ABSTRACT

TEACHER RECOMMENDATIONS OF STUDENTS FOR HONORS COURSEWORK: EFFECTS OF TEACHER PERCEPTIONS OF STUDENT CHARACTERISTICS INCLUDING RACE/ETHNICITY

by Meagan Marie Guenther

In addition to traditional grades, teacher ratings of student ability and effort have been recognized as having important implications for student opportunities for educational advancement in the schooling process. Specifically, teacher ratings can appreciably influence the identification of academically talented students and their subsequent enrollment in honors coursework. Previous research has investigated teacher ratings of students at the elementary and middle school levels. This study evaluates teacher ratings and recommendations of students for honors coursework at the high school level, specifically in relation to race/ethnicity. An analysis of data from the Educational Longitudinal Study of 2002 suggests that teacher recommendations of students for honors coursework in addition to being influenced by actual student behaviors are influenced by student race/ethnicity. These findings suggest that teachers differentially recommend academically talented students for honors classes by student race/ethnicity, a potential barrier to recruiting minority students into honors coursework at the secondary level.
TEACHER RECOMMENDATIONS OF STUDENTS FOR HONORS COURSEWORK:
EFFECTS OF TEACHER PERCEPTIONS OF STUDENT CHARACTERISTICS
INCLUDING RACE AND ETHNICITY

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Dedication

I dedicate this thesis to husband, Mark, with gratitude and love.
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Chapter 1: Introduction

The United States is a multicultural society consisting of a shared core culture, the macroculture, as well as a variety of smaller subcultures, microcultures. The characteristics, norms, and values of the macroculture are mediated by, interpreted, and expressed differently within, the coexistent microcultures. In the United States, specific racial/ethnic categories are often associated with the defining characteristics of given microcultures; racial/ethnic categories have been highly inflexible and have been considered to reflect social, economic, and political traits. Differences between the macroculture and the various microcultures, as well as additional differences among the various microcultures, can lead to cultural misunderstandings, cultural conflicts, and institutionalized discrimination. These dynamics bear significant and distinct implications for the United States public education system, which serves as the nation’s primary system of formal education. Because children enrolled as students in the public education system are subject to the expectations and judgments of the macroculture within that system, children who are members of minority racial/ethnic groups may be expected to act and think in disparate ways in their homes, in their communities, and in their schools. Discrepancies between those contexts necessitate that such students acquire attitudes, knowledge, and skills appropriate and pertinent to effective functioning in multiple separate settings (Banks, 2007). Further complications exist for racial/ethnic minority children who are academically talented, as they must confront various social perspectives of giftedness and struggle with the challenge of expressing their talents in diverse and often dissimilar contexts within which they may or may not be recognized. “Giftedness is a social construct; subjectivity guides definitions, assessments, and perceptions of giftedness” (Ford, 2007, p.402).

In the public school system, a highly disproportionate percentage of middle- and upper-middle-class White students are categorized as academically talented compared to lower-class racial/ethnic minority students, such as African American students and Latino students. Authorities on multicultural education suggest that the disproportionate percentage of middle- and upper-middle-class White students categorized as academically talented compared to lower-class African American students and Latino students is evidence of the social origin of the category of exceptionality, as is the similarly disproportionate number of African American students and Latino students classified by schools as having learning disabilities (Banks, 2007).
These inequalities indicate the extent to which within schools the identification of exceptionality is related to macroculture assumptions and expectations regarding the characteristics of particular microcultures.

Data suggests that both the recruitment and retention of academically talented racial/ethnic minority students are unambiguously problematical for public school systems throughout the United States and contribute to the problem of the underrepresentation of racial/ethnic minority students (Passow & Frasier, 1996; Ford, 1998). Racial/ethnic minority students, especially African American students and Latino students, historically have been inadequately represented in gifted education, and distressingly, recent studies indicate that these groups remain underrepresented by 50 to 70 percent (Brice & Brice, 2004; Elementary and Secondary Schools Civil Rights Survey, as reported by Ford, 2007). At the high school level, African American students and Latino students enroll in Advanced Placement and honors classes at approximately half the rate of White students (Klopfenstein, 2004). Because experience in Advanced Placement and honors classes is used as a screening device for college admissions and might also improve college retention by serving as beneficial college preparation (Trusty, 2002), this discrepancy is especially troubling, even more so when considered in relation to the fact that racial/ethnic minority students have been and continue to be highly underrepresented in postsecondary enrollment (Jackson & Moore, 2006). According to Gándara and Maxwell-Jollypoor (1999), performance in high school is a significant factor in the restricted pool of underrepresented racial/ethnic minority students applying to and enrolling in college. Citing a report from the National Center for Education Statistics (1997), they note specifically that underrepresented racial/ethnic minority students take fewer rigorous college preparatory courses in high school than do their non-racial/ethnic minority peers, and that, “Their grade-point averages in the courses that they do take are uniformly lower than for White or Asian American students” (p.7).

In the United States, a pluralistic society comprised of individuals from a broad swath of backgrounds, racial/ethnic and cultural, both excellence and equity are appropriate goals for the country’s primary system of formal education. Advancing toward both excellence and equity in the provision and practice of education requires concerted efforts to ensure that students with academic talents from all racial/ethnic groups have an equal opportunity to participate in appropriate educational programs to meet their needs (Banks, 2007). According to Kewai,
Ramani, Gilbertson, Fox, and Provasnik (2007), in 2005 minorities made up 33 percent of the United States population. Latinos were the largest minority group, representing 14% of the population, followed by African Americans, 12%, and Asian Americans, 4%. Statistical predictions indicate that minorities will represent 39% of the total United States population by the year 2020, suggesting that this issue holds increasingly significant implications for the future of this country and the performance of its citizens. Gándara and Maxwell-Jolly (1999) note that as the White population is shrinking relative to the non-White population, “The dramatic increase in ethnic minorities is felt disproportionately among the school-age population. As such, the most pressing issues associated with this demographic change are those involving the education of an increasingly diverse student body” (p. 5). Related, Morris (2002) asserts that, “Although there are clearly other factors, the significance of race and ethnicity and racism as variables that determine which students are placed in gifted education programs needs further investigation” (p. 59). Given that the high school curriculum is particularly influential and sometimes crucial in preparing students for their academic and occupational futures, such investigation should include analysis of decision making regarding the recommendation of high school students for Advanced Placement and honors classes.

Several barriers to recruiting and retaining academically talented racial/ethnic minority students into and within Advanced Placement and honors classes have been posited. In a school setting, many decisions about students are based on teacher perceptions of student performance levels. Teachers assess students in a variety of ways, most notably using conventional measures of achievement such as grades and standardized test scores, but also utilizing informal subjective measures of ability and effort. Both ability and effort have been recognized as key determinants of student academic achievement in schools. In the academic literature, ability is generally defined in terms of the competence using language, learning and mastering material, and attaining set standards that a student displays in approaching and completing his or her schoolwork, while effort is generally defined in terms of the motivation and perseverance a student directs toward the completion of his or her schoolwork. Teacher ratings of student effort and ability have been used in schools to indicate whether a student is perceived as working at a level commensurate with his or her ability and to distinguish student potentiality for success in gifted programs and honors classes (Natriello & McDill, 1986; Shouse, Schneider, & Plank, 1992).
While research regarding the reliability of teacher recommendations of students for gifted programs and honors classes at the primary, elementary, and middle school levels suggests that teacher referrals do have efficacy, such studies have been limited primarily to addressing whether recommended students succeed in their honors classes. A smaller number of studies have addressed which students teachers do and do not refer for those classes, and an even smaller number of studies have addressed whether those students not referred might have been appropriate candidates for referral. Fewer still are studies that have been conducted to investigate the identification and nomination of academically talented youth for Advanced Placement and honors classes at the secondary level. Additionally, limited research has been conducted to examine how factors such as teacher perceptions of student ability and effort might interplay with race and ethnicity to impact teachers’ decisions to refer students for Advanced Placement and honors classes at the secondary level.

One purpose of the present study was to examine the role of race and ethnicity in teacher perceptions of student ability and effort. A second intent of the study was to contribute further to existing research regarding whether or not a student’s race and ethnicity might predict to an extent a teacher’s likelihood of recommending that student for Advanced Placement or honors classes. A final function of this study was to investigate possible linkages among these factors. Ultimately, the present study investigated English teacher nominations of tenth grade students for Advanced Placement or honors classes in regard to equity across racial/ethnic status. It considered contributions and interactions of various indicators of the English teacher’s perceptions of the student’s characteristics of ability, effort, and student race and ethnicity, in the English teacher’s decision to recommend a student for Advanced Placement or honors classes.

Three key questions were prioritized for the purpose of the study, the first being: Is there a relationship between English teachers’ perceptions of student characteristics of ability and effort and student race and ethnicity? The second key question posed was: Do teachers differentially refer students for Advanced Placement or honors classes by race and ethnicity? The final question was: Is there a relationship between an English teacher’s perceptions of student characteristics of ability and effort, a student’s race and ethnicity, and an English teacher’s nomination of students for Advanced Placement or honors classes?

Regarding the contents and conclusions of this study, gifted refers to students who demonstrate evidence of high performance in academic areas and is transposable with the
descriptor *academically talented*. The terms *nomination, recommendation, and referral* may be used interchangeably to describe the process of a teacher designating a student as potentially gifted or suitably prepared for participation in Advanced Placement or honors coursework. *Perception* refers to a way of conceiving an object, individual, action, or situation. Perception can be affected by specific reference points for evaluating objects, individuals, actions, and situations, also referred to as predispositions. Within this paper, the terms *Caucasian and White* are used interchangeably to represent people of European descent. Similarly, the terms *African American, Black American, and Black* are used interchangeably to represent people of African descent.
Chapter 2: Review of Literature

Scholars have posited several probable barriers to the effective recruitment and sustainment of racial/ethnic minority students into and within programs and classes for the academically talented. Summarizing the existent body of research regarding the involvement of racial/ethnic minority students in gifted programs and honors classes, Frasier, Garcia, and Passow (as cited in Ford, Grantham, & Milner, 2004) have proposed three reasons for the underrepresentation of racial/ethnic minority students in gifted programs and honors classes: test bias, deficit-based paradigms, and under-referrals by teachers. This review discusses these reasons and the implications of teacher referrals.

Test Bias

The first reason proposed by Frasier, Garcia, and Passow (as cited in Ford, Grantham, & Milner, 2004) for the underrepresentation of racial/ethnic minority students in gifted programs and honors classes is test bias. Numerous scholars have advanced the hypothesis that test bias may explain the persistent underrepresentation of racial/ethnic minority students in gifted programs and honors classes. Typically, students are recruited into programs and classes for the academically talented through a multi-step process consisting of distinct screening, identification, and placement stages. The first stage of the recruitment process, screening, involves the formation of a candidate pool larger in number than the cohort that will ultimately be identified for inclusion into the gifted program or honors class. Measures employed within this screening stage may include the results of standardized assessments or other available tests, scores on checklists or rating scales, teacher nominations, or a combination thereof. Subsequent to the identification of an initial pool of candidates, the second stage, the identification stage, commences, and additional screening measures may be used to further examine the candidates. These additional measures may involve diagnostic assessment in the form of additional standardized testing, the gathering of additional teacher input, or the gathering of parental input. The information collected during this stage contributes to the creation of an academic profile of each candidate. During the third and final stage, the placement stage, these academic profiles allow for the evaluation of the relative merits of each candidate and ultimately inform final placement decisions. This process is more formalized at the elementary and middle school levels when students are being identified for participation in gifted programming than at the secondary
level when students are being identified for participation in Advanced Placement and honors classes, but the essential tenets remain consistent across grade levels.

In addition, nontraditional assessments, such as multicultural curriculum-based enrichment activities, observations, portfolios, and interviews, may also be included during the screening and identification phases of the process. However, despite the fact that such nontraditional assessments are recommended by scholars as unbiased alternatives to standardized assessments,—such as academic achievement tests and cognitive ability tests,—nontraditional assessments are typically not included as standard components of recruitment procedures (Sarouphim, 1999). Rather, a reliance on standardized assessments persists, due largely to the continued prevalence of an enduring belief in schools that tests are a more relevant identification technique than are other indicators of student achievement. Thus, despite concerns about the reliability and validity of such tests for use with racial/ethnic minority students and despite apprehensions that such tests of academic achievement and cognitive ability are not appropriate measures for screening or identifying children for gifted programs or honors classes, a dependence on such tests remains (Baldwin, 2004).

Within the literature regarding the use of standardized assessments with racial/ethnic minority students, five central arguments against using academic achievement and cognitive ability tests with such students are offered. The first argument presented is that such tests have a cultural bias. The second claim is that national norms are inappropriate for use with racial/ethnic minority students since such norms are based on predominantly White samples. The third contention is that racial/ethnic minority students are at a disadvantage in completing such tests due to the fact that they have been found to exhibit test-taking skill deficits compared to their White peers. The fourth assertion presented is that scores of racial/ethnic minority students can be depressed by the effects of having a White examiner and associated impediments in communication and rapport. The fifth major argument is that these test results can lead to inadequate and inferior education by segregating racial/ethnic minority students into special classes that have inadequate curriculums and by creating negative expectancies in the teachers. While decades of research suggest that racial/ethnic bias in tests is a legitimate concern, the use of tests in the identification of students for gifted programs and honors courses remains strong (Sarouphim, 1999). The results of a 2004 study by McKenzie on the influence of identification practices, socioeconomic status, and race and ethnicity on the identification of students for gifted
programs and honors classes indicated both an excessive reliance on standardized tests in the recruitment process as well as a significant relationship between gifted program participation rates and student race and ethnicity. The three identification practices cited most frequently in McKenzie’s study were Teacher Nominations (90.0%), Achievement Tests (89.6%), and Intelligence Quotient Tests (82.0%). Borland and Wright (2004) argue that within this system, “We have failed, as a field, to respond to our society’s diversity by adequately identifying and serving gifted students who are economically disadvantaged, especially students from racial/ethnic and minority groups” (p. 26).

Given the prominent roles of testing and teacher nominations in the identification of students for participation in gifted programs and honors classes, both the dependability of the insight and the soundness of the discernment demonstrated by the individuals who interpret the test scores during the screening phase as well as of the individuals who are in a position to offer or withhold nominations during the screening and identification phases are patently impactful and of significant importance to the legitimacy and equitability of the identification process. In 2001, Meyer, Finn, Eyde, Kay, Moreland, Dies, Eisman, Kubiszyn, and Read published a comprehensive article summarizing standardized assessment evidence drawn from the data of more than 125 meta-analyses and 800 samples examining assessment. They concluded that a multimethod assessment battery can provide a structured means for skilled clinicians to maximize the validity of individualized assessments, but they recommended that future investigations should move beyond an examination of test scales to focus more on the role of educational professionals who use tests as tools. They noted that, “Tests do not think for themselves, nor do they directly communicate with patients. Like a stethoscope, a blood pressure gauge, or an MRI scan, a psychological test is a dumb tool, and the worth of the tool cannot be separated from the sophistication of the clinician who draws inferences from it and then communicates with patients and professionals” (p. 153). Ultimately, the precision, appropriateness, and integrity with which these measures are utilized and their results interpreted in the screening and identification processes for gifted programs and honors classes may be limited, and thus resultant conclusions are not unassailable.

Deficit-based Paradigms

The second reason proposed by Frasier, Garcia, and Passow (as cited in Ford, Grantham, & Milner, 2004) for the underrepresentation of racial/ethnic minority students in gifted programs
and honors classes is deficit-based paradigms. The input provided by educational professionals such as teachers in the form of referrals during the screening and identification phases of the process is likewise controvertible. Scholars have investigated the existence and influence of paradigms among educators, including deficit-based paradigms. A paradigm is a set of assumptions, conceptualizations, principles, and practices that constitutes a way of viewing reality for the community that shares them, or, as defined distinctively by Kuhn in 1970, “The entire constellation of beliefs, values, techniques, and so on shared by members of a given community” (p. 175). In a sociological sense, several paradigms can exist concomitantly, the degree of popularity of each paradigm varying with time and context. The three most influential paradigms in education have been and continue to be the genetic paradigm, the cultural deficit paradigm, and the cultural difference paradigm (Banks, 2006).

The genetic paradigm manifests the historical belief that certain racial/ethnic groups are, and have been characterized and viewed as, genetically inferior. Within American society, the perception of African Americans as genetically inferior has been persistent. Latinos have been also been victimized by such apocryphal reasoning and irrational biases. The genetic paradigm persists despite the fact that geneticists and social scientists have fundamentally discredited the possibility of the genetic inferiority of particular races. The cultural deficit paradigm focuses instead of on genetics on the cultural deficits of low-income students and racial/ethnic minority students. According to Banks, this paradigm arose from the work of social scientists who in the 1960s created a cluster of research centralized around the conception that low-income students and racial/ethnic minority students were not experiencing success in school because of cultural deficits that resulted from their socialization within their family and community cultures. Within this conceptualization, socialization is defined as the adoption of the behavior patterns of the surrounding culture, thus in this argument the socialization of students to the norms of their own cultures results in behavior patterns that reduce or minimize their success in the educational setting. Specifically, according to Banks, these researchers believed that characteristics such as disorganized families, fatherless homes, and poverty caused children from low-income communities to experience cultural deprivation and related cognitive deficits. Banks notes however that other scholars have challenged this conception and provided an opposing view contending that low-income students and racial/ethnic minority students have many cultural strengths which they intrinsically bring to their educational environments and which enrich those
This conceptualization of cultural differences as a positive quality or asset is fundamental to the cultural difference paradigm. Unfortunately, as Weiner (1993) observes, though the cultural deficit paradigm remains contested, the conviction that deficits in school performance and a lack of school success for a given student is predominantly due to problems in that student and that student’s family, community, and related cultures, has persisted as the pervasive, prevailing, principle framework within education. Weiner suggests that attention should be turned from student deficiencies to teacher deficiencies. Weiner asserts that, “Teachers who create orderly classrooms that are academically demanding must establish and reinforce social norms in their classrooms that contravene the deficit paradigm, the dominant ideology of most schools” (p. 305). A theoretical break from deficit based models leads inherently to the pursuit of strength based models.

Strength based models, though ascendant in academia, have remained restricted in practice. The two primary strength based models in education are the protective factors model and the developmental assets model; the concept of the development of resiliency operates as an essential element of both. Resiliency is the ability to adapt successfully to adversity. In the educational setting, resiliency allows students to succeed and thrive in spite of the barriers and risk factors with which they are confronted (Horn and Chen, 1998). While a strength based paradigm can potentially lead to more efficient and effective practices in schools, research suggests that educators continue to undermine racial/ethnic minority student efforts to excel rather than assisting them in overcoming barriers. Ford (2007) has reported that educators do not recommend students from racial/ethnic minority groups into gifted programs or honors classes because they believe that the level and pace of the schoolwork in such classes may frustrate those students (p. 404). While a teacher may believe such concerns regarding a student potentially being overwhelmed and underachieving in a gifted program or honors class to be valid at an individual level, the practice of withholding recommendations to honors classes based on such an assumption can be harmful to students who are members of racial/ethnic minority groups. Teachers who fail to recommend qualified racial/ethnic minority students for honors classes are in effect further inhibiting the students’ potential to develop and enhance their talents. They could alternatively support diverse students by recommending them for the honors classes while helping them surmount possible weaknesses through the provision of counseling services, intervention, tutoring, special workshops and seminars, or other support systems.
Given the current prevalence of deficit-based paradigms in education, subjective assessments and projections of a racial/ethnic minority student’s probability to succeed in honors classes may undercut efforts to ensure that students from all racial/ethnic groups with academic talents have an equal opportunity to participate in educational programs for potentially high-achieving students. Ford (2007) summarizes, “Perceptions about racial/ethnic and ethnic minority students combined with a lack of cultural understanding significantly undermine the ability of educators to recruit diverse students into gifted education and to retain them” (p. 403). In order for educators’ recommendations regarding nominations of students for honors coursework to be valid, educators must both examine and be aware of their views about the function and objectives of education as well as to examine and be constantly cognizant of their perceptions of students from racially and ethnically diverse backgrounds.

*Under-referrals by Teachers*

The third reason proposed by Frasier, Garcia, and Passow (as cited in Ford, Grantham, & Milner, 2004) for the underrepresentation of racial/ethnic minority students in gifted programs and honors classes is under-referrals by teachers. Ford, Grantham, and Milner (2004) concur that the prevalence of deficit-based paradigms in education contributes to the continued underrepresentation of racial/ethnic minority students in honors classes. They note that teachers are not prepared to work with and understand racial/ethnic minority students and therefore fail to recognize strengths and potential within racial/ethnic minority students. This might be especially true at upper grade levels, wherein teachers faultily expect that if a student is academically talented, he or she will have been previously identified as such during the primary, elementary, or middle school years. While comprehensive conceptualizations of the extent and details of the implications and impact of deficit-based paradigms within the field of education have been attempted–posited, forwarded, and discussed–the body of pertinent quantifiable research, especially in regard to honors programming for racial/ethnic minority students, remains comparatively limited. Specific to teacher referrals of racial/ethnic minority students for gifted programs and Advanced Placement and honors classes at the upper grade levels, the research is restricted and inconclusive. According to Delisle and Galbraith (2002), overall, teacher nominations have been predominantly dismissed by the existent research as being, “Inaccurate, invalid, and inconclusive evidence of high intelligence, especially if not accompanied by high test scores” (p. 48). Yet others, such as Borland and Wright (2004), suggest that even if this
appraisal is accurate, human beings should still be relied upon as the instrument of choice for the purpose of screening and identifying students for gifted programs and honors classes, arguing that human observation and judgment are more sensitive and adaptable than tests in terms of accounting for context. Siegle and Powell (2004) agree, noting that because classroom teachers observe students in a variety of situations and under a variety of conditions, their unique perspective is valuable when considering students for gifted programs or honors classes. McBee (2006), however, admonishes that, “Despite the vital role of the referral as the ‘gatekeeper’ process through which students become eligible for official evaluation for entry into gifted programs, it remains poorly understood” (p. 103), and he observes that the paucity of research in this area, “is especially troubling and indeed surprising given the field’s well-documented struggle to identify and serve students from minority or low socioeconomic status (SES) families (e.g., Ford, 1998; Frasier, Garcia, & Passow, 1995)” (p. 103). Further muddling the matter, the existent research regarding teacher recommendations for gifted programs and Advanced Placement and honors classes more often seeks to ascertain teachers’ abilities to identify students who do ultimately succeed in such classes than to distinguish teachers’ abilities to identify all students who may succeed in such classes.

The Efficacy of Teacher Referrals

Clearly, with teacher referrals playing an influential role in the screening and identification of students for gifted programs and honors classes, it is important to quantitatively investigate, as Siegle and Powell (2004) describe, “Whether teachers’ beliefs, stereotypes, biases, and expectations influence their selection of students for gifted and talented programs” (p. 21). While scholars such as Morris (2002) maintain unequivocally that the bulk of existent research results, limited in certain ways though they may be, indicate that school processes, such as the over-reliance on standardized measures and incomplete identification and nomination processes, impede the placement of racial/ethnic minority students into gifted programs and honors classes, it is important to note that early studies on the efficacy of teacher referrals for gifted programs and honors classes were not intended to evaluate such claims. Rather, early studies were intended to analyze the extent to which teachers were able to predict which students would, upon testing, achieve an intelligence quotient score higher than a specific threshold, and these studies employed a cross-classification approach for this purpose. Renzulli and Delcourt (1986) have criticized such studies (cited by McBee, 2006), arguing that appropriate multidimensional
conceptualizations of preparedness for gifted programs or honors classes, accounting for academic ability as well as skills related to additional indicators such as achievement, creativity, leadership, and motivation, require that teacher referrals consider and provide information about students which differs in breadth, depth, and fluidity from the information measured by traditional testing and that assessing the reliability and validity of teacher referrals only in relation to their ability to accurately predict test scores is insufficient. Implicit in the verbiage of their critique is an assumption that teacher nominations of students for gifted programs and honors classes made with a multidimensional conceptualization of preparedness would result in higher rates of racial/ethnic minority students identified for inclusion than would testing. As an alternative, Renzulli and Delcourt suggested that the ultimate criterion for evaluating the usefulness of teacher recommendations should be a student’s performance in the enriched academic program for which he or she was recommended. Notably, this approach still fails to address those students who are qualified for but overlooked by teachers for recommendations into gifted programs or honors classes.

In 1984, Hoge and Butcher studied teacher judgments of student attributes, including judgments of student aptitudes and classroom behaviors, with a focus toward the academic achievement levels of the students. Their study was primarily concerned with the accuracy or validity of teacher judgments regarding student achievement. Their analyses revealed a high level of accuracy for teacher judgments of student achievement when assessed against student test scores. Also, Hoge and Coladarci (1989) completed a broad literature review of teacher-based judgments of student academic achievement and concluded that teacher judgment is a highly valid measure and that decisions based on teacher assessments of student attributes are accurate and functional. However, the studies revealed some variability across teachers in accuracy levels, which suggested the operation of moderator variables. The authors concluded that teachers might be more accurate at assessing achievement in high-performing students than in under-achieving students, and they admonished that in none of the studies reviewed were the variables that might be associated with the variability across teachers in accuracy levels investigated.

Teacher Biases

Siegle and Powell (2004) observe that while research over-all appears to support the use of teachers’ ratings of students, there is still limited research on teacher biases when assessing
students for recommendations for gifted programs or honors classes. Hoge & Cudmore (1986), Gagné (1994), and Rohrer (1995) have all conducted research regarding teacher judgements of student attributes incorporating student performance with outcomes, and they have all concluded that teachers are skilled identifiers of students who succeed in gifted programs or honors classes. However, other research suggests that teachers might develop their own conceptions of talent and tend to identify students who fit those conceptions (Campbell & Verna, 1998; Chasion & Sullenger, 1996, also cited in Pierce, Adams, Speirs, Neumeister, Cassady, J. Dixon, & Cross, 2007). According to Persson (1998), one study that aimed to investigate specific teacher biases revealed that teachers can identify high-ability students with accuracy in regard to cognitive attributes and personality characteristics but also that they fail to understand the socio-emotional dynamics that might affect students’ performances. Unfortunately, that study did not address any interactions that might occur regarding race and ethnicity. Thus, the question remains whether teachers use similar criteria when nominating White students and racial/ethnic minority students for involvement in gifted programs and honors classes.

In 2006, McBee examined a dataset containing demographic information, gifted nomination status, and gifted identification status for elementary students in one state with the intent of determining how various referral sources compared in terms of overall quality as well as with the intent of determining the number of students referred, the proportion of referred students who were successfully identified, how referral sources compared in terms of equity across racial/ethnic and socioeconomic groups, and whether the underrepresentation problem was primarily related to the nomination facet or testing facet of the identification process for students for gifted and honors programming. He concluded that teacher referrals were significantly more valuable than were other referral sources. However, in discussing his findings, he noted that Asian American students and White students were more likely to be referred than were African American students or Latino students, and moreover that African American students and Latino students, traditionally underrepresented in gifted and honors programming, were under-referred. His findings also suggested that referrals for African American students and Latino students were less accurate than were those for Asian American students and White students. McBee hypothesized that, “The low rate of teacher nominations for racial/ethnic minority students could indicate racism, classism, or cultural ignorance on the part of teachers” (p. 109). He ascertained that the nomination process is a primary cause of differential
representation in gifted programs and suggested that the results of his study indicated that more attention needs to be devoted to the issue of student nominations for gifted programs and honors classes. The finding that overall quality of teacher nominations was high, despite fluctuations related to differing student backgrounds, builds on earlier studies to indicate that teacher referrals are a screening and identification tool that potentially could be optimized by an increased understanding of and provisions to enhance the process, especially as it relates to racial/ethnic minority students. “The referral process is an obvious potential source of unfairness in the entrance process. It is essential that reliable information be made available so that current practices can be evaluated and perhaps modified” (McBee, p. 103). Teachers must be able to know and attend to the background, beliefs, knowledge, and skills of each student in order to provide referrals for gifted programs and honors classes with equity. Whether teachers are able to know and attend to the background, beliefs, knowledge, and skills of diverse students in order to provide referrals with equity is an important question.

Teacher Ratings of Student Characteristics and Implications

Especially with the nation’s student population becoming increasingly more diverse, teachers must be both willing and prepared to work effectively with and for students from backgrounds different from their own (Pohan, 1995, cited in Jones, 2004). Unfortunately, some research indicates that teachers might have difficulty attending to and applying such information when evaluating students’ effort, an important variable in academic success. A 1992 study by Shouse, Schneider, and Plank revealed that teacher ratings of effort are influenced by student characteristics such as race and ethnicity, family background, and other factors, and that the influence of race and ethnicity appears to be most pronounced in public schools. The researchers defined effort in terms of motivation and perseverance directed to schoolwork, and noted that effort has been recognized as a key determinant of academic achievement in schools. The researchers posited that probable achievement ratings and effort ratings may be influenced by conscious or unconscious stereotyping by teachers. For the purpose of their study, the researchers focused on subjective ratings of attentiveness and work completion as dimensions of effort. They noted that, “In addition to their distinctive quality, these ratings are subjective in that they reflect teacher perceptions and may be derived from intuitive judgments” (p. 271). Of particular interest, the researchers found a tendency for high-achieving African American students and Latino students to receive negative teacher ratings in regard to effort.
McBee (2006) has noted that there is some previous evidence suggesting that teachers evaluate racial/ethnic minority students, such as Latino students, less favorably than White students. He cites a 1999 study by Masten, Plata, Wenglar, and Thedford which found that fifth grade teachers rated Latino students less favorably than White students and that their ratings of all students were associated with the students’ levels of acculturation and ethnic identification. Masten, Plata, Wenglar, and Thedford suggested that the attitudes of teachers toward Latino students or the socioeconomic backgrounds of those students may have confounded teacher judgment and noted that, “The literature provides ample evidence that classroom teachers' judgments are influenced by students’ ethnicity (Clifton, Perry, Personson, & Hrynink, 1986; de Kanter & Frankiewicz, 1981; Demetrulias, 1990; Matute-Bianchi, 1986)” (p. 64). There is also evidence suggesting that teachers evaluate African American students less favorably than White students (Ryan, 1983).

Underachievement and the Importance of a Rigorous High School Curriculum

Though the bulk of the research regarding teacher referrals of students for participation in gifted programs and honors classes has focused on primary, elementary, and middle school systems, referrals by teachers for high school Advanced Placement and honors classes is more limited, although a recent study by Klopfenstein (2004) has revealed significant racial/ethnic differences in high school Advanced Placement (AP) course participation rates. Advanced Placement participation is increasingly recognized as an important determinant of student opportunities and performance in higher education, and experience in Advanced Placement or honors classes is useful as a screening device for college admissions. Such experience might also improve college retention by serving as strong college preparation. Research indicates that when students whose parents did not attend college pursue a rigorous high school curriculum, their chances of attending college improve significantly, as do their chances of continuing in college past their first undergraduate year, a finding that has particularly crucial implications for racial/ethnic minority students whose parents may be less likely to have attended college than the parents of their White peers (National Center for Education Statistics, 2001, cited in Klopfenstein, 2004). In 2000, the College Board’s National Task Force on Minority High Achievement produced a general report on the underachievement of minority students. In the report, the College Board emphasized that more research is needed to understand the
determinants of minority underachievement, particularly in regard to barriers to eventual college enrollment and success (also cited in Klopfenstein, 2004).

Zirkel (2005) has observed and described a dynamic that may function as a contributor to or determinant of such underachievement:

Young people observe patterns of racial/ethnic discrimination in academic and employment settings (Bigler, Averhart, & Liben, 2003). These observations influence their assessments of the connection between effort in school and economic and advancement opportunities later in life (Ogbu, 2003). These observations can then undermine their motivation to identify themselves with and exert high levels of effort in academic pursuits (Cross, 2003; Ogbu, 2003; Zirkel, 2002, 2004) (p.111).

Thus, a teacher withholding a referral for a racial/ethnic minority student to participate in Advanced Placement or honors classes not only deprives that student of an important enrichment opportunity, but might also serve to underscore the futility of the student’s efforts in his or her own mind and to decrease his or her future efforts in academic pursuits by lending to a reduction in motivation. Indeed, several studies have reported high percentages of underachievement among academically talented African American students (Ford, 1992, 1995, 1998). Additionally, this diminution of motivation and subsequently of academic performance could negatively impact the student’s access to future advancement opportunities.

In summation, “Although there are clearly other factors, the significance of race and ethnicity and racism as variables that determine which students are placed in gifted education programs needs further investigation” (Morris, 2002, p. 59), and such investigation should include analysis of teachers’ decision making regarding high school students given that the high school curriculum is influential and sometimes crucial in preparing students for their academic and occupational futures. The underrepresentation of African American students and Latino students in Advanced Placement and honors classes continues to be a concern to educators, including administrators, counselors, teachers, and school psychologists, as well as to parents and students themselves. Many African American students and Latino students are academically talented, but their talents may pass unidentified and undeveloped. Such occurrences might be related in part to incongruent expectations for student behavior and performance across cultural settings as well as to deficit-based paradigms related to race and ethnicity. While research regarding the reliability and validity of teacher recommendations of students for gifted programs
and honors classes suggests that teacher referrals do have efficacy, early studies investigating
teacher nominations simply assessed teacher abilities to predict student intelligence quotient
scores. More recent studies investigating teacher nominations of students for gifted programs and
honors classes have been limited primarily to addressing whether recommended students
subsequently succeed in those programs and classes, but those studies have revealed referrals for
racial/ethnic minority students to be less robust than those for White students.

**Purpose of the Present Study**

Research examining academic success among racial/ethnic minority students is restricted,
especially research regarding students at the high school level. While there is research to suggest
that whether or not racial/ethnic minority students are referred for and participate in Advanced
Placement or honors classes at the high school level is an important area of concern, the research
examining the factors related to whether or not racial/ethnic minority students are referred for
and participate in Advanced Placement or honors classes at the high school level remains
limited. Inadequate research has been conducted to examine teacher decisions to refer students
for Advanced Placement and honors classes at the high school level or how factors such as
ability and effort might interplay with race and ethnicity to contribute to those decisions.
Research to investigate whether or not a student’s race and ethnicity might predict to an extent a
teacher’s likelihood to recommend a student for participation in Advanced Placement or honors
classes and to examine the contributing factors regarding whether racial/ethnic minority student
candidates for Advanced Placement and honors classes are referred for those classes would
contribute significantly to our knowledge of the role of race and ethnicity in teachers’ decisions
in referring students for higher-level academic programming.

The present study undertook the examination of teacher referrals of students for
participation in Advanced Placement and honors classes within the high school setting. Of note,
whereas Masten, Plata, Wenglar, and Thedford’s 1999 study, which utilized an earlier version of
the same database employed in this study to examine the relationship between student race and
ethnicity and referrals for honors classes, did not control for potential lurking variables such as
mastery of applicable academic conventions or class participation, this study accounted for the
contribution of such factors through the inclusion of scales indicating teacher perceptions of
student ability and of student effort.
Specifically, the present study addressed English teacher nominations of tenth grade students for Advanced Placement and honors classes in terms of equity across racial/ethnic status considering the contributions and interactions of various indicators of the English teacher’s perceptions of the student’s characteristics of ability and effort, and the student’s race and ethnicity or ethnicity, in relation to the English teacher’s decision to offer or withhold a recommendation for the student to be enrolled in Advanced Placement or honors classes. The hypotheses of this study were as follows: There is a relationship between English teachers’ perceptions of student characteristics of ability and effort and student race and ethnicity, with teachers rating White students significantly higher on indicators of ability and effort than they rate racial/ethnic minority students on indicators of ability and effort; teachers do differentially refer students for Advanced Placement or honors classes by race and ethnicity, with teachers recommending White students at a higher rate than racial/ethnic minority students; and there is a relationship between an English teacher’s perceptions of student characteristics of ability and effort, a student’s race and ethnicity, and an English teacher’s nomination of students for Advanced Placement or honors classes.
Chapter III: Method

Data for this study were obtained from the Education Longitudinal Study of 2002 (ELS: 2002), a national longitudinal study administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) located within the U.S. Department of Education and the Institute of Education Sciences. The NCES is the primary federal entity for collecting and analyzing data related to education. ELS: 2002 was “designed to monitor the transition of a national sample of young people as they progress from tenth grade through high school and on to postsecondary education and/or the world of work” (NCES, 2004).

Sample

Using preliminary 1999–2000 Common Core Data (CCD) and provisional 1999–2000 Private School Survey (PSS) data files as sampling frames, the ELS: 2002 researchers identified a survey population consisting of spring-term tenth graders in 2002 who were enrolled in school within the United States – in regular public schools, including State Department of Education schools and charter schools, and in Catholic and other private schools. The sampling frame of schools was constructed with the intent to match the target population; selected schools were determined to be ineligible if they did not meet the definition of the target population. Ultimately, 1,268 schools were selected for inclusion in the study. Of those 1,268 schools, 1,221 (67.8%) responded to the invitation for inclusion, and a stratified systematic sample of students was subsequently selected from those schools. The strata were based on Black, Asian American, Latino, and other race and ethnicity, and over-sampling was employed in an attempt to ensure that each of the subpopulations had a minimum sample size of 1,356. Approximately twenty-six sophomores from each of the participating public and private schools were included.

ELS:2002 was specifically designed to study student achievement along with family, community, classroom, and school factors that might promote or inhibit educational success. A study with many components and phases, ELS: 2002 gathered information at multiple levels, including information about the backgrounds and experiences of students, parents, and teachers, and physical and administrative descriptions of the schools the students attended. Within this framework, information about individual students was obtained not just from students and their school records, but also from their parents, their teachers, and the administrators of their high schools. Self-administered questionnaires and curriculum-based cognitive tests constituted the
primary modes of data collection. The multilevel focus of ELS: 2002 served to furnish
performance data specific to individual students as well as ratings information from teachers
about those same students. The survey information solicited from teachers included rating
questions addressing teacher judgments of student ability and effort. The provision of this linked
data makes possible the exploration of relationships between student characteristics and teacher
ratings. Specifically, the data set allows for the examination of teacher ratings and
recommendations of students for honors coursework as related to the distribution of educational
experiences and opportunities across different racial/ethnic groups.

Each student in the ELS:2002 sample was rated by two teachers, one teacher of English
and one teacher of Mathematics, on a variety of ability and effort dimensions. The structure of
the ELS:2002 database dictated the use of either ratings from English teachers only or ratings
from Mathematics teachers only for the purpose of this analysis. Since the discipline of English
is arguably more subjective than the discipline of Mathematics, the ratings of English teacher
were utilized. Because previous research has revealed that the influence of race and ethnicity
appears to be most pronounced in public schools (Shouse, Schneider, & Plank, 1992), only the
public school sub-sample of the ELS:2002 data was utilized for this study. This stratified sub-
sample included 12,039 students attending 580 public schools. Finally, the racial/ethnic
distribution of the final student sample was limited to Asian Americans, Blacks, Latinos, and
Whites. Notably, an abbreviated version of the survey was offered to participants, resulting in a
high number of legitimate skips due to certain questions not being administered. Missing, not
administered, and multiple responses were coded as missing and excluded from the analyses.
The resulting student sample size was \( n = 10,254 \).

Procedure

The ratings were organized into two separate scales, an ability scale consisting of ratings
representing distinct dimensions of ability, and an effort scale consisting of ratings representing
distinct dimensions of effort (see Appendix A and Appendix B). Reliability and item analysis
was used to construct both scales and to evaluate the reliability of the final scales. The
assessment of each scale’s reliability was based on the correlations between the individual items
comprising the scale relative to the variances of the items. Given cases wherein the correlation
between a respective item and the total sum score was low, the item was deleted in order to
increase the internal consistency of the scale. To assess whether the five items that were summed
to create the ability scale and the eight items that were summed to create the effort scale formed reliable scales, Cronbach’s alpha was computed. The alpha for the five items on the ability scale was .962, which indicates that the items form a scale that has very high internal consistency reliability. The alpha for the eight items on the effort scale was .967, which indicates that those items also form a scale that has very high internal consistency. Very high alphas may be a sign that items are repetitious or that there are more items included on a scale than are necessary for an internally reliable measure of the intended concept. However, the problem of repetition is not apparent in these scales; each of the items within these scales contributes meaningfully to the scale within which it is included. On the ability scale, each rating utilized represents a specific behavior associated with ability in an English class, while on the effort scale, each rating utilized represents a specific behavior associated with effort in an English class. Furthermore, the ratings included within both scales can be considered subjective and to reflect teacher perceptions, the majority of the ratings being derived from intuitive judgments rather than from objective indicators. For example, even teachers who do accurately measure and keep records of student inattentiveness most likely did not refer to those records when completing the self-administered questionnaire.

*Data Analysis Method*

Data analysis consisted of a series of statistical procedures to examine relationships among the variables of interest. The Statistical Package for the Social Sciences version 17.0 was utilized to calculate all statistics. Both English grades and reading standardized test scores are provided for each student within ELS:2002, but only standardized test scores were utilized for the purpose of this study, as grading scales can vary from institution to institution and instructor to instructor. Each institution uses grading scales appropriate to the philosophy and purpose of that institution and within institutions there may be diverse grading scales, each used for a different type of course, section, or site. The use of standardized test scores alleviates this concern.
Chapter IV: Results

The first analyses undertaken were to examine teacher ratings of students by race/ethnicity. A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between student race/ethnicity and teacher perception of student ability. The independent variable, student race/ethnicity, included four categories: African American, Asian American, Latino, and White. The dependent variable was teacher perception of student ability as measured by a rating on an ability scale. The test was significant, $F(3,10250) = 605.21, p = .00$.

Table 1

<table>
<thead>
<tr>
<th>Student Race/ethnicity</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>11.25</td>
<td>8.253</td>
</tr>
<tr>
<td>Asian American</td>
<td>12.97</td>
<td>9.917</td>
</tr>
<tr>
<td>Latino</td>
<td>11.38</td>
<td>8.435</td>
</tr>
<tr>
<td>White</td>
<td>17.84</td>
<td>5.634</td>
</tr>
</tbody>
</table>

Post hoc analysis was conducted to evaluate pairwise differences among the means. Using the Bonferri method, each pairwise comparison was tested at the .05 level. The White group received significantly superior ratings on the ability scale in comparison with the Asian American group, the African American group, and the Latino group, and the Asian American students received significantly superior ratings on the ability scale in comparison with the African American group and the Latino group. The African American and Latino groups were not significantly different from one another.

A second one-way ANOVA was conducted to evaluate the relationship between student race/ethnicity and teacher perception of student effort. The independent variable, student race/ethnicity, included four categories: African American, Asian American, Latino, and White. The dependant variable was teacher perception of student effort as measured by a rating on an effort scale. The test was significant, $F(3,10250) = 652.23, p = .00$. 

23
Table 2

*Teacher Ratings of Student Effort, by Race/Ethnicity*

<table>
<thead>
<tr>
<th>Student Race/ethnicity</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>15.00</td>
<td>9.754</td>
</tr>
<tr>
<td>Asian American</td>
<td>17.07</td>
<td>11.071</td>
</tr>
<tr>
<td>Latino</td>
<td>15.29</td>
<td>9.995</td>
</tr>
<tr>
<td>White</td>
<td>22.00</td>
<td>3.73</td>
</tr>
</tbody>
</table>

Post hoc analysis was conducted to evaluate pairwise differences among the means. Using the Bonferri method, each pairwise comparison was tested at the .05 level. The White group received significantly superior ratings on the effort scale in comparison with the Asian American group, the African American group, and the Latino group, and the Asian American students received significantly superior ratings on the ability scale in comparison with the African American group and the Latino group. The African American and Latino students were not significantly different from one another.

The next analyses undertaken were to examine teacher recommendations of students for honors classes by race/ethnicity. A third one-way ANOVA was conducted to evaluate the relationship between student race/ethnicity and teacher recommendation for honors classes. The independent variable, student race/ethnicity, included four categories: African American, Asian American, Latino, and White. The dependant variable was teacher recommendation of the student for academic honors, Advanced Placement, or honors classes. The test was significant, \( F(3,10250) = 90.999, \ p = .00 \).

Table 3

*Teacher Recommendations of Students for Honors Classes, by Race/Ethnicity*

<table>
<thead>
<tr>
<th>Student Race/ethnicity</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>.08</td>
<td>.272</td>
</tr>
<tr>
<td>Asian American</td>
<td>.19</td>
<td>.393</td>
</tr>
<tr>
<td>Latino</td>
<td>.09</td>
<td>.286</td>
</tr>
<tr>
<td>White</td>
<td>.21</td>
<td>.409</td>
</tr>
</tbody>
</table>
Post hoc analysis was conducted to evaluate pairwise differences among the means. Using the Bonferrri method, each pairwise comparison was tested at the .05 level. Both the White group and the Asian American group were significantly more likely to be recommended for academic honors, Advanced Placement, or honors classes in comparison with the African American group and the Latino group. The White group and Asian American group were not significantly different from one another, nor were the African American group and Latino group significantly different from one another.

Subsequently, a more sophisticated statistical model was utilized to control for relevant factors such as sex, socioeconomic status, and standardized test scores when investigating the effects of race/ethnicity on teacher perception of student ability as measured by ratings on the ability scale. A multiple regression analysis was conducted to evaluate how student characteristics predicted teacher perception of student ability. The predictive student characteristics were race/ethnicity, sex, socioeconomic status, and standardized test scores, while the criterion value was the teacher’s rating of the student on the student ability scale. Presented in Table 4 are indices to indicate the relative strength of the individual predictors. Of note, all of the bivariate correlations between each of the minority races and teacher perception of ability were negative.

Table 4

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlation between each predictor and teacher perception of student ability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>-.209</td>
<td>.000</td>
</tr>
<tr>
<td>Asian American</td>
<td>-.091</td>
<td>.000</td>
</tr>
<tr>
<td>Latino</td>
<td>-.210</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>.111</td>
<td>.000</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.271</td>
<td>.000</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.435</td>
<td>.000</td>
</tr>
</tbody>
</table>

Correlations between test scores and racial/ethnic group are as follows: African American = -.201; Asian American = .033; Latino = -.213
The linear combination of student characteristics was significantly related to teacher perceptions of student ability, $R^2 = .27$, adjusted $R^2 = .27$, $F(6, 10247) = 637.85$, $p = .000$ with all variables significantly contributing to the prediction. The adjusted $R^2$ value indicates that 27% of the variance of teacher perception of student ability was explained by the model. According to Cohen, this is a medium effect. The beta weights, presented in Table 5, suggest that a high score on standardized tests contributes most to predicting high teacher perception of ability, and that being female and having high socioeconomic status also contribute to this prediction. Overall, the multiple regression results suggest that students of minority racial/ethnic status are less likely to receive high ratings on the ability scale from teachers.

Table 5

*Simultaneous Multiple Regression Analysis Summary for Race/Ethnicity, Sex, Socioeconomic Status, and Standardized Test Performance Predicting Teacher Perception of Student Ability*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>-4.44</td>
<td>.194</td>
<td>-.212</td>
</tr>
<tr>
<td>Asian American</td>
<td>-4.244</td>
<td>.211</td>
<td>-.177</td>
</tr>
<tr>
<td>Latino</td>
<td>-4.116</td>
<td>.193</td>
<td>-.201</td>
</tr>
<tr>
<td>Sex</td>
<td>1.372</td>
<td>.135</td>
<td>.086</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.898</td>
<td>.104</td>
<td>.081</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.254</td>
<td>.008</td>
<td>.316</td>
</tr>
<tr>
<td>Constant</td>
<td>3.87</td>
<td>.41</td>
<td></td>
</tr>
</tbody>
</table>

A more sophisticated statistical model was also utilized to control for relevant factors such as sex, socioeconomic status, and standardized test scores when investigating the effects of race/ethnicity on teacher perception of student effort as measured by ratings on the effort scale. A multiple regression analysis was conducted to evaluate how student characteristics predicted teacher perception of student effort. The predictive student characteristics were race/ethnicity, sex, socioeconomic status, and standardized test scores, while the criterion value was the teacher’s rating of the student on the student effort scale. Presented in Table 6 are indices to indicate the relative strength of the individual predictors. Of note, all of the bivariate correlations between each of the minority races and teacher perception of effort were negative.
Table 6
The Bivariate Correlations of the Predictors with Teacher Perception of Student Effort

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlation between each predictor and teacher perception of student ability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>-.210</td>
<td>.000</td>
</tr>
<tr>
<td>Asian American</td>
<td>-.125</td>
<td>.000</td>
</tr>
<tr>
<td>Latino</td>
<td>-.202</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>.080</td>
<td>.000</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.165</td>
<td>.000</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.251</td>
<td>.000</td>
</tr>
</tbody>
</table>

Correlations between test scores and racial/ethnic group are as follows: Asian American = .033; African American = -.201; Latino = -.213

The linear combination of student characteristics was significantly related to teacher perceptions of student ability, $R^2 = .18$, adjusted $R^2 = .18$, $F(6, 10247) = 384.43$, $p = .000$ with all variables significantly contributing to the prediction. The adjusted $R^2$ value indicates that 18% of the variance of teacher perception of student effort was explained by the model. According to Cohen, this is a medium effect. The beta weights, presented in Table 7, suggest that a high score on standardized tests contributes most to predicting high teacher perception of effort, and that being female and having high socioeconomic status also contribute to this prediction. Overall, the multiple regression results suggest that students of minority racial/ethnic status are less likely to receive high ratings on the effort scale from teachers.
Table 7  
*Simultaneous Multiple Regression Analysis Summary for Race/Ethnicity, Sex, Socioeconomic Status, and Standardized Test Performance Predicting Teacher Perception of Student Ability*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>-6.107</td>
<td>.214</td>
<td>-.297</td>
</tr>
<tr>
<td>Asian American</td>
<td>-5.765</td>
<td>.233</td>
<td>-.228</td>
</tr>
<tr>
<td>Latino</td>
<td>-5.765</td>
<td>.213</td>
<td>-.270</td>
</tr>
<tr>
<td>Sex</td>
<td>1.137</td>
<td>.149</td>
<td>.069</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.298</td>
<td>.115</td>
<td>.026</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.108</td>
<td>.008</td>
<td>.129</td>
</tr>
<tr>
<td>Constant</td>
<td>15.778</td>
<td>.41</td>
<td></td>
</tr>
</tbody>
</table>

Next, a binary logistic regression was conducted to assess whether the predictor variables—race/ethnicity, sex, socioeconomic status, and standardized test score—significantly predicted whether or not a student was recommended for academic honors, Advanced Placement, or honors classes. The assumptions of observations being independent and independent variables being linearly related to the logit were checked and met. When all predictor variables are considered together, they significantly predict whether or not a student was recommended for academic honors, Advanced Placement, or honors classes, \( \chi^2 = 1587.763, df = 6, N = 11,321, p = .000 \). Overall, 84.5% of participants were predicted correctly. The independent/covariate variables were better at predicting who would not be recommended for honors classes than who would be recommended for honors classes. Table 8 presents the odds ratios, which suggest that the odds of being recommended for honors classes are greater for females and increasingly greater as socioeconomic status and standardized test scores increase, and are lesser for African Americans and Latinos.
Table 8
*Binary Logistic Regression Predicting Who Will Be Recommended For Honors Classes*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>-.394</td>
<td>.100</td>
<td>.674</td>
<td>.000</td>
</tr>
<tr>
<td>Asian American</td>
<td>.014</td>
<td>.087</td>
<td>1.015</td>
<td>.868</td>
</tr>
<tr>
<td>Latino</td>
<td>-.249</td>
<td>.095</td>
<td>.780</td>
<td>.009</td>
</tr>
<tr>
<td>Sex</td>
<td>.625</td>
<td>.060</td>
<td>1.869</td>
<td>.000</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.334</td>
<td>.044</td>
<td>1.396</td>
<td>.000</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.098</td>
<td>.004</td>
<td>1.103</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-7.063</td>
<td>.215</td>
<td>.001</td>
<td>.000</td>
</tr>
</tbody>
</table>

If race/ethnicity, sex, socioeconomic status, and standardized test scores are controlled for, will teacher perception of ability and teacher perception of effort add to the prediction of whether students will be recommended for honors classes? To investigate this question, a hierarchical logistic regression was conducted. The results indicate that teacher perception of ability and teacher perception of effort do add to the predictive power of race/ethnicity, sex, socioeconomic status, and standardized test score, $\chi^2 = 4.46, p = .000$. The overall model with all predictors entered was significant, $\chi^2 = 8.14, df = 8, N = 11,321, p = .000$. Overall, 87.2% of participants were predicted correctly. Again, the independent/covariate variables were better at predicting who would not be recommended for honors classes than who would be recommended for honors classes. However, of note, this model, which included teacher perceptions of ability and effort, was better at predicting who would be recommended for honors classes than was the previous model that did not including teacher perceptions of ability and effort, (43.4% correct versus 17.2% correct). Table 9 presents the odds ratios.

---

29
Table 9
*Hierarchical Logistic Regression Predicting Who Will Be Recommended For Honors Classes*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>.0606</td>
<td>.000</td>
<td>1.061</td>
<td>.000</td>
</tr>
<tr>
<td>Asian American</td>
<td>.184</td>
<td>.000</td>
<td>1.202</td>
<td>.000</td>
</tr>
<tr>
<td>Latino</td>
<td>.012</td>
<td>.000</td>
<td>1.012</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>.275</td>
<td>.000</td>
<td>1.317</td>
<td>.000</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.128</td>
<td>.000</td>
<td>1.137</td>
<td>.000</td>
</tr>
<tr>
<td>Standardized Test Score</td>
<td>.045</td>
<td>.000</td>
<td>1.046</td>
<td>.000</td>
</tr>
<tr>
<td>Teacher Perception of Ability</td>
<td>.237</td>
<td>.000</td>
<td>1.267</td>
<td>.000</td>
</tr>
<tr>
<td>Teacher Perception of Effort</td>
<td>.109</td>
<td>.000</td>
<td>1.115</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-11.157</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Chapter V: Discussion

Summary

The presented data are largely congruent with existent literature regarding negative teacher perceptions of racial/ethnic minority students and the underrepresentation of minority students in Advanced Placement and honors classes. As hypothesized, teachers rated White students significantly higher on both the ability and effort scales than they rated African American students and Latino students. Unexpectedly, teachers also rated White students significantly higher on both the ability and effort scales than they did Asian American students. The results of previous research suggested that Asian American students would be most likely to receive the highest ratings overall, making this an adventitious finding. Teachers did rate Asian American students significantly higher on both the ability scale and the effort scale than they did African American students and Latino students. Notably, African American students and Latino students were given similarly low ratings on both scales. This finding is in line with previous research that has found that compared to White students and Asian American students, African American students and Latino students are more likely to receive negative ratings across measures of ability and effort. In previous research, even African American students and Latino students who have received the highest grades have still been the most likely of all racial/ethnic groups to receive negative ratings from their teachers (Shouse, Schneider, & Plank, 1992). Also in line with the results of previous research, White students and Asian American students were significantly more likely to be recommended for academic honors, Advanced Placement classes, or honors classes than were African American students and Latino students. In this regard, the White students and Asian American students were not significantly different from one another, and again nor were the African American students and Latino students significantly different from one another.

Achieving a high score on standardized tests, being female, and having high socioeconomic status were all found to contribute to predicting high teacher perception of both ability and effort as well as to contribute to increased odds of being recommended for honors classes. Interestingly, when standardized test scores, sex, and socioeconomic status were accounted for, African American students and Latino students remained significantly less likely to be recommended for honors classes. However, once teacher perceptions of ability and effort
were controlled for, no racial/ethnic group was less likely to be recommended for honors classes. These results suggest that teachers do express lower perceptions of student ability and effort for Asian American students, African American students, and Latino students but that given an equal perception of ability and effort across groups, racial/ethnic minority students are not less likely than their White peers to be recommended for honors classes. In fact, when teacher perceptions of ability and effort are controlled for, minority status students are more likely to be recommended for honors classes than are their White peers.

Regarding the results indicating that teacher perceptions of ability and effort add to the predictive power of race and ethnicity, sex, socioeconomic status, and standardized test score for whether a student will be recommended for participation in honors classes, it is important to note that the results do not comment upon the soundness of teacher perceptions of student ability and effort. Given the relationships between English teachers’ perceptions of student characteristics of ability and effort and student race and ethnicity, with teachers rating White students significantly higher on indicators of ability and effort than they rated racial/ethnic minority students on indicators of ability and effort, if teacher perceptions of students are biased according to student race and ethnicity, as may be signified by the results of these analyses, then those biases within teacher perceptions may transfer underlying prejudices to recommendations for honors classes. The model including teacher perceptions of ability and effort was better at predicting who would be recommended for honors classes than was the model not including teacher perceptions of ability and effort, indicating that the inclusion of teacher views imparts a more accurate prediction of likelihood of referral, but ultimately the model does not indicate whether those perceptions and referrals are just.

If teacher perceptions of ability and effort are contributing factors regarding whether a teacher will recommend a student for honors classes, then it is important for all students, and especially racial/ethnic minority students, that teacher perceptions be unbiased. Considered in relation to attitudes, given the definition of an attitude as the hypothetical construct that represents a given teacher’s degree of like or dislike for an item, the above interpretation of the data suggests that implicit rather than explicit attitudes might ultimately underlie the rate differences between teacher referrals of White students and of racial/ethnic minority students for participation in honors classes. Levy’s (1999) discussion of prejudice, as follows, assists in the
conceptualization of implicit attitudes as a potential contributory dynamic to the consistent trend of under-referrals of racial/ethnic minority students for honors classes:

According to Devine (1989), because of the early socialization and ubiquity of negative stereotypes in the United States, even low-prejudice persons have negative societal stereotypes accessible in memory. Thus, although low-prejudice persons may be committed to being egalitarian, their dormant knowledge of stereotypes can leak out when they do not have the time or cognitive capacity to consider their conscious nonprejudiced beliefs. From time to time, then, low-prejudice persons' unconscious prejudice responses can conflict with their conscious personal beliefs about equality (p. 756).

Applied to the present discussion, this suggests that even teachers who espouse the importance of equality may unwittingly produce decisions contributing to continued inequality. If this phenomenon is germane to teachers in a position to issue or withhold referrals for racial/ethnic minority students to enter honors classes, then it is possible that even well-meaning teachers may be unintentionally contributing to the stubborn persistence of stereotyping, prejudice, and discrimination within our educational system. Such a phenomena may contribute to the unfortunate scheme observed by Borland and Wright (2004), a scheme within which economically disadvantaged and racial/ethnic minority students, “Face serious impediments to success in a society that is in many respects racist and has what some call a caste system” (p. 28).

While previous research regarding the reliability and validity of teacher recommendations of students for gifted programs and honors classes has suggested that teacher referrals do have efficacy, early studies investigating teacher nominations simply assessed teacher abilities to predict student intelligence quotient scores. More recent studies investigating teacher nominations of students for gifted programs and honors classes have been limited primarily to addressing whether recommended students subsequently succeed in those programs and classes, but such studies have revealed referrals for racial/ethnic minority students to be less robust than those for White students. The current study attempted to build upon the findings of these more recent studies by investigating teacher nominations of students for honors classes including both students who did receive recommendations for such classes and students who did not receive recommendations for such classes. The results of this study indicate that teachers more negatively perceive the abilities and the efforts of racially diverse students than the abilities and
the efforts of their White peers. If these lower perceptions of the abilities and the efforts of racial/ethnic minority students represent negative attitudes, then these negative perceptions may contribute to teachers unwittingly referring racial/ethnic minority students for academic honors, Advanced Placement classes, or honors classes at a lower rate than they do equally qualified White students.

**Implications**

Clearly these results demonstrate that teacher perceptions of racial/ethnic minority students as exhibiting lower ability and effort is a significant factor in lesser teacher recommendations of African American students and Latino students for academic honors, Advanced Placement, or honors classes. Even considering that cultural or social factors can lead to aggregate differences in achievement across racial/ethnic groups, the existence of such differences does not explain the persistent tendency of teachers to give more negative ratings to those African American students, Asian American students, and Latino students whose achievement levels are comparable to their White peers. The results of this study suggest that if teachers perceived racial/ethnic minority students more positively, specifically in regard to ability and effort, the problem of lesser teacher recommendations of African American students and Latino students for honors classes might be at least partially negated.

The lack of training in gifted education for pre-service and in-service educators has been well documented, particularly in relation to racial/ethnic minority students (Ford, 1995; Colangelo & Davis, 2003). The results of this study may provide valuable information to prospective and current educators in their attempts to increase the recruitment into and retention of academically talented racial/ethnic minority students in Advanced Placement and honors classes, and the results of this study underscore the importance of educators examining and being constantly cognizant of their own perceptions of students from racially diverse backgrounds in order to avoid prejudicial actions and outcomes. Further extended, the results of this study highlight the importance of discerning what informational processing models teachers utilize when making relevant decisions and what determinants and processes of social influence and attitude change can be enacted to enhance the role of teachers in assuring appropriate access to Advanced Placement and honors classes for all academically talented racial/ethnic minority students.
The results of this study also accentuate the importance of the utilization of a multimodal process for screening and identifying students for participation in Advanced Placement and honors classes. These findings suggest that procedures utilized within the screening and identification phases of recruitment for Advanced Placement and honors classes should combine both dynamic and standardized forms of assessment. Even at the high school level, assumptions should not be made that qualified students have been previously identified or that teacher referrals are appropriate as a sole screening and identification measure for academic honors, Advanced Placement classes, or honors classes. Rather, dynamic and flexible screening and identification procedures may be beneficial in eliciting measurements of the best possible relevant performances of racial/ethnic minority students who are potential candidates for Advanced Placement and honors classes. Though an over-reliance on tests has been cited as possibly detrimental to the inclusion of racial/ethnic minority students in Advanced Placement and honors classes, the standardized procedures and information provided by such tests may be valuable when teamed with other varied measures of achievement, ability, and effort in that the consistency such tests provide can, contingent upon the tests being used prudently as measurements of phenomena rather than as measurements of a student en bloc, serve as a resource for the reliable comparison of a given student’s task performance with the performance and skill sets of his or her same-age peers. Of note, some studies indicate that intelligence tests have little or no cultural bias. Indeed, the continued use of intelligence tests and other ability tests for assessing ethnic minority children may be beneficial in several ways. They are useful in evaluating present functioning, that is, current cognitive ability; they may be useful in indicating future functioning as defined by the majority culture; and they may useful in evaluating school and special programs, for example, by helping to determine whether children have learned to read. Additionally, the educational practice of Response to Intervention (RtI) may be potentially beneficial in tempering teacher and test biases when they do exist to assist in the equitable identification of racial/ethnic minority students for participation in Advanced Placement and honors classes.

RtI is a form of flexible service delivery involving a collaborative problem solving model that utilizes a scientific approach to identify student needs, set measurable goals for student skills and performance, plan and monitor interventions to enhance student skills and performance, and provide a context for data based decision making for enhancing student skills and performance.
The differentiated instruction component of RtI affords students the opportunity to demonstrate their knowledge in multiple ways at varied levels. For academically talented students, these levels could comprise a progression of increasingly sophisticated endeavors to the intensity equivalent to that of an Advanced Placement or honors class. Students would receive strategies that are proven in the field of gifted education including acceleration in the area of strength, content extensions for depth and complexity, time with cognitive peers, high level problem solving approaches, and the use of inquiry and creative thinking strategies for ongoing learning. Thus, the use of RtI as a tool in identifying students for Advanced Placement and honors classes could complement other forms of assessment used in the recruitment process by allowing racial/ethnic minority students to demonstrate their potential for growth and performance while benefitting from enrichment activities. By providing students with access to a challenging and accelerated curriculum while also addressing their unique needs, RtI could potentially allay the problem revealed within this study of low teacher perceptions of the ability and the effort of racial/ethnic minority students and could moderate the problem noted by Ford (2007) of educators not recommending students from racial/ethnic minority groups into gifted programs or honors classes because they believe that the level and pace of the schoolwork in such classes may frustrate those students. The use of RtI in the screening and identification phases of the identification process of students for participation in Advanced Placement or honors classes might especially benefit those underperforming academically talented students who will require remediation and scaffolding until their level of functioning is commensurate with their ability. Gifted students will require remediation and scaffolding until the level of functioning is commensurate with ability. RtI may benefit racial/ethnic minority students by providing for a focus on both the instructional and social emotional needs of students while ensuring research-based strategies and providing the objectivity of ongoing progress monitoring. A strength profile could drive matches to programming interventions.

Limitations

Several limitations of this study are directly related to the database utilized. The ELS: 2002 sampling frame of schools was constructed with the intent to match the target population, and a stratified systematic sample of students was subsequently selected from those schools. Over-sampling was employed in an attempt to ensure that each racial/ethnic subpopulation had a minimum sample size of 1,356. An original intention of the present study was to include teacher
race and ethnicity as a variable in investigating the impact of student race and ethnicity on teacher perceptions of ability and effort and recommendation for honors classes. However, the ELS:2002 sample being dictated by student characteristics rather than teacher characteristics, the sample included an inadequate representation of minority teachers to include teacher race and ethnicity as a variable in the above-described analyses. Additionally, of the 12,039 students in the public school subsample utilized for this study, 1,067, or 8.86%, of the corresponding English teacher questionnaires were missing or not administered and were therefore coded as missing and excluded from the analyses. Also of note, while the input of both English teachers and Science teachers was provided for each student within the dataset, the format of the database prevented the creation and maintenance of separate ability scales and effort scales for English teachers and Science teachers. Combined ratings of English and Science teachers may have introduced additional confounding variables, and therefore the input of only one group, English teachers, was used for the current study. The possibility exists that disparate perceptions and patterns of referrals might arise among teachers of different disciplines.

An additional limitation to this study is a limitation common to much education research employing a large survey derived database. The target statements administered to a large sample are necessarily independent of the contexts of the individual respondents. The process of the recruitment of students into classes for the academically talented is more formalized at the elementary and middle school levels when students are being initially identified for participation in such programming than at the high school level when students are being identified for participation in Advanced Placement and honors classes. Though the essential tenets of the process remain consistent across grade levels, course prerequisites, counselor referrals, and student self referrals may become more common components of the screening and identification phases of the recruitment process at the high school level, and further the process of enrollment in such classes and the role of teacher input in that process may vary widely from school to school and district to district. In some districts, teachers may not have the opportunity to provide input in such matters.

Another limitation of this study is the dependence of the rating scales on teacher reports of signal factors related to student ability and student effort without corroborating evidence of actual student ability and effort aside from the variable of student performance on standardized achievement tests. While the content and structure of the database offered the possibility of also
utilizing grades as a variable, the decision was made to exclude grades based on reasoning that grade scales vary from teacher to teacher, from class to class, from school to school, and from district to district and are inconsistent. Additionally, had grades been utilized, the results would most likely have revealed grades to have an even greater influence than test scores on nomination practices because grades are teacher awarded. Notably, previous researchers have found discrepancies between student behaviors and teacher reports of those behaviors. For example, Schneider and Shouse (1991) demonstrated that while African American students reported spending an equivalent amount of time on their homework as did their White peers, the teachers of the African American students consistently stated that the African American students failed to complete their homework regularly as compared to their White students. While the purpose of this study was to assess teacher perceptions, additional information about the accuracy of those perceptions would be constructive in informing future research and practice. Also related to the rating scales, although there was a substantial rationale for utilizing each component of each scale, correlation was relatively high on both; had it been higher, overlapping components would have needed to have been eliminated.

Finally, several practical parameters related to the execution of this study prohibited the inclusion of additional variables of interest such as factors related to the home and community environments, including whether a student came from a single-parent family, factors related to the school environment, such as whether the school serviced a large population of racial/ethnic minority students, and in what area of the country the student and school functioned. It is possible that effects within the above results that appear to be accounted for by race and ethnicity might be better accounted for by a combination of race and ethnicity and other factors. Related, teacher ratings occur within school and community contexts, and the possibility exists that specific contexts might bear on the directionality of a given teacher’s ratings. Lastly, constraints of this study prevented the inclusion and evaluation of factors relevant to English Language Learners, but such factors may be significant in teacher perceptions of ability and effort.

Future Research

Several directions for future research are apposite. More intricate analyses of the information within the database, such as of the variables addressed within the current study in relation to geographically or demographically distinct groups, could extend knowledge of pertinent regional and cultural effects. Additionally, the major features of public-use ELS: 2002
include the integration of student, parent, teacher, and school data, the initial concentration on a 10th-grade student cohort with the same individuals surveyed repeatedly over time, and the addition of a 12th-grade cohort 2 years later, as well as the inclusion of supplementary components to support analyses of geographically or demographically distinct groups. Future studies might employ a longitudinal approach to assess how the results of the present study might be related to racial/ethnic minority student pursuit of college education.

As important consideration noted previously which could be informed by additional research is how closely teacher perceptions of ability and effort directly relate to actual student behavior. Research to provide new insights related to this concern would be valuable, as would research targeted to the gleaning of indicators regarding whether ability and effort ratings are influenced by unconscious or conscious stereotyping in order to best inform the development of teacher education materials and programs related to increasing cultural awareness and diminishing prejudice and inequality. Additionally, previous research conducted by Geake and Gross (2008) found that teachers demonstrate a negative affect toward gifted children concerning the potential use of high intelligence toward social noncompliance. Geake and Gross noted the rise of a factor in their analysis representing academically talented students as, “Social misfits, with significantly positive loadings of statements that gifted students are disrespectful of authority, seen as elitist, insensitive to others, and social isolates, together with a factor representing antisocial leadership” (p.226). Given that in the United States, specific racial/ethnic categories are often associated with the defining characteristics of given microcultures, that racial/ethnic categories have been highly inflexible and considered to reflect social traits, future research might explore whether beyond teacher perceptions of ability and effort teacher concerns of social noncompliance differ by student race and ethnicity and whether such concerns impact teacher nominations of students for higher-level coursework or similar opportunities. This study emerged in part from the lack of empirical research regarding the relation of student race and ethnicity to teacher perceptions of student ability and effort, and given that the results of this study have revealed significant differences in teacher ratings of student ability and effort by student race and ethnicity, future research to investigate the extent to which a student might perceive a teacher’s beliefs about that student’s ability and effort and the impact of that cognition on the student’s attributions about his or her own academic success and failure may be valuable.
While the results of this study are useful in revealing inequalities in the opportunities available to racial/ethnic minority students, future research would be remiss if it did not explore the development and facilitation not only of interventions to maximize student potential for overcoming barriers and excelling in the educational setting, but as if not more importantly, interventions to maximize teacher potential for perceiving and encouraging the talent of racial/ethnic minority students. Rudenstine (1996) asserted that students are best challenged:

By a diverse educational environment…to see issues from various sides, to rethink their own premises, to achieve the kind of understanding that comes only from testing their own hypotheses against those of people with other views. Such an environment also creates opportunities for people from different backgrounds, with different life experiences, to come to know one another as more than passing acquaintances, and to develop forms of tolerance and mutual respect on which the health of our civic life depends (p. B1).

Not only students but educators too may benefit from such an environment for motivation and stimulation toward the advancement of both excellence and equity within the country’s primary system of formal education.
References


Delisle, J., & Galbraith, J. (2002). *When gifted kids don’t have all the answers*. Minneapolis, MN: Free Spirit Publishing.


Renzulli, J. S., & Delcourt, M. (1986). The legacy and logic of research on the identification of


Appendix A

Scale of Teacher Perception of Student Ability

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Questionnaire Item</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty of class for student</td>
<td>Is this class too difficult, the appropriate level, or not challenging enough for this student?</td>
<td>1. Too difficult&lt;br&gt;2. Appropriate level&lt;br&gt;3. Not challenging enough</td>
</tr>
<tr>
<td>How far teacher expects student to get in school</td>
<td>How far in school do you expect this student to get?</td>
<td>1. Less than high school graduation&lt;br&gt;2. HS graduation or GED&lt;br&gt;3. 2-year school course in a community or vocational school&lt;br&gt;4. 4-year college degree&lt;br&gt;5. Master's degree or equivalent&lt;br&gt;6. Doctorate, professional degree or other advanced degree</td>
</tr>
<tr>
<td>How well student organizes ideas</td>
<td>Please rate this student's compositional skills, as exhibited in performance in your English class - Ability to organize ideas logically and coherently.</td>
<td>1. Poor&lt;br&gt;2. Fair&lt;br&gt;3. Good&lt;br&gt;4. Very Good&lt;br&gt;5. Outstanding</td>
</tr>
<tr>
<td>How well student uses grammar</td>
<td>Please rate this student's compositional skills, as exhibited in performance in your English class - Ability to employ the conventions of English grammar and usage.</td>
<td>1. Poor&lt;br&gt;2. Fair&lt;br&gt;3. Good&lt;br&gt;4. Very Good&lt;br&gt;5. Outstanding</td>
</tr>
<tr>
<td>How well student uses appropriate detail</td>
<td>Please rate this student's compositional skills, as exhibited in performance in your English class - Ability to elaborate points with appropriate detail.</td>
<td>1. Poor&lt;br&gt;2. Fair&lt;br&gt;3. Good&lt;br&gt;4. Very Good&lt;br&gt;5. Outstanding</td>
</tr>
</tbody>
</table>
Appendix B

Scale of Teacher Perception of Student Effort

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Questionnaire Item</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student usually works hard for</td>
<td>Does this student usually work hard for good grades in your class?</td>
<td>1. No</td>
</tr>
<tr>
<td>good grades</td>
<td></td>
<td>2. Yes</td>
</tr>
<tr>
<td>Student is exceptionally passive</td>
<td>Is this student exceptionally passive or withdrawn in your class?</td>
<td>1. Yes</td>
</tr>
<tr>
<td>Student talks with teacher</td>
<td>Does this student talk with you outside of class about schoolwork, plans for</td>
<td>1. No</td>
</tr>
<tr>
<td>outside of class</td>
<td>after high school, or personal matters?</td>
<td>2. Yes</td>
</tr>
<tr>
<td>How often student completes</td>
<td>How often does this student complete homework assignments for your class?</td>
<td>1. Never</td>
</tr>
<tr>
<td>homework</td>
<td></td>
<td>2. Rarely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Some of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. All of the time</td>
</tr>
<tr>
<td>How often student is absent</td>
<td>How often is this student absent from your class?</td>
<td>1. All of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Some of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Rarely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Never</td>
</tr>
<tr>
<td>How often student is tardy</td>
<td>How often is this student tardy to your class?</td>
<td>1. All of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Some of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Rarely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Never</td>
</tr>
<tr>
<td>How often student is attentive in</td>
<td>How often is this student attentive in your class?</td>
<td>1. Never</td>
</tr>
<tr>
<td>class</td>
<td></td>
<td>2. Rarely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Some of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. All of the time</td>
</tr>
<tr>
<td>How often student is disruptive in</td>
<td>How often is this student disruptive in your class?</td>
<td>1. All of the time</td>
</tr>
<tr>
<td>class</td>
<td></td>
<td>2. Most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Some of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Rarely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Never</td>
</tr>
</tbody>
</table>