Developing Equity in Gifted Programs: Testing an Approach

by

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Approved by the Committee on
the Degree of Doctor of Education

Date MAY 14 2007

Submitted in partial fulfillment of the
requirements for the Degree of Doctor of Education in
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ABSTRACT

DEVELOPING EQUITY IN GIFTED PROGRAMS: TESTING AN APPROACH

Kathleen Anne Kelly

The under-representation of ethnic minorities in gifted education programs is a persistent problem in the American educational system. Outstanding in popularity among possible solutions to this problem is the recommendation to use multiple-measure identification procedures to increase ethnic diversity. The purpose of this study, set in a suburban school district in the northeastern United States, is to investigate group differences, between fifth and ninth grades, among students identified for participation in honors classes through the use of a multiple-measure identification process administered in the fifth grade. The questions being investigated focus on whether, in a culturally diverse setting, the adoption of a more pluralistic approach to identification of gifted learners leads to a

more diverse gifted population, and will the newly-identified students find similar rates of academic success as they enter their high school years?

Data were collected from student records at the district level, with the variables being studied being specifically related to the identification of giftedness and academic success. Chi Square Analyses were performed to investigate four of the five research questions, with employment of ANCOVA procedures to investigate the final research question.

Through the analyses, it was found that the introduction of the multiple-measure identification procedure did not increase the ethnic diversity of the program. Notwithstanding the fact that, overall, diversity was not increased by this new protocol, it was found that minority students identified were more likely to make it into the gifted program by virtue of the new protocol, not in the traditional single-measure way, which relied on standardized test results alone. Additionally, it was found that students in both protocols experienced similar academic success rates, retention rates in honors programs in high school, and similar academic gains as reflected standardized test scores.

While this particular multiple-measure identification methodology did not increase the participation of minority students in honors courses in general, it did identify students who persevered in honors courses at the same rate as their traditionally identified counterparts. This finding is meaningful as we search for ways to identify students who will benefit from special programming for gifted learners over the long-term.

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Chapter I

BACKGROUND AND STATEMENT OF THE PROBLEM

Background of the Problem

Controversy in the Field

The field of gifted education reflects the changes that have transformed general education over the past 50 years due to desegregation, mandatory schooling, and early learning initiatives. Much of that change has been focused on equity in both the identification of gifted learners and the provision of services for students in gifted education programs. Baldwin (2004) points out that "the lack of culturally diverse and underserved populations in programs for the gifted is a major concern that has forged dialogues and discussion...over the past five years" (xxiii).

The controversy we have experienced over equity in the identification practices traditionally employed by school districts, namely standardized achievement tests, is well-documented (Ackerman, 1997; Baldwin, 1987; Baska, 1986; Borland, 1989; Brown, 1997; Coleman, 1999; Damiani, 1996; Fishkin et al, 1996; Ford, 1998, 2000; Ford & Thomas, 1997; Frasier, 1991; Goetz et al, 1996; Harris & Ford, 1999;

Howells, 1998; Kitano, 1991; Kaufman & Harrison, 1986; McGonagill, 1997; Passow & Frasier, 1994, 1996; Pendarvis & Howley, 1996; Piechowski, 1984, 1986; Pyryt, 1996; Scott, et al., 1996; Sisk, 1994; Sternberg, 1986, 1998; Schwartz, 1997; VanTassel-Baska & Willis, 1987; Wright & Borland, 1993). This debate is particularly relevant in districts that serve diverse populations, as those students excluded from these special programs for gifted learners tend to be from cultural minority groups and low-income families. In fact, as Patton (1990) points out, "gifted and talented students from culturally diverse and low socioeconomic environments represent untapped potential" (p. 94). Many in the field are concerned with this disequilibrium and are endeavoring to find ways to bring balance to the identification and retention of gifted learners from all cultural and economic backgrounds.

There is evidence that a discrepancy in test scores between Black and White students is the driving force for this disequilibrium within the field. This becomes even more significant when we examine entrance requirements to special programs for gifted learners as well as more rigorous high school courses, and realize the heavy reliance on test scores as the primary entrance requirement for these programs and courses. The differences in school

experiences between minority and nonminority students begin as early as three years of age. Over the past twenty-five years, we have actually lost ground with respect to minority enrollment in preschool programs. According to data from The National Center for Educational Statistics in their report entitled "The Educational Progress of Black Students" (1994), what began as similar enrollment rates in the 1970s, with 25% of all three- and four-year-olds attending pre-kindergarten has developed into a tale of two populations. By the 1990s, there existed nearly a ten percent difference in participation in pre-school for Blacks, with a 31% enrollment rate, and Whites, with a 40% enrollment rate.

Much of the debate surrounding equitable identification of academic potential has centered on the concept that in the field of gifted education there exist special groups of learners. Because our mainstream constructs of giftedness are based on the behaviors exhibited by subjects from the majority group, "participants in gifted programs, by and large, tend to come from middle and upper socioeconomic status family backgrounds, regardless of culture group membership" (Frasier, 1991, p. 24). Frasier goes on to clarify that "groups typically designated as underrepresented in gifted

programs also tend to be classified as having more members who are in a low socioeconomic group" (Frasier, 1991, p. 24). It is a fundamental convolution of the problem that in the United States culture group membership and socioeconomic status are so closely linked. The National Center for Educational Statistics (U.S. Department of Education, 1995) found that African-American people in this country have much higher odds of being either poor or from very rural or very urban areas, or both. In fact "in 1992, 46 percent of Black children, as opposed to 16 percent of White children, lived in a family with an income level below the poverty line" (p. 3).

This emphasizes the findings of Skuy, Gaydon, Hoffenberg, and Fridjhon (1990) regarding "the importance of additional research and application of appropriate processes for identifying children from disadvantaged groups" (p. 97). As the field of gifted education moves forward, it must do so reflectively and with regard for those things that would be classified as challenges. The differentiated school experience between minority and nonminority students, and the effects that has on their academic achievement are front-runners among the challenges that will define the field in the future. Based on national census data and future projections, Americans look

forward to more diversity, not less, in the future. Now is the time to endeavor to solve this complex and persistent problem.

In searching for ways to address this inequity, members of the scholarly community have done much to illuminate the effects of the disparity between traditional forms of identification of academic potential (single-measure, standardized achievement test results) and multiple-measure methods of identification, particularly the effects on groups classified as underrepresented in gifted education. One has only to look over the publications in the field from the past 20 years to see the plethora of articles on the topic (Borland & Wright, 1994; Frasier, 1991; Hunsaker, et al., 1997; Johnsen & Ryser, 1997; Kaufman & Harrison, 1986; Mills & Tissot, 1995; Mitchell, 1988; Passow & Frasier, 1994; Richert, 1987; Robinson & Chamrad, 1986; Silverman, 1986; Tomlinson, 1995; Treffinger & Feldhusen, 1996, VanTassel-Baska, 1986; Zorman, 1996). We find a variety of viewpoints in the literature, ranging from those in favor of single-measure identification schemes to those wishing to take bold, if untested, steps toward new approaches to gifted identification. What we find lacking is empirical evidence related to these new, multiple-measure identification

procedures, which could lead us to a definitive answer to the questions surrounding equitable identification for all gifted learners.

The engine that drives this parity movement is fueled by the inequity of the results of identification procedures used in the majority of districts across our country. In fact, Ford (1997) found that "under-representation of racially and culturally diverse students is one of the most persistent, troubling, and controversial issues in education" (p. 201). If giftedness, as is accepted in the field, is evident in all areas of human endeavor as well as all cultural groups, a logical conclusion would be that the faces in our gifted education programs should, at least approximately, mirror the faces in our general education populations.

Richert (1987) aptly describes a finding in The National Report on Identification (Richert, et al., 1982), revealing, "certain groups of gifted students are especially disadvantaged by the typical identification procedures being used in the United States" (p. 150). She goes on to enumerate the group of disadvantaged gifted as including racial and cultural minorities, rural and urban populations, and female, preschool, or disabled gifted students. Further, she writes that "the group whose

disadvantage cuts across every subpopulation, goes beyond them into the white majority population, and that is most consistently excluded through typical identification procedures in the United States is the poor" (Richert, 1987, p. 151).

The statistical picture is presented succinctly by the National Center for Education Statistics' report entitled "The Educational Progress of Black Students" (1994) in which they report

> Black children are at an educational disadvantage relative to white children for a number of reasons, including lower average levels of parental education, a greater likelihood of living with only one parent, fewer resources in their communities as a result of income-based residential segregation, and, especially, a greater likelihood of experiencing poverty. In 1992, 46 percent of black children, as opposed to 16 percent of white children, lived in a family with an income level below the poverty line. (p. 1)

Identification Practices

In order to make some sense out of the reasons for the ineffective identification of minority gifted learners, we must first look at the ways in which school districts identify gifted learners. Richert (1987) describes four problems leading to the exclusion of the minority gifted:

> (1) conceptually limited definitions of giftedness that reduce giftedness to a simple test score; (2) confusion between the research and programmatic purposes of identification; (3) identification procedures that oversimplify the complexity of

> giftedness; and (4) program designs that serve too few students with exceptional potential. (pp. 150-151)

Because a problem for the minority gifted has been their historically lower performance on IQ and achievement tests (now called "single-measure identification" protocols), nontraditional measures and multiple-criterion approaches have been recommended throughout the literature (Borland & Wright, 1994; Frasier, 1991; Hunsaker, et al., 1997; Johnsen & Ryser, 1997; Kaufman & Harrison, 1986; Mills & Tissot, 1995; Mitchell, 1988; Passow & Frasier, 1994; Richert, 1987; Robinson & Chamrad, 1986; Silverman, 1986; Tomlinson, 1995; Treffinger & Feldhusen, 1996; VanTassel-Baska, 1986; Zorman, 1996). "The principles of comprehensiveness, equity and pluralism require that multiple procedures be available to identify all gifted and talented students -- for their benefit and ours -- regardless of the entering characteristics " (Richert, 1987, p. 151). Even the proponents of the use of intelligence tests are quick to point out that they should not be used in isolation (Borland, 1986; Robinson & Chamrad, 1986; Silverman, 1986). Borland goes so far as to recommend using IQ scores if they benefit the child and ignoring them if they do not (particularly if they are contradicted by other data). In addition, he cautions

against a common practice of combining data from various sources into a single composite gifted index, which is "psychometrically uninterpretable and obscures important information needed for decision making" (Borland, 1986, p. 166).

Kaufman and Harrison (1986) found that there is evidence of

> ...an endorsement for the application of multiple criteria for gifted assessment to enable those children with special creative talents, and those who are able to achieve highly in school despite ordinary performance on intelligence tests, to benefit from and enjoy the challenges of a gifted program; but they endorse just as strongly the inclusion of an intelligence test as one of the criteria. (p. 154)

To that end, Public Law 94-142, the federal law that mandates minimal provisions for the education of students identified as needing special education services (not including gifted students), established that no single procedure should be used for determining an appropriate educational program for a child. Additionally, DeHaan & Havighurst, early pioneers in the debate, indicate that a "a good program aims at the discovery and development of a variety of talent." (DeHaan & Havighurst, 1957, p. 33).

Recommendations from the Field

It becomes imperative for us, as we seek equity of opportunity for all learners to examine the belief that many in the field of gifted education have that traditional measures of intelligence do not effectively identify some of our students from populations that remain underserved in gifted programs. Now that we have begun to recognize this problem, the time has come to work to rectify the situation so that all learners with special needs can be served.

These points not withstanding, we stand at a crossroads. We recognize the need for change, and some pioneers have begun to ask the difficult questions, particularly focusing on multiple-measure identification procedures. The time has come to begin to analyze these attempts to learn about their effects on the identification process as a whole, as well as on the students themselves. Reis (2004) contends that "fair identification systems use a variety of multiple assessment measures that respect diversity, accommodate students who develop at different rates, and identify potential as well as demonstrated talent" (xii). This may well be; however, it would seem we have lost our focus with respect to the impact of these recommendations on specific school systems, and more importantly, individual students. Absent in the literature

is any focused attempt to analyze the success of nontraditional methods with respect to retention of such identified learners in rigorous academic programs. It is incumbent on those who recognize the need for validity in our efforts to do the hard work of scrutinizing our efforts, as well as the wake we leave behind in our attempts to answer the calls to reform. Sternberg (1986) sums up the need for proof in this way:

> ...very recently, even some psychologists and educators who are aware of the recent developments in identification of the gifted are calling for a return (or in many cases, continuation) of the policy of identifying the gifted primarily or exclusively through IQ (e.g., Zigler & Farber, in press). Their argument is that the promise of other kinds of measures has not been fulfilled, and that with IQ, at least, we know what we are getting. (p. 143)

Assumptions for Future Efforts

There are three assumptions to ponder as we continue our work of searching for effective ways to identify and serve the diverse needs of gifted learners. First, intellectual giftedness occurs in every subpopulation with roughly the same frequency. People, by nature of their cultural background, are not more or less likely to be intellectually gifted. Second, it is incumbent upon those of us who recognize this to take the necessary steps to ensure that intellectual needs are identified and met for

all learners. Third, it behooves the educational community that we be committed to do our best to avoid the deleterious effects that unsubstantiated practices may have on our students as we attempt to respond to this systemic need for equity in identification, thus placing our students in the precarious position of being harmed by our use of untested identification procedures.

As we begin to attend to this inequity, we should keep in mind that these populations do not exist in a vacuum. Our attempts at solutions should be designed to reduce the potential negative effects on the students involved. One question we must discuss is how to "create alternatives to traditional identification procedures in order to establish a sort of 'safety net' for the underserved" (Mitchell, 1988, p. 163). We desire programs that screen larger percentages of students in order to beneficially assess a larger target sample, in the hope of catching all potential. Many programs follow a similar framework: (a) nomination into a pool of potential candidates, (b) assessment of gifted behaviors using a variety of tools, (c) evaluation based on a pre-developed desirable profile, and (d) programmatic prescription based on analysis of need. Some of the tools used in this screening process include IQ tests, achievement tests, behavior checklists,

nomination forms (self, peer, teacher, and parent), interest inventories, reading and math placement tests, and creativity tests (Borland, 1986; Borland & Wright, 1994; Hunsaker, et al., 1997; Kaufman & Harrison, 1986; Mitchell, 1988; Passow & Frasier, 1994; Richert, 1987).

Whichever path we intend to take, the point is that the time has come to make a change, as is born out by the many, varied reports, surveys, and research monographs illuminating the problem of underrepresentation of minority students in gifted programs. George Counts, a sociologist and educator and a former longtime professor at Teachers College, had much to say about a teacher's place in the world. He posited that teachers should lead society, not follow it and that we have a choice -- we can either reflect the knowledge, beliefs and values of society or we can seek to change them. Counts is quoted in The *Moral and Spiritual Crisis in Education,* written by David E. Purpel (1989)

> We must abandon completely the naive faith that school automatically liberates the mind and serves the cause of human progress; in fact, we know that it may serve any cause. [It] may serve tyranny as well as truth, war as well as peace, death as well as life . . . whether it is good or evil depends, not on the laws of learning, but on the conception of life and civilization that gives it substance and direction. In the course of history, education has served every purpose and doctrine contrived by man. If it is to serve the cause of human freedom,

it must be explicitly designed for that purpose. (p. xiii)

Statement of the Problem

Let this be the new direction for our attentions: to explicitly design procedures for the purpose of equitable identification of all gifted learners. Reverend Jesse L. Jackson (1978) frames our lofty intent well when he points out "we must move from educational existence to educational excellence" (p. 185). If we use this auspicious lens to view the varied subpopulations within education, from those needing more support to those needing more challenge, we begin to see what must be done.

The under-representation of ethnic minorities in gifted education programs is a persistent problem in the American educational system. To go farther, "identification is at the crux of the problem of under-representation, for this is the process whereby more students from some groups and fewer children from other groups are designated as gifted" (Borland, 2004, p. 21). Outstanding among the possible solutions to this problem is the recommendation to use multiple-measure identification procedures to increase ethnic diversity.

The purpose of this study is investigate group differences between fifth and ninth grades among students identified for participation in honors track classes through the use of a multiple-criterion identification process in the fifth grade year. The questions being investigated are (a) whether, in a culturally and economically diverse setting, the adoption of a more pluralistic approach to identification of gifted learners leads to a more diverse gifted population and (b) will the newly identified students be retained in the program into high school?

Research Questions

1. Did the introduction of a multiple-measure identification procedure in a suburban school district serving a diverse population create a pool of sixth grade honors students that was more culturally diverse than prior to when these identification procedures were employed?

2. What were the differences, if any, between the groups differentiated by the identification procedures with respect to minority status?

3. Are these groups of students differentiated by identification procedure retained in the honors courses into their high school years at similar rates?

4. Do these groups of students differentiated by identification procedure experience similar academic success rates in ninth grade?

5. Do these groups of students differentiated by identification procedure make similar academic gains (as reflected in standardized test scale scores) between fifth and ninth grades?

Significance of the Study

The significance of this study becomes apparent as we examine current projections for U.S. population diversity in the future. The Council of Economic Advisors reveals "racial and ethnic diversity of the United States will expand substantially in the next century" (Campbell, 1996). In the 1970 census, considered the Marland-Report Era in gifted education, minority groups (including African-Americans, Hispanics, non-Hispanic Blacks, Asians and American Indians) "only represented 16% of the population". However, "by 1998, this share had increased to 27%". The

U.S. Department of Commerce/U.S. Census Bureau published a report in 1999 entitled Population Profile of the United States: 1999, which contained a plethora of projections for our population diversity in the year 2050, including:

> ~ The population of the United States was 263 million in 1995, and will be 394 million in 2050.
> ~ The Minority population will account for nearly 90% of the total growth of 131 million people.
> ~ All racial and ethnic minority groups will increase faster than non-Hispanic Whites.
> ~ The Minority population most likely will surpass the non-Minority (non-Hispanic White) population after 2050.

The significance of this study is that this research will help us to understand whether new, multiple-measure identification procedures are making a difference in performance and retention for any students in gifted programs, but for minority students in particular. The aforementioned recommendation that we use multiple-measure identification procedures, particularly in diverse settings, has become widely accepted but gone virtually untested in the field. The fact that diverse settings will become more and more the norm as we approach 2050, finding an equitable solution to the under-representation of these populations in gifted education becomes an important part of any school reform movement. It is my aim to examine the many layers of success and failure that have been

experienced in a specific diverse setting relative to the use of a multiple-measure identification procedure, performed at the end of fifth grade, for a sixth grade high achievers class and subsequent academic success as reflected in ninth grade placements and achievement indicators.

Definitions

Alternative Assessment - An assessment in which students originate or create a response to a task or question in formats including: demonstrations, exhibits, portfolios, oral presentations, or essays.

Culturally Appropriate Assessment - Assessment tools and methods which are "fair" to the student in the sense that they are: given in his or her native language; given and interpreted with reference to the child's age, socioeconomic, and cultural background; given by trained persons; and appropriate, even if the child has a physical, mental, speech, or sensory disability. This has come to mean an assessment must be fair to students of all language and cultural backgrounds.

Disadvantaged Gifted - Identified participants in gifted programs who are at a disadvantage due to lack of educational resources and parental education in the home.

Diverse Population - The student population in any educational setting that serves a population consisting of substantial variety with respect to race, ethnicity, language, socioeconomic class, disabilities, and/or gender.

Equity - The state of educational impartiality and fairness in which all children—minorities and non-minorities, males and females, successful students and those who fall behind, students with special needs and students who have been denied access in the past receive a high-quality education and have equal access to the services they need in order to benefit from that education.

Matrix - An orderly array, a format in which results are organized for comparison, leading to decision-making process for participation in gifted programs.

Minority - (As relates to national minority standing) students classified in one of the minority ethnic groups: Black, Hispanic, Asian, and Native-American.

Multiple Criterion - Any behavior which is completed by considering the results of three or more types of assessment, not to include dual- or single-criterion.

Nontraditional Gifted - Students whose entrance to a gifted program can only be ascribed to "nontraditional"

procedures, those being anything outside of those defined as "traditional."

Performance Assessment - Systematic and direct observation of a student performance or examples of student performances and ranking according to pre-established performance criteria. Students are assessed on the result as well as the process engaged in a complex task or creation of a product.

Portfolio - A collection of student work chosen to exemplify and document a student's learning progress over time.

Traditional Gifted - Students whose entrance to a gifted program could be ascribed to "traditional" procedures, including and limited to intelligence tests and/or standardized tests of ability or achievement.

Under-represented Groups - Groups of learners who, by virtue of membership in a specific group (i.e., culture group, physically handicapped, gender), are represented in special programs in reduced proportion to their representation in the overall population.

Chapter II

LITERATURE REVIEW

Minorities in the Mainstream

A New Generation

A review of the history of the problem of the under-representation of minority students in gifted education reveals two types of inquiries. Earlier researchers, here known as first generation researchers, focused on the important questions of the day: Is there a problem?, Who is affected by the problem?, What are the possible solutions? These questions were the focus of much of the research of the 1970s, 1980s, and 1990s. From these inquiries educators realized that there was a problem and that a more pluralistic definition of giftedness was a step in the right direction.

We now find ourselves in the second generation of research. The inquiries have become more focused on testing solutions, discerning long-term effects and tracking marginalized groups. We are taking a new look at the field by examining existing programs that have

implemented some of the "first generation" solutions to see what the results are.

This research study is designed to add to that "second generation" pool of knowledge to help determine whether new identification procedures are making a true and credible difference in selection and retention for any students in the gifted program, but for minority students in particular.

This generational thinking reflects the growth in understanding writers in the field have experienced. Where by-gone days saw researchers endeavoring to identify some innate "thing" through the application of psychometric tests, today finds us grappling with the social constructs of power and privilege and their overly in the lives and thinking of our students.

Getting the Big Picture

Nowhere in our society has the much-needed desegregation of our population been more persistently problematic than in the field of education. As we celebrate the 51st anniversary of the Supreme Court decision in the case of Brown vs. The Board of Education, we contemplate the effects of the decision on the educational institutions of our country and the ground we

have covered to date relative to reform, not only in our institutions, but also in our own attitudes, perceptions and assumptions about intelligence.

Beginning in the 1930s, as researchers started the conversation about equity in educational opportunity for all students, we see imperatives being defined related to our very bright children. Jenkins succinctly pointed out "the Negro child of superior intelligence, however, has been almost altogether neglected" (p. 175). In that same publication, a researcher named Frank S. Horne (1936) drew a compelling picture of the disparities that existed between Black and White educational opportunities. He painted an idyllic picture of a rural school for White children in Crawford, Georgia, including swings and see-saws, shrubbery, and robust architecture. He then contrasted it with the "dingy cracker-box of a building [which] stood in a clearing…with irregular openings that served for door and windows" (p. 359). Horne termed this "dog house education," clearly showing that "separate but equal" was not always an apt description for our educational offerings of that day.

Truly, the road to desegregation has been convoluted and complex. It has taken, and will continue to take, a series of monumental paradigm shifts for those with

entrenched and historically negative attitudes about the nature of diversity and individual worth, in order to bring about a zeitgeist that will truly allow for individuals to be treated with equal justice. Venerated civil rights orator, Ralph J. Bunche (1936) points out

> …it must be admitted at the outset that the educational process for Negroes as for all other peoples in the nation cannot be divorced from the dominant political, social, and economic forces active in the society. (p. 351)

Ford and Harmon (2001) expose that "ideas about cultural diversity influence definitions, policies, and practices" (p. 141) and "too often, differences are equated with deficits" (p. 141). As we continue to make that journey toward educational excellence for all learners, it becomes important to take stock of where we are, as well as what is working and what is not.

The Statistical Picture

We are offered a glimpse into the current status of Minority learners by a pair of recently published government resources. First, Educational Achievement and Black-White Inequality (2001), a report published by the National Center for Educational Statistics of the U.S. Department of Education Office of Educational Research and Improvement offers insights in the form of analyses of

longitudinal surveys and statistical data regarding myriad topics related to race and education. Second, Status and Trends in the Education of Blacks (2004), also published by the National Center for Education Statistics of the U.S. Department of Education, but from the Institute of Education Sciences, which offers broad stroke comparisons of Black learners as compared with their White counterparts. These findings are taken from The Digest of Educational Statistics (2004), published by the same Institute of Education Sciences.

These documents do much to confirm the connection between Black underachievement in school and depressed economic futures. The similarities of other minorities, including Hispanic and Native-American learners, with respect to suppressed academic achievement expands this group beyond simply Black students. On the topic of wage-earning potential, the following was found in Educational Achievement and Black-White Inequality (2001):

> • Recent research suggests that black-white differences in educational achievement account for much of the black-white wage gap for men, and all of the Black-White wage gap for women. (p. 21)
> • The decline in blacks' relative labor force participation, and the increase in blacks' relative unemployment, appear to be due, at least in part, to an overall decrease in the labor force participation and employment of less educated workers, who are disproportionately black. (p. 22)

> • Several recent studies using the National Longitudinal Survey of Youth (NLSY) have found that between two-thirds and three-quarters of the black-white wage gap for men can be explained by either achievement alone or by a combination of achievement and educational attainment. (p. 24)

With regard to achievement, Status and Trends in the Education of Blacks (2001) finds

> • In 1998, Black students were less likely than White students to take advanced mathematics courses and some advanced science courses and less likely than Hispanic students to take advanced foreign language classes. (p. 12)
> • Despite gains among Black students at all three age groups since the 1970s, their performance in 1999 remained statistically significantly lower than that of White students. (p. 61)
> • Black students' mathematics performance has seen no statistically significant change since the 1980s. (p. 63)

Pair these findings with the fact that the 2000 U.S. Census found that statisticians project that minorities will be the majority in the United States by the year 2050 and we see a well-defined need for solutions. Surely, there is ground to cover in our quest for equity in education. One byproduct of this inequity is the current under-representation of special populations in gifted education.

The Problem of Under-representation in Gifted Education

Defining the Problem

As with most aspects of education, the field of gifted education has its share of successes as well as failures.

Truly, an area of great concern in this age of parity and equity is that which deals with special groups of underrepresented gifted learners (Borland, 2000; Damiani, 1996; Ford, 2000; Ford, 1998; Ford/Thomas, 1997; Frasier, 1991; Maker, 1996; Passow & Frasier, 1994; Scott, et al, 1996; Sisk, 1994; VanTassel-Baska, 1987).

Passow and Frasier (1996) reflect the vastness of literature that supports this consensus as they point out that "the under-inclusion of economically disadvantaged and children of minority cultures in programs for the gifted has been so well documented over the years that it hardly needs further recounting here" (p. 198). Morris (2002) contends

> It would be redundant to expound, in painstaking Detail upon the myriad statistics that speak to the disproportionate under-representation of African American students in gifted education programs throughout schools in the United States. (p. 59)

A fitting place to start on our review of literature on the topic might begin with the question of how we define the concept of under-representation. Researchers and practitioners in the field offer a wide variety of definitions and distinctions with regard to the term "underrepresented." Howells (1998) and Scott, et al. (1996) advance a broad definition, including all culturally different students; while Ford and Thomas (1997) delineate

three distinct populations: Black, Hispanic American, and Native American. Ford (1998) looks at specifically African American students as well as more broadly (2000) culturally and linguistically diverse students as being underrepresented. She also points out the "disproportionate representation of minority students in special education, including gifted education" (Ford, 1998, p.4).

Frasier (1991) generally identifies the gifted disadvantaged student as a different entity from the culturally diverse student, though it is presumed that one person might fall into both groups simultaneously. Passow and Frasier extend this differentiation by explaining, "the concept of 'disadvantaged' has meaning if it is understood, not in terms of deficiencies but rather as differences" (Passow & Frasier, 1994, p. 199).

To emphasize the severity of the current situation, we are focused by the words of Borland (2000), "the under-representation of economically disadvantaged children and adolescents -- especially those from racial and ethnic minority groups -- in programs for gifted students is one of the most recalcitrant and troubling issues confronting educators of gifted students" (p. 13). This builds on his earlier description of giftedness as "an elusive, socially

constructed entity. Too often it is reified as a 'thing' that is out there waiting to be discovered once the perfect tools for its detection and the tests for its quantification are developed" (Wright & Borland, 1993), which highlights the immense task that lies before us as a field.

The disparity was illuminated by the 1988 National Education Longitudinal Study (NELS, 1988), which looked at 8th graders throughout the nation for the purpose of a comparison study. The study found that, although 8.8% of all 8th grade public school students participated in gifted and talented programs, racial and ethnic groups participated in significantly different proportions. Asian students represented the highest participation rate at 17.6%, followed by non-Hispanic White students (9.0%), Black students (7.9%), Hispanic (6.7%), and American Indian (2.1%).

Impact of the problem. This complex discrepancy in our field has enormous impact on current educational paradigms. In the past decade, our federal government's Department of Education assembled a group to examine the very phenomena of which we speak. In their report, *National Excellence: A Case for Developing America's Talent* (1993) they urged 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).

As previously stated, the importance of including all learners, including those at educational disadvantage, has import beyond the school years. Education should be the segue to the American work force. Those at disadvantage in the educational system will also carry that effect with them into their working years. In recent years, according to the National Center for Educational Statistics, "Black-White disparities have also persisted—and have sometimes grown larger—for labor market outcomes such as labor force participation, unemployment, and hourly wages". (U.S. Department of Education, p.6)

Equally relevant is the recent publication of The American Psychological Association of the "Resolution on Poverty and Socioeconomic Status"(2003). In it, we are persuaded by the delineation of facts regarding poverty and its effects on American children to refocus our research efforts on our marginalized learners. Certainly, The American Psychological Association has realized the importance of correcting the problems associated with

under-representation in gifted programs and overrepresentation in special education programs.

Economics versus culture. Harris and Ford's (1999) research shows that as long ago as the 1930s (Woodson, 1933 and Jenkins, 1936) the treatment of Black students has been identified as a failure in our educational system. In the 1950s, along with the push to desegregate the schools, there was "a rethinking of 'access' and policies that opened doors to equalizing opportunities for children from all cultural and economic backgrounds" (Coleman, 1999, p. 17).

There seems to be a confounding of the terms minority, disadvantaged gifted and low-income. When authors, like Scott et al. (1996) make such statements as "In the United States, children from culturally different and/or low income backgrounds constitute a growing percentage of all school children" (p. 147), the line between the two groups becomes blurred. "The confounding of socioeconomic status (SES) level with race has lead to a blurring of the central issue of educational need based on economic deprivation" (VanTassel-Baska & Willis, 1987, p. 169). Rhodes (1992) points out "socioeconomic level also contributes to the perception of black low achievement" (p. 109). To add to the complexity of the debate, Perry, Steele, and Hilliard

(2003) remind us "historians and social scientists have argued that race and ethnicity are not natural categories, but social constructions" (p. 72). This makes imperative things like contextual examination and longer-term and more intimate involvement with subjects of studies in order to understand the multiple aspects of those constructions that impact the problem.

As we attempt to problematize the existence of under-representation in gifted education, we must begin to develop clarity regarding the precise groups and the possible overlay with which we are dealing. We look back to Frasier to begin to develop that clarity:

> Two observations made frequently in the research...first is that participants in gifted programs, by and large, tend to come from middle and upper socioeconomic status family backgrounds, regardless of cultural group membership. The second is that groups typically designated as underrepresented in gifted programs also tend to be classified as having more members who are in a low socioeconomic group. (p. 24)

These facts are supported by the findings of the National Education Longitudinal Study (NELS, 1988), which found that economically disadvantaged students were significantly underserved with only 9% of students in gifted and talented education programs in the bottom quartile of family income, yet 47% of program participants were from the top quartile in family income. More recently, the National Academy of

Sciences (2002) shared the results of a study on national participation rates by racial groups in gifted programs. The study found that, nationwide, "7.47% of all White students and 9.9% of all Asian students are placed in gifted programs; while 3.04% of Black students, 3.57% of Hispanic students, and 4.86% of American Indian students are classified as gifted" (Donovan & Cross, 2002).

We will work with an understanding that there are certain discernible groups within the general population, and that there are fairly clear definitions of the members of these groups. Having fully recognized and valued the distinctly different characteristics of these groups, we now merge them with a similar driving characteristic for the purposes of this study: ethnic minority, low income, and otherwise educationally disadvantaged students are underrepresented in programs for gifted learners.

It happens, in this study, that the ethnic minority members of the study population do have in common the fact that they tend to live in families with lower income, as well as educationally disadvantaged, according to accepted definitions in the field. Otherwise, this merging of characteristics would fly in the face of the good work done by Ogbu in expressing the fact that "having examined achievement data for racial minorities in the United States

and in other countries, [he] argues that being a racial minority and having a different culture does not in itself predict school failure" (Perry, et al., 2004, p. 59).

Borland (2005) points out that the concept of giftedness and its subsequent definition is inexorably tied to the dominant culture, to the exclusion of other cultures. In fact,

> [He} would argue that giftedness, as it has been constructed in American schools within American society has embedded in it the basis for the under-representation of certain groups outside the White middle-class and upper-middle-class mainstream, shaped by the values of the dominant culture or subculture. (p. 25)

We look to the many talented practitioners in the field to help us understand how we will make our way through what seems a daunting journey...to the place where we can solve the inequities created by a dominant culture, while still existing in that culture. Because unless something is done to separate the dominant culture from the others, an abhoration guaranteed not to happen by our country's "separate, but equal" legislation of the 1950s, we must find our answers within that confounding environment described by Borland above.

The nature of the inequity. As we turn our gaze to the group we refer to as "gifted minority," "diverse gifted," "gifted low-income," or "gifted disadvantaged."

It is these groups for whom the field now seeks fairness and equity.

> Diverse students are often underrepresented in gifted education. Therefore, allegations of de facto segregation are frequently charged at gifted education. In some instances, these discrepancies are a function of societal inequities, namely racial discrimination. In other instances, however, we must examine instruments, policies, and procedures to determine how they contribute to inequities in gifted education. (Ford and Thomas, 1997, p. 7)

The first step in achieving the parity we seek for those groups traditionally underrepresented in gifted education is to understand the nature of the inequity. "We need to identify the sociological and psychological processes that shape the attitudes and behaviors underlying educational disadvantage" (Borland, et al., 2000). Many researchers in the field agree that the primary reason for the under-representation is based in the ways we identify gifted learners (Ford, 2000; Harris & Ford, 1999; Damiani, 1996; Ford, 1998; Passow & Frasier, 2000; Scott, et al., 1996; Sisk, 1994; Kitano, 1991). While Ford (1998) indicates three categories of explanations for the under-representation: recruitment issues, personnel issues, and retention issues; Passow (1982) focuses on three altogether different explanations: experiential deprivations, limited language development, and socioeconomic or racial isolation. Notice that Ford focuses on external issues,

while Passow seems to indicate a deficit-based explanation for this discrepancy, further evidence of the range of viewpoints on this very important issue.

Damiani (1996) looks to Seely (1990) and Frasier (1989) to offer three comprehensive reasons for the under-representation: complexity of the identification task (Seely, 1990), inadequacy of traditional methods of assessment (Frasier, 1989), and cultural norms that work against advancement in some groups. Ogbu draws distinctions even between types of minorities: voluntary and involuntary minorities, each with its own distinct set of challenges and strengths. No matter which perspective is taken, it is true that "the educational needs of minority and economically deprived students have been sorely neglected in American Schools" (VanTassel-Baska & Willis, 1987, p. 169).

Uncovering Assumptions

The reification of a term. As with many exchanges of viewpoints, opinions, or beliefs, we have a variety of assumptions that confound our discourse regarding under-representation in gifted education. Some are clear assumptions about definitions and groups, as outlined previously; while others are much more complex and cloaked

in belief systems and life experiences. Ackerman (1997) describes one of our most critical problems in gifted identification as stemming from "confusion in the field about what giftedness is and how it should be defined" (p. 229). Quantifiers in the field may desire numerical equations for the gifted. Assuredly, numerous schools and school systems in our country align the term gifted with a numerical value, be it an IQ score, matrix total, or standard deviation. It is incumbent on the researchers in the field to do the work to discern the most appropriate, not the most expedient way to identify gifted learners in all settings, but especially in diverse settings where history has shown such disparity in the past. The time has come for a shifting of paradigms as "the gap is widening: a larger percentage of minority students are underrepresented today than several decades ago" (Harris & Ford, 1999, p. 227). The predicted increase in diversity in the United States makes this paradigm shift of particular importance.

Giftedness within cultural groups. While some may perceive the statement that giftedness can be found equally in all groups to be an assumption, there is strong evidence that it is in fact true. To believe the contrary leads us into questionable territory, where certain groups of

students, by virtue of group membership, are more or less inclined toward giftedness. Because we know the nature of intelligence is not racially or ethnically bound, propositions of this nature simply cannot be accepted. It does solidify our original inquiry focused on the reasons for the discrepancy in identification. Ford (2000) leads us to further inquiry

> If the educational decisions based upon test scores reflect significant disparities in the kinds of educational benefits afforded to students based on race, national origin or gender, then ask more probing questions about what's going on to ensure nondiscriminatory, educationally sound practices. (p. 5)

The notion that giftedness is a social construct, defined by the civilization in which it exists, particularly by those holding the power within the civilization, is one gaining momentum in the field. As we dance around the idea of pigeonholing groups of students with characteristics or attributes that may be inhibiting their identification, it may relieve some of our burden to investigate a more positive spin on this endeavor. Generalizations related to ethnic groups, admittedly, can be dangerous. However, to ignore that ethnic groups have traits in common in their majority is to deny a large part

of the discourse on this topic, potentially, the part that would lead us to solutions for the disparities that exist.

Before we can understand the nature of the under-representation of certain populations within the field of gifted education, "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" (Passow & Frasier, 1994, p. 199).

Factors that block identification. Based on our acceptance of the assumption that potential for giftedness exists equally in all groups, it would seem that there exist some barriers between nontraditional gifted learners and their identification by educators using traditional means. These barriers can be classified into two categories: either internal, in the mind and motivations of the student, or external, bound to the referral and identification process followed by the school system, and thus impacted by the social conventions of power and privilege in society.

One fact on which we can find a chorus of agreement in the field is that "it has been said that the psychometric approach has failed in its predictive promise" (Feldman,

1977; Gruber, 1982; Renzulli, 1978 as cited in Piechowski, 1984, p. 80). Harris and Ford (1999) point out that

> Ample data indicate that the test scores of minority students lag behind those of white students. When tests are used, and misused in this way, minority students are again denied appropriate educational services. (p. 2)

In fact, it is suggested, "the consistent under-representation of minority groups in gifted programs is related to a breakdown in the referral process, the assessment process, or both" (Scott, et al., 1992, p. 131).

> 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 under-representation of culturally different, economically disadvantaged, and limited English proficient gifted students. (Passow & Frasier, 1994; p. 200)

Ford and Thomas (1997) identify four internal factors that can "influence achievement by gifted minority students: less positive teacher-student relations, having too little time to understand the material, a less supportive classroom climate, and being unmotivated and disinterested [sic] in school"(p. 4). They add "numerous studies indicate that teacher expectations have a powerful impact on student achievement" (Ford & Thomas, 1997, p. 5). Some researchers define the barrier as one that exists in the context of the affected group's individuals' responses to the dominant culture. As Frasier (1991) reminds us

> [Tannenbaum] suggested that minority attempts to strive for excellence while also attempting to maintain a cultural identity represent an incompatible goal as well as an effort that is ludicrous, futile, and misguided "in a society where the means and idioms of excellence are dictated by the majority culture with its clearly Western tastes". (p. 85)

The Importance of Finding a Remedy

The reasons for taking the under-representation of these groups in gifted education seriously cannot be minimized. In fact, "the ethnic and economic make-up of American society today demands that programs educate and train gifted students across all economic and ethnic barriers" (Goertz, et al., 1996, p. 298). According to current population trends, there will be a day when our "minorities" will be in the majority. Ford (1996) indicates:

> By 2020, projections are that minority students will comprise almost half (46%) of all public schools students (National Center for Education Statistics, 1991). This increase of minority students in the national school population, however, has not been mirrored in gifted education. (p. 72)

Certainly, the fact that "there is an increased awareness of the need to identify and develop giftedness in a broadly defined population of able youth" (Renzulli & Reis, 1991 cited in Fishkin, et al., 1996, p. 226) frames our need for finding a remedy. Ford and Grantham (2003) point out that "the inclusion of the word potential in the federal

definition acknowledges our obligation to serve those students who have social, cultural, or psychological problems, yet to manifest their abilities and interests" (p. 219). It behooves us to thoroughly investigate and mitigate the effects of this inequity in identification for gifted programs. Where these discrepancies exist, "...schools must be able to demonstrate valid and nondiscriminatory reasons for such assignments" (Ford, 2000, p. 110). There is discrepancy in the field over the validity of the expectation that ethnic make-up of special programs for identified gifted learners should be the same as that in the general population. This assumption is demonstrated by Eby and Smutny (1990) (as cited in Smith, LeRose, and Clasen, 1991):

> The assumption underlying Eby and Smutny's assertion is that of proportionality: giftedness is randomly distributed across race, gender, and ethnic groups; therefore, an identification system which works properly must identify students representative of their subgroup in proportion to their numbers in the total population. (p. 81)

Yet Maker (1992) points out "seldom does one find a program for the gifted in which the percentage of minority children equals the percentage of children from that minority economically disadvantaged group in the general population" (p. 12). And Ford (2000), an advocate for underrepresented

population members, clarifies the situation by pointing out that:

> Although school districts must ensure that students are not assigned on the basis of race, color, or national origin, the law does not require that each school within a district have a racially balanced student population. This misperception is common among school districts with which the author has consulted. For example, gifted education personnel frequently believe that their gifted education student population must mirror the school demographics. (p. 3)

This leaves us with a choice of two paths: we either work to fix the way these underrepresented groups are socialized and acculturated so that they match our identification procedures or we work to find more equitable identification procedures that match the needed use. The former being literally impossible, given the scope and extent of the task, we claim the latter as our goal. Beyond our responsibility to equity, "...the persistent and pervasive under-representation of minority students is a tragic, unnecessary waste of human potential" (Harris & Ford, 1999, p. 234). The lack of a consistently appropriate option as a solution to our dilemma certainly does not indicate that no efforts have been focused on the concept. In fact, "the use of multiple criteria and nontraditional measures -- instruments and assessment tools other than intelligence and achievement tests -- is widely advocated"

(Passow & Frasier, 1994, p. 201). Unfortunately, "a persistent finding, however, is that even with the best screening procedures and multiple identification criteria, minority students can be (and have been) overlooked" (Harris & Ford, 1999, p. 233). It is now time to question the types of attempts we have made to solve our dilemma. We most certainly are at a crossroads. As a field, we must endeavor to identify the path that will lead us toward more equitable identification procedures for all students. As Frasier (1991) points out, "There must be a reevaluation of current practices if there are to be improvements in the identification of students currently underrepresented in gifted programs" (p. 235).

Single- versus Multiple-Measure Identification

Exposing the Tradition

To say that there is a single, traditional way to identify gifted learners would be to oversimplify a very complex history. It seems that each conception of giftedness has a related process for finding students to fit the concept. However, with the onset of new paradigms and procedures for finding these new types of students, the term *traditionally identified* evolved to mean the strategy of identifying gifted learners following the psychometric

tradition. That said, Borland (1989) reminds us "of all the components of a program for the gifted, the identification of gifted students arouses the most controversy" (p. 54).

Looking back, even at the broadest strokes of history of the field, students have, by-and-large, been identified through either achievement test or intelligence test results.

> We have carried with us into the 1980s a 1900s definition of intelligence and an IQ test largely unchanged since 1930. Many individuals who refer to intelligence still believe in the notion of a general intelligence which can be reliably measured using a standard intelligence [IQ] test. (Hatch & Gardner, 1986, p. 147)

Some in the field believe that this approach is effective. Others find compelling ways to emphasize their rebuttal to these claims. Abbot (1982) observed that "examining IQ scores for the purposes of identifying giftedness...amounts to viewing intelligence in terms of English fluency" (p. 8). This places an obvious burden on those identifying giftedness in populations with bilingual students.

Piechowski and Colangelo (1984) stand with many in the field in saying that there are "many factors, components, traits, facets, and potentialities are not captured by the tests in use" (p. 80). Piechowski (1986) goes on to

delineate a substantial downside of sole reliance on intelligence tests

> Intelligence testing as the major criterion variable for program selection fails to provide sufficient information about the personality characteristics that distinguish between gifted and average individuals. (p. 190)

Others say, "until tests are developed specifically for black children and for different socioeconomic levels, the standardized test must remain a minor portion of the assessment profile" (Rhodes, 1992, p. 109). Interestingly, as the field of gifted education is examining how to increase our effectiveness by working to diminish our reliance on standardized tests, the American educational system at large is being sent into a tailspin, the center of the vortex being recent No Child Left Behind legislation and its reliance on standardized testing as gatekeeper to progress.

Sternberg (1986) orients us to the larger picture of the question of the use of intelligence tests for identifying gifted learners by pointing out that their argument for a return to or a continuation of using primarily IQ tests for identification is that "the promise of other kinds of measures has not been fulfilled, and that with IQ, at least, we know what we are getting" (p. 143). He continues to expose the inadequacies in the use of IQ

tests in measuring the meta-processes, performance processes and knowledge-acquisition processes valued by gifted programs

> First, the tests tend to benefit those children who Can solve quickly problems in the intermediate range Of difficulty. Second, the kinds of meta-componential planning, monitoring, and evaluating needed for good performance on IQ tests may differ in kind from those needed in everyday or even academic situations. Third, the test obviously benefits disproportionately those students who have had superior, or at least adequate opportunities to apply their knowledge acquisition processes to various kinds of learning materials. A student from a disadvantaged background may be superior in these processes, but not have had adequate opportunities to apply the processes in the past. Such a student is handicapped by tests that measure the products, rather than the processes of knowledge-acquisition, simply because for that student, the products do not reflect the processes, as well they might for a more advantaged student. (p. 145-146)

Brown (1997) indicates that E. Paul Torrance (1997) "said that intelligence tests are strongly biased against culturally disadvantaged students because they emphasize rapid response, verbal comprehension, and answers that are acquired in the dominant, middle class culture" (p. 157). Additionally, "students with superior creative and practical abilities are not identified by conventional ability tests" (Sternberg, 1998, p. 4) and "tests do not measure very well the student's ability to make the most of both his or her latent abilities, and to implement these abilities in everyday settings" (Sternberg, 1986, p. 144).

In the end, there is agreement that "students should be selected for special academic programs based upon qualities required by that program" (Benbow & Minor, 1990, p. 25).

As is the nature of this debate, compelling evidence exists for the contrary beliefs as well. According to Pendarvis and Howley (1996)

> IQ scores and achievement test scores nevertheless seem to be the most reliable indicators of academic progress. Work samples and performance-based measures also offer promise as effective means of assessing achievement for which no adequate standardized tests are readily available. (p. 219)

Defining Multiple-Measure Identification

The identification practices in the field of gifted education have long centered on the use of standardized achievement and ability tests, with some districts utilizing IQ tests as well. This certainly answered the call for giftedness that seemed to go out in American society during the Sputnik era of the 1950s. We needed a way to find our "best and brightest" so that we could compete with Soviet scientific advancements. This need led us to what seemed a clear and obvious way to identify giftedness. We simply needed to find the students who were successful on these standardized tests of knowledge, and sometimes ability. This was the birth of what Ackerman (1997) states is one of the most critical problems in

gifted education, that it "stems from confusion in the field about what giftedness is and how it should be defined" (p. 229). Following our national awakening regarding the perils of segregation, we began to hear rumblings of discomfort with the inequity in identification of giftedness in our schools. Passow and Frasier (1994) illuminate the growing understanding that "by defining giftedness dynamically, the possibilities for demonstrating potential by individuals from any group regardless of how it is classified, are markedly increased" (p. 201). This change in focus demonstrated by Passow, from his 1980s "deficit approach" to this 1990s "possibilities approach" offers a glimpse into the suirge in understanding and growth in inquiry experienced by the field at large over the past twenty years. And so, the concept of a broadening of definition was born.

> A turning point for the gifted movement was Marland's 1972) definition of giftedness because it was the first to broaden the definition by including several areas not included previously: specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and psychomotor ability. (Ackerman, 1997; p. 229)

Truly, a new day was dawning in the field of gifted education. The Jacob K. Javits Gifted and Talented Students Education Act of 1988 followed this era, "which gives the highest priority to students who are economically

disadvantaged, limited English proficient, or have disabilities or handicapping conditions" (sec. 3063(a)(1)). Here, we see our first proactive steps being taken to "level the playing field" by acknowledging that there exists an inherent unfairness in preparation for educationally disadvantaged learners. This has become a large part of our discussion within the field regarding equitable identification of gifted learners. Then, in 1993, the US Department of Education established the path for our field to take by setting forth its most culturally inclusive definition of giftedness to date:

> Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capacity in intellectual, creative, and/or artistic areas, and unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by schools. Outstanding talents are present in children and youth from all cultural groups across all economic strata, and in all areas of human endeavor. (Ford, p. 3)

This was in response to "the recognition of the need for more aggressive strategies and programs to recruit minority students into gifted education" (Harris & Ford, 1999, p. 226).

The Need for Research

The recent publication of the American Psychological Association's "Resolution on Poverty and Socioeconomic Status" (2003) offers the clearest mandate yet for future research in this area of education. The APA, a preeminent psychological advocacy and research organization, has recently focused on the widening of the income gap between the poor and the rich and its deleterious effects on myriad aspects of education. The resolution contains a variety of calls for future inquiry. Supportive of this research, the APA points out that "research focused on low-income groups...is limited" and "perceptions of the poor...tend to reflect attitudes and stereotypes that attribute poverty to personal failings rather than socioeconomic structures and systems" (p. 104). The APA has resolved to do a number of things in their quest to be more mindful of the poor. This research begins to address five resolutions, specifically:

> 1. The APA will advocate for more research that Examines the causes and impact of poverty...as well as advocate for the broader dissemination of these research findings.
> 2. The APA will advocate for more research on prejudicial and negative attitudes toward the poor by other persons who may individually or collectively perpetuate policies that tolerate poverty and social inequality.

> 3. The APA will advocate for more research on special populations who are poor...including ethnic minorities.
> 4. The APA will advocate for research that identifies and learns from indigenous efforts by low-income people to work together to solve personal and shared problems or create organizations that advocate effectively for social justice.
> 8. The APA will support public policy that encourages access for all children to high-quality early childhood education and a high-quality public school education, better equipping individuals for self-sufficiency. (p. 104)

A frequent writer on the topic of poverty and gifted education, Tracy Cross, implores, "let us rededicate ourselves to impoverished students. Let us not rely so heavily on convenience samples of gifted students from programs that we already know are too expensive for the poor or too urbane for students from modest rural backgrounds" (Cross, 2003, p. 102).

Asa G. Hilliard, III (1995), a pre-eminent theorist in the field of education, shares some thoughts that go to the heart of the most damaging assumption affecting this debate and further reinforcement of the existence of social constructs, morays, and beliefs that directly impact the definition and therefore identification of giftedness in our country.

> Race, minority status, socioeconomic status, and other variables are not factors that predict what students can learn. More likely than not, they predict how schools will treat children. (p. xiv)

This quixotic exposure of the essential problem with misidentifying culturally diverse gifted learners helps to focus our examination of the past to inform our actions in the future. We know there is a problem as we see the disequilibrium persistently in diverse educational settings. We have myriad publications to tell us it exists. Now we begin the difficult, but important task of examining our efforts to determine the good from the bad, separate the wheat from the chaff, with respect to which strategies we should carry forward on our journey. Carol Ann Tomlinson, et al. (1997) point out

> Despite a proliferation of interest in identification of minority students for programs for gifted learners and their nurturance in gifted programs, few in-depth studies have been undertaken to provide insight about the relative efficacy of alternative identification methods or about the experiences of culturally diverse youngsters identified and served as gifted. (p. 6)

And so that is our chore: to investigate efficacy, to determine effectiveness of approaches, and to create a more just process for the identification and service of all gifted learners. Whether we see this as a moral dilemma of fairness to individual minority students, or a sociologic problem for communities as a whole, this inequity warrants further investigation and the search for a solution.

Chapter III

METHODOLOGY

Design

The study was a retrospective investigation into the effects of a change in policy related to identification procedures. The goal was to develop knowledge regarding a practice that has been frequently recommended within the field of gifted education, the use of multiple-measure identification procedures in diverse student populations. The study design was non-experimental with ex-post-facto data collection.

The study focused on examining the differential effects of a multiple-measure identification process on identified gifted learners through a retrospective analysis of student records. The complexity of the underlying assumptions relevant to this investigation required an interweaving of approaches to data analysis, sometimes looking at a single aspect and other times investigating combined effects. It was hoped that this research would expose the realities related to the expectation that the application of the multiple-measure identification

procedures will increase minority participation in the gifted program.

The study began with in-depth analysis of the data with the goal of answering the preliminary research questions, to determine if the change in identification approach created a difference between the identified groups (single- and multiple-measure). Inferential statistics was used to test for group differences and provided the framework for further analysis. It was expected that these findings would lead to a variety of additional questions.

It was not expected that results of this study could be generalized to all diverse student populations. Instead, it was believed that the results would aid the district involved in making appropriate educational decisions for their student population and may help others in formulating investigations into similar uses of these gifted identification procedures.

Subjects

Setting

The district of interest in this study is located in the northeastern United States. The district has a history of race-related issues, including the forced integration of

the school district in the 1960s through the imposition of a Princeton Redistricting Plan, as well as a recent (late 1990s) federal lawsuit brought by the teachers union together with a group of concerned parents, claiming de facto segregation in the tracking practices imposed by the school board members. This district would fall into what author Jonathan Kozol calls "reverse mobility" in his newest text entitled The Shame of the Nation (2005), meaning "moving from larger ghetto into smaller ghettos" (p. 33). He points out that this has been the experience of "hundreds of thousands of Black people who moved from inner-city districts to the promised land of a suburban life, only to find their children and themselves entrapped again in the same isolation they had fled" (p. 33). He also shares that a Gallup Poll conducted by Newsday, the local Long Island newspaper, found that "only one in ten Black people in the suburbs of Long Island...'wanted to live in all-Black areas,' although the overwhelming number do live in such areas" (p. 32).

To emphasize the extreme differences between districts like the one in question and other predominantly White districts in the area, we have but to examine school funding data. In The Shame of the Nation, Kozol shares a series of data points which are relevant to setting the

stage for our discussion of race-linked educational inequity (p. 324). He found two categories to be particularly relevant: spending per pupil and population percentages by race. He found that in nearby districts where White students make up 91%, 97%, and 89% of the population respectively, spending per pupil tended to be much higher, averaging over $19,000.00 per pupil in the three districts, with one district topping the list at over $22,000.00 per pupil per year. Conversely, another district and the district under study in this research have populations with 0% and 15% White representation respectively, and their spending per pupil was less than $13,000.00 on average in each district. This is marginally interesting on its face; however, it becomes exponentially more intriguing when you realize that these districts exist mere miles from one another.

The dichotomous nature of the district adds to the internal strains felt by its citizens. The town itself has two distinct areas: the Village and the North, the latter being the area farthest from the south shore and closest to the pair of highways that divide the area. There are distinct differences in the two areas, both aesthetically and ethnographically. While the Village is characterized by the old Victorian homes from the area's heyday as the

summer retreat for the rich and famous and is sprinkled with quaint neighborhood parks, the North is characterized by modest homes on small lots with few amenities, sprinkled with business establishments.

The disparity of resources between the two areas led the state to demand reorganization of the district in the 1960s in order to afford equal educational opportunities to all the district's students. Thus, there exist five schools in the district, one primary school, serving pre-kindergarten and kindergarten students; a lower elementary school, serving first and second graders; an intermediate elementary school, serving third through fifth graders; a middle school, serving sixth through eighth graders; and a high school, serving ninth through twelfth graders. The district bears the burden of a phenomenon commonly called "white flight," in which many of the White families, mostly from the Village, send their students to local private schools in the area.

While the town itself has a fairly balanced ethnic make-up, the student body served by the school district does not. For example, in 2001, White students made up only 15.7% of the student body; dropping in 2002 to 14% and down to 13% in 2003. This ethnic disparity is accompanied by an economic effect as well. In 1997, 62% of the

district applied for and received access the "Free Lunch" program this compared with an average of 24.7% for the county.

The district being investigated has an annual average enrollment (k-12) of approximately 3,000 students. The ethnic balance consists of 1% American Indian, 66% Black, 16% Hispanic, and 17 % White. The district average enrollment for English Language Learners is 7.5%, making these students a fairly small portion of the population, not statistically important in light of other populations being analyzed. The district's annual average attendance rate is 93%, its average annual student suspension rate is 12%, its drop-out rate is 3.7%, while the percentage of seniors going to a four-year college is 38%.

The district's "Need to Resource Capacity" category is rated as a 3, placing it in the group described as urban/suburban school district with high student needs in relation to district resource capacity. The State Education Department indicates that the single factor most highly correlated with educational need is population poverty. These categories are well supported by statistical research. The district being viewed in this study is one of only five districts to be classified as "high-need" in the geographic area. To put that into

larger perspective, it is one of only 44 high-need urban/suburban districts, in the context of a total of 741 districts in the State Department of Education's School Report Card Program.

Honors Program

Historically, prior to the inception of the groups being investigated in this study, academically gifted students have been identified in grades three through five through the use of standardized math and reading test scores. The program was called Quest. The district took a numbers approach to the student selection each year, settling on a "top twenty" mentality, as opposed to creating a benchmark for minimum achievement for inclusion in the program.

In 1992/93, the school board instituted a Sixth Grade Honors Class to effectively straddle the middle school transition, giving those Quest students a place to go until their seventh grade year, at which point traditional honors courses are made available for them. This program was to be focused on school-related abilities. The goal was to challenge the students academically to prepare them to segue into honors and advanced-placement courses in later middle school and high school. It was hoped, in the

beginning, that this might balance the concerns of those parents who might otherwise join the parents choosing to send their children, mostly White, to area private schools.

After the first year, in which students were identified using standardized test scores only, and following complaints from parents of excluded minority students, it was decided that the issue of diversity should be addressed by the district. Additionally, the district was investigating ways to increase the participation of minority students in the later middle school and high school honors courses. After investigating approaches to this, a matrix was developed to be used for identification for the new Sixth Grade Honors Class. The matrix included scores for: functioning reading level, functioning math level, standardized math score, standardized reading score, writing sample score, Teacher Behavioral Checklist scores, and grade point average. At one point, a creativity test score was included, but was dropped early in the process because it was found to be incongruous with the singularly academic goals of the program.

Just scratching the surface, in a fifth grade population of approximately 200 students (as was the case, approximately, in the district under consideration), 170 students would be minority students (85%) and 30 would be nonminority

students. Applying the identification rates for Cohort 2 (9 minority and 14 nonminority) 5.5% of the minority students were identified (9 out of 170 students) for the sixth grade honors class and 46.7% of the nonminority students (14 out of 30 students) on that grade level were identified. Certainly, this altered perspective leads us to tremendous questions about those unidentified minority students in the general population.

Students

The data used in the study included achievement and placement information for students from five consecutive sixth grade "high achievers" classes from this culturally and economically diverse suburban school district. Student data was analyzed for the years 1994 through 1999, with a beginning sample of approximately 120 students (Table 1). Sixth grade honors students from each of five consecutive years were divided by year of entrance into sixth grade, creating five cohorts.

The single-measure designation with respect to identification group included those students whose standardized reading and math scores averaged 90%. This is a logical benchmark that had been used in the past to identify students for the elementary Quest Program. Each

of these cohorts were analyzed for similarities and differences to see if identification procedure, single- or multiple-measure, impacts individual differences within and between the groups. Table 1 demonstrates the derivation of the five cohorts in the study.

Instruments

A table (see Table 2) was used to organize data on the variables of concern: reading and math scaled scores (fifth grade and ninth grade), honors placement (ninth grade), academic success (honor roll participation), gender, minority status, and identification group status. Retroactive student data was collected and analyzed for the purposes of developing understandings about the complex effects of multiple criterion identification procedures on honors course enrollment in an ethnically and economically diverse educational setting.

Researcher's Role

The role of the researcher in this research study, while passive in nature, did have a dynamic history. The researcher was employed by the target district as the

Table 1

Cohort Derivation

Year	Cohort Name	Number of Students in Cohort
1993-94	Pre-Intervention Cohort	25
1994-95	Cohort 2	23
1995-96	Cohort 3	26
1996-97	Cohort 4	23
1997-98	Cohort 5	23

Total = 120 Students

Table 2

Data Organizational Table

number	year	subject	Reading 5th	Reading 9th	Math 5th	Math 9th	Honor Roll 9th	H-Math 9th	H-Eng 9th	H-Global 9th	H-Bio 9th	MAT 5th - Math	MAT 5th - Reading	MAT 5th - avg	Minority Status	Trad/Nontrad	Gender

teacher of the Sixth Grade Honors Class for the first five years of the study. The researcher participated in the identification of the students for the Sixth Grade Honors Class, though identification was performed anonymously and the researcher personally knew none of the students prior to the identification process. The researcher had no participation in the process past the sixth grade year. Students were placed in honors courses based solely on classroom achievement.

Procedures

Data was collected from dormant student records at the district level, including Reading and Math standardized test scores (fifth grade and ninth grade scaled scores and percentile scores), student placement information at the onset of high school (ninth grade; math, social studies, science, and English), academic achievement (honor roll participation), gender, and minority status. The variables being studied were specifically related to the identification of giftedness and academic success, as supported by the research literature and defined by the goals of the program. Although the data collected speak to ethnic background, not specific socio-economic levels, the researcher's long experience with the population supports

the relationship between minority status and educational disadvantage. This assertion is also supported by research, "...poorer children (and thus children of color since race and SES are strongly related in this country)" (Borland, 2004, p. 11). Test results were gathered from school-wide listings, academic achievement information was found in honor roll lists filed at the district offices, as was student placement information and any other descriptive data that were collected.

Answering the first and second research questions, whether the introduction of the new, multiple-measure identification procedure produced a more culturally diverse group of students and what were the group differences related to minority status, was a matter of comparing minority status data for the second through fifth years' students with that of the first year, our Pre-intervention Cohort, in which only standardized test scores were used for identification. The third question required looking at our Ninth Grade Honors Placements data to investigate whether or not, and in what ratios, students continued taking rigorous courses into their high school years.

The fourth question looks at the concept of school success. The investigation of this question required the generation of a means of comparison. Based on the

literature about academic success, it was decided to use achievement indicators (honor roll placement) to achieve this comparison.

The question of academic gains was addressed using ninth grade reading and math scaled scores from standardized tests. Scaled scores were chosen as they present the most accurate means of investigation of change over time. While it was acknowledged that ceiling effect may be a factor, we wanted to investigate this avenue to find any meaningful data that might have existed.

Data Analysis

As a point of departure, analyses of basic statistics, including group means and standard deviations for all variables related to each cohort, were calculated. Because the multiple-measure methodology was not yet instituted for Cohort #1 in the first year of the study, it was identified as a Pre-intervention Cohort (PC), to be used in investigating research question #1 only, with years two through five being seen as "treatment" years. Research question #1 was addressed by examining group differences with respect to the variables by using Chi-Square Tests, reported in the form of a 2 x 2 contingency table.

Research question #2 required the use of an additional Chi-Square Test. The independent variables were the specific identification treatment utilized (single- or multiple-measure) and minority status. This allowed the investigator to determine whether there was a relationship between identification groups and minority status. Similar analyses were used for investigating questions #3 and #4. Research Question #5 required the use of Univariate Analyses of Covariance (ANCOVA) in order to investigate the change over time in standardized test scaled scores. All analyses were performed using SPSS Regression Software.

Limitations of the Study

The limitations of the study stemmed from the differentiated life experience of the students involved. As described, the mobility of the student population did create a diminished pool of data over time. In particular, the minority population, which is considerably more mobile in this case, was differentially affected by this phenomenon.

Because this was a small-scale, exploratory study, the results are not directly applicable to all situations. The intention in the study was to garner new knowledge about

the efficacy of multiple-measure identification procedures and the impact of their use in this diverse setting.

Validity of the Study

Validity of the study was established through rigorous discussion with professionals in the field of gifted education regarding the efficacy of the study itself, relevant to the desired outcomes. Five professional educators with specific experience in educational research were consulted regarding the structure of the study. Additionally, three professional educators with experience with this specific setting were consulted regarding the ethics and discovery process contained within the study. In all phases of the development of this study, other professionals were consulted as necessary for clarification and support.

The greatest threat to the validity of the study lies in the mobility of the population. Parts of the community, specifically its minority members, experienced a heightened mobility, which may ultimately differentially impact the validity of the study for that group.

Chapter IV

FINDINGS

The study was a retrospective investigation into the effects of a change in policy related to the identification of gifted students in a public school district. The goal was to develop knowledge regarding a practice that has been frequently recommended within the field of gifted education, the use of multiple-measure identification procedures in diverse student populations. The study design was non-experimental, with ex-post-facto data collection.

The data included information about minority status and gender as well as standardized test scores, honor roll placement and enrollment in honors courses in ninth grade. Students were placed in cohorts according to the year of their entry into fifth grade, with Cohort 1, which entered fifth grade in 1994, being treated as the Pre-intervention Cohort (PC). Statistical Package for Social Sciences (SPSS) software was used for data analysis.

In this chapter, I share the results of a number of analyses designed to investigate possible relationships within and between the cohorts. Chi-Square analyses were

employed to test for potential relationships between variables of interest, including means of identification, minority status, academic achievement and standardized test scores. Univariate Analyses of Covariance (ANCOVAs) were used to determine whether there were differences in academic gains between the identification groups.

The sample originally consisted of 120 students identified for the sixth grade honors class at the end of fifth grade, creating the pool of students for analyses related to research question #1. Of the 120 students in the full sample, 25 were identified in the Pre-intervention Cohort, leaving 95 students in the subsequent cohorts (2-5). Through attrition due to geographic relocation (N=27) and missing data (N=3), that number was reduced to 65 for analyses relating to ninth grade performance and placement.

First Research Question

A goal of this research study was to investigate whether the introduction of a multiple-measure identification procedure in a suburban school district serving a culturally diverse student population created a pool of sixth grade honors students that was more culturally diverse than had been created in the Pre-intervention Cohort. This question was answered through

Chi-Square Analysis, looking at minority status in the Pre-intervention Cohort (PC) versus subsequent cohorts.

A comparison of the Pre-intervention Cohort to the subsequent cohorts found there to be no evidence that more minority students were identified as gifted (x^2=1.51, p=.70) when multiple-measure methodology was employed (see Table 3 for percentage by year). The same holds true when looking at each subsequent cohort individually versus the Pre-intervention Cohort, Cohort 2 vs. PC (x^2=.06, p=.81); Cohort 3 vs. PC (x^2=.03, p=.87); Cohort 4 vs. PC (x^2=.48, p=.49); Cohort 5 vs. PC (x^2=1.04, p=.31).

In fact, the percentage of students in the first cohort from minority groups (40%) was marginally higher than the percentages in the subsequent years (percentages ranged from 26% to 39%). This difference however was not statistically significant (x^2 =.151, p =.70).

Second Research Question

The second research question, whether there were any differences in the nature of the groups differentiated by the identification procedures, was investigated through the use of Chi Square Analysis. This question was asked to

Table 3

Minority Representation by Cohort

Cohort	Number of Minority Students	Percentage Of Cohort
Pre-intervention	10	40%
Cohort 2	9	39%
Cohort 3	10	39%
Cohort 4	7	30%
Cohort 5	6	26%

determine if the students identified through single-measure protocol, as a group, were different with respect to minority status from the group of students who were identified using the multiple-measure approach. For this inquiry, only Cohorts Two through Five were used (N=95) as an aggregate measure. The sample was reduced by an additional three individuals (N=92) due to missing data.

In the aggregate, there was a significant difference in the demographic variable related to minority status when looking at the means of identification. Students classified as minority students were more likely to be identified using the multiple-measure methodology as opposed to the single-measure approach (x^2=3.38, p=.07; see Table 4).

Looking at each cohort separately, there were significantly more minority students identified as gifted using the multiple-measure methodology in Cohorts 2,4 & 5 but not Cohort 3 (see Table 5). While this difference was most significant in Cohort 2 (x^2=4.88, p=.03) and Cohort 4 (x^2=4.54, p=.03), in three of the four cohorts more minority students were identified as gifted using the multiple-measure methodology. Interestingly, nonminority students were identified equally well with methodologies.

Table 4

Percentages of Identification Groups, by Minority Status (Aggregate)

Identification Group	Minority Status	
	Minority	Nonminority
Traditional	32.3%	52.5%
Nontraditional	67.7%	47.5%

Table 5

Number (and Frequency) per Cohort Identified as Minority, by Identification Group

	Minority Students		Non-minority Students	
Cohort	Multiple-measure	Single-measure	Multiple-measure	Single-measure
2	8(87.5%)	1(12.5%)	5(38.5%)	8(61.5%)
3	4(40%)	6(60%)	11(73.3%)	4(26.7%)
4	6(85.7%)	1(14.4%)	6(37.5%)	10(62.5%)
5	4(66.7%)	2(33.3%)	7(41.2%)	10(58.8%)

* Minority percentage of school population = 85%

Third Research Question

The question of retention in honors courses in students' high school years is an important one when looking at the long-term efficacy of nontraditional our identification protocols. The new question becomes: did we simply identify students who demonstrated giftedness in the present? Or were they, in fact, ready for the long-term challenge of honors coursework? By looking at the cohorts as they entered high school and asking questions about their placement and performance, we hoped to get an idea of the long-term efficacy of the multiple-measure identification procedures.

Across Cohorts Two through Five, according to the results of Chi-Square analyses of variables, there is no difference in retention between students identified through single-measure protocol and students identified through multiple-measure protocol in any of the four high school honors subjects, including: mathematics (x^2=.107, p=.74), English (x^2=.817, p=.366), biology (x^2=2.92, p=.09), and global studies (x^2=2.53, p=.11). Students were retained in honors level courses into their ninth grade year at similar rates no matter how they were identified in fifth grade (see Table 6).

Table 6

Percentage of Students Retained in Honors Courses by Identification Method

Identification Group	Honors Math	Honors English	Honors Biology	Honors Global
Single-Measure	86.2%	93.1%	100%	96.6%
Multiple-Measure	88.9%	86.1%	91.6%	83.3%

Fourth Research Question

The fourth research question, whether there is a difference in academic achievement between students identified based on identification protocol, is explored by looking at honor roll participation in ninth grade. A Chi-Square Test was run to see if there was greater participation in percentage by students identified through the multiple-measure on the ninth grade honor roll. No difference in honor roll placement was found ($x^2=2.24$, $p=.14$; see Table 7).

Fifth Research Question

Finally, the question of whether students identified through the single-measure protocol make more academic gains than those identified through the multiple-measure identification procedure was analyzed through an Analysis of Covariance (ANCOVA). It was found that there was no difference in the gains made in standardized test scores by group, either in mathematics or in English. Controlling for fifth grade scores, there were no differences in gains of the groups in mathematics scores ($F=.006$, $p=.938$) or in

Table 7

Academic Achievement Group Differences

Identification Group	Demonstrating High Academic Achievement (on honor roll)	Not Demonstrating High Academic Achievement (not on honor roll)
Single-Measure	55.6%	44.4%
Multiple-Measure	36.8%	63.2%

English scores (F=3.3, p=.08). Fifth grade and ninth grade test score means are shown in Table 8.

Table 8

Group Mean Scores on 5th and 9th Grade Standardized Tests, Reading and Math

	5th Grade Math	9th Grade Math	5th Grade Reading	9th Grade Reading
Single-Measure	690.8 (14.9)	729.8 (39.8)	697.1 (19.5)	729.4 (30.9)
Multiple-Measure	665.5 (23.0)	698.1 (25.2)	660.7 (17.7)	700.7 (21.1)

Chapter V

CONCLUSIONS, DISCUSSION, AND IMPLICATIONS

During the latter part of the twentieth century, the field of gifted education has gradually moved toward more pluralistic definitions of giftedness in an effort to respond to increases in the ethnic diversity of the general population, and to be more inclusive of populations that have been historically marginalized within the field. In the publication, *National Excellence: A Case for Developing America's Talent* (1993), the authors, under the leadership of Pat O'Connell Ross, Director of the Javits Gifted and Talented Education Program, urged that "schools must eliminate barriers to participation of economically disadvantaged and minority students in services for students with outstanding talents" and that we "must develop strategies to serve students from underrepresented groups" (p. 28). "The inclusion of the word potential in the federal definition acknowledges our obligation to serve those students who have social, cultural, or psychological problems, yet to manifest their abilities and interests" (Ford & Grantham, 2003, p. 2).

This new paradigm has required school districts to examine their identification procedures and to make changes in an attempt to achieve greater diversity in their gifted programs. Unfortunately, when change is implemented in districts already overwhelmed by many externally imposed requirements and regulations, that change is less likely to be rooted in empirical knowledge. District personnel are left to make decisions that make sense to them based on hopes and feelings, rather than research data and empirical findings. Another reality is, when change is left in the hands of a solitary decision maker or small group of individuals, that change may be reflective of their own biases and beliefs about other culture groups. Ford and Harmon (2001) remind us that, "ideas about cultural diversity influence definitions, policies and practices" (p. 141). This is not always a desirable effect.

The lack of empirical data related to the implementation of multiple-measure identification procedures and whether that strategy increases the participation of minority students in gifted programs is egregious when we realize the potential impact these placement decisions can have in the lives of children. For many, both within the minority communities and outside, education represents the key to a better future. This fact

makes decisions about placement into special programs that may lead to scholarships and grants unavailable to those in mainstream courses even more pivotal for these students.

In a pair of published reports from the United States Department of Education we are reminded of the importance of identifying and serving the needs of underrepresented populations. The first report, "Educational Achievement and Black-White Inequality" (2001), established that "Black-White differences in educational achievement account for much of the Black-White wage gap" (p. 21). In the second report, "Status and Trends in the Education of Blacks" (2001), contributors point out that "in 1998, Black students were less likely than White students to take advanced mathematics courses and some advanced science courses" (p. 12). The disconnect between this problem of underrepresentation in gifted programs, aptly defined as "recalcitrant" by Borland (Borland, 2000, p. 13), and the research regarding the potential solutions is as complex for researchers as it is treacherous for those members of the underrepresented groups.

This study represented a research imperative in light of the opportunity presented to examine the effects and intricacies of a multiple-measure identification procedure. It was hoped that the results from the study would provide

evidence that would enable us either to recommend this procedure with greater confidence or to make obvious the need to develop new approaches to identifying gifted learners in a way that is fair to all constituents affected by the process.

Discussion

The findings of the study were guided by the five research questions. Discussion will follow reports of results.

Research Question #1 Results

1. Did the introduction of a multiple-measure identification procedure in a suburban school district serving a diverse population create a pool of sixth grade honors students that was more culturally diverse than prior to when these identification procedures were employed?

It was found that, after the introduction of the multiple-measure identification methodology, participation by minority students was not increased. In fact, for each year subsequent to the Pre-intervention Cohort, an increasingly smaller percentage of the identified cohort was comprised of minority students. In an effort to make sense of this effect, one might wonder about the change in

the overall student population. After investigating to determine population stability, it was established that no significant changes occurred in the district student population over the 5 years of the study, with the minority population staying at around 85% of the district.

This begs the question of whether underrepresentation of minority students in this gifted program is in fact due to their minority status or some other shared attribute. It has been previously stated that the minority population in this school district also tends to be from families in the lower socioeconomic strata. Based on this fact, perhaps it is their poverty that makes them fall short in the identification process and not their minority status after all? We recall that "[Ogbu] argues that being a racial minority and having a different culture does not in itself predict school failure" (Perry, et. al., 2004, p. 59). Which leads us to investigate other differences that might exist; in this case we were lead to socioeconomic status as a possible variable. As VanTassel-Baska and Willis remind us, "the confounding of socioeconomic status (SES) level with race has lead to a blurring of the central issue of educational need based on economic deprivation" (1987, p. 169).

Research Question #2 Results

What were the differences, if any, between the groups differentiated by the identification procedures with respect to minority status?

Notwithstanding the findings of Question #1, that this multiple-measure identification procedure did not increase the participation of minority students in honors courses, minority students were more likely to make it into the sixth grade honors class by way of the multiple-measure procedure as opposed to making it through the single-measure approach. In fact, of those minority students identified for the sixth grade honors class, in the four cohorts subsequent to the first year, 67.7% of them were identified through the multiple-measure protocol and 32.3% were identified using the single-measure protocol. This established that these multiple-measure identification procedures were more effective in identifying minority students than the traditional approach, but in no way did it solve the problem of underrepresentation. It was found that in the subsequent cohorts, there were significantly more minority students identified as gifted using the multiple-measure methodology than using the single-measure

methodology, with the exception of Cohort 3 which experienced the inverse effect.

When looking back at the data for Cohort 3, it was determined that two anomalies existed that may have impacted the results. First, Cohort 3 experienced exceptionally heavy attrition between fifth and ninth grade (39% student loss). Second, there were different attrition rates between minority and nonminority groups. In fact six out of nine students lost in that cohort were minorities, representing over half of the minorities in that cohort. When analyzing statistics for smaller samples, they can be by nature more fragile to fluctuating variables. Statistically speaking, what significantly affects a small sample of 25 cases could exert a negligible affect on a larger sample of 100 or more cases. It is possible that the difference in attrition affected the identification rates for that cohort because, when disaggregated, the cohorts represent relatively small sample sizes.

Research Question #3 Results

Are these groups of students differentiated by identification procedure retained in the honors courses into their high school years at similar rates?

This is an important question as we seek to solve the problem of underrepresentation in gifted programs over the educational life of students, not just for the short-term. We examined the students at the inception of their ninth grade year to see if they were persevering in honors levels courses, as this was a stated goal of the district's gifted program. The two identification groups were found to have similar rates of retention in honors courses. Additionally, those rates were fairly high, between 83% and 100% retention. This is great news with respect to the efficacy of the approach over the long-term. Clearly, the students who were identified proved that their abilities and achievement had staying power.

Some would say that any procedure that identifies and retains minority students in programs for high-achieving learners should be applauded; and that may be true. However, we did not fulfill our first goal of increasing the participation of minority students in the gifted and honors programs and others may choose to focus on that result instead. Harris and Ford (1999) point out "even with the best screening procedures and multiple identification criteria, minority students can be (and have been) overlooked" (p. 233).

Research Question #4 Results

Do these groups of students differentiated by identification procedure experience similar academic success rates in ninth grade?

An added level of confidence can be established regarding the finding that both groups enjoy similar retention rates when this is paired with the fact that there was no evidence of a difference between the groups when looking at academic achievement in ninth grade. Academic success was demonstrated in this study as participation on the honor roll in the first quarter of their ninth grade year. Students in both groups experienced a stability of placement as well as academic success rates to similar degrees. This adds to the data confirming the results that this multiple-measure approach does identify appropriate candidates for the honors program on the whole. If we had found that the minority students identified by the multiple-measure methodology were not achieving at the ninth grade level, we would certainly have to question the long-term effectiveness of the approach.

Research Question #5 Results

Do these groups of students differentiated by identification procedure make similar academic gains (as

reflected in standardized test scale scores) between fifth and ninth grades?

The simple answer to this question is "no". It was found that the groups experienced similar rates of growth as demonstrated by change in their standardized test scaled scores. This reinforces the lesson learned as a result of Research Question #3, that those minority students identified do persist in honors placement over time. We now know that they also grow at similar rates to their nonminority counterparts in the program. Interestingly, though the two groups, differentiated by identification procedure, had different aggregate scores to begin with, they experienced similar growth rates over the five year time period.

This leads us to further questions about the remaining mysteries involving minority students and programs for the gifted. While it is agreed that "the consistent underrepresentation of minority groups in gifted education programs is related to a breakdown in the referral process, the assessment process, or both" (Scott, et. al., 1992, p. 131), there are myriad aspects of the identification process that remain to become topics of other studies. Not

least among these is the dynamic relationship that referring teachers have with the identification process.

The relationship between our minority populations and academic testing is a contentious one at best, and one that yearns for more investigation. This may be true, but until we gather much more empirical data on alternatives to the psychometric approach to identification, we must rely on those approaches that are supported by research.

Implications for Practice

How can these results improve our efforts in achieving equity in identification of giftedness in our schools? Based on the results, there is still work to do in finding giftedness within our minority population at this location. There are new questions to answer and new thoughts to cultivate regarding concepts like *equity, parity, fairness,* and *opportunity.*

In this study, although more minority students were not identified for the gifted program, the students who were identified did demonstrate long-term successful participation in the honors courses. District decision-makers needing a way to identify students who persist in honors courses will certainly find meaningful information in the findings. As for this specific district, new

avenues of identification need to be considered. Perhaps learner profiles, giftedness portfolios, mentor relationships or identification by committee should be our next avenue of discovery.

The journey toward equity in gifted programs, and diversity in their populations, is a long one; but one that must be taken. As a field, we look forward to the day when we will find a way to identify giftedness effectively that is blind to demographics. Until then, we are charged with our challenge and move ahead with enthusiasm, knowing that each step takes us closer to our desired destination.

Limitations of the Study

The limitations of this study must be considered by the reader. The most significant limitation deals with the fact that the results of this study are solely intended for use in future decision-making by the district involved. It is not my intention to make any statements that might be generalizable to the field at large. It is hoped that this study, married with other larger-scale studies, might provide fertile soil for the development of protocols that may be applicable to more settings than those used in the studies themselves.

Because aggregate data were used for the study, we lost the ability to track individual students to see what some of the finer details of the study might look like. Had we had access to specific matrix materials for individual students, like their writing samples, actual grades, or teacher behavior checklists, we may have been able to find some more specific connections between variables involved in the identification process.

Additionally, the idea that this study was designed, implemented and analyzed by a single researcher, with singular ideas, attitudes and motivations is considered a limitation. One person's view, no matter how considered, in such a complex task as an educational research study must be seen as a limitation.

Conclusions and Future Research

While this particular multiple-measure identification methodology did not increase the participation of minority students in honors courses in the immediate time frame, it did identify students who persevered in honors courses at the same rate as their traditionally identified counterparts. This result begs for further study. Is it possible that this approach actually identified giftedness correctly and that, in this

setting, it appears differentially in ethnic groups? Or is there a fundamental confabulation that fills the gap in our understanding regarding ethnicity and poverty in this district that somehow impacts the identification process? Did the process still retain too many vestiges of "dominant culture" assessment paradigms? Ford and Thomas (1997) remind us that schools that adopt a psychometric definition are "problematic because minority students tend not to do well on standardized tests" (p. 1). With standardized test scores as part of our matrix, did we fall into this trap?

Let us examine the last question posed. If we say that minority students are left out of programs for the gifted due to their historically lower scores on standardized tests (Ford & Thomas, 1997), then any procedure that includes those scores as anything but a minor indicator among many other culture-fair indicators must be seen as unjust. While there have been investigations into myriad possible solutions, including the usefulness of culture-fair tests like The Raven Advanced Progressive Matrices (Baska, 1986), the role of family involvement in the identification process (Damiani, 1996), the influence of peer culture (Morris, 2002), and the use of portfolios in the identification process (Wright & Borland, 1993), we still have distance to travel in our

quest to find equitable ways to identify giftedness in all culture groups and economic strata.

Another investigation might take a different perspective on the problem at hand. Instead of beginning with the smaller pool of students already identified for the sixth grade honors class, look at the entire fifth grade pool of students as a whole. Between minority and nonminority student populations, what might the identification rate on the whole be?

An interesting follow-up to this study might take the tack of investigating this identification phenomenon in reverse. That is, to start with the successful minority students in ninth grade, whether they had been identified in fifth grade or not, and look back to see what they were demonstrating in fifth grade. Did they "just miss" the sixth grade honors class? Or was their academic record in fifth grade unremarkable as to make them easily overlooked in the identification process? This would certainly add to the findings of this study and would make a robust discussion of myriad aspects of minority identification for gifted programs.

This leaves us again at a crossroads. We have learned that, in this particular school district, the multiple-measure identification process used did not fulfill its

promise as a way to increase minority access to gifted programs. While it is worthwhile to know that the minority students who were identified were well qualified for long-term challenge of honors courses, we are left with the feeling that we have still missed some candidates. Surely, in a district whose student population is comprised of nearly 85% minority students, our pool of sixth grade minority honors students should be higher than 39% of the honors class at best.

In a field being so universally affected by current significant shifts in demographics we must, now more than ever, be vigilant that our protocols, procedures and approaches are fair and balanced in their effects on learners. Our country faces a wonderfully complex future with respect to projections for the ethnic diversity of our citizenship. It is to our benefit in the long-term to grapple with the equity and diversity issues now, to better prepare our field, perhaps more importantly our students, for success in the future.

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