1998

Increasing teachers' and parents' awareness of indicators of giftedness in economically disadvantaged students

Clifton Gadberry Payne Jr.

*College of William & Mary - School of Education*

Follow this and additional works at: https://scholarworks.wm.edu/etd

Part of the Adult and Continuing Education Commons, Special Education and Teaching Commons, and the Teacher Education and Professional Development Commons

**Recommended Citation**


https://dx.doi.org/doi:10.25774/w4-gpja-sf03

This Dissertation is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
INCREASING TEACHERS' AND PARENTS' AWARENESS
OF INDICATORS OF GIFTEDNESS IN ECONOMICALLY DISADVANTAGED STUDENTS

A Dissertation Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Clifton Gadberry Payne, Jr.
May 1998
INCREASING TEACHERS' AND PARENTS' AWARENESS
OF INDICATORS OF GIFTEDNESS IN ECONOMICALLY
DISADVANTAGED STUDENTS

by

Clifton Gadberry Payne, Jr.

Approved May 1998 by

Roger R. Ries, Ph.D.
Chairperson of Doctoral Committee

James M. Patton, Ed.D.

Thomas J. Ward, Ph.D.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. THE PROBLEM</td>
<td></td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>2</td>
</tr>
<tr>
<td>Justification for the Study</td>
<td>2</td>
</tr>
<tr>
<td>Theoretical Rationale</td>
<td>4</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>8</td>
</tr>
<tr>
<td>Research Questions</td>
<td>10</td>
</tr>
<tr>
<td>Sample Description</td>
<td>12</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>12</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>14</td>
</tr>
<tr>
<td>Historical and Theoretical Overview of Giftedness</td>
<td>14</td>
</tr>
<tr>
<td>Summary</td>
<td>20</td>
</tr>
<tr>
<td>Historical and Theoretical Overview of Gifted Characteristics</td>
<td>20</td>
</tr>
<tr>
<td>Summary</td>
<td>28</td>
</tr>
<tr>
<td>Teacher Nominations and Expectations</td>
<td>29</td>
</tr>
<tr>
<td>Summary</td>
<td>34</td>
</tr>
<tr>
<td>Parent Nominations and Expectations</td>
<td>35</td>
</tr>
</tbody>
</table>
Summary ............................................................................................................. 39

3. METHODOLOGY

Sample ................................................................................................................. 40

Research Design and Statistical Analysis .......................................................... 43

Questionnaire ...................................................................................................... 46

Scenarios ............................................................................................................ 47

Research Hypotheses ......................................................................................... 47

Ethical Considerations ......................................................................................... 50

4. ANALYSIS OF THE RESULTS

Introduction ........................................................................................................ 51

Hypothesis One .................................................................................................. 55

Traditional, Nontraditional, and Parental/Home Characteristics .......................... 59

Hypothesis Two ................................................................................................ 59

Hypothesis Three ............................................................................................. 61

Hypothesis Four ............................................................................................... 63

Hypothesis Five ................................................................................................ 66

Hypothesis Six .................................................................................................. 73

Hypothesis Seven .............................................................................................. 75

Hypotheses Eight and Nine .............................................................................. 76

iv

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Summary........................................................................................... 78

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary..................................................................................... 81
Conclusions................................................................................. 86
Limitations................................................................................. 91
Recommendations..................................................................... 93

APPENDICES

Appendix A. Teacher Questionnaire........................................... 96
Appendix B. Teacher Inservice Agenda...................................... 102
Appendix C. Written Inservice Presentation ......................... 109
Appendix D. Parent Inservice Presentation ......................... 118
Appendix E. TAG Eligibility Form............................................. 125

REFERENCES.................................................................................... 127
Acknowledgments

I would like to acknowledge my wife, Donna, who has put up with the process of graduate school and this dissertation with encouragement and confidence. Also, my son, Michael, who has had to endure my absences due to multiple trips to Williamsburg (er). I would like to thank my parents, whose encouragement and financial help allowed me to complete this degree.

I would like to acknowledge the teachers of gifted education and administrators, whose enthusiasm for the project and delivery of information were invaluable. My colleagues, whose encouragement and reinforcement kept me focused on completing this degree. The guidance counselors, for helping me compile the mountain of information. The teachers, who had to endure several questionnaires, in-service, and constant pestering for information. The administrators, who allowed me to conduct the study in their schools with encouragement.

I would like to acknowledge Dr. Roger Ries, whose guidance suggestions allowed me to complete this project. I would like to thank Dr. Tom Ward for his guidance and expertise in statistical analysis. Finally, I would like to thank Dr. James Patton, whose earlier research in this area inspired me to develop a program which would make gifted education more equitable and diverse for all students.
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Chronbach's Table of Gifted Characteristics</td>
<td>25</td>
</tr>
<tr>
<td>Table 2</td>
<td>Racial Demographics of Teachers</td>
<td>54</td>
</tr>
<tr>
<td>Table 3</td>
<td>ANOVA of Total Pretest Variances</td>
<td>54</td>
</tr>
<tr>
<td>Table 4</td>
<td>ANOVA of Total Questionnaire</td>
<td>56</td>
</tr>
<tr>
<td>Table 5</td>
<td>Descriptive Statistics for Total Questionnaire</td>
<td>57</td>
</tr>
<tr>
<td>Table 6</td>
<td>ANOVA of Traditional Characteristics</td>
<td>60</td>
</tr>
<tr>
<td>Table 7</td>
<td>ANOVA of Nontraditional Characteristics</td>
<td>62</td>
</tr>
<tr>
<td>Table 8</td>
<td>Descriptive Statistics of Nontraditional Items</td>
<td>63</td>
</tr>
<tr>
<td>Table 9</td>
<td>ANOVA of Parent Characteristics</td>
<td>66</td>
</tr>
<tr>
<td>Table 10</td>
<td>Descriptive Statistics of Parent/Home Items</td>
<td>67</td>
</tr>
<tr>
<td>Table 11</td>
<td>ANOVA of Scenarios</td>
<td>70</td>
</tr>
<tr>
<td>Table 12</td>
<td>Descriptive Statistics of Scenarios</td>
<td>71</td>
</tr>
<tr>
<td>Table 13</td>
<td>ANOVA of Actual Teacher Referrals of Economically Disadvantaged Students</td>
<td>74</td>
</tr>
<tr>
<td>Table 14</td>
<td>Actual Teacher Referral Rate</td>
<td>74</td>
</tr>
<tr>
<td>Table 15</td>
<td>ANOVA of Valid Teacher Referrals of Economically Disadvantaged Students</td>
<td>76</td>
</tr>
<tr>
<td>Table 16</td>
<td>Actual and Valid Referral Rates by Parents</td>
<td>78</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1 - Total Questionnaire</td>
<td>58</td>
</tr>
<tr>
<td>Figure 2 - Nontraditional Characteristics</td>
<td>64</td>
</tr>
<tr>
<td>Figure 3 - Parent/Home Characteristics</td>
<td>68</td>
</tr>
<tr>
<td>Figure 4 - Referral Scenarios</td>
<td>72</td>
</tr>
</tbody>
</table>
INCREASING TEACHERS' AND PARENTS' AWARENESS OF INDICATORS OF GIFTEDNESS IN ECONOMICALLY DISADVANTAGED STUDENTS

ABSTRACT

Low socioeconomic students represent a population in public schools which is underrepresented and underserved in the talented and gifted programs. Part of the problem may be due to teachers' and parents' abilities to recognize giftedness in economically disadvantaged potentially gifted students and to nominate them for a gifted screening. The present study attempted to determine if a training program for teachers and parents would increase the valid referral rate of potentially gifted economically disadvantaged students. Teachers at one school received an oral presentation and written summation of economically disadvantaged potentially gifted student characteristics. Teachers at a second school received the written summation only, while third school served as the control. Results indicate a significant improvement in the teachers' understanding and awareness of traditional, nontraditional, and parent/home characteristics in general. Teachers from the oral and written presentation group showed a significant improvement in their ability to accurately refer economically disadvantaged potentially gifted students.
following intervention. Teachers and parents from the treatment schools referred more economically disadvantaged students following treatment than from the control school, although not to a significant degree. However, these students continued to have difficulty meeting the eligibility criteria of the gifted program requirements, resulting in few new students following the intervention.

Clifton Gadberry Payne, Jr.

Department of Counseling and School Psychology

The College of William and Mary in Virginia

x
INCREASING TEACHERS' AND PARENTS' AWARENESS
OF INDICATORS OF GIFTEDNESS IN ECONOMICALLY
DISADVANTAGED STUDENTS
Chapter 1

Introduction

Statement of the Problem

The purpose of this study is to determine the effectiveness of a training program for teachers and parents that will result in more frequent referrals of low socioeconomic students to the talented and gifted (TAG) program.

Justification for the Study

Low socioeconomic students represent a population in public schools who are underrepresented and underserved in the talented and gifted programs (Coleman & Gallagher, 1992; Richert, 1987). Although there is consensus that gifted children can be found in all social classes and cultures, there is little question that economically disadvantaged students are not found in talented and gifted programs in proportionate numbers (Zappia, 1989). Economically disadvantaged students have qualitatively different and quantitatively fewer educational opportunities than students from middle and high socioeconomic backgrounds (Machado, 1987). If their educational potential is not realized or appreciated by their teachers
and parents, then they will likely not achieve to their ability and may possibly continue in the cycle of poverty.

Students from a low socioeconomic background have different behavioral manifestations than those of middle and high socioeconomic backgrounds (Maker & Schiever, 1989; Baldwin, 1985). Their learning styles are often different as well as their attitude towards school and achievement. Teachers' expectations towards the two groups are also different and may result in a bias, stereotyping, or lower expectations towards the poorer class of students (Pendarvis, Howley, & Howley, 1990). Because teacher nominations and rating scales are typically the entry point into the referral and eligibility process for the talented and gifted program, these lower expectations can prohibit low socioeconomic students from being initially referred. When teachers are trained to observe nontraditional gifted characteristics, they are more likely to increase their rate of referrals as well as improve the validity of their gifted nominations (Gear, 1978; Feldusen, VanTassel-Baska, & Seeley, 1989).

Additionally, parents of these potentially gifted students frequently have lower expectations and/or provide less educational stimulation or support (Scott, Perou, Urbano, Hogan, & Gold, 1992). The number of
referrals from low socioeconomic parents is significantly lower than those referrals from middle to higher income families, even when the disadvantaged parents are aware of the gifts and abilities of their child (Scott et al., 1992). Parent education regarding general information about the talented and gifted program and characteristics to observe in their children will likely increase the referral rate of these students by their parents and/or guardians (Frasier & Garcia, 1995).

In summary, the purpose of this study is to investigate the effects of teacher and parent training on the valid referral rate of low socioeconomic students. Studies in the past have focused on the effects of teacher or parent training on gifted referrals, but few studies have combined the two areas of training to increase referral rates (Jacobs, 1971; Frasier & Garcia, 1995).

Theoretical Rationale

The federal government has adopted the definition of giftedness five times since 1970, moving from vague to more complex, and included an emphasis on gifted "potential" as well as traditional giftedness in the late 1970's definition. The shift towards a more comprehensive definition of giftedness began with Marland (1972), which reads as follows:
"Gifted and talented children are those identified by professionally qualified persons, who, by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination: 1) general intellectual ability, 2) specific academic aptitude, 3) creative or productive thinking, 4) leadership ability, 5) visual and performing arts, & 6) psychomotor ability". This definition left little room for identifying nontraditional potentially gifted students who manifest their abilities in alternative ways. The Jacob K. Javits Gifted and Talented Student's Education Act of 1988 mandated a high priority for identification of students from racial and ethnic minority groups, economically disadvantaged, and those with limited English proficiency. These students are typically at risk of being unrecognized for their gifts and talents. The latest federal definition (USDE, 1993) includes "children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment," which indicates a move towards identifying students (including economically
disadvantaged students) who may exhibit their giftedness in alternative behaviors (USDE, 1993). Although a majority of states agree with this in principle and theory, many states are not changing the identification process that would find more gifted economically disadvantaged students (Coleman & Gallagher, 1995).

Students from the middle to high socioeconomic classes make up the overwhelming majority in talented and gifted classes (VanTassel-Baska, Prillaman, & Patton, 1989). Although many states and localities use the broad definition of giftedness, in reality the majority of students identified as gifted fit the one pattern of manifestation of giftedness. These are the students who are high achieving and conforming in school. There are different behavioral manifestations of giftedness in low versus middle/high socioeconomic level students. The students from the higher income families have been called "teacher pleasers" due to their traditional behaviors including cooperativeness, neatness, strong achievement, and high goal aspirations (Ford, 1996). Economically disadvantaged gifted students, on the other hand, may exhibit their giftedness by: being argumentative and questioning, "getting by" in achievement, and seeking low goal attainment (Baldwin, 1985). Ford (1996) notes that teacher attitude and expectations often are the cause of low referral rates of
racially and culturally diverse students because teachers lack the knowledge of these nontraditional gifted behaviors. Studies have demonstrated that educators and the general population have inaccurate expectations and negative stereotypes about the abilities of children from diverse cultures and socioeconomic levels (Maker, 1996; Ogbu, 1992; Burnstein & Cabello, 1989). Teachers who are not trained to identify these nontraditional characteristics of giftedness will often not refer these children because they do not "fit the mold" of traditional (advantaged students) gifted behaviors (Burnstein & Cabello 1989). Investigations have established that the accuracy of teacher nominations can be improved significantly with specific teacher training (Kitano & Kirby, 1986; Sisk, 1994). Teacher nominations and rating scales do have practical value when teachers have been trained in nontraditional gifted manifestations because the students and their work have been observed over a period of time and in a variety of academic and social situations. They can also compare the student's work to average and above average students in their class as well as in previous classes. While research indicates the nominations from teachers without training is questionable, teacher nomination forms which are based on a list of specific characteristics and used after training can be relatively accurate (Gear, 1978; Ford, 1996; Frasier & Garcia, 1996).
Parents from low socioeconomic backgrounds are less likely to refer their children to the gifted program even when they are clearly eligible to participate (Scott, Perou, Urbano, Hogan, & Gold, 1992). This low referral rate may be due to being unaware about the gifted program, lower expectations regarding their child, cultural issues, or perceptions about the program being "elitist". Schools may not encourage parent nominations because of a prevailing belief that parents tend to overestimate their child's abilities (Gallagher & Gallagher, 1994). Research does suggest that parents are capable of identifying their gifted children as well as teachers, possibly due to the children being observed in informal, more relaxed settings as compared to a structured and conforming classroom (Whitmore, 1980). Research suggests that parents who are informed about the gifted program and the process of referral, as well as instructed about the behavioral manifestations of giftedness, may increase the referrals of their children to the talented and gifted program (Anthony, 1990).

**Definition of Terms**

Economically disadvantaged- For the purpose of this study, students who are eligible to receive a free or reduced lunch. This criteria has been used in previous research (Harty, Adkins, & Sherwood, 1984; Frasier et al.,
1995). The federal government, which bases free or reduced lunch eligibility on family income and number of people living in the household, assumes that families who meet this criteria are at an economic disadvantage.

Traditional gifted student—For the purpose of this study a traditional gifted student will be defined as one who comes from an economically advantaged home.

Nontraditional gifted student—For the purpose of this study a nontraditional gifted student will be defined as one who comes from economically disadvantaged home, has behavioral manifestations that aren't typical of the average gifted student, and/or comes from educationally unsupportive homes. Ford (1995) refers to the nontraditional gifted student as one who is a minority, has a limited English background, or who is economically disadvantaged.

Valid referral—A referral of a student made by a teacher or parent to the gifted program where the student is eventually found eligible under the criteria to participate in the program. A student can be initially referred by anyone, including teachers, family members, self, or someone in the community. An eligibility committee meets to determine if they meet the criteria for entering the PADI program (K-3 grades) or the TAG program
(4-8 grades). Criteria are based on the following factors: ability, achievement, teacher recommendation, and "other factors" (see Appendix E).

**Research Questions**

The study will attempt to answer the following questions:

1) Is there a difference in the overall teachers' perceptions and knowledge towards economically disadvantaged gifted students prior to and following the teacher training program as compared to a control group with no teacher training?

2) Is there a difference in the teachers' perceptions and knowledge of traditional behavioral manifestations prior to and following the teacher training program as compared to a control school with no teacher training?

3) Is there a difference in the teachers' perceptions and knowledge of nontraditional behavioral manifestations prior to and following the teacher training program as compared to a control group with no teacher training?

4) Is there a difference in the teachers' perceptions and knowledge of parental/home characteristics of economically disadvantaged potentially
gifted students prior to and following the teacher training program as compared to the control group with no teacher training?

5) Are teachers better able to identify potentially gifted students for referral based on descriptions of nontraditional and traditional gifted characteristics following training as compared to the teachers of the control group that received no training?

6) Is there an increase in the frequency of actual teacher referrals of economically disadvantaged students to the talented and gifted program in the treatment group with training as compared to the control group with no teacher training?

7) Is there an increase in the frequency of valid teacher referrals of economically disadvantaged students to the talented and gifted program in the treatment groups with training as compared to the group with no teacher training?

8) Is there an increase in frequency of actual referrals of children from economically disadvantaged parents in the treatment groups with parent training as compared to the control group with no parent training?

9) Is there an increase in frequency of valid referrals of children from economically disadvantaged parents in the treatment group with parent training as compared to the control group with no parent training?
Sample Description

The study was implemented with teachers and parents of students in two elementary schools, kindergarten through fifth grade, and a primary school, kindergarten through third grade. A pre- and post-test assessing teachers' perceptions of traditional and nontraditional gifted characteristics, as well as a general knowledge of the gifted program, were given to teachers prior to and following a general training at the two treatment schools. Training at one elementary school included general information about the talented and gifted program and characteristics of traditional and nontraditional gifted students. Economically disadvantaged parents at both treatment schools were trained in general information regarding the gifted program, the process of referral to the gifted program, and characteristics of potential giftedness.

Training at the primary school included only materials from the in-service with no presentation. The number of new referrals of economically disadvantaged students by teachers and parents at the treatment and control schools was compared to the number of previous referrals for a similar period during the previous year.

Limitations of the Study

Limitations of this study include the following:
1) The study was conducted for approximately four months which made comparisons of pretraining to posttraining limited. A more conclusive study may result from comparing nominations on a year to year basis.

2) Pre- and post-test measures indicated immediate change of teachers' perceptions and awareness. Maintenance of valid referrals from teachers and parents of economically disadvantaged students will require follow-up training and assessment.

3) It was difficult to meet with all parents of economically disadvantaged students due to inconsistent attendance at school functions. A packet of information was sent home to all parents of children eligible for free or reduced lunch that included all information in the in-service training.

4) The current study was quasi-experimental in nature because teachers were not randomly selected to participate in the study. All teachers were asked to participate because of the intact nature of the schools. This type of research limits the generalization (external validity) of the study.
Chapter 2

Review of the Literature

Introduction

In this section theoretical concepts relevant to the identification of economically disadvantaged gifted children by teachers and parents are reviewed. This chapter is divided into four sections that summarize research and theory relevant to the study: giftedness, characteristics of traditional and nontraditional gifted students, teacher nomination, and parent nomination.

Historical and Theoretical Overview of Giftedness

Scientific interest in the identification of gifted people can be traced back to Terman's (1925) study of intelligence, where his unidimensional definition of giftedness was a high score on his standardized intelligence test (I.Q. > 130). Terman operated under the premise that gifted people fell within the top first percentile of intelligence on the normal distribution curve and perceived giftedness as synonymous with intelligence. Until the 1970's, Ford (1996) reports the definition was operationally defined in two
ways: high scores on intelligence tests (130+) and/or by high scores on achievement tests (90+%). The federal government has adopted five definitions of giftedness since 1970, varying from vague to more complex. The latest definition by the United States Department of Education (USDE, 1993) states:

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

Ford (1996) notes that educators continue to place primary emphasis on general intellectual ability and academic achievement while excluding creativity, leadership, and the performing arts.

Definitions of giftedness from theorists range from the unidimensional definition to the current multidimensional concept that the federal government has adopted. Marland (1972) was instrumental in developing a construct of giftedness that extended the definition from intellectually or academically gifted to other manifestations, including creative or productive thinking, leadership ability, and visual or performing arts. He also stressed gifted potential, where in his definition he states "Gifted and
talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance" (Marland, 1972). Perdarvis, Howley, and Howley (1990) report that most states continue to incorporate Marland's definition of giftedness into the state definition.

Another definition that was indicative of the policy in the late 1980's was the Jacob K. Javits' Gifted and Talented Students Act of 1988 (Javits, 1988, Title IV, Part B of P.L. 100-297) which defined gifted and talented students as "children and youth who: 1) give evidence of higher performance capability in such areas as intellectual, creative, artistic, or leadership capacity or in specific academic fields, and whom 2) require services or activities not ordinarily provided by the schools in order to develop such capabilities fully." J.J. Gallagher and Gallagher (1994) note that two concepts in this definition are especially important: potential, where one possesses the qualities that make it more likely that he or she will attain more; and production, which is the actual performance of gifted work. It is clear that the definition of giftedness has shifted from a unidimensional concept to actual or potential giftedness across five areas.

Historically, educators relied almost solely on standardized forms of intelligence tests. As the field has evolved, new initiatives have demanded
more sources of information, including achievement tests, creativity tests, checklists by teachers and parents, portfolio assessment, and personal interviews (Shaklee, 1997). However, intelligence assessment continues to be the most important indicator for most educators. This practice has led to a form of segregation where the dominant culture, or middle/upper class European American students have performed well on these tests, and students from lower socioeconomic levels or non-dominant cultures have not performed as well. Richert (1997) states that this discrepancy has resulted in economically disadvantaged and non-dominant students being underrepresented and underserved.

Richert (1992) reports that the poor are routinely screened out of gifted programs because their disadvantage cuts across every subpopulation. She found that the poor, as defined by the federal standard of students qualifying for free or reduced lunch, are underrepresented by 100 to 500%, although it is noted that she did not report how she obtained these figures in this citation. According to Ford (1996), Renzulli's and Sternberg's contemporary theories of giftedness are at the forefront of efforts designed to make identification of gifted students from all cultural, ethnic, and socioeconomic groups more equitable. Renzulli (1986) defines giftedness as an interaction of creativity, above average ability, and task
commitment. His theory broadens the identification of students from three to five percent to fifteen to twenty percent. Renzulli believes that talent pools support the notion of potential and talent development.

Sternberg's (1985) theory of intelligence has strong ramifications in the identification of disadvantaged students. He defines intelligence as an interaction of three components: 1) componential intelligence, most valued in schools and characteristic of those high achieving students who naturally use analytical thinking skills; 2) experiential intelligence, used in creative or divergent thinking, where students combine disparate experiences in insightful ways without necessarily achieving high test scores; and 3) contextual intelligence, or generally common sense and practical reasoning skills, or those who appear to be "street smart" but are not necessarily high test achievers.

Ford (1996) suggested that Sternberg's theory was noteworthy in the following manner: intelligence and giftedness cannot be understood outside of one's sociocultural context. Someone considered gifted in one culture may not be considered gifted in another culture. Sternberg and Renzulli's theories help define giftedness in multidimensional concepts that not only include traditional gifted behaviors, but also stress gifted
behavioral manifestations in nontraditional students, including those from economically disadvantaged homes.

Coleman and Gallagher (1992) report that all fifty states now encourage local systems to take certain steps designed to increase the number of underrepresented students and give them the opportunity to participate in the gifted program. However, the demographics suggest that the goal of full services to special populations has not been reached. Underrepresented students include minority students (especially African-American, Hispanic, and Native Americans), students with English as a second language, and economically disadvantaged students across all cultures.

While most localities agree in principle with their current state definitions of giftedness, many continue to use intelligence and achievement scores as measured on group standardized tests as the formal (and typically sole) criteria for identification as gifted. In VanTassel-Baska, Patton, and Prillaman's (1989) national survey, only twelve districts reported using "disadvantaged" in their definition of giftedness. These factors often prevent economically disadvantaged students from gaining access to gifted education.
Summary

Definitions of giftedness have progressed from a unidimensional concept of high intelligence to the recent multidimensional concept that integrates and distinguishes abilities with actual production and include those students who are "potentially gifted". Although most localities agree in principle with this multidimensional concept, many districts do not identify nontraditional gifted students. Furthermore, there needs to be more agreement on the construct of giftedness within the context of diverse cultures and economic levels so that the concept of "gifted potential" will not be limited to the dominant Euro-American middle class traditions. It is not the purpose of this study to redefine the construct of giftedness, but to inform teachers and parents of nontraditional gifted behaviors and how these behaviors affect performance.

Historical and Theoretical Overview of Gifted Characteristics

Gallagher and Kinney (1974) acknowledge that students from all cultures, ethnic groups, and socioeconomic levels share characteristics of giftedness, including the ability to meaningfully manipulate tasks held valuable by their subculture; to think logically when given appropriate
information; to use stored knowledge to solve problems; and to extrapolate knowledge to new or novel situations. However, these typical gifted behaviors are most often observed in economically advantaged students. Gifted students from minority or economically disadvantaged homes often exhibit their behaviors in nontraditional qualities that "mask" their giftedness to practitioners (Sisk, 1994). There is widespread agreement that individuals with exceptional gifts can be found in every socioeconomic level (Zappia, 1989), although children from various minority and economically disadvantaged groups are severely underrepresented in gifted programs. However, studies illustrate that most identified gifted learners come from high socioeconomic backgrounds (VanTassel-Baska, Patton, & Prillaman, 1989).

The literature rarely separates characteristics of low income gifted children from those of gifted minorities (primarily African-American, Hispanic, and Native Americans). However, there are differences noted between different socioeconomic levels in different races and cultures. Cohen (1989) agrees that middle class African-American children are more similar to middle class children of any ethnic or racial group than to poor African-American children. She believes that the issue is not race, but socioeconomic level. Maker (Kirschenbaum, 1990) states that minority
students who are well acculturated and are neither poor nor bilingual have a better chance of being identified than those who are poor and have not accepted the goals and values of mainstream society. She suggests they will either not be nominated to the gifted program, or if selected, won't be served well.

Richert (1987) states that disadvantage cuts across every subpopulation and due to this disadvantage impoverished students are the most excluded for identification, or even nomination to, the gifted program. When income status is factored into minority representation, children from impoverished environments do not have the stimulating educational materials (books, computers, etc.) that higher income children have in their homes. Jencks et. al (1979) reports that family background accounts for approximately half the variance in children's educational attainment, and economic status is a major determinant in the families overall impact. According to Jencks et. al (1979), economically disadvantaged parents may be limited in their ability to offer the educational and financial support that is often provided by high income families. Education may not be a high priority in low income families. This lack of educational and financial support is especially evident when one parent is shouldering all of the financial, emotional, and educational
responsibilities of the household (Machado, 1987).

In summary, research in gifted education often combines economically disadvantaged gifted with minority gifted, perhaps because minorities disproportionately have less income. However, research does indicate intragroup differences between low and middle/high socioeconomic levels that cut across all ethnic and cultural backgrounds. There is a need to identify these students because they are likely to proceed invisibly through school and not reach their innate potential.

Research from the past two decades has identified traditional concepts of giftedness and their behavioral manifestations that are seen in the majority of potentially gifted students. The following is a list of these manifestations from Ford (1997) that are often seen in traditionally gifted students:

1. Large memory; acquires and retains information quickly
2. Inquisitive; searches for significance and meaning
3. Intrinsic motivation; task commitment
4. Seeks cause and effect relations
5. Heightened sensitivity; concerned about equity and justice
6. Advanced, large vocabulary; verbal proficiency
7. Creative, inventive, divergent thinkers
8. Empathetic, strong interpersonal skills  
9. Interpersonal; desire for social acceptance and approval  
10. Strong sense of humor  
11. Diverse interests  
12. Intense concentration  
13. High energy  

There are differences in the behavioral manifestations of these gifted concepts between traditional (Anglo-, middle/upper class) and nontraditional (i.e., economically disadvantaged and minority) potentially gifted students which have been studied over the last two decades. Although some researchers feel these lists of differences are stereotypical and create biases (Ford, 1996), they can be useful for educators by describing behavioral manifestations of giftedness that are nontraditional. Maker and Schiever (1989, p.211) with reference to Cronbach (1977), developed a table of characteristics of giftedness and cultural values of low socioeconomic status groups and the behavior resulting from this interaction (See Table 1).  

This list, although certainly not exhaustive, illustrates how students from different backgrounds may use their giftedness to manipulate their environment.
Table 1

Chronbach's Table of Gifted Characteristics

<table>
<thead>
<tr>
<th>Absolute Aspects of Giftedness</th>
<th>Cultural Values Generally Characteristic of Low SES</th>
<th>Behavioral Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>flexible thought process</td>
<td>conformity, mastery of minimum academic essentials</td>
<td>acting out</td>
</tr>
<tr>
<td>accelerated pace of thought process</td>
<td>physical punishment, blunt orders rather than discussion</td>
<td>manipulation</td>
</tr>
<tr>
<td>unusual sensitivity to the expectations of others</td>
<td>parental pressure conduct oriented, rather than task-oriented achievement</td>
<td>compliant behavior weak academics</td>
</tr>
<tr>
<td>leadership</td>
<td>immediate or short-term gratification</td>
<td>leadership in street gangs, delinquency</td>
</tr>
<tr>
<td>persistent, goal-directed</td>
<td>survival in circumstances</td>
<td>&quot;streetwiseness&quot;</td>
</tr>
</tbody>
</table>

Other checklists have been developed for use as screening instruments that focus on nontraditional behaviors. Gay (1978) devised a checklist to evaluate different manifestations of giftedness in African-American children. For example, instead of using the typical descriptor of gifted children "interest and ability in perceiving relationships", he modified this statement to "seeks structure and organization in required tasks; may be slow to motivate in abstract thinking skills." Instead of "academic facility
and strength", Gay suggested the behavior manifestation be "good at basic school tasks; may not have expected achievement due to inferior schooling".

Baldwin (1985), in developing her screening instrument for nontraditional gifted students, suggested educators look for behavioral indicators such as good memory, high tolerance for ambiguity, inventiveness, and revolutionary ideas. Hilliard (1976) developed the "Who" and "O" checklist to screen for giftedness in the African-American population, and determined African-Americans tend to view things in entirety; appear to focus on people and not on objects; prefer novelty, personal freedom, and distinctiveness; tend to approximate time, space, and numbers instead of focusing on complete accuracy; have a keen sense of justice and quickly perceive injustice; and seem to prefer inferential reasoning to deductive or inductive reasoning.

Torrance (1977) developed the Checklist of Creative Positives (CCP) primarily for low income children that continues to be one of the best sources of behavioral characteristics of minority and/or disadvantaged youth. Following is a list of behavioral characteristics that are considered positive on the CCP:

1. Ability to express feelings and emotions
2. Ability to improvise with commonplace materials and objects

3. Articulateness in role playing, sociodrama, and story telling

4. Enjoyment of and ability in visual arts, such as drawing, painting, and sculpture

5. Enjoyment of and ability in creative movement, dance, drama, etc.

6. Enjoyment of and ability in music, rhythm, and problem solving

7. Use of expressive speech

8. Fluency and flexibility in figural media

9. Enjoyment of and ability in group activities, problem solving, etc.

10. Responsiveness to the concrete

11. Responsiveness to the kinesthetic

12. Expressiveness of gestures, body language, etc., and ability to interpret body language

13. Humor

14. Richness of imagery in informal language

15. Originality of ideas in problem solving

16. Problem centeredness or persistence in problem solving

17. Emotional responsiveness

18. Quickness of warm up

In summary, traits attributed to potentially gifted students, in general,
focus on strong intellectual and processing skills; academic achievement; interpersonal skills; humor; motivation; and creativity. These traits are manifested in different ways by all students and all students have their own strengths and weaknesses. However, significant differences do exist in the behavioral manifestations of economically disadvantaged students versus middle/upper socioeconomic level students. There are striking similarities as well as significant differences that will affect academic achievement and production. If educators and parents are not aware that these nontraditional behaviors are indicators of giftedness in economically disadvantaged students, they will likely be overlooked for nomination and identification as gifted.

Summary

Teacher and parent nomination and identification forms typically have a list of behaviors to rate (i.e., "exceptional", "usually demonstrates", "does not demonstrate") in relation to the average student. These lists are often based on behaviors that are manifested by the traditional "teacher pleaser" gifted student and have been aggregated by researchers based on surveys of teachers of student characteristics who are already identified as gifted. If educators are not aware or do not distinguish exceptional qualities of nontraditional gifted students, they will neither be nominated nor
identified for the program. Previous research is questionable in this area due to weak external validity of the studies. Weaknesses include small sample sizes, nonrandom assignment of experimental treatment, and difficulties in factoring out preexisting biases and intragroup differences. Much of the later research (1990's) also bases its conclusions on previous research by Gay (1978), Frasier (1989), and Cronbach (1977).

Most studies of characteristics of nontraditional gifted students combine both minorities and economically disadvantaged as a single group. This combination is likely due to the overwhelming disproportion of minority students falling below the poverty line. Since economic disadvantage falls in every race and cultural group, it would be practical to distinguish between race and socioeconomic level to determine more absolute characteristics of giftedness between different economic levels. This study will focus on socioeconomic levels rather than race when describing characteristics of the nontraditional gifted to allow parents and teachers to understand that these characteristics can be observed in all races.

**Teacher Nominations and Expectations**

Teacher referral remains the first step to entry into the gifted program (Perdarvis, A.A. Howley, & Howley, 1990). According to J. J. Gallagher and
Gallagher (1994), teacher identification was the primary and typically only means of entry into the program during the first half of the century. Unfortunately, little has changed, as parent, peer, and self-nominations continue to be infrequent (Archambault, 1993). Nominations generally constitute the first step in the identification process and it has been long recognized that economically disadvantaged students are simply not referred to programs of the gifted to the same extent as majority students. Coleman and Gallagher (1995) report that teacher nominations, used in 46 states, remain the most commonly used screening tools. A failure to look at economically disadvantaged students has been cited as one of the reasons they are underrepresented in the gifted program (Davis & Rimm, 1989; High & Udall, 1983). The failure of teachers to nominate and identify gifted children accurately may be a reflection of their stereotypes and inability to recognize different behavioral manifestations of giftedness (Tuttle, Becker, & Sousa, 1988). Studies show that many educators view economically disadvantaged and culturally diverse groups as homogeneous units with all members sharing the same characteristics (Ford, 1996; Maker & Schiever, 1989). Silverman (1990) suggests that teachers, by virtue of their close association...
and knowledge of students' academic performance, would be ideal candidates to screen students for the gifted program. However, she notes several problems with the nomination procedure. First, there may be a self-fulfilling prophecy where the teacher may not believe a student can perform; consequently they do not consider him or her for advanced programs. Second, the child may exhibit overlying behavioral manifestations which mask the giftedness, at least in the eyes of the teachers. In general, the practice of stereotyping these children as being negatively affected by their environments often causes them to be overlooked.

Ford (1996) states that educators tend to favor students who are cooperative, eager to please, strong in academics, neat and on time, and never talk back or question their expertise. These students may or may not be gifted, but they will tend to be perceived as gifted more so than the nontraditional student. Children who are stubborn, egotistical, rule-breaking, or highly divergent may not be the teachers' favorites, but they may be the most gifted. Studies have shown that teachers and the general population have inaccurate perceptions and negative stereotypes of the abilities of children from economically disadvantaged and culturally diverse homes (McCarty, Lynch, Wallace, & Benally, 1991; Ogbu, 1992).
Burstein and Cabello (1989) found that 38 percent of student teachers believe that poor academic achievement among minority students was due to cultural deficits. Not only do these stereotypes affect nomination into gifted programs, but the effects of teacher expectations may well affect the classroom performance and achievement of these students, further exacerbating the unlikelihood of their future nomination (Good & Brophy, 1994).

Research indicates that referrals from teachers without training are questionable (Gear, 1976; Kitano & Kirby, 1986; Feldhusen, VanTassel-Baska, & Seeley, 1989). Gear (1978) conducted one of the first studies that attempted to compare referral rates from teachers with training in identifying nontraditional gifted students to a control group of teachers without training. He concluded that given training, teachers use their judgment as an effective screening instrument in identifying potentially gifted students. Several researchers have developed in-service training programs that attempt to increase the knowledge of educators about behaviors of nontraditional potentially gifted students (Whitmore, 1980; Richert, Alvino, & McDonnel, 1982; Sisk, 1994).

Teacher preparation typically focused on recognizing and interpreting unexpected characteristics of the gifted, which are often negatively
correlated with school achievement and classroom performance (Eby & Smutney, 1990; Wood & Achey, 1990). Ford (1996, p. 40) suggested training should focus on the following: 1) teachers should be trained to understand and respect the students' cultural heritage and knowledge base in addition to the students' worldviews, values, and customs; 2) teachers should understand the students' communication skills (including nonverbal language); 3) teachers must understand and decrease their stereotypes; and 4) teachers must gain a greater respect for individual and group differences in learning behaviors and achievement. Tuttle, Becker, & Sousa (1988) concluded that with in-service preparation and guidelines teachers could become more effective in their perceptions, not only for potentially gifted students, but for all students in general. Teachers need to be trained not only in the traditional characteristics of giftedness but also in the nontraditional characteristics of the nontraditional potentially gifted student to increase the accuracy of their nominations.

Anthony (1990) also concludes that a major obstacle to nontraditional potentially gifted students being nominated to gifted programs is a lack of teachers' awareness of nontraditional behavior characteristics. She feels teachers are the "gatekeepers" and suggests the following barriers to
referral of potentially gifted economically disadvantaged students: 1) attitudes and expectations of educators who often don't believe there is giftedness in culturally different populations, and 2) failure to select, assign, and provide appropriate in-service education to teachers, counselors, administrators, and other educators who create the learning environment and who, by serving as the gatekeepers for programs and services, are critical in developing the talent pool.

When training is provided and more economically disadvantaged students are referred and/or identified, the acceptance of change will vary (Anthony, 1990). Teachers, administrators, parents, and even the traditional gifted student already identified may oppose changes to the diversity of the program. Some feel it will "water down the program" and others may feel it will take needed resources away from the "truly gifted". These stereotypes or concerns should be dealt with during training so the teachers will be committed to developing an inclusive and equitable program that meets the needs of all students.

Summary

Historically, the subjective judgment of teachers has been the sole or primary criterion for nomination and entrance into the gifted program. Researchers often criticize this method because of educator bias and
stereotyping of economically disadvantaged and culturally diverse students. Teacher nominations without in-service training should be interpreted with caution. Since teachers focus on the traditional student characteristics, many economically disadvantaged students will be overlooked. In-service training of nontraditional manifestations of giftedness certainly appears to increase overall nomination of economically disadvantaged students, but few if any studies have investigated the accuracy of referrals.

Teacher referral has practical value because a teacher sees the student over a long time in a variety of academic and social situations. In addition, teachers are in a position that enables them to compare potentially gifted students to other gifted and non-gifted students in their current class as well as to previous classes. This study attempted to increase the knowledge of teachers of how children manifest their gifts differently across different socioeconomic levels. The goal was to increase teacher's awareness which would encourage a change in attitude regarding stereotypical beliefs about economically disadvantaged students. This study also attempted to increase teachers' skills in making valid referrals of their nontraditional potentially gifted students.

Parent Nominations and Expectations
Underreferral is a problem for parents as well as teachers. The relatively few referrals from economically disadvantaged parents have often been attributed to a lack of knowledge and different cultural values regarding the gifted program, as well as limited participation in organizations and advisory groups concerned with giftedness (Frasier & Garcia, 1995). Scott et. al (1992) conducted a study that speculated that the underrepresentation of minority students was related to the percentage of parents who nominate their child for consideration. They found differences in the referral rates between minority (African-American and Hispanic) and non-minority (Anglo-American) parents; however, they concluded that although both minority and nonminority parents were equally aware of the gifted traits exhibited by their children, fewer minority parents referred them for possible inclusion in the gifted program. Parents often know intuitively when they have a gifted child, and they have known it since the early years (Smutney, 1994). They may notice that the child is "different" from the others, often most noticeable in the child's play group, nursery school, or kindergarten. Some researchers feel this "real world" intelligence can be more accurate as an early indicator of giftedness than conventional methods. In summary, although minority and economically disadvantaged parents often
recognize the giftedness of their child and may be the best ones to do so, they are much less likely to nominate them for consideration in the gifted program.

Parents have the advantage of observing their children in informal and formal situations in a variety of settings. At the kindergarten through third grade level, parents are among the best sources of information about a child's strengths and intrinsic motivation demonstrated by extracurricular activities outside of school (Richert, 1992). Students from limited income families tend to express themselves more under less rigid conditions; thus, special abilities may be more observable in the home and community. Jacobs (1971) found that parents were able to identify 61 percent of gifted children and showed less tendency than teachers to overestimate their ability. He concluded that this may be due to being observed in a casual atmosphere as opposed to a rigid classroom. However, some research does suggest that parents nominate more children of average ability than teachers (Ciha et al., 1974). There is little, if any, research that reports how the nomination rate is affected following parent training of the gifted program and characteristics.

There is a prevailing belief among educators that all parents think their child is gifted and will overestimate their child's abilities. However, many
school districts are becoming increasingly aware of the value of parent referrals. Nomination forms for parents have been developed that attempt to capture the child's abilities that may not be seen at school (Whitmore, 1980). Several cautions are made in general by researchers involving parent nominations: 1) parents may well overestimate or underestimate their child's abilities, depending on what they perceive about the gifted program or the purpose of the questionnaire; 2) parents may not know their child as well as the teacher, depending on who is the primary caretaker and their work schedule. With exception to these cautions, most feel a multimodal nomination procedure will increase the likelihood of referring and identifying nontraditional gifted students.

An economically disadvantaged parent may also view the gifted program as being "elitist". If there are few of their child's peers or siblings in the program, they may feel (with reason) that their child may not "fit in". If they are unaware about the program's goals and objectives and perceive it to be primarily Caucasian and economically advantaged, they may have problems with their child entering the program. A method to decrease this perception is to develop a program that is equitable and diverse as well as to increase public awareness about the program's goals and objectives.
Anthony (1990) suggests that an excellent way to generate parent nominations is to send a letter home explaining the program for the gifted and inviting them to nominate their child. She also suggests speaking within the community to organizations that have access to economically disadvantaged and minority groups, such as churches. These strategies will likely increase awareness as well as their opinion of the program.

Summary

Parent referral for economically disadvantaged students is significantly low in comparison to referral rates from teachers and majority parents. Although a few nomination forms have been developed for parents with the intent of identifying nontraditional gifted behaviors, the research does not appear to include parent in-service on gifted characteristics of nontraditional students or the gifted program in general. The research also does not state how the disadvantaged parents are made aware of the program and traditional/nontraditional gifted characteristics.
Chapter 3

Methodology

Sample

The data from this study was gathered from two elementary schools and one primary school located on the Eastern Shore of Virginia where this researcher is employed as a school psychologist. The Eastern Shore is located on the southern tip of the Delmarva Peninsula and has an approximate population of 33,000 residents. Agriculture and seafood are the primary industries in this rural section of Virginia. The overall socioeconomic level of this county is low, ranking third lowest in the state in per capita income. The unemployment rate, although seasonal, was approximately 14 percent during 1996. The school system in which this study was conducted has thirteen schools with approximately 5400 students.

Two elementary schools (kindergarten through fifth grade) and one primary school (kindergarten through third grade) were selected for this study. The first school, Elementary School 1, has an enrollment of 805 students with a racial breakdown as follows: African-American- 55.2%;
Caucasian- 40.6%; and Hispanic- 4.1%. The second school, Elementary School 2, has an enrollment of 798 students with a racial breakdown as follows: African-American- 61.9%; Caucasian- 35.2%; and Hispanic- 2.9%. The third school, Primary School 1, has an enrollment of 392 students with a racial breakdown as follows: African-American- 72%; Caucasian- 27%; and Hispanic- 1%. These percentages are typical of the population on the Eastern Shore of Virginia.

Socioeconomic levels were defined by eligibility for a free or reduced lunch. Those that qualify for a free or reduced lunch were defined as economically disadvantaged for the purpose of this study. The school system has 3223 students eligible for a free lunch and 381 students eligible for a reduced lunch, which represents 66% of the student population that were defined as economically disadvantaged in this study. Elementary School 1 has 551 students eligible for a free or reduced lunch which represents 68.4% of student the population. Elementary School 2 has 564 students eligible for a free or reduced lunch which results in 70.7% of this school's student population. Primary School 1 has 324 students eligible for a free or reduced lunch which represents 82.7% of this school's student population. While Elementary Schools 1 and 2 have economically disadvantaged students in the same
proportion as the entire school division, a chi-square test indicates that Primary School 1 has a significantly higher proportion of economically disadvantaged students \((p<.01)\). One could hypothesize that the frequency of economically disadvantaged potentially gifted students referred from Primary School 1 would be higher in general than the other two schools. However, this school has the fewest referred and number of students eligible in the school division.

The participants of this study were teachers in grades kindergarten through fifth grade in Elementary School 1, kindergarten through fifth grade in Elementary School 2, and kindergarten through third grade at Primary School 1. The accessible population consisted of 114 classroom teachers: 48 in Elementary School 1, 44 in Elementary School 2, and 22 in Primary School 1. It also targeted the parents of students deemed eligible for reduced or free lunch at all schools.

The Talented and Gifted (TAG) Program currently has a total of 302 eligible students, or approximately six percent of the total school division. However, 66 percent of those students eligible for the gifted program are in high school (grades 9-12). The TAG program is also broken down further by race with 88% Caucasian and 12% African-American. Elementary School 1 has 22 students currently eligible for the TAG program, or 2.7% of
their student population. Elementary School 2 currently has 43 students eligible for the TAG program, or 5.4% of their school population. Primary School 1 has 3 students eligible for the TAG program, or .76% of their school population.

Research Design and Statistical Analysis

The study used a quasi-experimental approach with a nonequivalent control-group design to compare the scores of pre- and post-tests on the teacher questionnaire and case studies. The design is represented by the following diagram:

```
O  X_1  O
---------
O  X_2  O
---------
O  O
```

where $X_1$ represents the experimental treatment 1 at Primary School 1, $X_2$ represents the experimental treatment 2 at Elementary School 1, and O represents the pre- and post-test measurements of the dependent variables.

Teachers at all schools initially completed a questionnaire (see Appendix
A) that had been adapted from the general Talented and Gifted (TAG) program information and from the literature review. The questionnaire was broken down into three categories: traditional characteristics of potentially gifted students; nontraditional or "overlooked" characteristics of economically disadvantaged potentially gifted students; and characteristics of the economically disadvantaged home. Teachers at Elementary School 1 (Treatment two) were given in-service training (see Appendix B) on the TAG program, characteristics of traditional and nontraditional potentially gifted students, and educationally relevant characteristics of the home environment of economically disadvantaged students in addition to the same material in written form (see Appendix C). Teachers at Primary School 1 (Treatment one) were given the same written in-service materials with no presentation (see Appendix C). Teachers from Elementary School 2 (control) were given no information and served as the control. Teachers from all schools completed the same questionnaire following a four week time interval and the data was compared on pre- and post-tests.

All teachers were given seven scenarios of potentially gifted students and asked if they would refer the student to the gifted program. The same seven scenarios were given at the pre- and post-test (Appendix A).
The actual number of referrals during a four month period (November 1997 through February 1998) of economically disadvantaged students to the gifted program at all schools was compared to a similar time frame during the previous year (November 1996 through February 1997).

Parents of economically disadvantaged students at Elementary School 1 (Treatment 2) and Primary School 1 (Treatment 1) were sent a packet of information (See Appendix D) describing the TAG program, traditional and overlooked behaviors of gifted students, and information about the process of referring their child to the gifted program. Parents were asked to discuss their child's strengths with their teacher and make a referral to the gifted program if warranted. Finally, the same information was shared with church leaders to share with their congregation to increase the parents' understanding and acceptance of the information. An actual frequency count of new referrals from parents following training was compared to the number of referrals during the previous school time frame.

A quasi-experimental approach was chosen due to the nature of the study, where the classroom teachers in their respective schools are perceived as intact and all teachers received the pretest, thus the sample was not randomly chosen. Gall, Borg, and Gall(1996) report that this
design is the most widely used in educational research. They indicated that
the main threat to internal validity is that group differences on the posttest
are due to pre-existing differences between groups rather than to
treatment effects. Because of this concern, the pretests at all schools were
assessed to determine if there were significant initial differences. Since
there were no initial differences, a repeated measures analysis of variance
was completed on all variables.

Students who were referred to the gifted program went through the
normal eligibility process. A committee then determined if the student
was eligible based on the number of points (six or more) obtained on the
county's TAG eligibility form (see Appendix E).

Questionnaire

A 48-item teacher questionnaire was developed covering general
information about the division's TAG program (referral process,
identification process, attitudes towards the program, etc.), knowledge of
traditional and nontraditional gifted characteristics, and attitude and
expectations towards economically disadvantaged potentially gifted
students. Teachers responded to the questionnaire in a Likert format
which ranged from "strongly agree to strongly disagree". The statements
on the questionnaire were taken directly from the research of experts in the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
field of gifted education and multicultural awareness regarding traditional and nontraditional behavioral manifestations of giftedness (Ford, 1997; Tuttle, 1988; Gay, 1978; Frasier, 1989; & Maker & Schiever, 1989). Prior to the ones developed for use during this study, no teacher questionnaires were available to ascertain their perceptions and expectations of traditional and nontraditional potentially gifted students.

Scenarios

The teachers at the treatment and control schools were also given seven descriptions of students that may display gifted characteristics in nontraditional ways, both prior to and following the training. Based on the information in the descriptions, the teachers indicated whether they would refer or not refer the student to the gifted program. These descriptions were reviewed by 4 TAG teachers and they agreed that five students should be referred to the program and that two students were unlikely to meet the criteria for the gifted program and should not be referred. This information will help determine if teachers are likely to make valid referrals following training.

Research Hypotheses

H1: Teachers participating in the in-service training would show statistically significant differences from teachers in the control group in...
their perceptions of the characteristics of economically disadvantaged potentially gifted children and the gifted program in general as assessed by the teacher questionnaire.

H2: Teachers participating in the in-service training would show statistically significant differences from teachers in the control group in their perceptions and awareness of traditional behavior manifestations of gifted students as assessed by the teacher questionnaire.

H3: Teachers participating in the in-service training would show statistically significant differences from teachers in the control group in their perceptions and awareness of nontraditional behavior manifestations of economically disadvantaged potentially gifted students as assessed by the teacher questionnaire.

H4: Teachers participating in the in-service training would show statistically significant differences from teachers in the control group in their perceptions and awareness of parental/home characteristics of economically disadvantaged potentially gifted students as assessed by the teacher questionnaire.
H5: Teachers would increase their accuracy in referring nontraditional potentially gifted students to the gifted program as assessed by their referral rate of seven potentially gifted descriptions.

H6: The number of referrals to the TAG Program of economically disadvantaged students by teachers who received in-service training would be significantly higher than the number of referrals from teachers who received no training.

H7: The valid referrals to the TAG Program of economically disadvantaged students from teachers who received in-service training would be significantly higher than valid referrals from teachers who received no training.

H8: The number of referrals of children to the TAG Program from economically disadvantaged parents who received training would be significantly higher than actual referrals from similar parents that received no training.

H9: The valid referrals to the TAG Program from economically disadvantaged parents who receive training would be significantly higher
than valid referrals from similar parents that received no training.

Ethical Considerations

The proposed study was conducted in a manner that protected the rights and privacy of the teachers, parents, and student participants. Student records of economic status and eligibility for the gifted program remained confidential. The school that received no treatment will receive in-service training following collection of all data. The results of this study will be made available to all interested participants, to the participating school system, and to the Gifted Advisory Board in this school system.

Procedures as outlined by the Human Subjects Research Committee of the College of William and Mary were followed. No permission was necessary for this study as students did not directly participate, parents were not forced to participate, and teachers received in-service training that is a normal element of their professional development.
Chapter 4

Analysis of the Results

Introduction

The present study attempted to determine if a training program for teachers and parents would increase the valid referral rate of potentially gifted economically disadvantaged students. Two elementary schools (kindergarten through fifth grade) and one primary school (kindergarten through third grade) were involved in the study. Treatment one (written presentation) took place in a primary school, treatment two (oral and written presentation) took place in an elementary school. An additional elementary school served as the control. A questionnaire was developed from the literature review to assess three areas: traditional characteristics of identified gifted students; "overlooked" or nontraditional characteristics of potentially gifted economically disadvantaged students; and parental/home environmental characteristics. One hundred and fourteen teachers were asked to complete two questionnaires and receive in-service training. The overall completion rate of teachers and guidance counselors was 72 percent of the pre- and
post-test questionnaires (80 teachers).

Teachers in Treatment 1 had the highest percentage completion rate of 82 percent (18 of 22). One teacher was on maternity leave during the pretest and the other teachers did not give a reason for not completing both questionnaires.

Teachers in Treatment 2 had a completion rate of 79 percent (37 of 48). Four teachers were on maternity leave during a portion of the study, three teachers taught in disciplines they felt had nothing to do with gifted education (severe disability, etc.), and four teachers gave no reason for noncompletion.

Teachers in the control group had a completion rate of 58 percent (25 of 44). Three teachers were on maternity leave, four teachers taught in disciplines they felt had nothing to do with gifted education, and twelve teachers gave no reason for not completing both questionnaires. Several reasons may account for this discrepancy in participation. First, the researcher works in the two treatment schools on a consistent basis, thus a rapport had already been established before initiation of the study. Second, the control group received no information throughout the study which may have caused disinterest or ambivalence about completing the questionnaire.
The most widely used quasi-experimental design in educational research is cited by Gall, Borg and Gall (1996) as the nonequivalent control group design. The essential features of this design are nonrandom assignment of subjects to groups (experimental and control) and administration of a pre-test and post-test to all groups. In the present study both the treatment groups (n=37 and n=18) and the control group (n=25) teach in elementary schools. The socioeconomic levels of the students are similar as well as the racial breakdown of the students. The teachers at all schools range from inexperienced (first year) to experienced (over twenty years) in instruction. Teachers in this county have a beginning salary of approximately $24,000 and increase with experience and education to over $40,000, with a median of approximately $30,000. Thus, the socio-economic levels of the teachers were similar across all schools. As can be seen in Table 2, all groups have a similar racial breakdown.

The main threat to internal validity of nonequivalent control group designs is the possibility that post-test differences are due to pre-existing group conditions rather than to actual treatment effects. The groups were tested for initial differences on the pretest using a one way analysis of variance (ANOVA). A test of homogeneity of variance indicates no
significant differences between the pre-test variables ($p = .768$). There were no statistically significant differences between the three groups in a one-way ANOVA (See Table 3).

**TABLE 3**

**ANOVA OF PRETEST VARIANCES**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>47.308</td>
<td>2</td>
<td>23.654</td>
<td>.110</td>
<td>.896 (NS)</td>
</tr>
<tr>
<td>Within</td>
<td>16,495.89</td>
<td>77</td>
<td>214.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16543.200</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$  
  NS = not significant  
  alpha level = .05

Fourteen dependent variables were assessed for each of the eighty subjects in the study. Ten measures resulted from the questionnaire,
including pre- and post-test scores and scenarios. The questionnaire was further divided into three categories each, including traditional characteristics of gifted students, nontraditional or "overlooked" characteristics of economically disadvantaged potentially gifted students, and parental/home environment characteristics. The next four variables dealt with actual referrals by teachers and parents, including teacher and parent referrals for the previous year (November 1996-February 1997). Each of the hypotheses is considered separately in the analysis of the results.

The repeated measures analysis of variance (ANOVA) and the post-hoc tests Tukey and Games-Howell were used to analyze the hypotheses. The .05 level of confidence was used for acceptance or rejection of the null hypotheses in all comparisons.

**Hypothesis one**

The first hypothesis states that there will be a significant difference on the questionnaire in the general teachers perceptions' and knowledge towards economically disadvantaged potentially gifted students following the teacher training program as compared to the control group with no teacher training. This hypothesis was analyzed with a repeated measures analysis of variance. The main factors were group (treatment 1, treatment
2, and control) and time (pre-intervention, post-intervention). The dependent variables were the total scores on the pre-test and post-test. Results indicated a significant time effect and a significant time by treatment interaction (See Table 4).

**TABLE 4**

ANOVA OF TOTAL QUESTIONNAIRE

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1428.585</td>
<td>2</td>
<td>714.293</td>
<td>1.972</td>
<td>.146 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>1727.354</td>
<td>1</td>
<td>1727.354</td>
<td>18.48</td>
<td>.000 *</td>
</tr>
<tr>
<td>Time X</td>
<td>1455.796</td>
<td>2</td>
<td>727.898</td>
<td>7.79</td>
<td>.001 *</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (time)</td>
<td>7197.398</td>
<td>77</td>
<td>93.473</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05 alpha level = .05 NS = not significant

If a significant interaction is obtained (i.e. time by treatment), a follow-up test is needed to statistically analyze the interaction. To determine which means varied significantly from one another, a post-hoc Tukey test was conducted on the interaction means.

Table 5 lists the means and standard deviations for each group on the
pre- and post-tests. The potential range of scores for these items was 48 to 240, with a score of 144 indicating neutral agreement with the items.

Table 5
Descriptive Statistics for Total ANOVA

<table>
<thead>
<tr>
<th>School</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Treatment 1</td>
<td>126.00</td>
<td>14.88</td>
<td>18</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>127.95</td>
<td>15.01</td>
<td>37</td>
</tr>
<tr>
<td>Control</td>
<td>127.60</td>
<td>13.88</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>127.40</td>
<td>14.47</td>
<td>80</td>
</tr>
<tr>
<td>Post Treatment 1</td>
<td>117.94</td>
<td>13.05</td>
<td>18</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>114.70</td>
<td>18.23</td>
<td>37</td>
</tr>
<tr>
<td>Control</td>
<td>128.32</td>
<td>12.46</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>119.69</td>
<td>16.47</td>
<td>80</td>
</tr>
</tbody>
</table>

As illustrated in Figure 1, the experimental and control groups were not significantly different prior to the treatment. Following the interventions, however, there was a significant difference between the two treatment groups and the control group. On this questionnaire a lower score
Figure 1

ANOVA OF TOTAL QUESTIONNAIRE

[Graph showing data points for Pretest and Posttest with lines representing different treatments: Treatment 1, Control, Treatment 2. The values at the y-axis range from 48 to 240.]

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
indicates increased awareness of traditional and nontraditional potentially
gifted characteristics. Treatment 1 and Treatment 2 demonstrated a
significant improvement following intervention. The control group did
not have a significant change. There was not a significant difference
between the two treatment groups following the intervention.

**Traditional, Nontraditional and Parental/Home Characteristics**

The questionnaire was divided into three areas: traditional
characteristics (items 2-14); nontraditional or "overlooked" characteristics
(items 15-36); and parental or home characteristics of economically
disadvantaged potentially gifted students (items 37-48). Each area was
first analyzed to determine if there were initial differences by using a test
of homogeneity of variances and a one-way analysis of variance. There
were no pre-existing differences found on the pre-test between groups in
the three areas (traditional, nontraditional, and parental/home
characteristics).

**Hypothesis two**

The second hypothesis states that there will be a significant difference
in the perceptions and awareness of traditional gifted characteristics in
teachers who participate in the training program as compared to the
control group as assessed by the teacher's questionnaire.
Since there were no significant initial differences on the pretest between the three groups, a repeated measures analysis of variance was used to assess pre-test/post-test comparisons of traditional characteristics on the questionnaire. The main factors were group (Treatment 1, Treatment 2, Control) and time (pre-intervention and post-intervention). The dependent variable was the score on items 2 through 14 on the pre-test and post-test. Results indicated a nonsignificant main effect or interaction (see Table 6).

### Table 6

ANOVA OF TRADITIONAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>161.962</td>
<td>2</td>
<td>80.981</td>
<td>0.975</td>
<td>.382 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>38.480</td>
<td>1</td>
<td>38.480</td>
<td>1.895</td>
<td>.173 (NS)</td>
</tr>
<tr>
<td>Time X</td>
<td>123.785</td>
<td>2</td>
<td>61.893</td>
<td>3.048</td>
<td>.053 (NS)</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (time)</td>
<td>1563.709</td>
<td>77</td>
<td>20.308</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p=.05    NS= not significant    alpha level =.05

Since no significant effects were obtained, follow-up tests were not necessary.
Hypothesis three

The third hypothesis states that there will be a significant difference in the perceptions and awareness of teachers of nontraditional or "overlooked" characteristics of potentially gifted economically disadvantaged students who participate in the training program as compared to teachers in the control group as assessed by the teacher questionnaire. Items 15 through 36 on the pre-test were initially analyzed with the test of homogeneity of variance and one-way ANOVA which found they were not significantly different.

Since there were no initial differences between these three groups on the pre-test, a repeated measures analysis of variance was used to assess the pre-test/post-test differences between the groups on the nontraditional items (15-36) on the questionnaire. The main factors were groups (two experimental, one control) and time (pre-intervention, post-intervention). The dependent variables were the total scores for each school on items 15 through 36 on the pre-test and post-test. As shown in Table 7, results indicated a significant time by treatment interaction (p=.003) but a nonsignificant time effect (p=.186).

If a significant interaction is obtained a follow up test is needed to statistically analyze the interaction. To determine which means differed
TABLE 7

ANOVA OF NONTRADITIONAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>546.340</td>
<td>2</td>
<td>273.170</td>
<td>2.096</td>
<td>.130 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>53.025</td>
<td>1</td>
<td>53.025</td>
<td>1.780</td>
<td>.186 (NS)</td>
</tr>
<tr>
<td>Time X</td>
<td>375.454</td>
<td>2</td>
<td>187.727</td>
<td>6.303</td>
<td>.003 *</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Time)</td>
<td>2293.521</td>
<td>77</td>
<td>29.786</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05  NS = not significant  alpha level = .05

significantly from one another, a post-hoc Tukey test was conducted on interaction means. A lower score on the post-test indicates increased awareness and knowledge of nontraditional characteristics. Table 8 lists the means and standard deviations for each group on the pre- and post-tests. The potential range of scores for these items was 22 to 110, with a score of 66 indicating neutral agreement with the statement (See Table 8).
Table 8
Descriptive Statistics of Nontraditional Items

<table>
<thead>
<tr>
<th>School</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>56.94</td>
<td>8.01</td>
<td>18</td>
</tr>
<tr>
<td>Treatment 1</td>
<td>55.94</td>
<td>9.66</td>
<td>37</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>56.64</td>
<td>8.63</td>
<td>25</td>
</tr>
<tr>
<td>Control</td>
<td>56.16</td>
<td>8.90</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>56.16</td>
<td>8.90</td>
<td>80</td>
</tr>
</tbody>
</table>

| Post Treatment 1| 53.50| 9.34| 18 |
| Treatment 2     | 51.86| 10.13| 37 |
| Control         | 59.56| 6.15| 25 |
| Total           | 54.64| 9.41| 80 |

As Figure 2 illustrates, the experimental and control groups were not significantly different prior to the treatment. Following treatment, the two treatment groups had significantly lower means than the control, indicating an improvement in their level of awareness of nontraditional characteristics.

**Hypothesis four**

The fourth hypothesis states that there will be a significant difference in
Figure 2

ANOVA OF NONTRADITIONAL CHARACTERISTICS

Max

PRETEST POSTTEST

110
92.4
74.8
57.2
39.6
22

--- Treatment 1

--- Control

--- Treatment 2
perceptions and awareness of the home environment of economically disadvantaged potentially gifted students in teachers who receive training as compared to the teachers in the control group as assessed by the teacher's questionnaire. Items 37 through 48 on the pretest were initially analyzed with the test of homogeneity of variance and a one-way ANOVA which found no significant initial differences.

Since there were no initial differences between the three schools on the pre-test, a repeated measures analysis of variance was used to assess pre-test/post-test differences between the schools on the parental/home items (37 through 48). The main factors were groups (Treatment 1, Treatment 2, Control) and time (pre-intervention, post-intervention). The dependent variable was the total score for items 37 through 48 on the pre-test and post-test for all schools. As can be seen in Table 9, the analysis of the findings indicated a significant time effect (p=.024) and a significant time by group interaction (p=.009).

To determine which means differed significantly from one another, a post hoc Tukey test was conducted on interaction means. A lower score indicates increased awareness and understanding of parental/home
TABLE 9

ANOVA OF PARENT CHARACTERISTICS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>23.391</td>
<td>2</td>
<td>11.695</td>
<td>.339</td>
<td>.713 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>45.835</td>
<td>1</td>
<td>45.835</td>
<td>5.308</td>
<td>.024 *</td>
</tr>
<tr>
<td>Time X</td>
<td>86.053</td>
<td>2</td>
<td>43.026</td>
<td>4.982</td>
<td>.009 *</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Time)</td>
<td>664.947</td>
<td>77</td>
<td>8.636</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05  
NS = not significant  
alpha level = .05

characteristics of economically disadvantaged students. Table 10 lists means and standard deviations for each group on the pre- and post-test. The potential range of scores for these items was 12 to 60, with a score of 36 indicating neutral agreement with the statement.

The experimental and control groups were not significantly different prior to the treatment (See Figure 3). Treatment 2 had a significantly lower mean than Treatment 1 or the Control group.

Hypothesis five

The fifth hypothesis states there will be a significant increase in the
Table 10
Descriptive Statistics of Parent/Home Items

<table>
<thead>
<tr>
<th>School</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Treatment 1</td>
<td>32.11</td>
<td>5.54</td>
<td>18</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>32.76</td>
<td>4.16</td>
<td>37</td>
</tr>
<tr>
<td>Control</td>
<td>32.00</td>
<td>5.16</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>32.38</td>
<td>4.76</td>
<td>80</td>
</tr>
<tr>
<td>Post Treatment 1</td>
<td>32.00</td>
<td>4.49</td>
<td>18</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>29.68</td>
<td>4.61</td>
<td>37</td>
</tr>
<tr>
<td>Control</td>
<td>31.84</td>
<td>4.21</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>30.88</td>
<td>4.55</td>
<td>80</td>
</tr>
</tbody>
</table>

accuracy of referring nontraditional potentially gifted students to the TAG program by teachers who receive training as compared to the control group as assessed by the referral rate of seven potentially gifted scenarios. The pre-test and post-test had the same seven scenarios, five of which should have been referred to the TAG program, and two which should not have been referred to the program. The scores were recoded to
Figure 3

ANOVA OF PARENTAL CHARACTERISTICS

Max

60
55.25
50.5
45.75
41
36.25
31.5
26.75
22

PRETEST

POSTTEST

Min

Treatment 1

Control

Treatment 2

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
correct/incorrect and a point was given only for correct referrals. A teacher could receive a maximum of seven points for all correct responses on the questionnaire and a minimum of zero points for all incorrect responses. A test of homogeneity of variances indicated there were no significant initial differences between the pretests of the three groups (p=.083, Levene's statistic).

This hypothesis was analyzed with a repeated measures analysis of variance. The main factors were group (Treatment 1, Treatment 2, Control) and time (pre-intervention, post-intervention). The dependent variables were the mean correct number of referrals on the pre-test and post-test for each school. A summary of the data is presented in Table 11. Results indicated a significant time effect (p=.040) and a significant time by treatment interaction (p=.046) was found.

To determine which means differed varied significantly, a post hoc Tukey test was conducted on interaction means. Table 12 includes the means and standard deviations of each school on the pre- and post-tests. The potential range of scores of for these items was zero to seven, with seven being complete accuracy.
TABLE 11

ANOVA OF SCENARIOS

<table>
<thead>
<tr>
<th>SOURCES</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1.711</td>
<td>2</td>
<td>.856</td>
<td>.205</td>
<td>.815  (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>4.149</td>
<td>1</td>
<td>4.149</td>
<td>4.343</td>
<td>.040  *</td>
</tr>
<tr>
<td>Time X Treatment</td>
<td>6.130</td>
<td>2</td>
<td>3.065</td>
<td>3.065</td>
<td>.046  *</td>
</tr>
<tr>
<td>Error (Time)</td>
<td>73.563</td>
<td>77</td>
<td>0.955</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05  
NS=not significant  
alpha level=.05

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
The experimental and control groups were not significantly different prior to the treatment. Following the intervention, Treatment 2 had a significant improvement in their accuracy of referring potentially gifted economically disadvantaged students in practice scenarios. Treatment 1 and the control group did not significantly improve their accuracy on the post-test (See Figure 4).
Figure 4

ANOVA OF SCENARIOS

Max

PRETEST

POSTTEST

- Treatment 1
- Control
- Treatment 2

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Hypothesis Six

The sixth hypothesis states there will be a significant increase in the number of referrals of economically disadvantaged potentially gifted students by teachers who participate in a training program as compared to the number referrals of these students by teachers in the control group. This was assessed by comparing the number of referrals of economically disadvantaged students by each teacher of the given group for the previous year (November 1996-February 1997) and the current year (November 1997-February 1998).

A repeated measures analysis of variance was used to compare the previous year and current year referrals between the two treatment and control groups. The main factors were groups (Treatment 1, Treatment 2, and Control) and time (last year, this year). The dependent variable was the actual number (frequency) of referrals from each teacher in each school. Results, as illustrated in Table 13, indicated a significant effect over time ($p = .028$).

To determine which means varied significantly from one another, a post-hoc Tukey test was conducted on the means. The experimental and control groups were not significantly different prior to the intervention, nor were they significantly different following the intervention.
Table 13

ANOVA OF ACTUAL TEACHER REFERRALS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>.707</td>
<td>2</td>
<td>.353</td>
<td>.446</td>
<td>.642 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>.540</td>
<td>1</td>
<td>.540</td>
<td>5.02</td>
<td>.028*</td>
</tr>
<tr>
<td>Time X</td>
<td>2.775</td>
<td>2</td>
<td>1.39</td>
<td>.013</td>
<td>.987 (NS)</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (TIME)</td>
<td>8.380</td>
<td>78</td>
<td>.107</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P< .05  NS = NOT SIGNIFICANT  alpha level=.05

Table 14 lists the referral rates of each group.

Table 14

Actual Teacher Referral Rate

<table>
<thead>
<tr>
<th>Group</th>
<th>96-97</th>
<th>97-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment 1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Control</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>
The control group increased their referrals by two over the previous year. Treatment 1 increased their referrals by three over the previous year. Treatment 2 increased their referrals of economically disadvantaged students by nine over the previous year.

**Hypothesis seven**

The seventh hypothesis states there will be a significant increase in the valid referral rate (nomination and entry into gifted program) of economically disadvantaged students by teachers who participate in the training program as compared to the number of valid referrals from the control group. This was assessed by comparing the number of economically disadvantaged students who were referred and made eligible for the gifted program at each school for the previous year (November 1996-February 1997) and the current year (November 1997-1998).

A repeated measures analysis of variance was used to compare the previous year and current year referrals between the schools. The main factors were group (Treatment 1, Treatment 2, and Control) and time (last year, current year). As Table 15 indicates, results indicated no significant treatment effect or interaction between the three schools.
Table 15

ANOVA OF VALID TEACHER REFERRALS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>SIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>5.318</td>
<td>2</td>
<td>2.659</td>
<td>.595</td>
<td>.554 (NS)</td>
</tr>
<tr>
<td>Time</td>
<td>.940</td>
<td>1</td>
<td>.940</td>
<td>1.938</td>
<td>.168 (NS)</td>
</tr>
<tr>
<td>Time X</td>
<td>.275</td>
<td>2</td>
<td>.137</td>
<td>.283</td>
<td>.754 (NS)</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERROR</td>
<td>37.836</td>
<td>78</td>
<td>0.485</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P<.05 NS = NOT SIGNIFICANT alpha level = .05

Since no significant results were obtained, follow-up tests were not necessary.

Hypotheses eight and nine

The eighth hypothesis states there will be a significant increase in the referral rate by parents of economically disadvantaged students who participated in training in the treatment groups as compared to parents from the control group. The ninth hypothesis states that there will be a significant increase in the valid referral rate by parents of economically
disadvantaged students who participated in training in the treatment groups as compared to valid referrals from the control group. Each hypothesis was assessed by comparing actual and valid referrals by these parents from each group for the previous year (November 1996-February 1997) and the current year (November 1997-February 1998).

A repeated measures analysis of variance was used to compare the number of referrals by parents from each school. The main factors were group (Treatment 1, Treatment 2, and Control) and time (last year, current year). The dependent variable was the actual frequency count of referrals made by these parents from each group. Due to the low number of referrals by parents and the fewer number of these students who were later made eligible for the program, the analysis of variance could not be utilized, thus a treatment effect could not be measured. Table 15 lists the referral rates by parents from each group.

The control group had no parent referrals of economically disadvantaged students for either year. Parents in Treatment 1 increased their actual referrals by three, while Treatment 2 increased their actual parent referrals by two students. In terms of the valid referral frequency, the control group and Treatment 1 had no economically disadvantaged students referred by their parents and eventually found eligible for the gifted program.
Table 15

Actual and Valid Referrals by Parents

<table>
<thead>
<tr>
<th>Group</th>
<th>Ref 96-97</th>
<th>Valid Referral</th>
<th>Ref 97-98</th>
<th>Valid referral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96-97</td>
<td>97-98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment 1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Treatment 2 increased their valid referral by one student over the previous year.

Summary

Factorial designs provide information about the main effects of independent variables and the interaction of two or more of these variables. In the present study, the independent variables were the specific training programs (or control) and the effect of these treatments over time.

Hypothesis 1

Teachers who had in-service training significantly improved their levels of awareness and understanding of traditional, nontraditional, and
parental/home characteristics of economically disadvantaged potentially gifted students. There was no difference between the two methods of intervention.

**Hypothesis 2**

There was no difference between groups in teachers perceptions and awareness of the traditional behavior manifestations of giftedness following the interventions.

**Hypothesis 3**

Teachers who had in-service training significantly improved their level of awareness and understanding of nontraditional behavior manifestations of the economically disadvantaged potentially gifted student. There was no difference between the two methods of intervention.

**Hypothesis 4**

There was a significant improvement in the perception and awareness of economically disadvantaged parental/home characteristics by teachers who participated in Treatment 2, or the oral and written in-service. There was no difference following intervention in the control or Treatment 1 (written in-service only).

**Hypothesis 5**

There was a significant improvement in the accuracy of referring
nontraditional potentially gifted students in the practice scenarios by teachers who participated in Treatment 2, or the oral and written in-service. There was no difference following intervention in the control or Treatment 1 (written in-service only).

**Hypothesis six**

There was no difference between the two treatment and control groups in the teacher referral rate of economically disadvantaged students following intervention.

**Hypothesis seven**

There was no difference between the two treatment and control groups in the valid teacher referral rate of economically disadvantaged students following intervention.

**Hypothesis eight**

There was no difference between the two treatment and control parent groups in their referral rate of economically disadvantaged students following intervention.

**Hypothesis nine**

There was no difference between the two treatment and control parent groups in their valid referral rate of economically disadvantaged students following intervention.
Chapter 5

Summary, Conclusions, and Recommendations

Summary

The identification process for finding potentially gifted students eligible for services has changed dramatically over the years (Frasier & Garcia, 1995). The first fifty years of gifted identification was based solely on obtaining a high score on a standardized intelligence test. Over the past three decades the definition has been changed five times by the federal government to reflect changes in the understanding of multiple intelligences and diversity in the United States. The most recent definition emphasizes potential and specifically states that giftedness crosses all racial, ethnic, cultural, and economic lines (Frasier & Garcia, 1995). As the field has evolved, new initiatives in gifted education have demanded more sources of information be included in identification of gifted students, including creativity tests, portfolio assessment, less-biased cognitive tests, and personal interviews (Shaklee, 1997). However, intelligence assessment continues to be the most important indicator of giftedness utilized by educators (Coleman & Gallagher, 1995). This has led to a form
of segregation, where the dominant culture, or middle to upper socioeconomic class European American students, tends to perform better on these tests than students from low socioeconomic levels or non-dominant cultures. Richert (1997) states that non-dominant cultures are often underrepresented in gifted education.

Why is there such an underrepresentation in identification of economically disadvantaged gifted students? Frasier and Garcia (1995) argue that broadening the gifted program to serve more diverse students would significantly increase costs by requiring the hiring of new teachers and requiring additional instructional materials. Ford (1996) suggests that some test instruments, or items on the tests, are biased against non-dominant cultures, resulting in fewer students who meet the score criteria for a gifted program. Still another reason is based on stereotypical beliefs that the only type of gifted student is the one who excels in school, or the "teacher pleaser" (Ford, 1996). This may explain why nontraditional gifted students often receive lower scores on teacher rating scales that are used for identification in gifted programs. Furthermore, these students may not even be nominated for gifted screening even if they potentially meet the criteria for placement in the gifted program.
Research over the past two decades has found that the following constructs are seen in the majority of gifted students (Ford, 1997; Maker & Schiever, 1989). These constructs include high intelligence, intrinsic motivation, extensive memory, creativity, leadership, large vocabulary, humor, and good interpersonal skills. However, the behavioral manifestations of these gifted constructs are often different in economically advantaged than in economically disadvantaged students (Maker & Schiever, 1989; Torrance, 1977; Ford, 1997). While the traditional gifted student may excel in achievement, be cooperative, follow direction, and in general be the role model for the class, nontraditional gifted students may "get by" in achievement, be overly inquisitive, question teachers' authority or knowledge, or may even be the leader of delinquent activity. Nontraditional gifted students may not act in the "teacher pleaser" mode. They frequently mask their giftedness through alternative behaviors, including poor achievement in areas of disinterest, highly divergent answers, or not following the rules of traditional student behavior. In order to provide these students with opportunities to reach their full potential, teachers need to be aware of the different behavioral manifestations of giftedness.

Teachers are often the gatekeepers of the gifted identification process,
as teacher referral or nomination is the most common type of screening instrument in the United States (Coleman & Gallagher, 1995). Teachers are adequate in nominating traditional gifted students; however, economically disadvantaged students may be overlooked in their referral or nomination. This tendency to overlook the economically disadvantaged student may be due to the teacher's lack of awareness of nontraditional behavior characteristics; beliefs that giftedness does not occur in culturally different populations; and negative stereotypes of economically disadvantaged students (Ogbu, 1992; McCarty, Lynch, Wallace, and Benaly, 1991).

Research indicates that teachers can increase their awareness and perception of nontraditional gifted behaviors with in-service training (Tuttle, Becker, & Sousa, 1988; Ford, 1996). As teachers increase their awareness and understanding of alternative gifted behaviors and develop realistic expectations for economically disadvantaged students, referrals of these students to the gifted program will likely increase. This will result in a more diverse talent pool and make the program more equitable and inclusive for all students.

Underreferral is a significant problem for parents of economically disadvantaged potentially gifted students. The relatively few referrals from
economically disadvantaged parents is often attributed to a negative attitude toward the gifted program and a lack of information about gifted education (Frasier & Garcia, 1995). The lack of nominations from these parents has been cited as major reason for the severe underrepresentation of economically disadvantaged students in the gifted program (Scott et al, 1992).

There is little research that reports on how the nomination process may be affected by parent training programs. It stands to reason that nominations will increase if parents become more aware of the gifted programs and how these programs will benefit their child, the behavioral manifestations of giftedness in their child, and the nomination procedure in selecting students for the gifted program.

The present study assessed the effectiveness of a training program for teachers and parents that was designed to increase their knowledge and understanding of economically disadvantaged potentially gifted students as well as increase their referral rate to the gifted program. Several studies have validated the need to train teachers about nontraditional gifted behaviors to increase their referral rate (Ford, 1996; Gear, 1978; Sisk, 1994; Whitmore, 1980; Richert, Alvino, & McDonnel, 1982). Other studies have demonstrated that teachers increase their awareness and
expectations of economically disadvantaged students when given training that emphasizes not only traditional characteristics, but also the negative characteristics of the nontraditional potentially gifted student (Anthony, 1990; Tuttle, Becker, & Sousa, 1988).

Conclusions

This study investigated a number of hypotheses which involved the effects of a teacher and parent in-service program that focused on developing teachers' and parents' awareness of economically disadvantaged potentially gifted students. In addition, the study assessed the numbers of actual and valid referrals of economically disadvantaged potentially gifted students from parents and teachers. Specifically, this study attempted to:

1. To determine if completion of an intensive in-service presentation would increase teachers' awareness of traditional gifted characteristics, nontraditional characteristics, and parental/home characteristics of economically disadvantaged gifted students, and
2. To determine if an intensive in-service training program would increase the actual and valid referral rate of economically disadvantaged potentially gifted students.

Nine hypotheses were formulated to study these objectives. The
conclusions are summarized in three sections: teacher questionnaire responses, accuracy of practice referrals, and referral rates of teachers and parents.

**Questionnaire**

Teachers in both treatment groups (oral and written presentation, written presentation only) significantly improved their overall awareness and understanding of economically disadvantaged potentially gifted students while the control group had no change. There was no difference in either group in their understanding of traditional behavior manifestations of giftedness, suggesting they have a fairly accurate perception of the traditional gifted learner. Teachers who participated in either treatment group significantly improved their level of awareness of nontraditional or "overlooked" behavioral manifestations of giftedness. Teachers who participated in the more comprehensive intervention (oral and written presentation) significantly improved their level of understanding of the parental and home characteristics of the economically disadvantaged student.

These results suggest teachers can improve their general level of understanding of economically disadvantaged potentially gifted students by receiving in-service training. The oral and written presentation appears
to be the most effective intervention of increasing their level of awareness.

Scenarios

Teachers who participated in the more comprehensive treatment, or oral and written presentation, significantly improved their accuracy of referring economically disadvantaged potentially gifted students in practice scenarios. The oral presentation of Treatment 2 included a component in which teachers "practiced" referring potentially gifted students based on description of these students. They then received feedback on their responses. This intervention was the most effective method of increasing teachers accuracy of referring potentially gifted students.

Referral Rates

There was not a significant increase in the actual or valid referral rates by teachers or parents following intervention. However, there was a higher percentage rate of referral of economically disadvantaged students in the two treatment schools following intervention. One cannot assume that the treatments were the reason for the higher percentage of referrals because the difference was not statistically significant. Although more economically disadvantaged students were referred this year, they did not meet the established criteria for eligibility in the TAG or PADI programs.
The findings of this research support studies by Anthony (1990) and Tuttle, Becker, and Sousa (1988) illustrating that teachers can improve their perceptions and understanding of economically disadvantaged potentially gifted students with intensive in-service training. Anthony (1990) suggested in-service training should focus on two areas: attitudes and expectations of educators who often don't believe there is giftedness in culturally different populations; and failure to provide appropriate educational opportunities for teachers, counselors, administrators. Ford (1996) suggested in-service should focus on training teachers to understand and respect diverse cultures and views; to recognize student's communication skills (including nonverbal language); to acknowledge and decrease stereotypes; and develop a greater respect for individual and group differences in learning behavior and achievement.

This study focused on training teachers to understand and identify nontraditional gifted characteristics that are often evident in economically disadvantaged potentially gifted students. It was confirmed in this study that teachers can identify the nontraditional or "overlooked" behavioral manifestations of giftedness if provided oral and/or written in-service training.

Frasier and Garcia (1995) view teachers as the gatekeepers of the gifted
program. Without the initial nomination from the teacher, children are unlikely to be identified as gifted. Making teachers aware of nontraditional behavior manifestations of giftedness will likely increase their accuracy and/or frequency in nominating economically disadvantaged potentially gifted students. This study demonstrated that in-service training in traditional and nontraditional behavior manifestations, along with practice referring potentially gifted students, will increase the accuracy of referral by teachers.

Increasing economically disadvantaged parents' awareness and understanding of the gifted program is more difficult. In this study, a parent in-service was developed for the PTA meeting. However, few parents whose children are eligible for free or reduced lunch attended the meeting. Information was subsequently sent home and shared with leaders in the community. A face to face discussion with the parents would certainly be more advantageous, however such meetings on a large scale were not feasible in this study. Research suggests this lack of involvement by economically disadvantaged parents may be due to valid constraints, such as jobs that require them to work or lack of a baby-sitter. Additionally, they may have negative views towards school in general (Ford, 1996). However, studies also suggest parents are often the best
sources to recognize giftedness in their children, particularly at the primary
grade level (Richert, 1992). This study sent information home with all
children who received free or reduced lunch at the two treatment schools.
Although the statistical analyses could not be completed due to the small
sample size, the actual parent referral percentage rate increased from the
previous year. This researcher documented 23 contacts from parents
inquiring about the program. Teachers, guidance counselors, and
principals also reported numerous contacts by parents. Parents were told
to contact their child's teacher and discuss their child's potential
giftedness. If a gifted referral was warranted, then either the teacher or
parent was encouraged by this researcher and the principals of their
school to nominate the child. Even if a child was not referred, the
teachers were told during the in-service that this would be an excellent
way to foster communication with parents who may not appear involved
with their child's education, and allow the parents an opportunity provide
positive information about their child.

Limitations

Generalization of the findings of this study are limited by several
concerns. The first concern is the design of the study. Due to the intact
nature of classes and grades at school it is difficult to obtain a random
sampling. This study used a quasi-experimental approach which limits generalization beyond the present study. Although this design of study is used in the majority of educational research (Gall, Borg, & Gall, 1996), non-random assignment may cause false conclusions due to pre-existing conditions between the groups. This study attempted to evaluate pre-existing differences by comparing the groups on a pretest before any other statistical analyses were employed. All analyses demonstrated no significant differences between groups prior to the treatment.

A limitation is noted in the questionnaire which was not norm-referenced or standardized. However, the statements on the questionnaire were taken directly from the literature of studies on behavioral manifestations of traditional, nontraditional, and parental/home characteristics of economically disadvantaged potentially gifted students.

A limitation is observed in the size of the study. Of the 114 teachers who were asked to participate in the study, only 80 teachers completed all of the items. This may have due to maternity leave, type of class assignments (i.e., severe disability, preschool, etc.), or refusal to participate due to time constraints. The sample size of the potentially gifted student referrals is small by definition of the criterion for entrance
into the program (intelligence: 95%, achievement: 95%; etc.). This small sample size decreases the likelihood of finding significant results, and limits the generalization of the study.

Finally, access to economically disadvantaged parents was difficult in this study. An attempt was made to reach each parent by sending home a clearly written informational packet. Information was also shared with community leaders who were asked to relay this information to the parents. In spite of these attempts, it is impossible to determine how many parents received and understood the information.

Recommendations

It is recommended that future research increase the sample size of the study. This can be accomplished by including more of the schools in the system. Another method would be to use one school system as the experimental group and use another school system as the control, as long as the groups are similar. This method may increase the significance of the results as well as make them more generalizable to the target population.

It is recommended that future research increase the longevity of the study to at least a complete school year. This would allow the researcher to deliver multiple in-services and "reminders" throughout the year, which
would likely increase accessibility to more teachers and parents and possibly increase the number of referrals of economically disadvantaged potentially gifted students. It would also create more accurate comparisons of the total numbers of actual and valid referrals from year to year.

In terms of practitioner recommendations, it is suggested that the questionnaire be given to all teachers at the beginning of the school year. This would allow the practitioner to pinpoint misperceptions or inadequate understanding of the economically disadvantaged potentially gifted learner. If necessary, the practitioner could then develop in-service programs that would alert teachers to nontraditional behavioral manifestations of giftedness as well as to parental expectations and perceptions of the gifted program. The in-service material for parents could be sent home at the beginning and middle part of the school year to increase awareness about the program as well as children's potential gifts.

As a follow-up to this in-service program, the practitioner could develop a more informal program, perhaps meeting with small groups of teachers at a time. This would allow for more discussion of nontraditional characteristics as well as teachers' perceptions of the
economically disadvantaged student.

The practitioner could summarize successful case studies of economically disadvantaged students who were placed in the program on a trial basis and later flourished in the program and school in general. This would allow the teachers to recognize the benefits of identifying these students.

The practitioner could attempt to meet with parents on a more informal level. An informational program for parents and their community could be set up in a church or community center to discuss the gifted program in general, and how their child may exhibit his or her talents. This could also be a form of "child-find", where there is a demonstrated effort to find potentially gifted students who may not have been referred by educators. Referrals for a gifted screening could be taken at these informational meetings.
APPENDIX A

Teacher Questionnaire
Designated Number............ Grade............
Please Circle: Pre-test Post-test X

Last time I'll ask for anything! Please complete within a week. Thanks so much for your cooperation!! If your number is different from the previous questionnaire please mark out and put previous designated number.

Gifted and Talented Survey

Directions
Contained below are statements regarding the talented and gifted (TAG) program and characteristics of talented and/or gifted students. Please read each statement carefully and use the following response key to indicate your perceptions of the TAG program and prospective students, based on your experience with students at your grade level. Keep in mind that the average students at your grade level may not have the developmental skills to strongly demonstrate the following skills.

Response Key
SA=Strongly Agree (1)
A=Agree (2)
N=Neither Agree nor Disagree (3)
D=Disagree (4)
SD=Strongly Disagree (5)

The Gifted and/or Talented Student...

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. is always gifted in all areas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. typically has early language development and interests.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. typically has an unusually well developed memory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. has an unusually large vocabulary for his age.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. is an independent worker and has lots of initiative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. has a long attention span for his age.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. is widely informed about many topics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. produces original or unusual products or ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
9. has a good sense of humor.
10. tends to be a "perfectionist".
11. typically has strong attachments and commitments.
12. typically has a strong ability to manipulate abstract symbol systems.
13. usually demonstrates curious and questioning behavior.
14. has an interest in and ability to perceive relationships.
15. has keen sense of justice and picks up quickly on racist attitudes.
16. may feel alienated by school.
17. may express displeasure at discontinuing an activity.
18. may neglect schoolwork to pursue artistic, musical, creative writing, or leadership talent.
19. is good at basic school tasks but may not have expected achievement.
20. may express his large vocabulary by "rambling on and on".
21. prefers to work independently and may resist directions.
22. has a tendency to organize people, things, and situations, and may often "want his own way".
23. is often self-assertive and can be stubbornly set in his or her own ideas.
24. is often frustrated by a lack of progress in his project.
25. can have a rebellious attitude.
26. can be loner.
27. often departs from peer norm in action and behavior.
28. often is sensitive to rhythm, melody, mood, form, and tone in musical appreciation.
29. may have only a mastery of the minimum academic essentials.
30. can often overcome a lack of environmental structure and direction.
31. may prefer blunt orders to discussion.
32. may have a high tolerance for ambiguity.
33. may seek structure and organization in required tasks.
34. tends to focus on people, not on objects.
35. tends to approximate time, space, and numbers instead of complete accuracy.

36. Has a keen sense of justice and quickly perceives injustice.

37. Parents from economically disadvantaged homes often do not provide stimulating early home environments, thus these students start with a disadvantage and rarely catch up.

38. Parents from economically disadvantaged homes often view the TAG program as "elitist" and do not want their child referred.

39. Differences in language experiences hinder the development of giftedness in children from economically disadvantaged backgrounds.

40. There are few truly gifted children from the economically disadvantaged population.

41. Teachers often do not recognize indicators of potential giftedness in students from economically disadvantaged backgrounds.

42. Because of poor expectations teachers often do not refer economically disadvantaged children for gifted screening.

43. Placing students from economically disadvantaged backgrounds in the TAG program will lower the quality of the program.

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

45. Poverty will often cause a student to express his gifts and talents in nontraditional ways.

46. Students nominated to the TAG program should score within the top 2% on a cognitive test.

47. A student's teacher is the only person who can refer a child to the TAG program.

48. A student can enter the PADI or TAG program without a high score (>120) on an ability measure.

Number of students who you referred to TAG last year

Number of students who you have referred to TAG this year

Number of students referred last year to TAG who received free or reduced lunch
Based on your educational experience I would like for you to
decide if you would refer the following students to the
Talented and/or gifted program based only on the
following profiles. Please circle your response.

1. Joshua is an a third grade African-American student who
is eligible to receive a free lunch. He makes average grades
in language arts but does very well in math and integrated
sciences. His behavior often appears oppositional and he
will question the teacher's judgment. His Cognitive Ability
Test (CogAT) scores suggest average verbal reasoning
skills (SS=105), high average quantitative reasoning
skills (SS=117), and above average nonverbal reasoning
skills (SS=122), for a total CogAT score of 113.

Refer

Don't Refer

2. Julie is a Caucasian third grader who is compliant in
school and is motivated to "do her best". She receives a
free lunch. She makes average to above average grades and
is a natural leader in the classroom. Her scores on the CogAT
are Verbal (107), Quantitative (109), and Nonverbal (100), for
a total score of 103.

Refer

Don't Refer

3. Nellie is migrant Mexican-American girl who is in the 2nd
grade. Her parents speak no English and she is learning to
speak both English and Spanish. Her grades are poor but
she is a compliant child. She does not appear to be
interested in excelling in school although her teachers feel
she can do much better. Her CogAT scores are highly
discrepant, with scores of Verbal (92), Quantitative (96),
and Nonverbal (117), and a total score of 103.

Refer

Don't Refer

4. Mark is a 4th grade Caucasian child coming from an
affluent family. He does average to above average school
work and excels in sports. He rarely completes more school work than what is expected of him. His CogAT scores are verbal (112), Quantitative (103), and Nonverbal (102), for a total score of 107.

Refer  Don't Refer

5. Nicole is an African-American 5th grader who comes from a middle class family. She is not particularly interested in academic work although she "gets by". She spends much of her time dancing, singing, and organizing "plays" in her community. Her CogAT scores are verbal (97), quantitative (106), and nonverbal (116), for a total score of 108.

Refer  Don't Refer

6. John comes from an economically deprived home and has little interest in school. He is oppositional and often gets into trouble at school. He refuses to listen during class and is continuously doodling, drawing, or tracing. The art teacher says he does not behave in class but appears to have raw talent.

Refer  Don't Refer

7. Lisa, a Caucasian third grader who receives a free lunch, often does not complete her work. She is skeptical of teacher's information and is always questioning for further details to the annoyance of the teacher. Her grades are poor due to incompletion of her schoolwork, but she does well in discussions. Her CogAT scores are verbal (117), quantitative (105), and nonverbal (106), for a total score of 112.

Refer  Don't Refer

Thank you so much for your time and cooperation!!!!!!!
APPENDIX B

Teacher Inservice Agenda
Teacher Inservice Agenda

A. Introduction

B. Overview of the Gifted Program
   1. Purpose of Gifted Education
   2. History of the TAG Program
   3. Referral Process

C. Definitions of Giftedness
   1. Eligibility Criteria
   2. Characteristics of Traditional and Nontraditional Gifted Students
   3. Research on Teacher Expectations
   4. Research on Teacher and Parent Nominations
   5. Practice Referrals

D. Questions and Answers
Teacher Inservice

Reasons for doing study:

1. Underrepresented and underserved
2. Economically disadvantaged students can be found in all social classes and cultures, but their numbers are disproportionate.
3. Potentially gifted economically disadvantaged students manifest their gifts and talents in alternative ways than the typical TAG student (economically advantaged).

Research indicates that training teachers to be more aware of nontraditional gifted characteristics will increase the referral rate of these students.

Research also indicates that training parents to understand their child's talents and the TAG program will increase their referral rate.

My aim is to increase the referral rate from teachers and parents of economically disadvantaged potentially gifted students by increasing awareness about the TAG program and illustrating the different ways economically disadvantaged students show their talents.

History of the Gifted Program

1920's- giftedness=IQ over 130
1960's- Included gifted and talented

1972- Improved definition of gifted to include different areas besides intelligence:
1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual or performing arts
6. psychomotor ability


1993- latest gifted and talented definition:
"children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment."

Accomack County TAG Program

PADI: Kindergarten through third

General TAG: Fourth through eighth

TAG: ninth through twelfth

Environmental Science: fourth through eighth

Visual Arts: third through twelfth

Referral Process: Academic TAG

Teacher Parent Community Student Peers
Refer to TAG program, CST

Refer to Eligibility Committee

Don't Refer

Eligibility Committee

Reviews test scores (cognitive and achievement)
Teacher recommendation forms
Other factors (free lunch, disability, creativity, diverse talents, etc.)

Meets criteria

Doesn't meet criteria

Close to meeting criteria

Eligible

Not Eligible

Further evaluations

individualized assessments
more teacher recommendations
portfolios, etc.

A student must have at least 6 points to be eligible for PADI/TAG

Economically Advantaged Students ("teacher pleasers") tend to be:

Cooperative
Neat
Have strong achievement
Have high goal aspirations
Are respectful to teachers

Economically Disadvantaged Students may:

Be argumentative
Questioning or skeptical of teacher's information
"Get by" in achievement
Low goal attainment
Interested in other things besides your lesson
Be stubborn
Highly Divergent
Rule-breaking
Teacher Expectations

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Low SES</th>
<th>Middle SES</th>
<th>High SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>African-American</td>
<td>Hispanic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parent Expectations

Rarely refer because:

1. Lack of knowledge about the TAG program
2. Cultural values and perceptions regarding the TAG program
3. Limited participation in organizations and advisory groups concerned with TAG

Potentially Gifted Scenarios

1. Juan 3rd Hispanic
   - free lunch; not very talkative; bilingual; doesn’t complete homework;
   - attitude towards school is adequate
   - V: 115  Reading: 87%
   - Q: 95  Math: 43%
   - NVB: 103

2. Natasha 2nd African-American
   - free lunch; attitude problem; refuses to do all her work; teacher feels she could do more; leader, but often gets others into trouble
   - V: 105  Reading: 55%
   - Q: 100  Math: 50%
   - NVB: 107
3. Susan 2nd Caucasian
free lunch; "know it all", questions the appropriateness or reason for doing class assignments; appears "scatter-brained", or mind is often on different things
V: 115  
Q: 95  
NVB: 103  
Reading: 87%
Math: 43%

4. Deandre 4th African-American
free lunch; scowls at doing "busy work"; natural leader on the playground; natural wit, sometimes at the expense of his peers; creative imagination
V: 106  
Q: 118  
NVB: 112
Reading: 50%
Math: 87%

5. Mark 2nd Caucasian
free lunch; manipulative, can get others to do his projects; skeptical of authority; very observant about people and fairness; oppositional at times
V: 110  
Q: 93  
NVB: 102
Reading: 65%
Math: 47%

6. Rosario 3rd Hispanic
free lunch; nonstandard English but large vocabulary; perfectionist but critical of others; creative to the point of being very different from others; achievement appears to be lower than her vocabulary would suggest
V: 112  
Q: 92  
NVB: 105
Reading: 72%
Math: 35%
APPENDIX C

Written Inservice Presentation for Teachers
Teacher In-Service on Nontraditional Gifted Student Identification

Introduction

I am currently researching the question of why students who are potentially gifted and come from economically disadvantaged environments are infrequently referred to the talented and/or gifted (TAG) program. I feel it has to do with a number of reasons, many that are not related to the child's innate ability level. I will present several areas of research that could help explain why potentially gifted economically disadvantaged students are not referred to the TAG program at the same rate as "traditional" gifted students.

Overview of the Gifted Program

Gifted and talented students come from all backgrounds and their special abilities cover a wide spectrum of human potential. The "Regulations Governing Educational Services" define gifted students as "those students whose abilities and potential for accomplishment are so outstanding that they require special educational programs to meet their educational needs" (Virginia Plan for the Gifted. 1996). The latest federal definition of "giftedness" includes "children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment (USDE, 1993). It is the mission of Accomack County Public Schools to provide talented students appropriately differentiated instruction and enriched educational experiences to develop to their fullest potential.

Differentiated instruction for gifted students began in the 1920's with high school students whose intelligence fell within the top first percentile, as measured by an individually administered intelligence test. These students were placed in accelerated programs based solely on the IQ scores. Eligibility for a gifted program has moved over the years from a sole criterion of very superior intelligence to one based on multiple criteria and in different areas, including general intellectual aptitude, creativity and/or artistic areas, unusual leadership ability, psychomotor abilities, or excelling...
in specific academic fields. The new definition also emphasizes potential and specifically states that giftedness crosses all racial, ethnic, cultural, and economic lines, as well as emphasizing their specific talent development.

The Talented and Gifted (TAG) program in Accomack County Public Schools is separated into different programs depending on grade level and area of giftedness. Programs include the Primary Academic Differentiated Instruction (PADI) program in kindergarten through third grades, general TAG program in fourth through eighth grades, Environmental Science program in fourth through eighth grades, and the Visual Arts program in third through twelfth grades. These programs effectively serve all gifted students in kindergarten through twelfth grades, meeting each student's unique needs. Students in the PADI program meet in groups according their grade level for approximately two hours per week with a focus on acceleration and enrichment. Students in grades four through eight in the TAG program are bussed to Onancock Learning Center approximately two days per month according to grade level and school, with a focus on enrichment. Students in high school are offered advanced placement classes, honors classes, mentorship programs, and compete for placement in statewide Governor's School summer programs. Students eligible for the Visual Arts Program receive weekly resource instruction, mentorships, field trips, and a two week workshop during the summer. Students in the Environmental Education program meet at the Onancock Learning Center approximately four times a year, with a focus on science and math enrichment and research.

**Referral Process**

The screening and referral processes are continuous and on-going throughout the year. This permits referrals on any student (K-12) from any school personnel, parents, the students themselves, peers, and community members. Students are referred to the school's Child Study Team (CST), which reviews standardized group test scores, including cognitive tests (Cognitive Ability Tests-CoGAT and Otis-Lennon School Ability Test-OLSAT) and academic tests (Iowa Test of Basic Skills-IOWA and Stanford Achievement Tests). The CST also reviews pertinent information, grades, records, and other performance criteria. Students meeting the
criteria below are automatically referred to the Division Level Placement Committee:

* Students who score at or above 120 on a subtest (verbal, quantitative, or nonverbal) of a cognitive test.
* Students with lower cognitive test scores but significantly high achievement or classroom performance.
* Students who may not perform well on group tests but who may have the potential to score higher on an individually administered cognitive and/or achievement test.

Screening provisions are made to include those students with differing cultural and/or socioeconomic backgrounds, as well as those students with disabilities.

A student is found eligible for PADI or TAG if he/she meets the criteria as shown in Appendix A. As seen, a student must receive at least six points to qualify for the program. A point is also given under "other factors" if: the child is economically disadvantaged (i.e., free or reduced lunch); has limited English proficiency; is disabled; or has some other significant factor that could impede his or her academic performance. If a student is close to meeting the six point criteria and there is evidence of potential giftedness, the TAG eligibility committee will request further individualized evaluations in the cognitive and academic domains, and may also request further information from the child's teachers.

**Characteristics of Traditional and Nontraditional Gifted Students**

Research indicates that students from all cultures, ethnic groups, and socioeconomic levels share characteristics of giftedness, including:

1) the ability to meaningfully manipulate tasks held valuable by their subculture;
2) the ability to think logically given appropriate information;
3) the ability to use stored knowledge to solve problems; and
4) the ability to extrapolate knowledge to new or novel situations.

However, these typical talents are most often observed in economically advantaged students. Gifted and/or talented students from economically disadvantaged homes often exhibit their gifts in nontraditional ways that
may "mask" their giftedness to practitioners. Although experts agree that individuals with exceptional gifts can be found in every socioeconomic level, children from economically disadvantaged groups are severely underrepresented in the gifted school population.

Differences in the behavioral manifestations of giftedness between traditional (Anglo-, middle to upper class) and nontraditional (economically disadvantaged, minority, limited English proficiency) gifted students have been studied over the last two decades. Following is a list of characteristics of traditional and nontraditional characteristics of giftedness, as well as the behavior that might be observed. **Remember that all children are different and may have strengths in one or more areas, as well as demonstrate these strengths in traditional or nontraditional ways.**

<table>
<thead>
<tr>
<th>Ability Area</th>
<th>Typical and &quot;Overlooked&quot; Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic facility</td>
<td>Strong achievement; Reads independently; Retains and uses new ideas and information; May not have expected achievement; may avoid difficult material; may read material deemed inappropriate for age or school</td>
</tr>
<tr>
<td>Curiosity</td>
<td>Displays a curiosity about many things; Displays a maturity of judgment and reasoning beyond age level; Asks probing questions; May question to the point of being annoying; may question teacher's judgment and be skeptical</td>
</tr>
<tr>
<td>Creativity</td>
<td>Generates large number of ideas or solutions to problems or questions; Makes up games and activities; Demonstrates exceptional ability in the fine arts; improvises with commonplace materials; Shows musical appreciation; Produces original thoughts, products, or ideas; Expresses ideas in nontraditional ways; solutions may seem out of the ordinary or inappropriate in school setting; Is resourceful with what he has; has exceptional ability in the practical arts</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Diversity of interests and abilities | Frequently has artistic, musical, creative writing, or leadership talent in addition to global intelligence; Possesses a large storehouse of information about a variety of topics beyond usual interests of age peers;  
**May neglect other schoolwork due to other interests; may be a leader in delinquent type activity** |
| Verbal proficiency and facility of expression | Has a large vocabulary; Verbal behavior characterized by "richness" of expression, imagery, elaboration, and fluency in any language;  
**May "ramble" on and on; Vocabulary may be large but in nonstandard English** |
| Rapid insight into cause-effect relationships | Tries to discover the "how and why" of things; Wants to know what makes people "tick"; Asks many provocative questions;  
**Can be an annoyance in persisting to ask questions; Questions may appear to be off the subject but do have a relationship** |
| Making generalizations | Has a deeper understanding; Requires little drill to grasp concepts; seeks other than routine tasks;  
**Needs to know the reason for activity; may appear skeptical** |
| Keen and alert observer | Usually "sees more" or "gets more" out of a story; Is concerned with right and wrong; Likes structure and order but not static progress;  
**Prefers to make observations about people; has a keen sense of justice and quickly perceives injustice; May be frustrated by a lack of progress** |
| Concentration and memory | Long attention span; Has a good memory for things heard or read; May have difficulty changing tasks;  
**Doesn't want to quit an activity before completion; May have short attention span due to ADHD** |
| Independence | Prefers to work independently with minimal directions from others; Has lots of initiative; Does not fear being different;  
**Departs from peer norm in action and behavior; may resist direction from teachers and others; may appear oppositional and defiant** |
| Leadership | Tend to organize people, things, and situations; Accepts and carries out responsibilities; Is self-confident with age peers; seems well-liked by classmates and is looked upon as a leader;  
**May resist opinions of others (wants own way); sometimes has a rebellious attitude; sometimes is a loner** |
Perfectionism
Strives for perfection; self-critical and assertive; Sometimes critical of others and not self; Can be stubbornly set in ideas

Humor
Displays a keen sense of humor; Insights are original and "offbeat"; Humor may be reflective of cultural background and not understood by everyone; Humor may appear sarcastic and above the level of peers

Responsibility
Handles outside responsibilities and meets school demands; Takes responsibility for projects; Overcomes lack of environmental structure and direction; Deals effectively with deprivations, problems, frustrations, or obstacles caused by living situation

Research on Teacher Expectations

Teacher referral is the typical entry point into a gifted and talented program. Parent, peer, and self-nominations are often mentioned in identification procedures but continue to be infrequent. Nominations generally constitute the first step in the identification process and it has long been recognized that economically disadvantaged students are simply not referred to gifted programs to the same extent as advantaged students. Teachers' abilities to make accurate observations are critical in creating a pool of students to be considered for gifted or talented program participation.

Studies have shown than many educators view economically disadvantaged and culturally diverse students as homogeneous units with members showing the same characteristics. The practice of stereotyping these children as being negatively affected by their environment causes them to be overlooked for potential giftedness. Researchers have found that educators tend to refer students who are cooperative, eager to please, who are strong in academics, are neat and on time, and who never talk back or question their expertise ("teacher pleasers"). This observation has special implications for identifying students who come from economically disadvantaged backgrounds. Besides the negative impact these children may face when teachers equate giftedness with the model student, other problems may arise if the teachers do not clearly understand the impact of
different cultural and/or environmental influences on the expression of giftedness.

Dusek and Joseph (1983) concluded in their meta-analysis of research studies that student attractiveness, conduct, cumulative folder information, race and ethnicity, and social class were related to teacher expectancies. Children who are "teacher pleasers" who come from higher socioeconomic levels may or may not be gifted, but they will tend to be perceived as gifted more so than the nontraditional student. Children who are stubborn, egotistical, rule-breaking, or highly divergent may not be the teachers' favorites, but they may be the most gifted or talented. Burnstein and Cabello (1989) found that 38 percent of student teachers believe that poor academic achievement was due to cultural deficits. Not only do these negative stereotypes affect nomination into gifted or talented programs, the effects of teacher expectancies may well affect the classroom performance and achievement of these students, further exacerbating the unlikelihood of their future nomination to the gifted program. 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 and potential.

Research indicates that referrals to the gifted and/or talented program from teachers without specific gifted training are questionable. Given training, teachers can use their judgment as an effective screening instrument in identifying potentially gifted students. Training should focus on 1) general information about the gifted program, 2) understanding individual and group differences in how students express their giftedness, and 3) how teachers can identify and decrease their stereotypes.

**Parent Nomination and Expectations**

Underreferral is a problem for parents as well as teachers. The relatively few referrals from economically disadvantaged parents have often been attributed to a lack of knowledge and cultural values regarding the gifted or talented program, as well as limited participation in organizations and advisory groups concerned with giftedness. Studies have shown that both minority and non-minority parents are equally aware of the gifted traits
exhibited by their children, although minority parents are much less likely to nominate their child for consideration in the TAG program.

Parents have the advantage of observing their child in both formal and informal settings. Students from limited income families tend to express themselves more under less rigid conditions. Therefore, their special abilities may be more observable in the home and community.

Another difficulty with economically disadvantaged parents referring their child to the gifted program is their perception of TAG as "elitist". They may not want their child participating in a program that they feel, whether valid or not, is discriminatory. Students may also have similar perceptions and may feel out of place in the TAG program, where there may be few of their peers or family members. Teachers need to view the TAG program as available to all potential students and express this to the students' parents.

Several studies have shown that parents from economically disadvantaged homes may have lower expectations for their potentially talented or gifted child and/or may provide less educational stimulation or support. The child may come from a single-parent home that may involve the parent working two or more jobs, or night shift work, which will not allow the parent to be as involved with their child's schoolwork or even be aware of their gifted characteristics. Parent education regarding general information about the TAG program and characteristics to observe in these children will likely increase the referral rate by their parents and/or guardians.
APPENDIX D

Parent Inservice Presentation
Dear Parent or Guardian:

Is your child:

* Very curious about a lot of things?
* Creative, often making up games and stories?
* Funny, making jokes out of ordinary things?
* A natural leader, directing brothers, sisters, and those in the community?
* Very talkative, using many words and questioning everything?
* Smart, but may not make the best grades?

Your child may have talents that can be served in the Talented and Gifted (TAG) program. I am currently working on a process to increase the diversity of students in the TAG program. Students who are eligible for the TAG program will receive extra instruction in the area of their talents so that they can work towards their full potential, learn in a way they see as fun, and likely improve their attitude towards school.

Potentially gifted students come from all cultures, races, and economic levels. Your child may not have been referred to the TAG program because his or her talents may be "overlooked" by teachers and by their parents. These students may not make the best grades, be really interested in school, or may even get into trouble at times (talking back, questioning the teacher and other authority, or having interests other than their classwork). However, these students may be showing their talents and gifts in different or "overlooked" ways.

We receive very few referrals to the TAG program from parents and I believe you are the ones who can best refer your child or someone in your community. You are able to watch your child in the home and in the community (church, community events, sports, etc.) where they may show their talents the most.

I will be presenting information at the November 17, 1997 PTA meeting that will show how some talented students are "overlooked" for the TAG program and the way students are referred for a talented or gifted evaluation. Please join me for a discussion of the Talented and Gifted Program and behaviors that may suggest your child is potentially talented and/or gifted. For more information on this program, please contact me at 787-7765. Thank you for your time.

Cliff Payne
Characteristics of Traditional and Nontraditional Gifted Students

Research indicates that students from all cultures, ethnic groups, and socioeconomic levels share characteristics of giftedness, including:
1) the ability to meaningfully manipulate tasks held valuable by their subculture;
2) the ability to think logically given appropriate information;
3) the ability to use stored knowledge to solve problems; and
4) the ability to extrapolate knowledge to new or novel situations.

However, these typical talents are most often observed in economically advantaged students. Gifted and/or talented students from economically disadvantaged homes often exhibit their talents in nontraditional or overlooked ways that may "mask" their giftedness to practitioners. Although experts agree that individuals with exceptional talents can be found in every socioeconomic level, children from economically disadvantaged and minority groups are severely underrepresented in the gifted school population.

Differences in the behaviors of gifted and/or talented students between traditional (Anglo-, middle to upper class) and nontraditional (economically disadvantaged, minority, limited English proficiency) gifted students have been studied over the last two decades. Following is a list of the general characteristics, typical behaviors, and "overlooked" behaviors in talented children. **Remember that all children are different and may have strengths in one or more areas, as well as demonstrate these strengths in traditional or overlooked ways.**
<table>
<thead>
<tr>
<th>Ability Area</th>
<th>Typical and &quot;Overlooked&quot; Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic facility and strength</td>
<td>Good grades; Reads by himself; Remembers information easily; <strong>Grades may not be very good; may avoid difficult classwork; may prefer to read comic books, magazines, or other information instead of books for his class</strong></td>
</tr>
<tr>
<td>Curiosity</td>
<td>Displays a curiosity about many things; Asks difficult questions; <strong>Wants to know everything; May question to the point of being annoying; May question parent's judgment and be skeptical</strong></td>
</tr>
<tr>
<td>Creativity</td>
<td>Makes up games and activities; Has many ideas and solutions for problems and projects; Very good at art, music, dance, or writing; can make things with common materials; <strong>Expresses ideas in different ways; solutions may seem out of the ordinary or inappropriate in school setting; Is resourceful with what he has; very good at taking things apart and putting it back together</strong></td>
</tr>
<tr>
<td>Diversity of interests and abilities</td>
<td>Frequently has artistic, musical, creative writing, or leadership talent in addition to global intelligence; Possesses a large amount of information many different things beyond usual interests of friends; <strong>May neglect other schoolwork due to other interests; may be a leader in his group</strong></td>
</tr>
<tr>
<td>Verbal proficiency and facility of expression</td>
<td>Has a large vocabulary; Verbal behavior characterized by &quot;richness&quot; of expression, imagery, elaboration, and fluency in any language; <strong>May talk on and on; Vocabulary may be large but in nonstandard English</strong></td>
</tr>
<tr>
<td>Rapid insight into cause-effect relationships</td>
<td>Tries to discover the &quot;how and why&quot; of things; Wants to know what makes people &quot;tick&quot;; Asks many interesting questions; <strong>Can be an annoyance in persisting to ask questions; Questions may appear to be off the subject but do have a relationship</strong></td>
</tr>
<tr>
<td>Making generalizations</td>
<td>Understands at a &quot;deeper&quot; level; Does not need to repeat activity to understand; Likes to do different things; <strong>Needs to know the reason for activity; may appear skeptical</strong></td>
</tr>
<tr>
<td>Keen and alert observer</td>
<td>Usually &quot;sees more&quot; or &quot;gets more&quot; out of a story; Is concerned with right and wrong; <strong>Prefers to make observations about people; has a keen sense of justice and quickly perceives injustice; May be frustrated by a lack of progress</strong></td>
</tr>
<tr>
<td>Concentration and memory</td>
<td>Long attention span; Has a good memory for things heard or read; May have difficulty changing activities; Doesn't want to quit an activity before completion; May have short attention span due to ADHD</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Independence</td>
<td>Prefers to work by himself without help from others; Does not fear being different; Is different from friends' action and behavior; may resist direction from teachers and others; may appear oppositional and defiant</td>
</tr>
<tr>
<td>Leadership</td>
<td>Tend to organize people, things, and situations; Accepts and carries out responsibilities; Is self-confident with people his age; seems well-liked by classmates and is looked upon as a leader; May resist opinions of others (wants own way); sometimes has a rebellious attitude; prefers to be by himself</td>
</tr>
<tr>
<td>Perfectionism</td>
<td>Strives for perfection; Is often down on himself; Sometimes critical of others and not self; Can be stubborn and &quot;hard-headed&quot;</td>
</tr>
<tr>
<td>Humor</td>
<td>Is funny; Ideas are different and &quot;offbeat&quot;; Humor may be reflective of cultural background and not understood by everyone; Humor may appear sarcastic and above the kids his age</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Handles outside responsibilities and meets school demands; Takes responsibility for projects; Deals effectively with not having things, problems, frustrations, or obstacles caused by living situation</td>
</tr>
</tbody>
</table>

**Parent Nomination and Expectations**

Underreferral is a problem for parents as well as teachers. The relatively few referrals from parents have often been attributed to a lack of knowledge and cultural values regarding the gifted program, as well as limited participation in organizations and advisory groups concerned with giftedness. Studies have shown that both minority and non-minority parents are equally aware of the gifted traits exhibited by their children, although minority parents are much less likely to nominate their child for consideration in the gifted program.
Parents have the advantage of observing their child at home and in the community, including church, stores, and group settings. Students from limited income families tend to express themselves more under less rigid conditions. Therefore, their special abilities may be more observable in the home and community.

Another difficulty with parents referring their child to the gifted program is their perception of TAG as "elitist". They may not want their child participating in a program that they feel, whether valid or not, is discriminatory. Students may also have similar perceptions and may feel out of place in the TAG program, where there may be few of their peers or family members. Teachers and parents need to view the TAG program as available to all potential students and express this to the students' parents.

**Referral Process**

The screening and referral processes are continuous and on-going throughout the year. This permits referrals on any student (K-12) from any school personnel, parents, the students themselves, peers, and community members. Students are referred to the school's Child Study Team (CST), which reviews standardized group test scores, including cognitive tests (Cognitive Ability Tests-CoGAT and Otis-Lennon School Ability Test-OLSAT) and academic tests (Iowa Test of Basic Skills-IOWA and Stanford Achievement Tests). The CST also reviews other important information, including grades, records, and other performance criteria. Students meeting the criteria below are automatically referred to the Division Level Placement Committee:

* Students who score at or above 120 on a subtest (verbal, quantitative, or nonverbal) of a group test (CoGAT, OLSAT).
* Students with lower cognitive test scores but significantly high achievement or classroom performance.

* Students who may not perform well on group tests but who may have the potential to score higher on individually administered intellectual or
achievement tests.

Screening provisions are made to include those students with differing cultural and/or socioeconomic backgrounds, as well as those students with disabilities.

A student is found eligible for PADI or TAG if he/she meets the criteria as shown in Appendix A. As seen, a student must receive at least six points to qualify for the program. A point is also given under "other factors" if the child is economically disadvantaged (ie. free or reduced lunch), has limited English proficiency, is disabled, or has some other significant factor that could impede his or her academic performance. If a student is close to meeting the six point criteria and there is evidence of potential giftedness, the TAG eligibility committee will request further individualized evaluations in the cognitive and academic domains, and may also request further information from the child's teachers.

Summary

If you feel your child may be gifted, where he or she demonstrates gifted characteristics in a traditional or nontraditional way, then you are encouraged to refer your child to the school's CST. This can be done by contacting your child's teacher, guidance counselor, principal, or by calling the TAG Specialist. Children from limited income families (ie. free or reduced lunch) and minorities are severely underrepresented in the gifted program and your referral of your child, or someone you know in the community, will likely increase the diversity of potentially gifted students into our gifted program and allow your child the opportunity to meet his full potential. If you have questions about this information please contact Cliff Payne at 787-7765. Thank you for your time and cooperation.

Your child's teacher at 824-4756
Guidance Counselor: Mrs. Regina Prader at 824-4756
Guidance Counselor: Ms. Veronica Byrd at 824-4756
Principal: Dr. Merry White at 824-4756
TAG Specialist: Mrs. Ruth Grillo at 787-7941
APPENDIX E

TAG Eligibility Form
TAG ELIGIBILITY MINUTES

Student ______________________ School ________________
Number ______________________ Grade ___________ Age __________
Date of Eligibility ____________

Ability Measure Average ___________ 130 = 4 points
(Highest score in last 2 years) 125-129 = 2 points
120-124 = 1 point

Achievement Measure ___________ 97-99%ile = 3 points
(Highest score in last 2 years) 94-96%ile = 2 points
90-93%ile = 1 point

Teacher Recommendation ___________ 170 & + = 2 points
150-169 = 1 point

Other Factors (specify) ___________ = 1 point
(Interview, creativity, disability, at-risk, past performance)

The total of Ability measure plus Achievement plus Teacher recommendation plus Other measures (as necessary) must total at least 6 points.

Is this child eligible for TAG or PADI? ________________
Why or why not? ________________

Signature of those persons present: I agree with this decision:

__________________________________________________________________________
YES NO
__________________________________________________________________________
YES NO If you disagree with
__________________________________________________________________________
YES NO the decision, please
__________________________________________________________________________
YES NO write your reason for
__________________________________________________________________________
YES NO the dissent on the back
__________________________________________________________________________
YES NO of the page.
__________________________________________________________________________
YES NO
__________________________________________________________________________
YES NO

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
REFERENCES


