

DOCUMENT RESUME

ED 402 707

EC 305 215

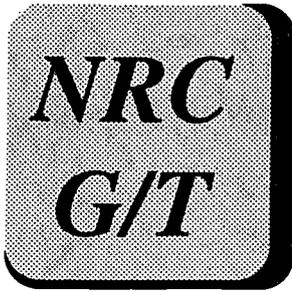
AUTHOR Frasier, Mary M.; And Others  
 TITLE Educators' Perceptions of Barriers to the Identification of Gifted Children from Economically Disadvantaged and Limited English Proficient Backgrounds.  
 INSTITUTION National Research Center on the Gifted and Talented, Storrs, CT.  
 SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.  
 REPORT NO RM-95216  
 PUB DATE Sep 95  
 CONTRACT R206R00001  
 NOTE 44p.  
 AVAILABLE FROM NRC/GT, University of Connecticut, 362 Fairfield Road, U-7, Storrs, CT 06269-2007.  
 PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Ability Identification; \*Economically Disadvantaged; Elementary Secondary Education; Evaluation Methods; \*Gifted Disadvantaged; Inservice Teacher Education; Language Minorities; \*Limited English Speaking; Professional Development; Student Evaluation; \*Teacher Attitudes; Test Bias

ABSTRACT

This report presents results from a 10-item survey of 750 educators from 14 school sites, designed to gain insights into the perceptions educators hold regarding the problems of identifying gifted children from economically disadvantaged and limited English proficient backgrounds. Results indicated that major barriers to identification were test bias and teachers' inability to recognize indicators of potential in certain groups. Five other issues were identified as moderate barriers: students' use of nonstandard English and/or limited proficiency in the English language; differences in language experiences; parents not providing a stimulating home environment; use of narrow screening/selection processes; and teachers' prejudicial attitudes. Three issues were identified as minor barriers: beliefs that intellectual giftedness is not valued by certain groups; teachers' fears about program quality diminishing when minority and economically disadvantaged students participated; and beliefs about the limited number of gifted children who come from economically disadvantaged and limited English proficient backgrounds. The implications of these results for designing staff development programs are discussed. Appendices include the evaluation instrument used to measure educators' attitudes, descriptions of the pilot sites, and descriptions of the national field test study sites. (Contains 57 references.) (Author/CR)

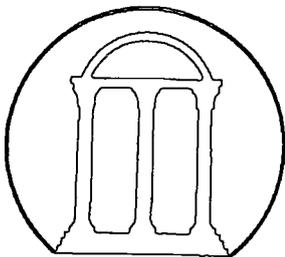
\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*



THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED



The University of Connecticut  
The University of Georgia  
The University of Virginia  
Yale University



1785  
The University of Georgia

Educators' Perceptions of Barriers to the Identification of Gifted Children From Economically Disadvantaged and Limited English Proficient Backgrounds



Mary M. Frasier  
Scott L. Hunsaker  
Jongyeun Lee  
Vernon S. Finley  
Elaine Frank  
Jaime H. García  
Darlene Martin  
The University of Georgia  
Athens, Georgia



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

September 1995  
Number RM95216

EC 305215

# **Educators' Perceptions of Barriers to the Identification of Gifted Children From Economically Disadvantaged and Limited English Proficient Backgrounds**

Mary M. Frasier  
Scott L. Hunsaker  
Jongyeun Lee  
Vernon S. Finley  
Elaine Frank  
Jaime H. García  
Darlene Martin  
The University of Georgia  
Athens, Georgia

September 1995  
Number RM95216

# **THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED**

---

The National Research Center on the Gifted and Talented (NRC/GT) is funded under the Jacob K. Javits Gifted and Talented Students Education Act, Office of Educational Research and Improvement, United States Department of Education.

The Directorate of the NRC/GT serves as the administrative unit and is located at The University of Connecticut.

The participating universities include The University of Georgia, The University of Virginia, and Yale University, as well as a research unit at The University of Connecticut.

The University of Connecticut  
Dr. Joseph S. Renzulli, Director  
Dr. E. Jean Gubbins, Assistant Director

The University of Connecticut  
Dr. Francis X. Archambault, Associate Director

The University of Georgia  
Dr. Mary M. Frasier, Associate Director

The University of Virginia  
Dr. Carolyn M. Callahan, Associate Director

Yale University  
Dr. Robert J. Sternberg, Associate Director

Copies of this report are available from:

NRC/GT

The University of Connecticut  
362 Fairfield Road, U-7  
Storrs, CT 06269-2007

Research for this report was supported under the Javits Act Program (Grant No. R206R00001) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgement. This report, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.

---

## **Note to Readers...**

All papers by The National Research Center on the Gifted and Talented may be reproduced in their entirety or in sections. All reproductions, whether in part or whole, should include the following statement:

**Research for this report was supported under the Javits Act Program (Grant No. R206R00001) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgement. This report, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.**

**This document has been reproduced with the permission of The National Research Center on the Gifted and Talented.**

If sections of the papers are printed in other publications, please forward a copy to:

The National Research Center on the Gifted and Talented  
The University of Connecticut  
362 Fairfield Road, U-7  
Storrs, CT 06269-2007

# **Educators' Perceptions of Barriers to the Identification of Gifted Children From Economically Disadvantaged and Limited English Proficient Backgrounds**

Mary M. Frasier  
Scott L. Hunsaker  
Jongyeun Lee  
Vernon S. Finley  
Elaine Frank  
Jaime H. García  
Darlene Martin  
The University of Georgia  
Athens, Georgia

## **ABSTRACT**

This paper presents results from a 10-item survey designed to gain insights into the perceptions educators hold regarding the problems of identifying gifted children from economically disadvantaged and limited English proficient backgrounds. The survey was one component of a larger national field test study conducted to investigate the effectiveness of a staff development model and an assessment plan addressing identification and programming problems. There were 750 educators from 14 school sites who participated in the national field test study and responded to the survey. They identified two issues as major barriers to identification: (a) test bias, and (b) teachers' inability to recognize indicators of potential in certain groups. Five other issues were identified as moderate barriers: (a) students' use of nonstandard English and/or limited proficiency in the English language, (b) differences in language experiences, (c) parents not providing a stimulating home environment, (d) use of narrow screening/selection processes, and (e) teachers' prejudicial attitudes. Three issues were identified as minor barriers: (a) beliefs that intellectual giftedness is not valued by certain groups, (b) teachers' fears about program quality diminishing when minority and economically disadvantaged students participated, and (c) beliefs about the limited number of gifted children who come from economically disadvantaged and limited English proficient backgrounds. These perceptions of barriers identified from the perspectives of educators provided several important implications for designing staff development programs to address the problems of identifying gifted children from economically disadvantaged and limited English proficient backgrounds.

# **Educators' Perceptions of Barriers to the Identification of Gifted Children From Economically Disadvantaged and Limited English Proficient Backgrounds**

Mary M. Frasier  
Scott L. Hunsaker  
Jongyeun Lee  
Vernon S. Finley  
Elaine Frank  
Jaime H. García  
Darlene Martin  
The University of Georgia  
Athens, Georgia

## **EXECUTIVE SUMMARY**

School districts continue to struggle with finding effective ways to identify children from economically disadvantaged and limited English proficient backgrounds for participation in programs for the gifted. A number of methods have been tried to resolve difficulties in identification, but the problems still persist. Children from economically disadvantaged backgrounds and children who have limited proficiency in the English language do not participate in gifted programs at rates that reflect their presence in the general school population. A number of reasons regarding the issues that create barriers to the identification of gifted children from these backgrounds have been expressed. Many of the reasons are based on speculations and opinions; very few are based on research.

Very little attention has been given to the perceptions that educators hold concerning issues affecting the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Are educators' perceptions or beliefs about the problems of identifying gifted children from economically disadvantaged and limited English proficient backgrounds similar to those presented in the literature? Which problems do educators consider to be the most and the least important? What implications do their perceptions of the problems have for designing staff development activities?

A survey instrument was developed to investigate educators' perceptions of issues affecting the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. This survey was one component of a staff development model (SDM) being developed for use in training teachers to observe gifted traits, aptitudes, and behaviors (TABs) in children from economically disadvantaged and limited English proficient backgrounds. Results from the survey were used in the development of the SDM. The discussion in this paper is concerned with findings from the survey when it was administered as part of a national field test of the SDM. Implications for the design and implementation of staff development programs, which better prepare educators to recognize gifted potential in children from diverse cultural, linguistic, and economic groups, are provided.

## **Background Information**

The first step typically used by schools to identify students for participation in gifted programs is to involve educational staff, especially classroom teachers, in observing

and referring students for assessment. Teachers' ability to make accurate observations is critical in creating the pool of students to be considered for gifted program participation. However, there has been continuing skepticism about the ability of teachers to accurately perform this function, especially when they have had no training (Borland, 1978; Clark, 1992; Davis & Rimm, 1994; Gallagher, 1994; Pagnato & Birch, 1959; Stanley, 1976).

Clark (1992) observed that teachers often refer students to gifted programs who are quiet, well-behaved, well-dressed, and who obtain good grades. This observation has special implications for identifying gifted children from economically disadvantaged and limited English proficient backgrounds. In addition to the negative impact these children may face when teachers equate giftedness with being a model student, other problems may arise if teachers do not clearly understand the impact of cultural and/or environmental influence on the expression of giftedness.

Based on a meta-analysis of 77 research studies concerned with teachers' expectations about achievement, Dusek and Joseph (1983) concluded that student attractiveness, conduct, cumulative folder information, race/ethnicity, and social class were related to teacher expectancies. A significant effect of moderate magnitude was found when social class alone was examined as a basis for teacher expectancies. Approximately 64% of the middle-class students were expected to perform better than the average lower-class students. African American and Mexican American students were not expected to perform as well as White students. Results from the Dusek and Joseph study suggest that, in the absence of more academically relevant information, teachers may rely on more stereotypic notions about socioeconomic status, race, and ethnicity to form initial impressions and expectations about economically disadvantaged and minority students' abilities to achieve. Martinson (1974) noted that if teachers assume that the pupils are not capable of high-level performance, they are unlikely to give them proper opportunities to demonstrate their true abilities. Scott, Perou, Urbano, Hogan, and Gold (1992) also noted that regardless of any inadequacies in the assessment process, children who are not referred will never have the opportunity to be selected for gifted programs.

## **National Field Test Study**

### **Participants**

A national field test of the staff development model and assessment plan included 750 educators in 14 school sites across the United States. A wide variety of ethnic and cultural groups which included African Americans, Native Americans, Native Hawaiians, Asian Americans, Appalachian Whites, and Hispanics, comprised the student bodies of the participating schools which were located in both urban and rural areas. Of the 750 educators who participated in the national field test study, 65% worked with students at the elementary school level, 14% at the middle school level, and 23% at the high school level. These educators included counselors, administrators, teachers of the gifted, and other school personnel (e.g., music teachers, physical education teachers, or media specialists). However, the overwhelming majority of participants were classroom teachers.

### **Survey Instrument**

The instrument developed to survey the perceptions of participants regarding identification barriers is entitled *Why Do We Identify So Few Children from Economically Disadvantaged (ED) and Limited English Proficient (LEP) Backgrounds?* One source for the ten items on the instrument was the literature on gifted minority and economically

disadvantaged students. The other source was the professional judgment of researchers at the University of Georgia. The survey instrument was designed as a 5-point Likert scale with response possibilities ranging from 1 meaning "strongly agree" to 5 meaning "strongly disagree."

The survey instrument was administered by the site coordinator or designee prior to providing any training that was a part of the larger investigation into effective methods to identify gifted children from economically disadvantaged and limited English proficient backgrounds. Participants were told that the purpose of the survey was to find out their perspectives regarding the problems encountered when identifying gifted children from economically disadvantaged and limited English proficient backgrounds. The following instructions were given to the participants:

Based on your experiences as an educator, please help us to understand why so few children from economically disadvantaged (ED) and limited English proficient (LEP) backgrounds are identified as gifted. Please use the following response key to indicate your perceptions about some of the possible barriers to their identification. We are *only* interested in the problems associated with identifying giftedness among students who are from ED and LEP backgrounds.

### **Analysis of Survey Responses**

To facilitate a more meaningful discussion of the survey results, responses to the items were reduced from five levels to three for data analysis. That is, "Strongly Agree" and "Agree" were combined to form a category called "Agree"; "Strongly Disagree" and "Disagree" were combined to form a category called "Disagree." The third category, "Neither Agree Nor Disagree," was renamed "Uncertain." Frequencies were calculated and then used to determine the percentage of participants who felt that a particular issue was a barrier to identifying gifted children from economically disadvantaged and limited English proficient backgrounds.

A barrier was considered to be major if 60% or more of the participants agreed or strongly agreed with a statement. A barrier was interpreted as moderate if the percentage of the participants' agreement was between 40% and 59%. If the agreement was 39% or less, a barrier was interpreted as minor.

### **Results**

Participants in this study perceived that two issues are major barriers to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds: (a) standardized tests are biased against children from economically disadvantaged and limited English proficient backgrounds (70%), and (b) teachers' inability to recognize indicators of potential giftedness (62%). Five issues were considered by the participants to be moderate barriers to identification: (a) nonstandard English and limited English proficiency (57%), (b) differences in language experiences (55%), (c) lack of a stimulating environment (54%), (d) use of narrow screening/selection process (48%), and (e) prejudicial attitudes held by teachers (43%). Three issues were considered to be minor barriers to identification: (a) beliefs that intellectual giftedness is not valued in certain groups, (b) teachers' fear about "watering down" program quality, and (c) beliefs about the limited number of gifted children who come from economically disadvantaged and limited English proficient backgrounds.

## **Discussion**

### **Major Issues Creating Barriers to Identification**

#### **Test Bias**

The results of the survey indicate that test bias is viewed as a major barrier affecting the identification of gifted children from economically disadvantaged and limited English proficient backgrounds (70% agreement). There have been two competing views regarding the test bias issue, however. One view contends that there is little or no evidence to substantiate claims of bias in most well-constructed tests of intelligence (Reynolds & Kaiser, 1990). The other view asserts that factors such as low socioeconomic status and differences in social and cultural heritage, in communicative behaviors, and in language contribute to test bias for children from economically disadvantaged and limited English proficient backgrounds (Bernal, 1974, 1980; Hilliard, 1976, 1991a, 1991b; Kirschenbaum, 1988; Richert, 1987, 1991). For many researchers and scholars, the bigger challenge is to find effective ways to assist educators in recognizing that tests are not infallible measures of gifted potential rather than to continue debating issues of test bias (Davis & Rimm, 1994; Ramos-Ford & Gardner, 1991; Renzulli, 1990; Sternberg, 1990; Treffinger, 1991). Staff developers should help teachers understand that tests do not provide all the information needed to make decisions about the gifted potential of young people. Teachers are in a good position to provide a wealth of information about children that is not accessible through tests.

#### **Teachers' Inability to Recognize Indicators of Potential Giftedness**

Teachers' inability to recognize indicators of potential giftedness was identified as a major barrier to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds (62% agreement). The results of this survey suggest that teachers feel uncertain about the core characteristics of the gifted child. Teachers need to be provided with training that will help them to recognize gifted behaviors in children from economically disadvantaged and limited English proficient backgrounds. By helping teachers recognize diverse expressions of gifted behaviors in children whose performances may be impacted by cultural and linguistic differences and by low socioeconomic circumstances, we are also helping them to correct dysfunctional attitudes they may have regarding abilities in economically disadvantaged and limited English proficient student populations.

### **Moderate Issues Creating Barriers to Identification**

#### **Language Issues**

Several language issues were perceived to be moderate barriers to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Fifty-seven percent of the participants in this survey agreed that using nonstandard English and having limited proficiency in the English language create barriers to identification. Further, 55% agreed that differences in language experiences posed a moderate barrier to identification. Duran (1989) observed that issues regarding the language abilities of minority and economically disadvantaged students frequently result in evaluations of them as incompetent students. Children with nonstandard speech are often rated as less competent and socially different from children with a more standard dialect, according to García (1993). García further observed that opinions about a dialect and about English language proficiency may not only affect initial judgments about the abilities of

children, but also affect how these children are grouped for instruction. Insights into this issue suggest that when designing staff development programs, it may be very important to discuss with teachers the more current findings regarding language proficiency evaluation. According to Duran (1989), for example, tests of communicative competence would provide a much more comprehensive picture of students' language abilities. Thus, the emphasis shifts to interactional abilities which extend far beyond students' simple knowledge of a language's structural features.

### **Lack of a Stimulating Environment**

The lack of a stimulating early home environment was perceived by 54% of the participants in this survey as a barrier to identification of gifted children from economically disadvantaged and limited English proficient backgrounds. While it may be speculated that these families do not always have the resources available compared to more affluent families to support their children's educational development, it is not correct to assume that they do not engage their children in supportive educational activities. It is also not correct to assume that they do not use effective strategies in the encouragement of the intellectual development of their children. Teachers need to be provided with information about the family processes which operate within the homes of economically disadvantaged and limited English proficient students that parents use to provide their children with support and encouragement in the development of their intellectual skills.

### **Screening/Selection Process Too Narrow**

Less than half (48%) of the participants in this survey agreed that the screening and selection processes used by their school/state to identify gifted children from economically disadvantaged and limited English proficient backgrounds were too narrow. Responses to this question are conceptually related to issues of test bias, inability to recognize gifted behavior in economically disadvantaged and limited English proficient student populations, and language differences among some economically disadvantaged and limited English proficient children. As was noted earlier, precise English usage and English vocabulary often played a major role in both teacher recommendations and in assessment.

### **Teachers' Prejudicial Attitudes**

The results of the survey showed less than half (43%) of the participants agreed that teachers' prejudicial attitudes is a barrier to identification. This result is strongly supported by speculations in the literature that the limited presence of minority and disadvantaged students in gifted programs may be due to prejudicial or discriminatory attitudes (Bernal, 1974, 1980; Cummins, 1989; Ford-Harris, Harris, & Winborne, 1989; Hale-Benson, 1982; Hilliard, 1976, 1991a, 1991b; McLeod & Cropley, 1989; Richert, 1987, 1991; Shade, 1978, 1982; Spicker, Southern, & Davis, 1987; Tonemah, 1987). However, 45% of the participants in this survey disagreed that prejudicial attitudes among teachers are a barrier to identification. Reasons for this almost even split between those who agreed and those who disagreed cannot be determined from this study. It was concluded that when designing staff development programs, it might be prudent to advise staff developers to explore the degree to which this issue should be considered as a barrier of concern in their particular educational setting.

## **Minor Issues Creating Barriers to Identification**

### **Intellectual Giftedness Not Valued by Certain Groups**

Participants in the survey were asked to respond to the following statement: "Intellectual giftedness is not valued by some cultural groups so parents of children from these groups do not encourage their children to excel in school." Thirty-seven percent of the participants responding to this statement agreed that the value placed on intellectual giftedness by some cultural groups has a minor effect on the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Forty-eight percent disagreed with that statement.

### **Fear About Reducing Program Quality**

Twenty-nine percent of the participants agreed that concerns with program quality are a barrier to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. That is, they did not believe that teachers' fears about the effects these children might have on the quality of the gifted program constituted a major barrier to their identification as gifted.

### **Beliefs About the Limited Number of Gifted Students in These Groups**

Only 26% of the participants agreed that beliefs about the limited number of gifted children from economically disadvantaged and limited English proficient backgrounds created a barrier to their identification. This belief is consistent with frequently made statements by a number of writers who assert that there is no reason to doubt that there are many gifted children who come from these backgrounds (Clark, 1992; Davis & Rimm, 1994; Gallagher, 1994; Piirto, 1994).

Even though we interpreted these three issues as reflecting minor barriers to identification, staff developers are encouraged to remain sensitive to the concerns reflected in these issues. There is still an abundance of literature discussing the history of ethnic subgroups being rated as intellectually inferior to Whites, especially in America (Baldwin, 1985, Carter & Goodwin, 1994; Ford-Harris et al., 1989). Further, McLeod and Cropley (1989) observed that if the culture of a dominant subgroup in a society is widely accepted as correct or standard, then the behaviors, values, and norms of nondominant subgroups are often seen as less desirable, or even as inferior.

## **Implications for Designing Staff Development Programs**

Referrals by classroom teachers are a traditional first step in identifying children for gifted program participation. The perceptions they hold about giftedness and about who is gifted may have a profound impact on referral decisions. Results presented in this paper provide important insights into the perspectives that classroom teachers have on problems in identifying gifted children from economically disadvantaged and limited English proficient backgrounds. Several important implications for developing effective staff development programs are suggested as follows:

1. Issues of test bias cannot be resolved through staff development. Researchers and test developers must work to alleviate concerns in this area. Classroom teachers, however, can be better educated about tests and their proper use.

2. Staff development programs should be designed to provide teachers with opportunities to understand the wealth of information they can provide about children that is not accessible through tests.
3. Staff development programs should include a variety of strategies to help teachers develop a common frame of reference about the core attributes of giftedness and to understand how these core attributes may be expressed in different cultural and environmental contexts.
4. Staff development should include information about the family processes operating within the homes of economically disadvantaged and limited English proficient students who are achieving, regardless of their circumstances or status.
5. Staff development programs should include opportunities for teachers to reinterpret items on referral checklists so they can be more easily understood by parents of the economically disadvantaged and limited English proficient children in the communities they serve.
6. Most importantly, staff development programs should be designed to provide teachers with opportunities to understand their role in identification as extending far beyond the task of generating names of students for testing.

## **Conclusion**

If we are to become more effective in recognizing gifted potential in economically disadvantaged and limited English proficient student populations, then a number of issues must be addressed. This paper has dealt with one of those issues: the impact that educators' perceptions about gifted ability in these groups may have on student referral. Insights into educators' perceptions of barriers to identification were discussed. The most important implication derived from these insights was the need to focus staff development activities on helping teachers to understand and recognize gifted abilities when they are exhibited in their classrooms. This understanding is especially important when focusing on the recognition of gifted abilities of children from economically disadvantaged and limited English proficient students. By better training educators more effectively as to what they should look for when they engage in daily classroom activities, we will not only increase the likelihood that gifted children from underrepresented groups may be better recognized, but also increase the chances that educators will become more effective advocates for them.

## References

Baldwin, A. Y. (1985). Programs for the gifted and talented: Issues concerning minority populations. In F. D. Horowitz & M. M. O'Brien (Eds.), *The gifted and talented: Developmental perspectives* (pp. 223-249). Washington, DC: American Psychological Association.

Bernal, E. M. (1974). Gifted Mexican American children: An ethno-scientific perspective. *California Journal of Educational Research*, 25, 261-273.

Bernal, E. M. (1980). *Methods of identifying gifted minority students*. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service. (ERIC Document Reproduction Service No. ED 204 418)

Borland, J. (1978). Teacher identification of the gifted: A new look. *Journal for the Education of the Gifted*, 2(1), 22-32.

Carter, R. T., & Goodwin, A. L. (1994). Racial identity and education. In L. Darling-Hammond (Ed.), *Review of research in education* (pp. 291-336). Washington, DC: American Educational Research Association.

Clark, B. (1992). *Growing up gifted: Developing the potential of children at home and at school* (4th ed.). New York: Merrill.

Cummins, J. (1989). Institutionalized racism and the assessment of minority children: A comparison of policies and programs in the United States and Canada. In R. J. Samuda, S. L. Kong, J. Cummins, J. Pascual-Leone, & J. Lewis (Eds.), *Assessment and placement of minority students* (pp. 95-107). Toronto: C. J. Hogrefe.

Davis, G. A., & Rimm, S. B. (1994). *Education of the gifted and talented* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Duran, R. P. (1989). Assessment and instruction of at-risk Hispanic students. *Exceptional Children*, 56(2), 154-158.

Dusek, J. B., & Joseph, G. (1983). The bases of teacher expectancies: A meta-analysis. *Journal of Educational Psychology*, 75(3), 327-346.

Ford-Harris, D., Harris, J. J., & Winborne, D. (1989). Determinants of underachievement among gifted Black students: Learning to underachieve. *Journal of Social and Behavioral Sciences*, 35(3), 145-162.

Gallagher, J. J. (1994). *Teaching the gifted child* (4th ed.). Boston: Allyn & Bacon.

García, E. E. (1993). Language, culture, and education. In L. Darling-Hammond (Ed.), *Review of Research in Education* (pp. 51-98). Washington, DC: American Educational Research Association.

Hale-Benson, J. (1982). *Black children: Their roots, culture, and learning styles* (Rev. ed.). Baltimore: Johns Hopkins University Press.

Hilliard, A. (1976). *Alternatives to IQ testing: An approach to the identification of gifted "minority" children* (Final Report). Sacramento, CA: California State Department of Education, Sacramento Division of Special Education. (ERIC Document Reproduction Service No. ED 147 009)

Hilliard, A. G. (1991a). The learning potential assessment device and instrumental enrichment as a paradigm shift. In A. G. Hilliard (Ed.), *Testing African American students: Special re-issue of the Negro educational review* (pp. 200-208). Morristown, NJ: Aaron Press.

Hilliard, A. G. (1991b). The ideology of intelligence and I.Q. magic in education. In A. G. Hilliard (Ed.), *Testing African American students: Special re-issue of the Negro educational review* (pp. 136-145). Morristown, NJ: Aaron Press.

Kirschenbaum, R. (1988). Methods for identifying the gifted and talented American Indian student. *Journal for the Education of the Gifted*, 11(3), 53-63.

Martinson, R. A. (1974). *The identification of the gifted and talented: An instructional syllabus for the National Summer Leadership Training Institute on the Education of the Gifted and Talented*. Ventura, CA: Office of the Ventura County Superintendent of Schools.

McLeod, J., & Cropley, A. (1989). *Fostering academic excellence*. New York: Pergamon Press.

Pegnato, W., & Birch, J. (1959). Locating gifted children in junior high school. *Exceptional Children*, 25(7), 300-304.

Piirto, J. (1994). *Talented children and adults: Their development and education*. New York: Merrill.

Ramos-Ford, V., & Gardner, H. (1991). Giftedness from a multiple intelligences perspective. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 55-64). Boston: Allyn & Bacon.

Reynolds, C. R., & Kaiser, S. M. (1990). Bias in assessment of aptitude. In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of psychological and educational assessment of children: Intelligence and achievement* (pp. 611-653). New York: The Guilford Press.

Renzulli, J. S. (1990). The three-ring conception of giftedness: A developmental model for creative productivity. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 53-92). New York: Cambridge University Press.

Richert, E. S. (1987). Rampant problems and promising practices in the identification of disadvantaged gifted students. *Gifted Child Quarterly*, 31(4), 149-154.

Richert, E. S. (1991). Rampant problems and promising practices in identification. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 81-96). Boston: Allyn & Bacon.

Scott, M. S., Perou, R., Urbano, R., Hogan, A., & Gold, S. (1992). The identification of giftedness: A comparison of White, Hispanic, and Black families. *Gifted Child Quarterly*, 36(3), 131-139.

Shade, B. J. (1978). Social-psychological characteristics of achieving Black children. *Negro Educational Review*, 29(2), 80-86.

Shade, B. J. (1982). Afro-American cognitive style: A variable in school success? *Review of Educational Research*, 52, 219-244.

Spicker, H. H., Southern, T., & Davis, B. I. (1987). The rural gifted child. *Gifted Child Quarterly*, 31(4), 155-158.

Stanley, J. C. (1976). Tests better finder of great math talent than teachers are. *American Psychologist*, 31, 313-314.

Sternberg, R. J. (1990). A triarchic theory of intellectual giftedness. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 223-243). New York: Cambridge University Press.

Tonemah, S. (1987). Assessing American Indian gifted and talented students' abilities. *Journal for the Education of the Gifted*, 10, 181-194.

Treffinger, D. J. (1991). Future goals and directions. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 441-449). Boston: Allyn & Bacon.

## Table of Contents

<b>ABSTRACT</b>	v
<b>EXECUTIVE SUMMARY</b>	vii
<b>Introduction</b>	1
<b>Background Information</b>	2
<b>National Field Test Study</b>	2
Participants	2
Survey Instrument	3
Analysis of Survey Responses	3
<b>Results</b>	3
<b>Discussion</b>	4
Major Issues Creating Barriers to Identification	4
Test Bias	4
Teachers' Inability to Recognize Indicators of Potential Giftedness	6
Moderate Issues Creating Barriers to Identification	7
Language Issues	7
Lack of a Stimulating Home Environment	8
Screening/Selection Process Too Narrow	9
Teachers' Prejudicial Attitudes	9
Minor Issues Creating Barriers to Identification	9
Intellectual Giftedness Not Valued by Certain Groups	9
Fear About Reducing Program Quality	9
Beliefs About the Limited Number of Gifted Students in These Groups	10
<b>Implications of Survey Results for Designing Staff Development Programs</b>	10
<b>Conclusion</b>	12
<b>References</b>	13
<b>Appendices</b>	17
Appendix A: Why Do We Identify So Few Gifted Children From Economically Disadvantaged (ED) and Limited English Proficiency (LEP) Backgrounds?	17
Appendix B: Pilot Study Sites	21
Appendix C: National Field Test Study Sites	25

## List of Tables

Table 1.	Percentage of Educators in the National Field Test Study Considering Each Issue (Item) as a Barrier to Identification (N = 750)	5
----------	---	---

# **Educators' Perceptions of Barriers to the Identification of Gifted Children From Economically Disadvantaged and Limited English Proficient Backgrounds**

Mary M. Frasier  
Scott L. Hunsaker  
Jongyeun Lee  
Vernon S. Finley  
Elaine Frank  
Jaime H. García  
Darlene Martin  
The University of Georgia  
Athens, Georgia

## **Introduction**

School districts continue to struggle with finding effective ways to identify children from economically disadvantaged and limited English proficient backgrounds for participation in programs for the gifted. A number of methods have been tried to resolve difficulties in identification, but the problems still persist. Children from economically disadvantaged backgrounds and children who have limited proficiency in the English language do not participate in gifted programs at rates that reflect their presence in the general school population. A number of reasons regarding the issues that may create barriers to the identification of gifted children from these backgrounds have been expressed. Many of the reasons are based on speculations and opinions; very few are based on research.

Very little attention has been given to the perceptions that educators hold about issues affecting the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Are educators' perceptions or beliefs about the problems in identifying gifted children from economically disadvantaged and limited English proficient backgrounds similar to those presented in the literature? Which problems do educators consider to be the most and the least important? What implications do educators' perceptions of the problems of identifying gifted children from economically disadvantaged and limited English proficient backgrounds have for designing staff development activities?

A survey instrument was developed to investigate educators' perceptions of issues affecting the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. This survey was one component of a staff development model (SDM) being developed for use in training teachers to observe gifted traits, aptitudes, and behaviors (TABs) in children from economically disadvantaged and limited English proficient backgrounds. Results from the survey were used in the development of the SDM. Implications for the design and implementation of staff development programs which better prepare educators to recognize gifted potential in children from diverse cultural, linguistic, and economic groups are provided.

## **Background Information**

The first step typically used by schools to identify students for participation in gifted programs is to involve educational staff, especially classroom teachers, in observing and referring students for assessment. Teachers' ability to make accurate observations is critical in creating the pool of students to be considered for gifted program participation. However, there has been continuing skepticism about the ability of teachers to accurately perform this function, especially when they have had no training (Borland, 1978; Clark, 1992; Davis & Rimm, 1994; Gallagher, 1994; Pegnato & Birch, 1959; Stanley, 1976). Davis and Rimm (1994) noted that while teacher nominations continue to be widely used, they are among the least reliable and valid measures used to identify gifted students. One complicating factor in this finding, though, is that traditionally measured IQ scores were used as the criterion for validity, and the shortcomings of this criterion are well known.

Clark (1992) observed that teachers often refer students to gifted programs who are quiet, well-behaved, well-dressed, and who obtain good grades. This observation has special implications for identifying gifted children from economically disadvantaged and limited English proficient backgrounds. In addition to the negative impact these children may face when teachers equate giftedness with being a model student, other problems may arise if teachers do not clearly understand the impact of different cultural and/or environmental influences on the expression of giftedness.

Numerous studies have examined teacher expectancies as a basis for impressions they develop about students' abilities to achieve. Based on their meta-analysis of 77 research studies concerned with teacher expectations about achievement, Dusek and Joseph (1983) concluded that student attractiveness, conduct, cumulative folder information, race/ethnicity, and social class were related to teacher expectancies. These researchers conducted separate meta-analyses to examine the effects of social class and race on teacher expectancies. A significant effect of moderate magnitude was found when social class alone was examined as a basis for teacher expectancies. Approximately 64% of the middle-class students were expected to perform better than the average lower-class student. Also race and ethnicity were found to be a significant factor in the formation of teacher expectancies. African American and Mexican American students were expected to perform less well than White students. Results from the Dusek and Joseph (1983) study suggests that, in the absence of more academically relevant information, teachers may rely on more stereotypic notions about socioeconomic status, race, and ethnicity to form initial impressions and expectations about economically disadvantaged and minority students' abilities to achieve. Martinson (1974) noted that if teachers assume that the pupils are not capable of high-level performance, they are unlikely to give them proper opportunities to demonstrate their true abilities. As Scott, Perou, Urbano, Hogan, and Gold (1992) also noted, regardless of any inadequacies in the assessment process, children who are not referred will never have the opportunity to be selected for gifted programs.

## **National Field Test Study**

### **Participants**

A national field test of the staff development model and assessment plan included 750 educators in 14 school sites across the United States. A wide variety of ethnic and cultural groups (African Americans, Native Americans, Native Hawaiians, Asian Americans, Appalachian Whites, and Hispanics) comprised the student bodies of the participating schools which were located in both urban and rural areas. Of the 750

educators who participated in the National Field Test Study, 65% worked with students at the elementary school level, 14% at the middle school level, and 23% at the high school level. These educators included counselors, administrators, gifted teachers, and other school personnel (e.g., music teachers, physical education teachers, or media specialists). However, the overwhelming majority of participants were classroom teachers.

### Survey Instrument

The instrument developed to survey the perceptions of participants regarding identification barriers is entitled *Why Do We Identify So Few Children from Economically Disadvantaged (ED) and Limited English Proficiency (LEP) Backgrounds?* One source for the ten items on the instrument was the literature on gifted minority and economically disadvantaged students. The other source was the professional judgment of researchers at the University of Georgia. The survey instrument was designed as a 5-point Likert scale with response possibilities ranging from 1 meaning "strongly agree" to 5 meaning "strongly disagree."

The survey instrument was administered by the site coordinator or designee prior to providing any training that was a part of the larger investigation into effective methods to identify gifted children from economically disadvantaged and limited English proficient backgrounds. Participants were told that the purpose of the survey was to find out their perspectives regarding the problems encountered when identifying gifted children from economically disadvantaged and limited English proficient backgrounds. The following instructions were given to the participants:

Based on your experiences as an educator, please help us to understand why so few children from economically disadvantaged (ED) and limited English proficient (LEP) backgrounds are identified as gifted. Please use the following response key to indicate your perceptions about some of the possible barriers to their identification. We are *only* interested in the problems associated with identifying giftedness among students who are from ED and LEP backgrounds.

### Analysis of Survey Responses

To facilitate a more meaningful discussion of the survey results, responses to the items were reduced from five levels to three for data analysis. That is, "Strongly Agree" and "Agree" were combined to form a category called "Agree"; "Strongly Disagree" and "Disagree" were combined to form a category called "Disagree." The third category, "Neither Agree Nor Disagree," was renamed "Uncertain." Frequencies were calculated and then used to determine the percentage of participants who felt that a particular issue was a barrier to identifying gifted children from economically disadvantaged and limited English proficient backgrounds.

A barrier was considered to be major if 60% or more of the participants agreed or strongly agreed with a statement. A barrier was interpreted as moderate if the percentage of the participants' agreement was between 40% and 59%. If the agreement was 39% or less, a barrier was interpreted as minor.

## Results

The results from the administration of the survey to the National Field Test participants are presented in Table 1. Two issues were identified as major barriers to the

identification of gifted children from economically disadvantaged and limited English proficient backgrounds: (a) standardized tests are biased against children from economically disadvantaged and limited English proficient backgrounds (70% agreement), and (b) teachers' inability to recognize indicators of potential giftedness (62% agreement). Five issues were considered by the participants to be moderate barriers to identification: (a) nonstandard English and limited English proficiency (57% agreement), (b) differences in language experiences (55% agreement), (c) lack of a stimulating home environment (54% agreement), (d) use of narrow screening/selection process (48% agreement), and (e) prejudicial attitudes held by teachers (43% agreement). Three issues were considered by the participants to be minor barriers to identification: (a) beliefs that intellectual giftedness is not valued in certain groups (37% agreement), (b) teachers' fears about "watering down" program quality (29% agreement), and (c) beliefs that limited number of gifted children come from economically disadvantaged and limited English proficient backgrounds (26% agreement).

## **Discussion**

### **Major Issues Creating Barriers to Identification**

#### **Test Bias**

The results of the survey indicate that the bias in standardized tests is considered a major barrier to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds (70% agreement). There are two competing views regarding test bias. Reynolds and Kaiser (1990) define test bias as "systematic error in the estimation of some 'true' value for a group of individuals" (Reynolds & Kaiser, 1990). Their conclusions from a comprehensive review of a large number of studies designed to assess claims of test bias were that little or no evidence exists to substantiate any claim of bias in most well-constructed tests of intelligence. They contended that most attempts to find bias in well-constructed instruments from the major test publishers have failed, and most of the tests offered as alternatives for use with minority groups were either invalid for practical criteria or more biased than the tests they were designed to replace.

Nonetheless, a number of researchers continue to charge that discrimination is evident in traditional tests used to assess minority students. The gist of these charges is that test bias cannot be evaluated solely on the basis of the instrument's psychometric properties; social consequences must also be considered (Bogatz, Hisama, Manni, & Wurtz, 1986). Hilliard (1991b), for example, argued that testing instruments and practices developed in the Euro-American tradition are invalid measures for African Americans. Taylor and Lee (1991) argued that "incongruencies between the communicative behavior or language of the test giver (or test constructor) and the test taker can result in test bias" (p. 67). Duran (1988) observed that the different social and cultural heritage of language-minority persons creates the possibility that unrecognized differences violate assumptions about the nature of the population under consideration.

Table 1

Percentage of Educators in the National Field Test Study Considering Each Issue (Item) as a Barrier to Identification (N=750)

Issue	Agree	Uncertain	Disagree
1. Differences in language experiences	55	8	37
2. Lack of a stimulating home environment	54	8	38
3. Teachers' inability to recognize indicators of potential giftedness	62	9	29
4. Standardized tests biased against children from ED and LEP backgrounds	70	11	19
5. Prejudicial attitudes held by teachers	43	13	44
6. Beliefs about the limited number of gifted children who come from ED and LEP backgrounds	26	8	66
7. Use of narrow screening/selection process	48	27	25
8. Intellectual giftedness not valued	37	15	48
9. Teachers' fears about "watering down" program quality by including gifted children from ED and LEP backgrounds	29	19	52
10. Nonstandard English and limited English proficiency	57	10	33

Similar comments regarding the negative effects of tests on the identification of gifted children from economically disadvantaged and limited English proficient backgrounds are evident in the gifted literature. Bernal (1980) argued that traditional identification techniques have discriminated against minorities because the tests are designed to measure the maximum performance of persons from a different culture. According to Laycock (1979) the discrepancy between the number of White and African American children identified as gifted may be a result of the prejudice and poverty more often faced by African American children and the greater familiarity that White children have with test materials. VanTassel-Baska and Olszewski-Kubilius (1989) succinctly summarized conclusions regarding test bias and minority students as follows:

Some disadvantaged students undoubtedly will be chosen for gifted programs as a matter of course, because they do fall within the selection criteria. But much depends upon what criteria are used and how they are applied. If the criteria focus strongly on test scores and use rigid cutoffs, students from economically deprived or "culturally different" populations may be at a disadvantage because of the mainstream cultural bias of many instruments. (pp. 55-56)

Issues of test bias will not be easily resolved. As long as performance on standardized tests remains as dominant a part of the assessment process for gifted programs as they currently do, discussions about test bias will continue. Reynolds and Kaiser (1990) concluded that despite their findings that well-constructed tests are not biased toward minority and disadvantaged groups, societal scrutiny and ongoing sentiment about testing will serve to force the psychometric community to refine its definition of bias even further and to continue to inspect practices involved in the construction of nonbiased measures. In addition, it will sustain efforts to develop statistical procedures to detect bias when it is occurring.

### **Teachers' Inability to Recognize Indicators of Potential Giftedness**

Participants in this National Field Test Study felt that another major barrier to identification was teachers' inability to recognize indicators of potential giftedness in gifted children from economically disadvantaged and limited English proficient backgrounds (62% agreement). This finding is consistent with a body of professional opinion and research. Several researchers doubt that educators are familiar enough with the impact of cultural, linguistic and economic differences on behavior to make accurate referrals of children from economically disadvantaged and limited English proficient backgrounds (Baca & Chinn, 1982; Bernal, 1974, 1978, 1980; Wood & Achey, 1990). Baca and Chinn suggested that because teachers do not recognize the meanings of some unfamiliar behaviors of these students, they are less prone to refer them for gifted program participation.

Leung (1981) noted that the identification of gifted minority students is a problem because these students often do not exhibit behaviors and characteristics which are recognized as manifestations of talents and gifts by the dominant culture. She suggested that there are two aspects of giftedness and talents that should be acknowledged: absolute aspects and relative aspects. Absolute aspects include attributes such as the ability to learn faster and more than an average person and the capacity to perform tasks better and faster than most people. Leung believes that absolute aspects of giftedness having universal application can be identified in all human beings, regardless of cultural, physical, geographical, or socioeconomic differences. Relative aspects of giftedness relate to values held by specific societies and cultures. They refer to specific abilities that are identified and nurtured by a culture; they may not be considered gifted and talented abilities in another culture.

Derman-Sparks and Jones (1992) suggested that teachers' inability to recognize indicators of exceptional ability in economically disadvantaged and limited English proficient student populations may be related to their inappropriate approaches to cultural diversity. For example, teachers may announce with pride that they are colorblind; they see all their children as the same. In addition, they may assume that the economically disadvantaged and limited English proficient students with whom they work are all deprived. This may divert their attention to experiences they feel these children need to fill the void created by inadequate home experiences. Little or no attention may be given to any exceptional abilities these children might possess.

### **Moderate Issues Creating Barriers to Identification**

#### **Language Issues**

Several language issues were perceived to be moderate barriers to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Fifty-seven percent of the participants in this survey agreed that using nonstandard English and having limited proficiency in the English language created barriers to identification. Further, 55% agreed that differences in language experiences were a barrier. It should not be a surprise that respondents to this survey consider language to be a barrier to identification. There are few discussions of giftedness that do not include some reference to advanced language abilities. As VanTassel-Baska (1994) concluded, "Lists of characteristics of gifted population have always included several traits related to high verbal ability: early reading, large vocabulary, high-level reading comprehension, and verbal interests such as voracious reading on a wide variety of topics" (p. 129). All these traits are included as a part of the language proficiency construct which typically refers to a person's learned, functional capability to use a language system and may refer to skills in different modalities of language use such as speaking, writing, oral comprehension, and reading (Duran, 1988).

Issues regarding the language abilities of children from economically disadvantaged and limited English proficient backgrounds frequently result in evaluations of them as incompetent students. In Garcia's (1993) summary of the effects of language and culture on education, reasons for these perceptions are elaborated. They include comments about negative attitudes created when it is believed that some dialects are linguistically inferior to the standard version of a language. Children with nonstandard speech are often rated as less competent and socially different from children with a more standard dialect. Opinions about a dialect and about English language proficiency may not only affect initial judgments about the abilities of children, but also affect how these children will be grouped for instruction.

In a much earlier discussion, Bernstein (1961) attributed the poor academic performance of economically disadvantaged students to their deviant language and concluded that this language deficiency trait contributed to their limited capacity for complex reasoning. Observations such as this continue to appear in the literature to the present time. For example, McCarty, Lynch, Wallace, and Benally (1991) noted that the educational literature continues to characterize Native American children as nonanalytic, nonverbal learners despite the lack of empirical support for these conclusions. Spicker, Southern, and Davis (1987) pointed to prejudices that teachers continue to hold about language and behavioral differences of students from lower socioeconomic, minority, and ethnic backgrounds and to the biases they hold against nonstandard English dialects and grammatically incorrect writing.

Findings from recent research by sociolinguists and ethnographers (Duran, 1989) suggested that improvements in understanding the language capabilities of ethnic minority students could occur by replacing the notion of language proficiency with that of communicative competence. Current tests of language proficiency, he observed, emphasize a student's mastery of vocabulary terms and knowledge of appropriate grammatical structures. According to Duran, tests of communicative competence would provide a much more complete picture of students' language abilities. The emphasis would be on interactional abilities which extend far beyond students' simple knowledge of a language's structural features. Considering the inclusion of information from current research on language proficiency, evaluation would be very important when designing staff development programs.

### **Lack of a Stimulating Home Environment**

The lack of a stimulating early home environment was also perceived by 54% of the participants in the national field test as a barrier to identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Perceptions such as these held by educators have been widely discussed in the literature. However, most recent researchers find these perceptions to be overgeneralized.

Scott-Jones (1993) noted that because research has often involved comparisons of minority and majority children, few studies have examined variations within minority groups. Ogbu (1974, 1985) has demonstrated in his research, that contrary to stereotypes, parents of many inner-city minority youth do hold high aspirations for their children's educational and occupational futures. In addition, they provide encouragement and support for their children to do well in school. Sipes (1993) noted that in traditional Native American culture, children are considered the most sacred of all resources and the need to educate them is considered a priority. Native American families have not only always stressed education, but they have also considered children's education as essential.

Findings from a study by Ritter, Mont-Reynaud, and Dornbusch (1993) "clearly refute(d) the stereotype that minority parents are not concerned with their children's education" (p. 118). While they found cultural differences among the African American, Asian, and Hispanic families in their study, they also concluded that there were high degrees of caring and involvement in all these families.

Dornbusch and Wood (1989) observe that "social-status indicators are relatively poor predictors of children's achievement compared with family-process measures, and family processes are related to children's achievement to an important extent across all status groups" (p. 90). Findings from a study of low-achieving and high-achieving children conducted by R. Clark (1983) support this observation and help to establish the fact that educationally competent families can be found at every social class level. Clark described families of high-achieving students that are functioning effectively despite severe hardships and daily challenges. Parents of the high-achieving students are characterized as adults who take responsibility for guiding, nursing, and protecting their children during their pursuit of competent adult behavior.

Chavkin and Williams (1993) advised that it is important for educators to recognize that "all parents, regardless of ethnicity or minority status, are concerned about their children's education" (p. 80). Not only are these parents concerned, they want to take an active role in their children's education. Many times the appearance of lack of involvement occurs because parents of children from economically disadvantaged and limited English proficient backgrounds do not understand some of the concepts their children are learning or because teachers do not ask them to be involved in school as much as they ask other

parents. Increased knowledge by teachers of the characteristics of, and strategies used by, economically disadvantaged and limited English proficient families to support the achievement of their children could result in better cooperation and support between educators and parents.

### **Screening/Selection Process Too Narrow**

Less than half (48%) of the participants in the national field test study felt that the screening and selection processes used by their school/state to identify gifted children from economically disadvantaged and limited English proficient backgrounds were too narrow. Responses to this question are conceptually related to issues of test bias, inability to recognize gifted behavior in economically disadvantaged and limited English proficient student populations, and language differences among some children from economically disadvantaged and limited English proficient backgrounds. As was noted earlier, precise English usage and English vocabulary often play a major role in both teacher recommendations and in assessment.

### **Teachers' Prejudicial Attitudes**

Less than half (43%) of the participants in the National Field Test Study felt that teachers' prejudicial attitudes are a barrier to identification. This perception is strongly supported by speculations in the literature that the limited presence of minority and disadvantaged students in gifted programs may be due to prejudicial or discriminatory attitudes (Bernal, 1974, 1980; Cummins, 1989; Ford-Harris, Harris, & Winborne, 1989; Hale-Benson, 1982; Hilliard, 1976, 1991a, 1991b; McLeod & Cropley, 1989; Richert, 1987, 1991; Shade, 1978, 1982; Spicker et al., 1987; Tonemah, 1987). However, 45% disagreed that prejudicial attitudes among teachers are a barrier to identification. Reasons for this almost even split between those who agreed and those who disagreed cannot be determined from this study. Further study is needed to explore the degree to which this issue should be considered a barrier of concern.

### **Minor Issues Creating Barriers to Identification**

#### **Intellectual Giftedness Not Valued by Certain Groups**

Participants in the survey were asked to respond to the following statement: "Intellectual giftedness is not valued by some cultural groups so parents of children from these groups do not encourage their children to excel in school." Thirty-seven percent of the participants responding to this statement agreed that the value placed on intellectual giftedness by some cultural groups has a minor effect on the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. Forty-eight percent disagreed with that statement.

#### **Fear About Reducing Program Quality**

Twenty-nine percent of the participants agreed that concerns with program quality are a barrier to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds. That is, they did not believe that teachers' fears about the effects these children might have on the quality of the gifted program constituted a major barrier to their identification as gifted.

## **Beliefs About the Limited Number of Gifted Students in These Groups**

Only 26% of the participants agreed that beliefs about the limited number of gifted children from economically disadvantaged and limited English proficient backgrounds created a barrier to their identification. This belief is consistent with frequently made statements by a number of writers who assert that there is no reason to doubt that there are many gifted children who come from these backgrounds (Clark, 1992; Davis & Rimm, 1994; Gallagher, 1994; Piirto, 1994).

Even though we interpreted these three issues as reflecting minor barriers to identification, staff developers are encouraged to remain sensitive to the concerns reflected in these issues. There is still an abundance of literature discussing the history of ethnic subgroups being rated as intellectually inferior to Whites, especially in America (Baldwin, 1985, Carter & Goodwin, 1994; Ford-Harris et al., 1989). Further, McLeod and Cropley (1989) observed that if the culture of a dominant subgroup in a society is widely accepted as correct or standard, then the behaviors, values, and norms of nondominant subgroups are often seen as less desirable, or even as inferior.

## **Implications of Survey Results for Designing Staff Development Programs**

Referrals by classroom teachers are a traditional first step in identifying children for gifted program participation. The perceptions they hold about giftedness and about who is gifted may have a profound impact on referral decisions. Results from this survey provide important insights into the perspectives that classroom teachers have on problems in identifying gifted children from economically disadvantaged and limited English proficient backgrounds. Knowing more about what they think and the degree of importance they attach to their thoughts have important implications for creating effective staff development programs. Implications for designing the content of staff development programs to address the concerns in identifying gifted children from economically disadvantaged and limited English proficient backgrounds that were raised by the educators who participated in this survey, are provided in this section:

1. Issues of test bias cannot be resolved through staff development. Researchers and test developers must work to alleviate concerns in this area. Classroom teachers, however, can be better educated about tests and their proper use. The following points would be important to include in a staff development presentation:
  - (a) Tests or any other such instrument chosen to measure potential are not reliable or valid enough to provide foolproof information on who is destined to achieve excellence (Tannenbaum, 1983).
  - (b) Test scores do not irrefutably define and identify a population of gifted children. At best, scores on standardized tests identify children who may learn somewhat better and more efficiently than children who score below them (Eby & Smutney, 1990).
  - (c) Conventional intelligence tests fail to recognize many of the intellectual components of talent such as divergent thinking, openness to ideas, and tolerance of ambiguity and complexity, as well as nonintellectual factors, such as motivation and strength of self-concept (Dabney, 1988)

2. Staff development programs should include opportunities for teachers to understand the wealth of information they can provide about children that is not accessible through tests. Schack and Starko (1990) suggested that by focusing teachers' attention on the unique information they can provide, teachers begin to act more as talent scouts than as gatekeepers eliminating students from consideration. They suggest that teachers can provide information about unique behaviors and events that children exhibit in the classroom such as the following: (a) learning quickly and easily, (b) initiating own learning, (c) multiple interests, (d) curiosity, (e) leadership, (f) hobbies or projects, and (g) creativity. These behaviors and events are not easily derived from tests, according to Schack and Starko.
3. Staff development programs should include a variety of strategies to help teachers develop a common frame of reference about the core attributes of giftedness as they are expressed in different cultural and environmental contexts. Vignettes are a very useful strategy to help teachers develop story-pictures of children's gifts that match what happens in the classrooms. Story-pictures provide a useful way to focus teachers' attention on diverse expressions of gifted behaviors in children whose performances are impacted by cultural and linguistic differences and by low socioeconomic circumstances and away from dysfunctional attitudes they may have about these children's abilities. Vignettes can also be used as a guide to stimulate teachers' development of their own story-pictures based on actual children in their classroom.
4. Staff development should include information about the family processes operative within the homes of children from economically disadvantaged and limited English proficient backgrounds who are achieving, regardless of their circumstances or status. While it is clear that disadvantaged families do not always appear to have the resources available to support their children's educational development, it is not correct to assume that they do not engage in supportive activities or that they do not use effective strategies in the encouragement of the intellectual development of their children. A growing number of studies and other reports provide rich information about the families of achieving children from economically disadvantaged and limited English proficient backgrounds (Billingsley, 1992; R. Clark, 1983; Dornbusch & Wood, 1989; Ogbu, 1974; Ritter, Mont-Reynaud, & Dornbusch, 1993; Scott-Jones, 1993; Sipes, 1993; VanTassel-Baska & Olszewski-Kubilius, 1989).
5. Staff development programs should include opportunities for teachers to learn how to reinterpret checklist items for the parents of the children from economically disadvantaged and limited English proficient backgrounds in the communities they serve. This training would focus teachers' attention on finding ways to describe the attributes of gifted children in a manner that facilitates parents in their ability to provide good observational data about their children's gifts. As teachers gain skills in interpreting gifted behaviors as they appear in diverse groups, they are more prepared to focus on the real proficiencies, and less on any perceived deficiencies of children from economically disadvantaged and limited English proficient backgrounds. Teachers may also become more aware that differences are not necessarily deficits; they are simply differences.

6. Most importantly, staff development programs should be designed to provide teachers with opportunities to understand their role in identification as extending far beyond the task of generating names of students for testing. They should have experiences that assist them in understanding that assessment refers to an entire process of observing students, making referrals for further evaluations, gathering information from multiple tests and nontest sources, making professional decisions for services, planning and implementing appropriate programs and curricula using the information collected as the foundation, and evaluating student growth and development.

## **Conclusion**

If we are to become more effective in recognizing gifted potential in economically disadvantaged and limited English proficient student populations, a number of issues must be addressed. This paper has dealt with one of those issues: understanding the impact that educators' perceptions about gifted ability in these groups may have on student referral. Insights into educators' perceptions of barriers to identification were discussed. The most important implication derived from these insights was the need to focus staff development activities on helping teachers to understand and recognize gifted abilities when they are exhibited in their classrooms. This understanding is especially important when attempting to recognize the gifted abilities of children from economically disadvantaged and limited English proficient backgrounds. By better training educators about what to look for as they engage in their daily classroom activities, we will not only increase the likelihood that gifted children from underrepresented groups will be better recognized, but also increase the chances that educators will become more effective advocates for them.

## References

- Baca, L., & Chinn, P. C. (1982). Coming to grips with cultural diversity. *Exceptional Education Quarterly*, 2(4), 33-45.
- Baldwin, A. Y. (1985). Programs for the gifted and talented: Issues concerning minority populations. In F. D. Horowitz & M. M. O'Brien (Eds.), *The gifted and talented: Developmental perspectives* (pp. 223-249). Washington, DC: American Psychological Association.
- Bernal, E. M. (1974). Gifted Mexican American children: An ethno-scientific perspective. *California Journal of Educational Research*, 25, 261-273.
- Bernal, E. M. (1978). The identification of gifted Chicano children. In G. H. Gear, A. Y. Baldwin, & L. J. Lucito (Eds.), *Educational planning for the gifted: Overcoming cultural, geographic, and socioeconomic barriers* (pp. 14-17). Reston, VA: The Council for Exceptional Children.
- Bernal, E. M. (1980). *Methods of identifying gifted minority students*. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service. (ERIC Document Reproduction Service No. ED 204 418)
- Bernstein, B. (1961). Social structure, language, and learning. *Educational Research*, 3(3), 163-176.
- Billingsley, A. (1992). *Climbing Jacob's ladder: The enduring legacy of African-American families*. New York: Simon & Schuster.
- Bogatz, B., Hisama, T., Manni, J. L., & Wurtz, R. (1986). Cognitive assessment of nonwhite children. In O. L. Taylor (Ed.), *Treatment of communication disorders in culturally and linguistically diverse populations* (pp. 67-111). Austin, TX: Pro-Ed.
- Borland, J. (1978). Teacher identification of the gifted: A new look. *Journal for the Education of the Gifted*, 2(1), 22-32.
- Carter, R. T., & Goodwin, A. L. (1994). Racial identity and education. In L. Darling-Hammond (Ed.), *Review of research in education* (pp. 291-336). Washington, DC: American Educational Research Association.
- Chavkin, N. F., & Williams, D. L. (1993). Minority parents and the elementary school: Attitudes and practices. In N. F. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 73-83). Albany, NY: State University of New York Press.
- Clark, B. (1983). *Growing up gifted: Developing the potential of children at home and at school* (2nd ed.). Columbus, OH: Merrill.
- Clark, B. (1992). *Growing up gifted: Developing the potential of children at home and at school* (4th ed.). New York: Merrill.
- Clark, R. (1983). *Family life and school achievement: Why poor Black children succeed and fail*. Chicago: The University of Chicago Press.

Cummins, J. (1989). Institutionalized racism and the assessment of minority children: A comparison of policies and programs in the United States and Canada. In R. J. Samuda, S. L. Kong, J. Cummins, J. Pascual-Leone, & J. Lewis (Eds.), *Assessment and placement of minority students* (pp. 95-107). Toronto: C. J. Hogrefe.

Dabney, M. G. (1988). An alternative model for identification of potentially gifted students: A case study. In R. L. Jones (Ed.), *Psychoeducational assessment of minority group children: A casebook* (pp. 273-304). Berkeley, CA: Cobb & Henry.

Davis, G. A., & Rimm, S. B. (1994). *Education of the gifted and talented* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Derman-Sparks, L., & Jones, E. (1992). Meeting the challenge of diversity. *Young Children*, 47(2), 12-18.

Dornbusch, S. M., & Wood, K. D. (1989). Family processes and educational achievement. In W. J. Weston (Ed.), *Education and the American family: A research synthesis* (pp. 66-95). New York: New York University Press.

Duran, R. P. (1988). Testing of linguistic minorities. In R. L. Linn (Ed.), *Educational Measurement* (pp. 573-587). New York: Macmillan.

Duran, R. P. (1989). Assessment and instruction of at-risk Hispanic students. *Exceptional Children*, 56(2), 154-158.

Dusek, J. B., & Joseph, G. (1983). The bases of teacher expectancies: A meta-analysis. *Journal of Educational Psychology*, 75(3), 327-346.

Eby, J. W., & Smutney, J. F. (1990). *A thoughtful overview of gifted education*. New York: Longman.

Ford-Harris, D., Harris, J. J., & Winborne, D. (1989). Determinants of underachievement among gifted Black students: Learning to underachieve. *Journal of Social and Behavioral Sciences*, 35(3), 145-162.

Gallagher, J. J. (1994). *Teaching the gifted child* (4th ed.). Boston: Allyn & Bacon.

García, E. E. (1993). Language, culture, and education. In L. Darling-Hammond (Ed.), *Review of Research in Education* (pp. 51-98). Washington, DC: American Educational Research Association.

Hale-Benson, J. (1982). *Black children: Their roots, culture, and learning styles* (Rev. ed.). Baltimore: Johns Hopkins University Press.

Hilliard, A. (1976). *Alternatives to IQ testing: An approach to the identification of gifted "minority" children* (Final Report). Sacramento, CA: California State Department of Education, Sacramento Division of Special Education. (ERIC Document Reproduction Service No. ED 147 009)

Hilliard, A. G. (1991a). The learning potential assessment device and instrumental enrichment as a paradigm shift. In A. G. Hilliard (Ed.), *Testing African American students: Special re-issue of the Negro educational review* (pp. 200-208). Morristown, NJ: Aaron Press.

Hilliard, A. G. (1991b). The ideology of intelligence and I.Q. magic in education. In A. G. Hilliard (Ed.), *Testing African American students: Special re-issue of the Negro educational review* (pp. 136-145). Morristown, NJ: Aaron Press.

Laycock, F. (1979). *Gifted children*. Glenview, IL: Scott Foresman.

Leung, E. K. (1981). The identification and social problem of the gifted bilingual-bicultural children. Paper presented at The Council for Exceptional Children Conference on the Exceptional Bilingual Child. New Orleans, LA. (ERIC Document Reproduction Service No. ED 203 653)

Martinson, R. A. (1974). *The identification of the gifted and talented: An instructional syllabus for the National Summer Leadership Training Institute on the Education of the Gifted and Talented*. Ventura, CA: Office of the Ventura County Superintendent of Schools.

McCarty, T. L., Lynch, R. H., Wallace, S., & Benally, A. (1991). Classroom inquiry and Navajo learning styles: A call for reassessment. *Anthropology & Education Quarterly*, 22, 42-59.

McLeod, J., & Cropley, A. (1989). *Fostering academic excellence*. New York: Pergamon Press.

Ogbu, J. (1974). *The next generation: An ethnography of education in an urban neighborhood*. New York: Academic Press.

Ogbu, J. (1985). A cultural ecology of competence among inner-city Blacks. In G. B. M. Spencer & W. Allen (Eds.), *The social and affective development of Black children* (pp. 45-66). Hillsdale, NJ: Erlbaum.

Pegnato, W., & Birch, J. (1959). Locating gifted children in junior high school. *Exceptional Children*, 25(7), 300-304.

Piirto, J. (1994). *Talented children and adults: Their development and education*. New York: Merrill.

Reynolds, C. R., & Kaiser, S. M. (1990). Bias in assessment of aptitude. In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of psychological and educational assessment of children: Intelligence and achievement* (pp. 611-653). New York: The Guilford Press.

Richert, E. S. (1987). Rampant problems and promising practices in the identification of disadvantaged gifted students. *Gifted Child Quarterly*, 31(4), 149-154.

Richert, E. S. (1991). Rampant problems and promising practices in identification. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 81-96). Boston: Allyn & Bacon.

Ritter, P. L., Mont-Reynaud, R., & Dornbusch, S. M. (1993). Minority parents and their youth: Concern, encouragement, and support for school achievement. In N. F. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 107-119). Albany, NY: State University of New York Press.

Schack, G. D., & Starko, A. J. (1990). Identification of gifted students: An analysis of criteria preferred by preservice teachers, classroom teachers, and teachers of the gifted. *Journal for the Education of the Gifted*, 13(4), 345-363.

Scott, M. S., Perou, R., Urbano, R., Hogan, A., & Gold, S. (1992). The identification of giftedness: A comparison of White, Hispanic, and Black families. *Gifted Child Quarterly*, 36(3), 131-139.

Scott-Jones, D. (1993). Families as educators in pluralistic society. In N. F. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 245-253). Albany, NY: State University of New York Press.

Shade, B. J. (1978). Social-psychological characteristics of achieving Black children. *Negro Educational Review*, 29(2), 80-86.

Shade, B. J. (1982). Afro-American cognitive style: A variable in school success? *Review of Educational Research*, 52, 219-244.

Sipes, D. S. B. (1993). Cultural values and American-Indian families. In N. F. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 157-173). Albany, NY: State University of New York Press.

Spicker, H. H., Southern, T., & Davis, B. I. (1987). The rural gifted child. *Gifted Child Quarterly*, 31(4), 155-158.

Stanley, J. C. (1976). Tests better finder of great math talent than teachers are. *American Psychologist*, 31, 313-314.

Tannenbaum, A. J. (1983). *Gifted children: Psychological and educational perspectives*. New York: Macmillan.

Taylor, O. L., & Lee, D. L. (1991). Standardized tests and African-American children: Communication and language issues. In A. G. Hilliard (Ed.), *Testing African American students* (pp. 67-80). Morristown, NJ: Aaron Press.

Tonemah, S. (1987). Assessing American Indian gifted and talented students' abilities. *Journal for the Education of the Gifted*, 10, 181-194.

VanTassel-Baska, J. (1994). Language arts for the gifted. In J. VanTassel-Baska (Ed.), *Comprehensive curriculum for gifted learners* (pp. 129-165). Boston: Allyn & Bacon.

VanTassel-Baska, J. L., & Olszewski-Kubilius, P. (Eds.). (1989). *Patterns of influence on gifted learners: The home, the self, and the school*. New York: Teachers College Press.

Wood, S. B., & Achey, V. H. (1990). Successful identification of gifted racial/ethnic group students without changing classification requirements. *Roeper Review*, 13(1), 21-26.

## **Appendix A**

### **Why Do We Identify So Few Gifted Children From Economically Disadvantaged (ED) and Limited English Proficiency (LEP) Backgrounds?**

Position \_\_\_\_\_ Subject/Content \_\_\_\_\_  
(Teacher, Principal, etc.)

Grade \_\_\_\_\_ Gender \_\_\_\_\_ Ethnicity \_\_\_\_\_

Based on your experiences as an educator, please help us to understand why so few children from economically disadvantaged (ED) and limited English proficient (LEP) backgrounds are identified as gifted. Please use the following response key to indicate your perceptions about some of the possible barriers to their identification. We are only interested in the problems associated with identifying giftedness among students who are from ED and LEP backgrounds.

#### RESPONSE KEY

**SA** = Strongly Agree

**A** = Agree

**N** = Neither Agree nor Disagree

**D** = Disagree

**SD** = Strongly Disagree

*Please indicate your response concerning your perceptions about the problems related to identifying gifted students from economically disadvantaged (ED) and limited English proficient (LEP) backgrounds.*

1. Differences in language experiences hinder the development of giftedness in children from ED and/or LEP backgrounds.

**SD D N A SA**

2. Parents often do not provide stimulating early home environments; thus, these children often enter school at a disadvantage and are unlikely to catch up.

**SD D N A SA**

3. Teachers often do not recognize indicators of potential giftedness in ED and/or LEP students.

**SD D N A SA**

4. Standardized tests are biased against these students, so they can't score high enough to qualify for gifted programs.

**SD D N A SA**

5. Because of prejudice (either subconscious or overt), teachers often do not nominate these children for gifted screening.

**SD D N A SA**

6. There are few truly gifted children who come from these populations.

**SD D N A SA**

7. The screening/selection process used by my school/state is too narrow to permit these students to qualify for gifted placement.

**SD D N A SA**

8. Intellectual giftedness is not valued by some cultural groups, so parents of children from these groups do not encourage their children to excel in school.

**SD D N A SA**

9. Teachers fear that placing ED and/or LEP students in existing gifted programs will "water down" the quality of those programs.

**SD D N A SA**

10. Nonstandard English and limited English proficiency prevent children from performing well enough in school to be nominated for gifted programs.

**SD D N A SA**

**Appendix B**  
**Pilot Study Sites**

Site	District Size	Description of Population Served	Enrollment by Group
A	24,375	Urban	<ul style="list-style-type: none"> <li>• White = 38%</li> <li>• African American = 62%</li> <li>• Hispanic, Asian/Pacific Islander, Native American or Alaskan Native = less than 1% each</li> </ul>
B	995	Private, rural, reservation school	<ul style="list-style-type: none"> <li>• White = 5%</li> <li>• Native American = 95%</li> </ul>
C	10,800	25% Rural 35% Suburban 40% Urban	<ul style="list-style-type: none"> <li>• African American = 51%</li> <li>• White = 46%</li> <li>• Hispanic = 1%</li> <li>• Asian/Pacific Islander = 1.5%</li> <li>• Native American/Alaskan Native = .5%</li> </ul>
D	42,000	Inner city, rural, and suburban	<ul style="list-style-type: none"> <li>• African American = 42%</li> <li>• White = 54%</li> <li>• Hispanic = 2%</li> <li>• Asian/Pacific Islander = 3%</li> <li>• Native American/Alaskan Native = .07%</li> </ul>
E	65,000	Suburban	<ul style="list-style-type: none"> <li>• White = 90%</li> <li>• African American = 5%</li> <li>• Hispanic = 2%</li> <li>• Asian/Pacific Islander = 3%</li> <li>• Native American/Alaskan Native = .5%</li> </ul>
F	1,800	Rural	<ul style="list-style-type: none"> <li>• White = 40%</li> <li>• African American = 60%</li> </ul>

**Appendix C**  
**National Field Test Study Sites**

Site	District Size	Description of Population Served	Enrollment by Group
A	24,614	Urban/rural	<ul style="list-style-type: none"> <li>• Asian/Pacific Islander = 70.7%</li> <li>• White = 19.4%</li> <li>• African American = .5%</li> <li>• Hispanic = 2.6%</li> <li>• Native American/Alaskan Native = .4%</li> </ul>
B	56,282	Urban/suburban	<ul style="list-style-type: none"> <li>• Asian/Pacific Islander = 7.8%</li> <li>• White = 71.3%</li> <li>• African American = 15.3%</li> <li>• Hispanic = 3.3%</li> <li>• Native American/Alaskan Native = 2.2%</li> </ul>
C	68,406	Suburban/urban	<ul style="list-style-type: none"> <li>• Asian/Pacific Islander - 18.3%</li> <li>• White = 35.2%</li> <li>• African American = 10.5%</li> <li>• Hispanic = 34.8%</li> <li>• Native American/Alaskan Native = .7%</li> </ul>
D	1,565	Rural	<ul style="list-style-type: none"> <li>• White = 49%</li> <li>• Native American/Alaskan Native = 51%</li> </ul>
E	850	Rural	<ul style="list-style-type: none"> <li>• White = 1.5%</li> <li>• Native American/Alaskan Native = 98.5%</li> </ul>
F	14,992	Urban	<ul style="list-style-type: none"> <li>• White = 1.7%</li> <li>• African American = 2.2%</li> <li>• Hispanic = 95.9%</li> <li>• Asian/Pacific Islander = 0.2%</li> <li>• Native American/Alaskan Native = .01%</li> </ul>
G	4,823	Rural	<ul style="list-style-type: none"> <li>• White = 2.6%</li> <li>• African American = .2%</li> <li>• Hispanic = 97.1%</li> <li>• Asian/Pacific Islander = .1%</li> </ul>

Site	District Size	Description of Population Served	Enrollment by Group
I	5,700	Suburban	<ul style="list-style-type: none"> <li>• White = 30%</li> <li>• African American = 70%</li> </ul>
J	11,002	Rural/urban	<ul style="list-style-type: none"> <li>• White = 90%</li> <li>• African American = 9%</li> <li>• Asian/Pacific Islander = 1%</li> </ul>
K	22,133	Urban	<ul style="list-style-type: none"> <li>• White = 56.7%</li> <li>• African American = 37.6%</li> <li>• Hispanic = 3.2%</li> <li>• Asian/Pacific Islander = 1.4%</li> </ul>
L	*2,031	Urban	<ul style="list-style-type: none"> <li>• African American = 80%</li> <li>• Hispanic = 20%</li> </ul>
M	43,000	Rural/suburban	<ul style="list-style-type: none"> <li>• White = 75%</li> <li>• African American = 17%</li> <li>• Hispanic = 4%</li> <li>• Asian/Pacific Islander = 4%</li> <li>• Native American = .4%</li> </ul>
N	*1,012	Rural	<ul style="list-style-type: none"> <li>• White = 99%</li> <li>• African American = 1%</li> </ul>

\* A single high school.

---

# The National Research Center on the Gifted and Talented

The University of Connecticut  
362 Fairfield Road, U-7  
Storrs, CT 06269-2007

## *Production Assistants*

Dawn R. Guenther  
Siamak Vahidi

## *Reviewers*

Mallory Bagwell  
M. Katherine Gavin  
E. Jean Gubbins  
Cheryl R. Kerison  
Karen Kettle  
Valentina I. Kloosterman  
Jeanne Purcell  
Mary Rizza  
Patricia Schuler



*The  
National  
Research  
Center  
on  
the  
Gifted  
and  
Talented  
Research  
Teams*

*The University of Connecticut*

Dr. Francis X. Archambault, Jr., Associate Director  
The University of Connecticut  
School of Education, U-4  
Storrs, CT 06269-2004  
860-486-4531

Dr. Alexinia Y. Baldwin  
Dr. Scott W. Brown  
Dr. Deborah E. Burns  
Dr. David A. Kenny  
Dr. Jonna Kulikowich  
Dr. Sally M. Reis  
Dr. Karen L. Westberg  
Dr. Michael F. Young

*The University of Georgia*

Dr. Mary M. Frasier, Associate Director  
The University of Georgia  
Department of Educational Psychology  
323 Aderhold Hall  
Athens, GA 30602-7146  
404-542-5106

Dr. Scott L. Hunsaker

*The University of Virginia*

Dr. Carolyn M. Callahan, Associate Director  
Curry School of Education  
The University of Virginia  
405 Emmet Street  
Charlottesville, VA 22903  
804-982-2849

Dr. Michael S. Caldwell  
Dr. Marcia A. B. Delcourt  
Dr. Brenda H. Loyd  
Dr. Kathleen May  
Dr. Claudia Sowa  
Dr. Ellen Tomchin  
Dr. Carol A. Tomlinson

*Yale University*

Dr. Robert J. Sternberg, Associate Director  
Department of Psychology  
Yale University  
P.O. Box 208205  
New Haven, CT 06520-8205  
860-432-4632

Dr. Pamela Clinkenbeard



**U.S. DEPARTMENT OF EDUCATION**  
*Office of Educational Research and Improvement (OERI)*  
*Educational Resources Information Center (ERIC)*



## NOTICE

### REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").