

## DOCUMENT RESUME

ED 454 664

EC 308 468

AUTHOR Siegle, Del  
TITLE Teacher Bias in Identifying Gifted and Talented Students.  
SPONS AGENCY Office of Educational Research and Improvement (ED),  
Washington, DC.  
PUB DATE 2001-04-00  
NOTE 8p.; Paper presented at the Annual Meeting of the Council  
for Exceptional Children (80th, Kansas City, MO, April  
18-21, 2001).  
CONTRACT R206R000001  
PUB TYPE Information Analyses (070) -- Speeches/Meeting Papers (150)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Ability Identification; \*Academically Gifted; Classroom  
Environment; Cultural Influences; Elementary Secondary  
Education; Predictor Variables; \*Sex Bias; Sex Stereotypes;  
\*Student Characteristics; \*Talent; \*Teacher Attitudes

## ABSTRACT

This paper explores the impact of teacher bias on identifying students as gifted or talented. It reviews findings from an investigation that developed a series of hypothetical student profiles to assess teacher nomination bias of gifted students. The profiles were also used to explore both the interaction of gender with student interests and work habits, and findings from other research on teachers' identification of gifted and talented students. The paper highlights: (1) gender bias in gifted education that indicates teachers are more likely to select profiles in which the student's behavior did not match expected gender stereotypes; (2) how the nature of the student's interests influences classroom teachers and how unexpected interests produce unexpected behaviors that attract attention; (3) the tendency for classroom teachers to focus on student weaknesses rather than student strengths; (4) the fear educators have of misidentifying students and of placing students in gifted and talented classes; (5) the tendency of teachers to focus more on skills associated with academic performance and less on creativity, leadership, and motor skills; and (6) how culture and socioeconomic status influence teacher ratings. Recommendations for educators on how to best avoid identification bias are provided. (Contains 25 references.) (CR)

*Teacher Bias in Identifying Gifted and Talented Students*<sup>1</sup>

ED 454 664

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.

Del Siegle, PhD  
Neag School of Education  
University of Connecticut  
2131 Hillside Road Unit 3007  
Storrs, CT 06269-3007  
860-486-0616  
dsiegle@uconn.edu  
<http://www.nsoe.uconn.edu/siegle>

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

Siegle

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

Several years ago, a friend of mine commented that classroom teachers were nominating more males than females for her district's gifted and talented program. My own experiences as a gifted and talented coordinator had not revealed any preference for males over females. We decided to develop a series of hypothetical student profiles to assess teacher nomination bias, to explore the interaction of gender with student interests and work habits, and to discover which student characteristics might preempt or promote student nominations to gifted and talented programs (Powell & Siegle, 2000). The purpose of this paper is to provide a review of that and other research on teachers' identification of gifted and talented students, and to provide classroom teachers and gifted and talented coordinators with suggestions for avoiding identification bias in the future.

Although standardized achievement tests and intelligence tests play a key role in the identification of gifted and talented students, many school districts include teachers' ratings of students as part of their selection criteria. Often these ratings are used to form a pool of students to be tested for gifted and talented programs and increasingly, are included as part of a total identification system. Because classroom teachers most frequently interact with students, they are in a unique position to observe students in a variety of situations and under a variety of conditions. Since teachers' ratings of students play an important role in identifying gifted students, teachers' beliefs, stereotypes, biases, and expectations can influence whether students are included or excluded from gifted and talented programs.

Whether or not teachers are qualified to identify gifted students has been the topic of much debate throughout the years (Gagné, 1994; Hoge & Cudmore, 1986; Pagnato & Birch, 1959; Rohrer, 1995). For the past 40 years, there has been a general perception that teachers are poor at identifying gifted and talented students. This perception stemmed from a 1959 study by Pagnato and Birch which reported that teachers were poor at identifying students who had IQ scores over 130. Their work has been frequently cited to support the opinion that classroom teachers are not reliable at identifying the gifted and talented students in their classrooms.

Gagné (1994) criticized the methods employed by Pagnato and Birch (1959), and after reanalyzing the data, found that "teachers do not come out worse than most other sources of information [for the identification of gifted and talented students], including some subgroups of the Otis [group intelligence test]" (p. 126). More recent research indicates that teachers are not the poor identifiers of gifted students that Pagnato and Birch reported. Hoge and Cudmore (1986) suggested there is very little empirical foundation for the negative evaluation so often associated with teacher judgment measures. Rohrer (1995) found that while teachers' preconceived notions of giftedness could preclude children with certain personality traits from consideration for gifted programs, overall,

<sup>1</sup> Siegle, D. (2001, April). *Teacher bias in identifying gifted and talented students*. Paper presented at the Council for Exceptional Children Annual Convention, Kansas City, MO.

This paper has been accepted for publication in the California Association for the Gifted's *Gifted Education Communicator*

308468



"teachers were able to recognize intellectual potential in students who were not the stereotypical White, fit, well-adjusted, high-achieving students" (p. 279).

Renzulli has been a proponent of teacher nominations as part of an identification system because teachers may recognize student strengths that standardized tests miss. The *Scales for Rating the Behavioral Characteristics of Superior Students (SRBCSS)* that he developed with his colleagues in 1976, and later revised in 1997, are among the most popular identification rating scales for nominating students for gifted programs. Hunsaker, Finley, and Frank (1997) reported that teachers were able to successfully identify student talents when they used the *SRBCSS* and other student rating scales. They found that student "nominations based on thinking abilities, general gifted behaviors, and special learning skills were related to later performance on creativity, group skills, and language abilities" (p. 19).

While research appears to support the use of teachers' ratings of student behaviors, there is also a body of research that suggests that certain biases exist when rating students. The remainder of this paper will focus on those biases and how they can be addressed. In addition, suggestions for promoting teacher awareness are included with each of the following sections.

#### *Gender Issues*

One area of concern in identifying students for gifted programs is gender bias. Research has shown that teachers spend more time interacting with male students in verbal and nonverbal ways (Mann, 1994; Oliveres & Rosenthal, 1992; Sadker & Sadker, 1993). Teachers face male students when talking (Sadker & Sadker, 1995) and give them more detailed instructions (Oliveres & Rosenthal, 1992). Not only do males receive more attention, but the quality of this attention is higher than that received by females. While males appear to receive more attention, there is no evidence that their overall skills are rated higher than females.

Gender bias in nomination appears to be related to specific characteristics being rated and the bias may surprise some educators. Gagné (1993) reported that males were thought to be more able in areas requiring physical or technical skill and females were perceived as performing better in the areas of artistic talent and socioaffective domains. Overall, boys and girls exhibit different interests and talents (Benbow, 1988; Gagné, 1993). Teachers develop stereotypes based on these expected differences. When students do not conform to these stereotypes, they draw attention to themselves. Teachers who were asked to nominate students for gifted and talented programs based on hypothetical student profiles were more likely to select profiles where the students' behavior did not match expected gender stereotypes (Powell & Siegle, 2000). For example, a voracious reader who is male, will receive higher ratings than a voracious reader who is female from a teacher who believes that females love reading more than males. Similarly, a female who excels in mathematical problem solving will receive higher ratings than a similar male with teachers who believe that boys are better at math than girls. Academic skills are not the only characteristic that gender perceptions influence. Teachers are much more likely to nominate disorganized, introverted boys than disorganized, introverted girls (Powell & Siegle, 2000).

Bernard (1979) found that "irrespective of the sex of teacher or student, or course of study, students who are perceived as masculine in role orientation are likely to be evaluated more highly than students who are not" (p. 562). Dusek and Joseph (1983) also found that "teachers were more likely to expect high achieving students, regardless of gender, to be masculine or androgynous, and low achieving students, regardless of gender, to be feminine or undifferentiated" (p. 338). Teacher training should include opportunities to reflect on the gender stereotypes they hold and how those stereotypes can influence their selection of students.

#### *Esoteric Nature of the Talent*

The esoteric nature of students' knowledge influences educators' selections. Non-producers who were interested in airplane design and flying were more likely to be nominated than producing

students who were interested in dinosaurs, a topic of interest to most elementary students (Powell & Siegle, 2000). The nature of the student interest influenced classroom teachers more than it influenced gifted and talented specialists.

Unexpected interests, as well as unexpected gender performances, produce unexpected behaviors that attract attention. In some cases, this may increase the likelihood of students being nominated for gifted and talented programs. Tannenbaum (1986) described gifted traits as being both scarce and valued. It may be that some students are nominated for a program because they do not "fit the mold," rather than for the gifted behaviors that they exhibit. This finding is supported with the higher ratings Powell and Siegle (2000) found for nonproductive student with an esoteric interest over the producing student with a common interest. Teachers need to be aware that "being different" is not a sufficient reason for inclusion in a gifted program.

#### *Diverted Attention to Weaknesses Rather than Strengths*

A third area of concern with teacher nominations is the tendency for classroom teachers to focus on student weaknesses rather than student strengths. Powell and Siegle (2000) found that gifted and talented specialists tended to give students higher ratings than classroom teachers. It may be that those trained in gifted education concentrate more on students' strengths, rather than their weaknesses. Programs for the gifted often focus on student strengths and interests and the gifted and talented coordinators may be more sensitive to this. Classroom teachers, on the other hand, are often cast in a diagnosis and remediation role with students and therefore, may be more sensitive to student weaknesses. Perhaps the focus on weaknesses rather than strengths stems from teachers' past experiences nominating students for remediation programs.

Teachers seldom have any reluctance in identifying students for remedial help in core subjects, or in sending them to a specialist for instruction to improve weaknesses in basic skills. Somehow, the reverse must be made clear; *the needs of gifted students are just as strong and as worthy of specialized instruction as any other special category of students.* (Weber, 1999, p. 187)

Teachers require training that focuses on student talent areas. Efforts should also be made to help teachers understand that there isn't an all-purpose gifted child, and children do not need to exhibit gifted characteristics in all aspects of their lives. This awareness may also increase teachers' recognition of strengths over weaknesses. Classroom teachers who are asked to identify gifted and talented students should be encouraged to identify characteristics that indicate giftedness, rather than look for reasons why children are not gifted. Teachers also should not expect synchronous development in gifted students. This is particularly important for young children.

The paradox between the exhibition of age appropriate behaviors in a young child and the display of mental capabilities beyond his years creates a disequilibrium not easily dealt with by classroom teachers who have not received training in working with gifted students. (Weber, 1999, p. 185)

#### *Fear of Misidentification*

Another reason classroom teachers focus on student weaknesses over strengths is their fear of misidentifying students. Classroom teachers who express fear about labeling a child for what they think is a lifelong prediction might be helped by considering Renzulli's (1979) statement that individuals are gifted only at certain times, under certain conditions, and in certain circumstances. Therefore, teachers "are actually only being asked to recommend certain services for certain children at a certain point in time, under certain circumstances...[which] removes a great burden from the shoulders of ...[those] who are concerned that their identification amounts to a 'forever' label" (Weber, 1999, p. 188).

Teachers may also fear that they will harm students by placing them in gifted programs. Ample research evidence documents the effectiveness of acceleration and enrichment for students.

Teachers need to have access to current research to dispel their fears of doing harm to children through acceleration or enrichment.

### *Specificity of the Talent*

The first step in identification should be to clearly define what is meant by gifted. Without a clear definition, those who are asked to nominate students must rely on the stereotypes they have developed, resulting in the inherent biases previously described. When left to their own devices, teachers tend to focus on skills associated with academic performance when nominating students to gifted programs and less on creativity, leadership, and motor skills (Guskin, Peng, & Simon, 1992; Hunsaker et al, 1997). This may be because of the perception that services for gifted programs ought to be limited to academic skills. While these perceptions are appropriate for academic-based programs, if a program is based on recognizing and developing a wide range of student talents, then checklists describing specific behaviors in the other domains should be used by teachers.

Borland (1978) showed that nomination accuracy was improved by asking teachers for nominations based on specific characteristics, rather than global judgments. Kolo (1999) found that instruments which “explicitly and very clearly spell out the traits or characteristics to be used by nominators... were more effective than those ones in which the traits to be rated or checked are not so obvious” (p. 181). Selection committees should be specific about the skills the teacher is being asked to evaluate.

A Chinese proverb notes that when one doesn't know to which port one is sailing, no wind is favorable. The first step in identification is defining what types of students will benefit from the program and training teachers to recognize those traits. Gifts and talents come in various domains. Teachers should be provided with specific criteria which matches the area of talent that a program is designed to service.

### *Culture and SES*

Culture, more than race, appears to be a factor in student selection. Students from different cultures will exhibit gifts and talents differently. Those who are being asked to nominate students should be aware how talent manifests itself in different cultures. For example, bringing honor to the group, rather than to oneself influences American Indian students' behaviors. A teacher who is not aware of this, can easily overlook talented individuals from that culture.

Recent research showed that Hispanic students who were nominated for gifted programs received ratings similar to Anglo students who were nominated, however Hispanic students who were not nominated receive much lower ratings than Anglo students who were not nominated (Plata & Masten, 1998). Because perceived weaknesses limit student selection opportunities and different groups may exhibit traits that teachers view as weaknesses, culturally diverse students are at a disadvantage.

The socioeconomic status of students also influences teacher ratings. Low SES males were seen as less attentive and low SES students overall were seen as less confident (Guskin et al., 1992). This may be a problem in small communities where teachers are well acquainted with their students' families. The adage, “The acorn doesn't fall far from the tree” can be detrimental for talented students from impoverished conditions in close-knit communities. As early as 1984, Birch warned that when the social, cultural, and personal interests of students are not considered, educators fail to recognize and react to children's individual strengths.

### *Opportunity to Demonstrate One's Talent*

Lastly, teachers won't recognize student talent if their classroom environments don't provide opportunities for students to demonstrate their talent. This is particularly problematic for young children. “Because the emphasis for the majority of young students is on the acquisition of basic skills

in academics, students who have already mastered these skills may not even receive the opportunity to demonstrate the range of their capabilities during an average class period” (Weber, 1999, p. 185).

Students may turn off in classrooms where there is limited academic challenge and intellectual stimulation. Powell and Siegle (2000) found that students who chose not to engage in classroom assignments were rated lower than students of a similar profile who did engage in classroom assignments. Such students may be classified as underachievers and end up being under-identified as well. Despite demonstrating productivity related to personal interests, these students were seldom recommended. This is unfortunate, since involvement in gifted and talented programs may provide the intellectual stimulation many of these students seek through personal interests. Baum, Renzulli, and Hébert (1995) found that students who had the opportunity to explore advanced projects related to personal interests often reversed their underachievement pattern.

Teachers also need to be aware that sending students to gifted programs does not confer inadequacy on their part (Weber, 1999). They may be reluctant to nominate students if they believe these nominations suggest they are unable to meet the academic needs of gifted students in their classrooms.

The first step in solving a problem is to identify it. Coordinators of gifted programs can improve student identification by providing teachers with information on identification bias. They can also give teachers opportunities to examine their biases and stereotypical beliefs about gifted and talented students and share specific student identification criteria that matches the district’s gifted and talented program definition. Such training will go a long way toward improving referrals for gifted and talented programs.

## References

- Baum, S. M., Renzulli, J. S., & Hébert, T. P. (1995). Reversing underachievement: Creative productivity as a systematic intervention. *Gifted Child Quarterly*, 39, 224-235.
- Benbow, C. P. (1988). Sex differences in mathematical reasoning ability in intellectually talented preadolescents: Their nature, effects, and possible causes. *Behavioral and Brain Sciences*, 11, 169-232.
- Bernard, M. E. (1979). Does sex role behavior influence the way teachers evaluate students? *Journal of Educational Psychology*, 71, 553-562.
- Birch, J. W. (1984). Is any identification procedure necessary? *Gifted Child Quarterly*, 28, 157-161.
- Borland, J. H. (1978). Teacher identification of the gifted: A new look. *Journal for the Education of the Gifted*, 2, 22-32.
- Dusek, J. B., & Joseph, G. (1983). The bases of teacher expectancies: A meta-analysis. *Journal of Educational Psychology*, 75, 327-346.
- Gagné, F. (1993). Sex differences in the aptitude and talents of children as judged by peers and teachers. *Gifted Child Quarterly*, 37, 69-77.
- Gagné, F. (1994). Are teachers really poor talent detectors? Comments on Pagnato and Birch's (1959) study of the effectiveness and efficiency of various identification techniques. *Gifted Child Quarterly*, 38, 124-126.
- Guskin, S. L., Peng, C. J., & Simon, M. (1992). Do teachers react to "Multiple Intelligences"? Effects of teachers' stereotypes on judgments and expectancies for students with diverse patterns of giftedness/talent. *Gifted Child Quarterly*, 36, 32-37.
- Hoge, R. D., & Cudmore, L. (1986). The use of teacher-judgment measures in the identification of gifted pupils. *Teaching and Teacher Education*, 2, 181-196.
- Hunsaker, S. L., Finley, V. S., & Frank, E. L. (1997). An analysis of teacher nominations and student performance in gifted programs. *Gifted Child Quarterly*, 41, 19-24.
- Mann, J. (1994). *The difference: Growing up female in America*. New York: Warner Books.
- Kolo, I. A. (1999). The effectiveness of Nigerian vs. United States teacher checklist and inventories for nominating potentially gifted Nigerian preschoolers. *Roeper Review*, 21, 179-183.
- Oliveres, R. A., & Rosenthal, N. (1992). *Gender equity and classroom experience: A review of the research*. New York: Queens College. [ERIC Reproduction Service No. ED 366 701]
- Pagnato, C. W., & Birch, J. W. (1959). Locating gifted children in junior high schools: A comparison of methods. *Exceptional Children*, 25, 300-304.
- Plata, M., & Masten, W. G. (1998). Teacher ratings of Hispanic and Anglo students on a behavior rating scale. *Roeper Review*, 21, 139-144.
- Powell, T., & Siegle, D. (2000, Spring). Teacher bias in identifying gifted and talented students. *The National Research Center on the Gifted and Talented Newsletter*, pp. 13-15.
- Rohrer, J. C. (1995). Primary teacher conceptions of giftedness: Image, evidence, and nonevidence. *Journal for the Education of the Gifted*, 18, 269-283.
- Renzulli, J. S. (1979). *What makes giftedness: A reexamination of the definition of the gifted and talented*. Ventura, CA: Ventura County Superintendent of Schools Office.
- Renzulli, J. S., Smith, L. H., White, A. J., Callahan, C. M., & Hartman, R. K. (1976). *Scales for rating the behavioral characteristics of superior students*. Mansfield Center, CT: Creative Learning Press.

Renzulli, J. S., Smith, L. H., White, A. J., Callahan, C. M., Hartman, R. K., & Westberg, K. L. (1997). *Scales for rating the behavioral characteristics of superior students*. Mansfield Center, CT: Creative Learning Press.

Sadker, M., & Sadker, D. (1993). Fair and square? Creating a nonsexist classroom. *Instructor*, 102(7), 44-45, 67-68.

Sadker, M., & Sadker, D. (1995). *Failing at fairness: How our schools cheat girls*. New York: Touchstone Press.

Tannenbaum, A. J. (1986). Giftedness: A psychosocial approach. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 21-52). New York: Cambridge University Press.

Weber, P. (1999). Mental models and the identification of young gifted students: A tale of two boys. *Roeper Review*, 21, 183-188.

The work reported herein was supported under the Educational Research and Development Centers Program, PR/Award Number R206R000001, as administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education.





**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## DOCUMENT IDENTIFICATION:

Title: <i>Teacher Bias in Identifying Gifted and Talented Students</i>	
Author(s): <i>Del Siegle</i>	
Corporate Source:	Publication Date:

## REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2A documents

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

*Sample*

\_\_\_\_\_

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

*Sample*

\_\_\_\_\_

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**2A**

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

*Sample*

\_\_\_\_\_

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**2B**

Level 1

Level 2A

Level 2B

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.  
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

*I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

Sign here, →  
please

Signature: <i>Del Siegle</i>	Printed Name/Position/Title: <i>Del Siegle - Assistant Professor</i>	
Organization/Address: <i>UConn</i>	Telephone: <i>860-486-0016</i>	FAX: <i>860-486-2900</i>
<i>431 Hillside Road Unit 3007</i>	E-Mail Address: <i>dsiegle@uconn.edu</i>	
<i>Storrs CT 06269</i>	Date: <i>4/30/2001</i>	



(over)