in Spanish with Hispanic characters followed by the children engaging in art, language, and mathematics activities that are observed and recorded. Phase I standardized assessment includes (1) *Draw-a-Person Test*; (2) Early Childhood Development Portfolios that provide a practical means for classroom teachers to observe, record, and store samples of children's work and behavior; (3) "Let-Me-Tell-You-About-My-Child" cards in English and Spanish on which parents can list anything the child does at home that reflects the child's abilities and interests; (4) "Notable Moment Cards," a component of portfolios on which teachers document children's activities or accomplishments of special note; and (5) Teacher nominations. A case-by-case review aims at determining a large and inclusive candidate pool.

  Phase II involves collecting additional data in individual sessions with each child in the pool. The data include: (1) a Matrix Test that "instead of just measuring what a student knows and can do at the time of testing [gauges] what the student is ready to do or could do with a little instruction; (2) a non-traditional literature-based activity that uses a story with minimal text and many ambiguities to stimulate responses and behaviors that are observed and recorded; (3) standardized assessments including the *Test of Early Mathematical Ability-2*, the *Test of Early*

Reading Ability-2, the *Peabody Picture Vocabulary Test*; and (4) an interview with each child regarding "the child's thinking, aspirations, perceptions of parental support, metacognitive awareness, and self-determination" (p. 14). An academic profile is prepared for each candidate in the talent pool.

Phase III involves placing each child in one of three categories: "(a) no signs of potential giftedness are now discernible, (b) equivocal signs are present, requiring further observation and re-assessment, or (c) clear signs of potential academic giftedness are present and intervention is indicated" (p. 14). The intervention strategies consist of transitional services, the creation of an individual talent development plan, mentorships with gifted adolescents, and parent seminars.

- **Project STREAM** (University of Wisconsin-Whitewater, WI) has developed a *Talent Identification Matrix (TIM)* with a broad array of abilities and talents on one axis and student assessments on the other. The assessments include both traditional (e.g., teacher grades, achievement scores, and teacher recommendations) and or non-traditional (e.g., art assessment, problem solving, community recommendations) procedures. Both strengths and weaknesses are noted in the matrix and both receive programming attention. Three non-traditional approaches are being used:

  1. **Art Is Elementary** is aimed at recognizing and nurturing art talent, especially among African Americans and Hispanic students whose exceptional artistic talent often went undeveloped. The assessment consists of drawing tasks taken from a well-developed art curriculum. It has seven ability levels, each with four "activity" or sub-stages. Art is Elementary helps identify students with advanced perception and art skills.
  2. **Contextually Relevant Problem Solving** requires students to solve problems they might encounter in their home (e.g., a problem faced by a young person caring for a younger child/children) and school (e.g., truancy) settings.
  3. **Opportunities Revealing Concealed Abilities (ORCA)** employs improvisational theater and television production as a means for students to reveal their special talents. ORCA is based on several assumptions: (a) students neither recognize special talents nor perceive how good they are, (b) teachers neither see nor seek talents that are not displayed in the academic classroom, (c) students conceal some abilities in order not to be seen as "different," and (d) talents such as practical intelligence or divergent thinking ability require venues that permit and reward their display. Improvisational theater and television production require students to use and display a wide range of skills and abilities (Clasen & Middleton, 1992).

- **Chicago Public Schools' LEP Hispanic Students Program** (Chicago, IL) uses a computer to compile a list of all entering seventh and eight grade Hispanic students who were classified as limited English proficient and had taken the *Prueba Riverside de Realizacion en Espanol* test, scoring at the 95th percentile or higher on either the reading or math subtest or at the 90th or higher percentile on both subtests. A list of eligible students is sent to principals who distribute nomination forms, printed in both Spanish and English, consisting of parent, student self-nomination, and counselor questionnaires. Students who are named on three nomination forms then take the *Raven Progressive Matrices*. Those who qualify are placed in magnet sites for gifted LEP students during the summer and school year.

- **Spotting Talent Early in Minority Students: Project STEMS** (Howard County, MD) is a non-Javits Act project aimed at increasing the number of students identified from traditionally underrepresented groups by training teachers to use an observation form to select youngsters in their classrooms whose behaviors on the dimensions considered characteristics of giftedness are noticeably different: "Specifically, teachers are trained to seek out students whose advanced vocabulary is rich in expression and who are fluent and elaborate for this age" (Pizzat, n.d., p. 77). The program seeks students who use imagery in their speech and communication, exhibit traits of task commitment, independence, and risk-taking, and improvise well.

  The key element of Project STEMS is the inservice training that begins with a questionnaire assessing the teachers' prior knowledge of characteristics of and attitudes toward gifted minority students. After the training, another questionnaire is administered. The inservice program focuses on the county's philosophy regarding the gifted; the goals and purposes of the project; best practices regarding identifying culturally diverse students; and knowledge about the ways children from different cultures manifest gifted behaviors. The *STEMS Observation of Gifted/Talented Characteristics* form directs teachers to look and listen for students who display any of the 10 behaviors.

  In addition, the project assists in modifying the curriculum through additions and alterations to specific lessons in order to elicit gifted behaviors. Observational data are reviewed regularly in order to recommend primary grade children for gifted programming.

- **Project STEP-UP** (Lamar University, University of Arizona, and Arkansas State University) is a cooperative program involving 12 school districts and three universities aimed at identifying and nurturing gifted disadvantaged minority students who would normally be overlooked. All second grade teachers in the school sites were asked to cite the children

who demonstrated the characteristics of minority children (Black, Hispanic, Asian, and Native American) included in a *Project Step-Up Minority Checklist*. These students were placed into a second grade school talent pool and teachers prepared a portfolio of student products for each student in the pool. Achievement and ability test scores were included when available. Test data were augmented with the *Structure of the Intellect Battery* and the *Raven's Test of Progressive Matrices*. Selected learning tasks, based on Gardner's model of multiple intelligence, were developed by Maker.

The regular school day program was adapted with emphasis on self-concept development, thinking skills, creativity, and communication through the arts and high potential children were provided opportunities to experience an intensive transitional curriculum to develop their talent or giftedness.

- **Kent State University Early Assessment for Exceptional Potential-EAEP** (Kent, OH) is a project aimed at identifying young gifted and talented minority and/or economically disadvantaged students using a non-traditional assessment model that employs computer-aided data analysis and at developing student skills and talents over time in order to increase their chances for admission to the formal gifted program that begins in grade 4.

A research-based list of universal primary identifiers of potential was developed together with an observational management system for teachers. The project focused on commonalities among and between groups rather than separate identifiers by gender, race, or class, based on "the belief that while the manifestations of an identifier would be influenced by the environmental context or cultural heritage of the child, the identifier itself would remain consistent" (Shaklee, Barbour, Ambrose, Rohrer, & Whitmore, n.d., p. 28).

Eighteen primary identifiers were culled from the literature and demonstration videotapes of authentic examples of exceptional potential were developed and tested. A Portfolio Assessment Process was devised to promote systematic observation at regular intervals. Over an eight week time frame, teachers collected at least seven different types of evidence from four different audiences including: teacher observations during six inquiry lessons; product samples collected by student, teacher and/or parent; a home/community survey of student interests and activities; self-nomination questionnaires; peer nomination questionnaires; anecdotal record-keeping; and additional data from resource specialists.

Teachers aggregated data to provide a profile of student strengths as defined by the 18 primary identifiers organized into four categories: Exceptional Learner, Exceptional User, Exceptional Generator (creator of

knowledge), and Exceptional Motivation. The matrix then called for teachers to rate their level of confidence regarding the validity and reliability of the data and provide an overall evaluation (high, moderate, or low) of the exceptional potential of each child in the class. The profile of student strengths provided the basis for curricular modifications for identified students with specific instructional strategies for curriculum individualization in science and social studies.

Shaklee et al. (n.d.) note that the "collection of authentic examples through the use and analysis of videotaped data . . . appears to have contributed to the teachers' awareness and ability to accurately observe examples of exceptional potential in their own classrooms" (p. 39).

- **The Texas Education Agency Javits Project** (Austin, TX) developed, with the assistance of Sandra Kaplan, an instrument titled *The Texas Student Portfolio (TSP)*, one of the tools used to assess student potential (Hiatt, 1991). The TSP includes student self-selected products that come from both in-school and out-of-school settings and focuses on student behaviors associated with high performance instead of skills related to specific disciplines. The TSP is inclusive in that all students keep a portfolio. It assesses all products against the same eight descriptors: unusual presentation of an idea, work advanced beyond age or grade level, complex or intricate presentation of an idea, in-depth understanding of an idea or skill, resourceful and/or clever use of materials, evidence of support of research for an idea, organization that communicates effectively, and evidence of high interest and perseverance.

  Another component of the Texas Education Agency Javits Project, also developed by Kaplan, involves the use of *Activity Placements* that enables the child to interact in school-related activities to show potential instead of merely taking a test or waiting to be recognized by the teacher. The *Activity Placemats* are content-free, can be used in any area of study, and "are specifically designed to assess certain processes of creative, logical, and critical thinking such as planning, seeing relationships, and hypothesizing" (Hiatt, 1991, p. 26).

- **The Nebraska Project: Early Identification of High Potential Students from Underserved Populations** (Lincoln, NE) developed the *Nebraska Starry Night Observational Protocol* as an early identification instrument with which behavior is observed, described, and scripted, and then recorded in a *Constellation(s)* within a *Behavior Universe*. The constellations represent behavioral configurations, the manifestations of which take varied forms that change across time, task, and children. *Nebraska Starry Night* "represents the metaphor, with all the behaviors within the protocol clustered in 'constellations' " (Griffin, 1992, p. 6). The focus is on the creation and testing of "an original, observation-based early

identification instrument, one designed as a screening device to be used by regular classroom teachers in the regular classroom" (pp. 5-6).

The protocol includes 18 constellations with illustrative classroom behaviors listed for each. The final constellation is labeled *COMET* and directs the teacher's observation as follows: "Any behavior that is off-the-wall spectacular and cannot be ignored as evidence of special ability or talent, but doesn't appear to fall into any of the constellation categories, call it a COMET, script it as you would any behavior, and record it in the COMET segment of the behavior universe" (p. 12).

In connection with a project involving the collection and evaluation of instruments and procedures used by Javits grantees and other schools, Callahan, Tomlinson, and Pizzat (n.d.) identified 11 programs that seemed to: (a) apply the principles that have been advocated in the literature on gifted education, (b) have attempted to deal with the question of equity and the issues relating to the identification of economically disadvantaged and limited English proficient students, and (c) use innovative approaches. Their review of these programs led them to identify the following "commonalities and themes," displayed to different degrees and clarity in the various program reports.

- *Acceptance of intelligence as multi-faceted*—"a trend toward viewing intelligence as manifesting itself along multiple dimensions rather than one or two dimensions."
- *Recognition of the multiple manifestations of giftedness*—"an acceptance of the premise that intelligence expresses itself differently in different contexts and cultures" that leads to the search for intelligence in culture-specific and context-specific ways.
- *Emphasis on authentic assessment tools and assessment over time*—reliance on "data collection via interaction with students and observations of students in action rather than a reliance on paper and pencil responses."
- *Expanding sources of evidence*—expansion of sources of information from a wide variety of school and non-school sources.
- *Development of a philosophy of inclusiveness rather than exclusiveness*—"stress the existence of giftedness in all cultures and economic groups, seek students who are gifted non-conformers as well as performers, and focus on strength-finding and strength-building in students rather than deficit-finding and remediation in order to foster undiscovered ability."
- *Strong links between the identification process and instruction*—typified by a clear linkage between identification and service to students and the use of data "for instructional decision-making, not labeling."
- *Collaborative efforts*—involvement of a variety of persons with different areas of expertise who broaden the base for services.
- *Use of identification to enhance understanding*—utilization of the identification process to sensitize staff members about the presence and needs of gifted students.

- *Early and on-going plans and procedures to evaluate the process*—"a commitment to assess the success of the identification procedures in identifying gifted students and the services offered to the students identified by the new process" (pp. v-vii).

CHAPTER 8: Toward a New Paradigm for Identifying Talent Potential Amongst Culturally Diverse Populations

The models and paradigms that have dominated the search for talent potential, primarily psychometric and test-driven, have been justly criticized because of the drastic and unconscionable underrepresentation of culturally different, economically disadvantaged, and limited English proficient gifted students. Although the traditional paradigms seemed to have worked somewhat better with the non-minority middle class groups, even with that population they have neither adequately nor satisfactorily identified the range and variety of talent potential.

The search for new paradigms that would enhance the search for talent potential has been ongoing, one that has intensified over recent years as educators and others have become increasingly concerned with the underrepresentation of economically disadvantaged in programs for the gifted.

For the past three decades, there has been controversy regarding the nature and causes of low achievement of minority and economically disadvantaged populations and their underrepresentation in gifted programs. The controversy focuses on whether the causes are "deficiencies" in the children and their families that stem from the conditions of poverty in which they live or the inadequacies of and discriminatory practices of schools and society that restrict the search for talent potential and its nurture. This controversy has led to debates as to whether there really are special needs, procedures, or approaches for identifying gifted minority students or whether the general improvement of identification processes will lead to greater success in recognizing the talent capabilities of these youngsters.

This review of the issues and the efforts regarding the assessment of talent potential of children from diverse cultures makes clear the fact that the problems of identifying and nurturing talent potential are not resolved by formulating constructs of giftedness solely for minority and economically disadvantaged students that differ from those for the majority populations, or by watering down the criteria or standards for excellence or outstanding performance, or by seeking different areas of talent in various populations. On the other hand, the review makes clear that cultural differences and environmental contexts have a significant impact on behavior and performance and must be attended to if the search for talent potential among all populations is to succeed.

The challenge is one of creating paradigms that take culture and context into account in order to enhance the possibilities for identifying potential of many kinds in all populations so that appropriate opportunities and conditions can be provided to nurture potential to talented performance. Focusing on ways to increase the representation of economically disadvantaged minorities in programs for the gifted has meaning and implications for the ways the search for talent potential in all populations can be enhanced and improved. New paradigms will consider the following elements differently from the traditional psychometric models.

1.   **New Constructs of Giftedness.** Giftedness is being reconceptualized and redefined to encompass a broad range of cognitive and affective traits and qualities that are dynamically displayed as potential to be nurtured and developed. New constructs of giftedness reflect multifaceted, multicultural, multidimensional perspectives and are defined by traits, aptitudes, and behaviors to be nurtured rather than by static test performance.

Although certain talent areas may have greater value and relevance in some cultures than others, the basic elements of the gifted construct are similar across cultures. Culturally diverse, economically disadvantaged, and limited English proficient groups do not value broadly defined concepts of intelligence and aptitude any less than a middle-class group, although they may not give the same value to a standardized test score that conveys a narrow view of intelligence.

Newer conceptions apply to all individuals with talent potential, not just those who are economically disadvantaged or limited English proficient. For example, constructs such as Gardner's Multiple Intelligences, Sternberg's Triarchic Theory, Renzulli's Talent Pool, and others, call attention to a broad array of traits and behaviors that contribute to talent potential and talented performance. There are no talent areas that are reserved for particular racial, ethnic, or cultural groups. By defining giftedness dynamically, the possibilities for demonstrating potential by individuals from all groups are markedly increased.

The giftedness construct is critical in guiding identification processes. Conceptions of talent must be examined in the context of diverse cultures and socioeconomic levels in order to give meaning to the notion of "gifted potential" that is not limited to the prevailing dominant tradition, one that is itself in transition as well.

2.   **Absolute Attributes and Specific Behaviors.** Although it has long been understood that culture and environmental contexts play a significant role in the display of talent potential, educators have been slow in implementing and applying those understandings. There is a consensus that there are *absolute attributes* of giftedness—traits, characteristics, and behaviors that are universally associated with talent potential and performance—and *specific behaviors* that represent different manifestations of gifted potential and performance as a consequence of the social and cultural contexts in which they occur. Dynamic assessment focuses on the specific behaviors, the ways the absolute attributes are displayed in a particular context.

Ten traits or aptitudes that are generally considered absolute attributes of giftedness were listed in Table 1. Although the list represents a

compilation from a number of researchers, it could be revised with other traits added and some deleted. The concept of absolute attributes is pretty well accepted; the details are still changing.

In various settings, each of the traits or aptitudes might be displayed differently. *Unusual communication skills*, for example, "the ability to be highly expressive with words or symbols," appears to be an attribute of all gifted individuals but the ways such skills are exhibited will vary with culture and context. It is the specific behavior, culturally and contextually determined, that has significance for improved identification. The display of unusual communication skills is not limited to high scores on reading or other standardized tests but will be manifested by products and performances in many situations and under diverse conditions. A bilingual Hispanic child in the *barrio*, an African American child in an inner city ghetto, an American Indian child on a reservation, a White child in a rural setting, and an African American child in a suburban setting, might all exhibit "unusual communication skills" in very different ways. Consequently, it is the specific behaviors that must be assessed as manifestations of attributes of giftedness. The identification processes must facilitate the display of gifted behaviors.

3. **Cultural and Contextual Variability.** To acknowledge that cultural variables significantly affect behavior both positively and negatively is only a first step toward improved identification processes. The review of the range of differences among and within cultures, underscores the complexity of the problem. While there are some valid generalizations that can be made about "a culture," there are a broad range of intragroup differences that raise cautions regarding stereotypes and characterizations.

Although generalizations can be made about a particular culture's child-rearing patterns, family structure and relationships, community values, educational aspirations, cognitive functioning and information processing strategies, peer relationships, socializing mechanisms, and other aspects of a group's social and psychological functioning, their application to specific individuals in particular contexts can vary considerably.

While it is impossible to acquire specific knowledge about every cultural or ethnolinguistic group, it is not unreasonable for educators to increase their sensitivity to and understanding of culturally determined and environmentally affected behaviors and to recognize and interpret such behaviors in the context in which they are displayed. Behavioral and performance indicators of talent potential, self-perceptions of ability, teacher attitudes and insights, familial characteristics, environmental features or people or services that hinder the development of potential—all of these are relatively focused when considered in a particular setting. That is, there are overall understandings and insights regarding cultures

and there is knowledge and insights regarding the specific populations within which talent potential is being sought and nurtured. Table 2 provided some examples of how characteristic cultural values may affect attributes of giftedness and result in their being displayed differently behaviorally.

4. **More Varied and More Authentic Assessment.** The use of multiple criteria and non-traditional measures—instruments and assessment tools other than intelligence and achievement tests—is widely advocated. Traditional identification approaches can be improved by designing, adapting, modifying, and extending instruments, strategies, and procedures that take into account the influence of race, culture, caste, and socioeconomic status on behavior.

    Authentic assessment involves data collection that is derived, in part, from observing the interaction of students with learning opportunities. Many of the checklists and observation forms developed for Javits programs use such techniques to guide the teacher's search for gifted behaviors.

5. **Identification Through Learning Opportunities.** Economically disadvantaged and limited English proficient students are more likely to be in schools and classrooms where they have fewer opportunities to demonstrate their talent potential. Schools with fewer challenging curricula, fewer instructional resources, and environments that provide limited educational opportunities, effectively impede the chances for potentially gifted students to manifest gifted behaviors.

    The search for talent will be enhanced by improving the quality of learning and the learning environment in ways that will open up opportunities for the display of gifted behaviors—what Montgomery County (MD) calls "identification through teaching." The concept of "self-identification" takes on considerable meaning and importance for the disadvantaged gifted. Passow (1986) has argued for the creation of environments that will make it possible for students to engage in rich learning opportunities as a means of displaying gifted behaviors and talent potential:

    > By their behavior, by their performance and products *when provided with opportunities to demonstrate unusual potential*, students can and do indicate that potential. Qualities of leadership, evidence of creativity and unusual solutions to problems, sensitivity and insight to environment and community interactions, ability to manipulate symbol systems valued by a subculture— these and other "positive strengths" are manifested by the disadvantaged. . . . (p. 162)

As Griffin (1992) put it describing the Nebraska Starry Night project:

> The operational definition, therefore, of the *educate* aspect of the model is the creation of a developmentally appropriate learning environment where children are actively involved in the *construction of their own knowledge*. For the *assess* aspect of the model, *assessing student behavior*, including both observable classroom behaviors and student products is the primary means by which learning and progress are evaluated. (p. 3)

CHAPTER 9: Conclusion

The components of traditional paradigms have come under criticism for a variety of reasons: (a) the giftedness construct is too narrow and limited; (b) alternative approaches to or modifications of the identification processes focus on "fitting" populations into a narrow giftedness construct; and (c) the impact of culture and environment is not taken into account.

New paradigms are needed that respond to these criticisms by reconceptualizing the giftedness construct, focusing on gifted behaviors, designing dynamic approaches to assessing gifted and talented behaviors within the students' sociocultural context, and integrating identification processes with learning opportunities. In forging new paradigms, strategies need to be employed that consider a variety of factors that impact on the behaviors of gifted economically disadvantaged and limited English proficient students, looking at these factors within and across various cultural groups and diverse environmental contexts.

The nature of the problem—the under-development of the talent potential of gifted culturally diverse, economically disadvantaged, and limited English proficient youngsters—is clear. The hopeful aspect is that the elements of needed new paradigms for identifying and nurturing talent potential are becoming equally apparent. In coming to grips with more effective approaches to the identification and development of talents among minorities, the promise is that educators will better understand how to identify and nurture talent potential among all learners.

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