Winter 2002

Identifying gifted African-American students: A case study of a Louisiana school system

Donna Lynn Sutton
Louisiana Tech University

Follow this and additional works at: https://digitalcommons.latech.edu/dissertations
Part of the Bilingual, Multilingual, and Multicultural Education Commons, and the Curriculum and Instruction Commons

Recommended Citation
https://digitalcommons.latech.edu/dissertations/693

This Dissertation is brought to you for free and open access by the Graduate School at Louisiana Tech Digital Commons. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of Louisiana Tech Digital Commons. For more information, please contact digitalcommons@latech.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.

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.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
IDENTIFYING GIFTED AFRICAN-AMERICAN STUDENTS:
A CASE STUDY OF A LOUISIANA SCHOOL SYSTEM

by

Donna Sutton, B.A., M.A.

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

COLLEGE OF EDUCATION
LOUISIANA TECH UNIVERSITY

March 2002
LOUISIANA TECH UNIVERSITY
THE GRADUATE SCHOOL

January 15, 2002

We hereby recommend that the thesis prepared under our supervision by Donna Sutton entitled
Identifying Gifted African-American Students: A Case Study of a Louisiana School System be accepted in
partial fulfillment of the requirements for the Degree of Doctor of Education.

Dr. Pauline Leonard
Supervisor of Thesis Research

Dr. David Gullatt
Head of Department

Curriculum, Instruction, and Leadership
Department

Recommendation concurred in:

Dr. Bob Cage

Dr. Andolyn Harrison

Dr. Don Wells

Advisory Committee

Approved:

Dr. Cathy Stockton
Director of Graduate Studies

Dr. Terry McConathy
Dean of the Graduate School

Dr. Jo Ann Dauphine
Dean of the College
ABSTRACT

Donna Sutton
Identifying Gifted African-American Students: A Case Study of A Louisiana School System
(Major Professor: Dr. Pauline Leonard)

In 1995, the Office for Civil Rights conducted a compliance review of the Bayou Parish School System (a pseudonym) in Louisiana. The review revealed a statistically significant underrepresentation of African-American students in the Bayou Parish gifted program. This case study examined how African-American representation in a gifted program may be increased through the use of research-based interventions implemented by the Office for Civil Rights.

The researcher used both quantitative and qualitative methods to collect and analyze data. Documents from the Office for Civil Rights and the Louisiana Department of Education were examined to: (a) show patterns of African-American and nonminority student populations in the Bayou Parish gifted program from 1994 to 2001 and (b) obtain a detailed description of the interventions created by the Office for Civil Rights for the purpose of increasing the gifted African-American population. A member of the Bayou Parish Pupil Appraisal Team involved with gifted student testing was interviewed to supplement this information.

The results from these data showed that the percent in the identified gifted African-American population increased from 8.0 percent in 1994 to 12.9 percent.
in 2001. The Office for Civil Rights believed the increase in identified gifted African-American students to be a result of (a) an increase in the number of students referred for an initial gifted screening by teachers and parents, (b) adoptions of new IQ tests that were believed to be less culture-biased, and (c) lowering the initial screening cutoff score by one point to allow more African-American students the opportunity for an individual evaluation.

ANOVA, descriptive statistics, and interviews were used to examine differences in the beliefs of groups of teachers based on their demographic information. Teachers agreed that (a) gifted student identification should include the use of qualitative data, (b) giftedness can develop in children over a period of time, and (c) the gifted identification system should be periodically re-evaluated. They were uncertain about the use of culture-fair tests and the sole use of standardized tests to identify giftedness. Teachers' beliefs about giftedness were attained through (a) special education and psychology classes in which giftedness was discussed, (b) inservice training, and (c) exposure to their schools' gifted program. The college courses seemed to have had the strongest influence on teachers' conceptions of giftedness.
DEDICATION

This dissertation is dedicated to my parents, Jerry and Betty Muse Sutton, and my grandmother, Margaret Stewart Sutton, for their support during the years of this project and for their faith in my abilities. It is also dedicated in memory of my grandfather, G.C. Sutton, and my great-grandparents Cecil Sutton, Myrtle Tilley Sutton, Roger Hayden Stewart, and Gladys Whitley Stewart, who, long ago, each said that they were proud of me.
# TABLE OF CONTENTS

ABSTRACT ........................................................................................................... iii

DEDICATION ....................................................................................................... v

LIST OF TABLES .............................................................................................. xv

ACKNOWLEDGEMENTS ................................................................................... xviii

CHAPTER I: INTRODUCTION ........................................................................ 1

Purpose of the Study ....................................................................................... 5

Background to the Study .............................................................................. 9

Bayou Parish Gifted Program ........................................................................ 9

Steps in the Gifted Placement Process ...................................................... 10

The Compliance Review ............................................................................. 17

Justification for the Study ........................................................................... 20

Theoretical Framework ................................................................................. 23

Current Research in Gifted Education ....................................................... 26

Research Questions ...................................................................................... 32

Definition of Terms ...................................................................................... 33

Summary ......................................................................................................... 34

CHAPTER II: REVIEW OF LITERATURE ..................................................... 36

Introduction .................................................................................................... 36

Intelligence Quotient ................................................................................... 36
How Giftedness Should Be Identified

Factor 1: Restricted, which is the use of standardized testing for gifted student identification.

Factor 2: Individual Expression, which is the use of qualitative methods such as case studies for gifted student identification.

Factor 3: On-Going Assessment, in which periodic re-evaluations should be conducted of the school system's placement process.

Factor 4: Multiple Criteria, in which teachers believe students develop giftedness at certain ages and in specific areas of interest.

Factor 5: Context-Bound Identification, in which teachers believe gifted student identification should involve the use of culture-fair methods.

How Giftedness Should Be Served

Ford's (1994) Barriers to Gifted Student Identification

Inadequate Identification Practices

Parental Involvement

Teacher Identification

Conclusions

Strengths of the Identification Process

Areas That Need Improvement

xiii
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bayou Parish, Louisiana, Summary Report</td>
<td>3</td>
</tr>
<tr>
<td>1998 Population Estimates</td>
<td></td>
</tr>
<tr>
<td>2. Model-Based Income and Poverty Estimates for Bayou Parish,</td>
<td>4</td>
</tr>
<tr>
<td>3. Bayou Parish School Enrollment</td>
<td>4</td>
</tr>
<tr>
<td>4. Change in Total School Enrollment by Race, 1987-1999</td>
<td>5</td>
</tr>
<tr>
<td>5. Bayou Parish School System General Enrollment and Gifted</td>
<td>8</td>
</tr>
<tr>
<td>Education (GEP) Enrollment</td>
<td></td>
</tr>
<tr>
<td>7. Overview of Steps</td>
<td>10</td>
</tr>
<tr>
<td>8. Gifted Screening Matrix</td>
<td>11</td>
</tr>
<tr>
<td>10. Grades 1-12 Evaluation Matrix</td>
<td>15</td>
</tr>
<tr>
<td>11. IQ Distribution</td>
<td>38</td>
</tr>
<tr>
<td>12. Overview of Steps</td>
<td>170</td>
</tr>
<tr>
<td>13. Gifted Screening Matrix</td>
<td>172</td>
</tr>
<tr>
<td>14. Gifted Student Evaluation Matrix</td>
<td>174</td>
</tr>
<tr>
<td>15. Bayou Parish Gifted Program Enrollment</td>
<td>177</td>
</tr>
<tr>
<td>16. Genders of Survey Participants</td>
<td>187</td>
</tr>
<tr>
<td>17. Ages of Survey Participants</td>
<td>187</td>
</tr>
</tbody>
</table>
18. Ethnic Backgrounds of Survey Participants ........................................... 188
19. Highest Academic Degrees Earned by Survey Participants ................. 188
20. Years of Teaching Experience Earned by Survey Participants ............. 189
21. Survey Participants' Experience in Teaching Gifted Students in their Classroom .................................................................................... 189
22. Survey Participants' Training in Gifted Education ................................ 190
23. ANOVA Results Based on School Type .................................................. 193
24. Descriptives Based on School Type ........................................................ 194
25. Summary of Responses Based on School Type ...................................... 196
26. ANOVA Results Based on Highest Degree Earned ............................... 198
27. Descriptives Based on Highest Degree Earned ...................................... 199
28. Summary of Responses Based on Highest Degree Earned .................. 200
29. ANOVA Results Based on Years of Teaching Experience ..................... 201
30. Descriptives Based on Years of Teaching Experience ........................... 202
31. Summary of Responses Based on Years of Teaching Experience ........ 203
32. ANOVA Results Based on Ethnicity ....................................................... 205
33. Descriptives Based on Ethnicity ............................................................. 206
34. Summary of Responses Based on Ethnicity ........................................... 207
35. ANOVA Results Based on Inservice Training ....................................... 208
36. Descriptives Based on Inservice Training .............................................. 209
37. Summary of Responses Based on Inservice Training ......................... 210
38. ANOVA Results Based on College Education in Gifted ..................... 211
39. Descriptives Based on College Education in Gifted ............................. 212
40. Summary of Responses Based on College Education in Gifted ........... 213
ACKNOWLEDGEMENTS

Many, many people deserve thanks for their help and support during the last few years. Because of each of these people, my dissertation and my doctorate are complete. This is my attempt to thank each person who was involved.

To the Bayou Parish School Superintendent, Bayou Parish Gifted Program Supervisor, and to the participants in my study, who all took the time to help me when I know they did not have the time to spare, and without whom there would have been no study. I am truly and deeply grateful.

To my contact at the Louisiana Department of Education, who assisted me in my seemingly never-ending quest for documents.

To Dr. Carolyn Talton, my committee chair during the years when my study was a proposal that was being developed. She helped turn my broad idea for a study into a manageable project.

To Dr. Pauline Leonard who graciously agreed to serve as my advisor and committee chair when Dr. Talton retired. Dr. Leonard worked with me daily during the process of this study, reading draft after draft of my final chapters, adding polish to my writings, and offering advice to me both as an advisor and a friend.

To Dr. Bob Cage, my statistician and friend who patiently guided me through the bewildering process known as "methodology."

To Dr. Andolyn Harrison and Dr. Don Wells, my committee members who guided me through the process of writing a complete review of literature.
To Susie Watts, graduate assistant and future "Dr. Watts," without whom I would still be entering survey data into a computer.

To my friends Dr. Dawn Basinger and Elmore Mayfield for their unending support during the years of the proposal process when the stress seemed unbearable.

To Dr. Don Nelson of Southern Arkansas University, my undergraduate advisor and my advisor as I travel through life.

I believe the following quotation from Proverbs 4:11-13 describes the knowledge, guidance, and support I have received from each of these people:

I have taught thee in the way of wisdom, I have led thee in right paths, When thou goest, thy steps shall not be straitened; And when thou runnest, thou shalt not stumble. Take fast hold of instruction; Let her not go; Keep her, for she is thy life.
CHAPTER I

INTRODUCTION

The Gifted and Talented Education Act of 1998 provides the most recent national definition of "gifted." The Act defined gifted children as those who are highly capable in one or more of the following: academics, intellectual ability, creativity, leadership, and the arts. The Act stated that gifted children require educational experiences and opportunities outside the regular curriculum because they are advanced academically and are able to learn more quickly, more in-depth, and with more complexity than other students their age. According to the Act, gifted programs are important in helping the United States compete successfully in a global economy. These programs can help more students achieve at higher levels and can help them receive the education they need to perform in highly innovative and creative jobs in today's workplace (National Association for Gifted Children, 1998).

The main purpose of gifted education is to meet the needs and interests of gifted children in ways that will expand their knowledge and talents, as well as prepare them for productive and rewarding lives when their formal schooling ends. Gifted education is designed to provide these students with enriched
learning opportunities that are seldom available in the regular classroom setting. Unfortunately, many highly intelligent minority children and children from low socioeconomic backgrounds have not been identified as gifted (Ford, 1994).

This case study of the underrepresentation of African-American students in gifted programs took place in Bayou Parish (a pseudonym), which is a parish (the equivalent of a county) in Louisiana. Bayou Parish is about 882 square miles in size and has both a large urban population and a large agricultural economy. The median income of Bayou Parish’s residents is estimated at $28,713 per year (U.S. Census Bureau, 2000). Though the parish has 11 incorporated cities, towns, and villages, most residents live in the city of Cypress (a pseudonym), the parish seat (Louisiana Cooperative Extension Service, 2000). Bayou Parish’s population is predominantly Caucasian and African American, as shown in Table 1. Nearly a quarter of the adult population lives in poverty, and well over a quarter of the children under age 18 live in poverty, as shown in Table 2.

One finds both traditional and modern culture in Bayou Parish. The area has over 3,000 acres of landscaped parks and several lakes. Cypress has many shopping areas, specialty restaurants, sporting events, performing arts groups, and museums. Bayou Parish offers opportunities for higher education through its two-year and four-year colleges (Overview of Cypress, 2000; Cypress Points of Interest, 2000; Bayou Parish Page Locale, 2000).
Table 1


<table>
<thead>
<tr>
<th>Population Types</th>
<th>Population Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>243,121</td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>113,048</td>
</tr>
<tr>
<td>Female</td>
<td>130,073</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
</tr>
<tr>
<td>Under 20 years</td>
<td>72,584</td>
</tr>
<tr>
<td>65 years and over</td>
<td>33,401</td>
</tr>
<tr>
<td>Race by Gender:</td>
<td></td>
</tr>
<tr>
<td>White Non-Hispanic Male</td>
<td>63,517</td>
</tr>
<tr>
<td>White Non-Hispanic Female</td>
<td>70,987</td>
</tr>
<tr>
<td>White Hispanic Male</td>
<td>1,190</td>
</tr>
<tr>
<td>White Hispanic Female</td>
<td>1,233</td>
</tr>
<tr>
<td>Black Male</td>
<td>47,136</td>
</tr>
<tr>
<td>Black Female</td>
<td>56,390</td>
</tr>
<tr>
<td>American Indian Male</td>
<td>260</td>
</tr>
<tr>
<td>American Indian Female</td>
<td>305</td>
</tr>
<tr>
<td>Asian Male</td>
<td>660</td>
</tr>
<tr>
<td>Asian Female</td>
<td>793</td>
</tr>
<tr>
<td>Hispanic Male</td>
<td>1,475</td>
</tr>
<tr>
<td>Hispanic Female</td>
<td>1,598</td>
</tr>
</tbody>
</table>

Note: From U.S. Census Bureau, 2000
Table 2

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>People of all ages in poverty</td>
<td>55,174</td>
<td>22.6</td>
</tr>
<tr>
<td>People under age 18 in poverty</td>
<td>24,264</td>
<td>35.4</td>
</tr>
<tr>
<td>Related children age 5-17 in families in poverty</td>
<td>15,505</td>
<td>31.4</td>
</tr>
</tbody>
</table>

The Bayou Parish school enrollment has been dropping from 60,158 students in 1970 to a projected low of 45,524 students in 1999, as shown in Tables 3 and 4 (Cypress Times, November 7, 2000). Table 4 shows the changes in Bayou Parish schools' ethnic makeup during a 12-year period.

Table 3
Bayou Parish School Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>60,158</td>
</tr>
<tr>
<td>1980</td>
<td>45,469</td>
</tr>
<tr>
<td>1995</td>
<td>49,683</td>
</tr>
<tr>
<td>1997</td>
<td>47,435</td>
</tr>
<tr>
<td>1999</td>
<td>45,524</td>
</tr>
</tbody>
</table>
Table 4

Change in Total School Enrollment by Race, 1987-1999

<table>
<thead>
<tr>
<th>Race</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>-0.3%</td>
</tr>
<tr>
<td>White</td>
<td>-26.2%</td>
</tr>
<tr>
<td>Other</td>
<td>+67.8%</td>
</tr>
<tr>
<td>Total Change</td>
<td>-11.2%</td>
</tr>
</tbody>
</table>

Purpose of the Study

The purpose of this study is to examine screening procedures (IQ tests, etc.) and practices (teacher referral, parental involvement, etc.) used by a typical school system to address the problem of underrepresentation of African-American students in a gifted program. A typical school system relies heavily on the use of standardized test scores to identify gifted students. This is due to state laws and regulations that must be followed in order for schools to obtain state funding for gifted programs (Ross, 1993).

Bayou Parish may be considered a typical school system because it uses a combination of intelligence and achievement test scores to identify students for gifted program placement. It may also be considered a unique school system due to its predominantly Protestant culture and its lack of wide ethnic diversity. The
traits that make Bayou Parish both typical and unique will be discussed in detail in Chapter III.

Nationwide, the reliance on standardized tests continues despite research that shows how multiple sources of information (such as a combination of IQ tests with portfolios, interviews, products, etc.) are a more effective way to identify gifted students (NAGC, 1997; Nevo, 1994). This study will attempt to determine how African-American representation in a gifted program can be improved by investigating the screening procedures and practices of the Bayou Parish school system. The researcher was interested in this study because the Office for Civil Rights was promoting research-based methods to identify gifted African-American students.

The Office for Civil Rights concentrated on increasing, not the overall gifted minority population, but the gifted African-American population. According to an interview with a member of the Bayou Parish School System's Pupil Appraisal Team, this was because the remaining minority population was very small and was a mix of Asian and Native American students with different strengths and different needs when compared to each other and to the African-American population. Bayou Parish began to address these populations in the 2001-2002 school year.

Despite the declining school enrollment and poor performance on state-mandated standardized tests, the number and percent of African-American students placed in the Bayou Parish Gifted Program has increased slightly. This
marginal increase was believed to be in response to interventions implemented by the Office for Civil Rights.

In 1995, the Office for Civil Rights conducted a compliance review to investigate the underrepresentation of African-American students in gifted programs in Louisiana. Table 5 (Office for Civil Rights, 2000) shows the Bayou Parish School System’s gifted enrollment and general enrollment during the 1994-1995 school year (the year before the intervention from the Office for Civil Rights) and during the 1998-1999 school year (the year of the follow-up visit). Table 6 (U.S. Department of Education, 1996) shows the demographic makeup of the school system at the beginning of the 1995-1996 school year (the first year of intervention). The increase in gifted African-American students took place within the limits of the Louisiana State Department of Education’s guidelines which, at the time, limited Bayou Parish to the use of standardized IQ and achievement test scores for gifted student identification. Even though the Office for Civil Rights expressed approval of the results of the review and despite the slight rise in African-American representation, Bayou Parish central office personnel reported that a new plan would be created to increase further the African-American population in the gifted program by 15 percent (Office for Civil Rights, 2000). The data gathered in this case study might be useful in helping Bayou Parish improve the equity of the identification process.
Table 5

Bayou Parish School System General Enrollment and Gifted Education Program (GEP) Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Black</th>
<th>White</th>
<th>Asian/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>49,654</td>
<td>29,796</td>
<td>19,401</td>
<td>457</td>
</tr>
<tr>
<td>Student Population</td>
<td>(60.0%)</td>
<td>(39.1%)</td>
<td>(0.9%)</td>
<td></td>
</tr>
<tr>
<td>1998-99</td>
<td>46,637</td>
<td>28,831</td>
<td>17,806</td>
<td>Not Available</td>
</tr>
<tr>
<td>Student Population</td>
<td>(61.8%)</td>
<td>(38.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-95 GEP</td>
<td>1,322</td>
<td>106</td>
<td>1,173</td>
<td>43</td>
</tr>
<tr>
<td>Enrollment</td>
<td>(2.7%)</td>
<td>(8.0%)</td>
<td>(88.7%)</td>
<td>(3.3%)</td>
</tr>
<tr>
<td>1998-99 GEP</td>
<td>1,493</td>
<td>159</td>
<td>1,278</td>
<td>56</td>
</tr>
<tr>
<td>Enrollment</td>
<td>(3.2%)</td>
<td>(10.6%)</td>
<td>(85.6%)</td>
<td>(3.8%)</td>
</tr>
</tbody>
</table>

Table 6

Bayou Parish, 1995-1996 School Year

<table>
<thead>
<tr>
<th>Population</th>
<th>Schools</th>
<th>Students</th>
<th>White</th>
<th>Black</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>75</td>
<td>49,683</td>
<td>38.4%</td>
<td>60.5%</td>
<td>1.10%</td>
</tr>
<tr>
<td>Gifted</td>
<td>24</td>
<td>1,238</td>
<td>88.3%</td>
<td>8.6%</td>
<td>3.20%</td>
</tr>
<tr>
<td>Enrichment</td>
<td>23</td>
<td>2,497</td>
<td>77.0%</td>
<td>22.0%</td>
<td>0.08%</td>
</tr>
</tbody>
</table>
Background to the Study

The following sections provide information related to the Bayou Parish gifted program. These sections describe the gifted program's curriculum, its criteria for admission, and the compliance review conducted by the Office for Civil Rights.

**Bayou Parish Gifted Program**

"Alpha" (a pseudonym) is the state-funded Bayou Parish Gifted Program and is offered to students in grades preschool through 12 who are identified as being gifted (Alpha, 2000). The preschool through fifth-grade gifted students participate in a pullout program, where they work in small groups. Their curriculum includes reading, language, science, mathematics, and social studies activities that develop higher level skills of logic, reasoning, and critical thinking.

The curriculum for gifted students in grades six through eight consists of language arts acceleration and participation in competitions such as Pentathalon, Mathcounts, and Duke University Talent Search. Gifted students in grades nine through twelve take advanced placement courses in French, chemistry, American history, physics, and English language and composition. Each advanced placement course covers the equivalent of a full-year college course. Each year, all gifted students and their parents attend an IEP (individual educational plan) meeting to discuss each student's educational goals and objectives for the current year and to discuss each student's educational needs.
Each student receives a progress report along with his/her report card to indicate whether he/she is achieving the objectives stated in the IEP (Alpha, 2000).

In 1995, criteria for admission consisted of attaining required scores on standardized aptitude and achievement tests in accordance with Louisiana State Department of Education requirements. Students earned points on a matrix for high scores on IQ (aptitude) tests and the mathematics and reading sections of a standardized test. The steps in the placement process and the matrices and tests that were used are outlined as follows. These steps, summarized in Table 7, will be discussed on the following pages (U. S. Department of Education, 1996).

Table 7

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Referral for Gifted Screening</td>
</tr>
<tr>
<td>Step 2</td>
<td>Gifted Screening</td>
</tr>
<tr>
<td>Step 3</td>
<td>School Building Level Committee Meeting</td>
</tr>
<tr>
<td>Step 4</td>
<td>Full Evaluation</td>
</tr>
</tbody>
</table>

Steps in the Gifted Placement Process

In Step 1, students are referred to the school psychologist for a gifted screening. Referrals were made by any of the following: teachers, parents, counselors, or the students (self-reporting). Referrals were based on evidence of
gifted characteristics, classroom performance, grades, California Achievement Test (CAT) scores, and creativity.

The gifted screening is the second step. A Pupil Appraisal Team member (such as the school psychologist or educational diagnostician) scheduled a day and time when the referred students could be given a brief group screening for gifted. The screening involved the use of an IQ test. Each student's IQ score was placed on a matrix along with his/her reading and mathematics achievement test scores. Students had to score at least five points on a matrix (see Table 8) before being referred to the next step.

Table 8

<table>
<thead>
<tr>
<th>Points</th>
<th>Aptitude (IQ)</th>
<th>Reading</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>115-122</td>
<td>84-92%</td>
<td>84-92%</td>
</tr>
<tr>
<td>2</td>
<td>123-129</td>
<td>93-97%</td>
<td>93-97%</td>
</tr>
<tr>
<td>3</td>
<td>130+</td>
<td>98%</td>
<td>98%</td>
</tr>
</tbody>
</table>

Note. % represents percentile.

The IQ tests used in the screening were the Slosson Intelligence Test (SIT) and the Kaufman-Brief Intelligence Test (K-BIT). According to Richert, Alvino, and McDonnel (1982), the Slosson was appropriate for large group screenings, but was not appropriate for diagnosis and placement because it assessed a very limited aspect of mental ability. Because it was normed on a
small population, it was not appropriate for use with culturally different populations or with any population with English language deficiencies.

The achievement tests used in the screening were the California Achievement Test (this was the primary screening test), Wide Range Achievement Test – Revised (WRAT-R), Test of Cognitive Ability (TCA, a state-mandated test), Louisiana Educational Assessment Program (LEAP, the state proficiency test), and Kaufman Test of Educational Achievement (KTEA). According to Frasier (1989), the Kaufman was considered to be a culture-fair test due to its assessment of a broader range of mental functions than was usually associated with IQ tests.

The students who scored at least five points on the Gifted Screening Matrix (see Table 8) were referred to the School Building Level Committee (SBLC), which is the third step in the placement process. The purpose of the SBLC meeting was to compose a case file of additional information about each student. This information described the strengths, weaknesses, and traits of each student. If a student had health problems or social adjustment problems, these could be addressed as a part of the evaluation process. The SBLC team at each school was made up of the principal, the student’s teacher, the school counselor, and a member of the Pupil Appraisal Team. Information discussed at the SBLC meeting included screening results, current grades and test scores, social adjustment, health history, and observed behavioral characteristics.
questionnaire completed by the student’s teacher to determine gifted characteristics).

The fourth step, the full evaluation, involved the use of an IQ test administered to individual students instead of to a group of students. The IQ score was placed on a matrix along with reading and mathematics achievement test scores. This individual administration allowed the school psychologist to identify particular strengths and weaknesses during the testing process and in the IQ test results. These strengths and weaknesses were added to the student’s case file. If the student successfully completed the full evaluation, the case file was used to compose an individual education plan (IEP) for the student. The IEP formed the student’s instruction in the gifted program. Table 9 shows the matrix used for kindergarten and preschool gifted identification.

On the matrix shown in Table 9, students had to (a) obtain at least 3 standard deviations above the mean on an IQ test, and (b) obtain at least 10 points on the matrix, at least 4 points of which were earned on the IQ test in order to be placed in the gifted program. The IQ tests used were the Slosson Intelligence Test (SIT) and Wechsler Preschool and Primary Scale of Intelligence (WPPSI). The achievement tests used were the Woodcock-Johnson Revised (WJ-R) subtests (word/letter recognition, applied mathematics), Kaufman Assessment Battery for Children (K-ABC), Test of Early Reading Ability, and Differential Abilities Scale (DAS). According to Hicks and Bolen (1990),
Table 9

Preschool and Kindergarten Evaluation Matrix

<table>
<thead>
<tr>
<th>Points</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas</td>
<td>1.0 – 1.5 SD</td>
<td>1.5 – 2.0 SD</td>
<td>2.0 – 2.5 SD</td>
<td>2.5 – 3.0 SD</td>
<td>3.0+ SD</td>
</tr>
<tr>
<td>IQ</td>
<td>115 – 122</td>
<td>123 – 129</td>
<td>130 – 137</td>
<td>138 – 144</td>
<td>145+</td>
</tr>
<tr>
<td>Reading</td>
<td>84-92%</td>
<td>93-97%</td>
<td>98%</td>
<td>99%</td>
<td>———</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>84-92%</td>
<td>93-97%</td>
<td>98%</td>
<td>99%</td>
<td>———</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SD is an abbreviation for Standard Deviations.

The Woodcock-Johnson is one of a few tests that is based on the theory of multiple intelligences. It was normed using a sample of individuals from ages two through 90, and the sample included gender, geographic region, community size, race, and socioeconomic variables.

A separate matrix (see Table 10) was used to identify gifted students in grades one through twelve. To qualify for gifted placement, the students were required to obtain at least 2 standard deviations above the mean on an intelligence test, or obtain a score of at least 7 on the matrix, at least 2 of which are intelligence, or obtain a score of at least 6 on the matrix and have a strong recommendation from a Pupil appraisal team based on performance on an additional test and a review of all educational and screening data with the
student's teacher. The IQ tests used were the Slosson, the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), and the Wechsler Intelligence Scale for Children (WISC-III). The WISC-III, according to Post and Mitchell (1993, p. 541), is "arguably the best instrument currently available for assessing students' intelligence." Its norms were updated in the early 1990's to fairly assess the intelligence of culturally disadvantaged and minority children due to the inclusion of an additional scale. The achievement tests used were the Woodcock-Johnson Revised, the Differential Abilities Scale (DAS), and the Wechsler Individual Achievement Test (WIAT).

The Louisiana State Department of Education permitted individual school districts to determine screening criteria at the school level. During the 1995-1996 Table 10

<table>
<thead>
<tr>
<th>Grades 1-12 Evaluation Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
</tr>
<tr>
<td>Areas</td>
</tr>
<tr>
<td>IQ</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Reading</td>
</tr>
<tr>
<td>Achievement</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>Achievement</td>
</tr>
</tbody>
</table>

Note. SD is an abbreviation for Standard Deviations.
school year, Bayou Parish students were required to score five out of a possible nine points on the locally-developed screening matrix to receive an evaluation for gifted program placement. This cutoff score was chosen because the gifted education supervisor found that students who scored lower on the screening would not score high enough on the full evaluation for gifted program placement (U.S. Department of Education, 1996).

Whereas "Alpha" is the Bayou Parish gifted program, "Exploration" (a pseudonym) is an enrichment program for students in grades two through five who are high achievers but do not qualify for the Alpha program. This program is funded by the Bayou Parish School System and receives no state funding. This pullout program offers 45 minutes of instruction two times a week. Exploration provides independent projects, enrichment activities, and field trips for the participants. (U.S. Department of Education, 1996). In 1995, its criteria for admission were:

- enrollment in grades 2-5;
- scored 75% or above on the total battery of the school-administered standardized test;
- above-average range on the K-BIT or other appropriate aptitude tests;
- on grade level in reading and mathematics;
- maintains all As and Bs in the content areas and in conduct;
- is highly motivated and task-committed; and
nominated by a teacher.

The Compliance Review

During the 1995-1996 school year, the United States Department of Education, Office for Civil Rights, Southern Division – Dallas, conducted six compliance reviews in Louisiana. Three reviews looked at the issue of overrepresentation of African-American students in special education programs, and three reviews looked at the underrepresentation of African-American students in gifted programs. The three reviews that were concerned with gifted program populations took place in Bayou Parish and two other parishes. The compliance reviews were conducted under Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of color, race, or national origin in activities and programs receiving federal financial assistance. In these reviews, the Office for Civil Rights obtained information about the gifted programs through (a) interviews with teachers and other staff members involved in the gifted placement process, (b) data from student records, and (c) gifted placement policies used by the school systems.

The school systems' gifted placement policies were mandated by the Louisiana State Department of Education, and were published in Bulletin 1508. The Office for Civil Rights determined that African-American underrepresentation in gifted programs was a statewide problem because the criteria for gifted identification described in Bulletin 1508 relied exclusively on IQ and achievement test scores. According to the Office for Civil Rights report (Office for Civil Rights, p. 11),

"dual screening and evaluation systems at the Parish level require that students 'pass' two levels of testing, which tends to screen out candidates. This two-level testing tends to have an adverse impact on minority students. Also, OCR determined that some minority students with potential giftedness or talent have not been exposed to enrichment. As a result of this lack of exposure, these students may not test well."

The Office for Civil Rights also found the following problems that were common to all three parishes that were visited: (a) teachers and parents were not knowledgeable of how to recognize giftedness and (b) parents were not well informed about the gifted program and its eligibility requirements. The Office for Civil Rights believed that all these problems were common to all school systems in Louisiana; therefore, these problems were brought to the attention of the Louisiana State Department of Education. As a result, the Louisiana State Department of Education changed the Bulletin 1508 (now known as the Pupil Appraisal Handbook) gifted identification criteria to include creativity and leadership screenings along with IQ and achievement test scores. The Louisiana State Department of Education later (during a statewide Office for Civil Rights
compliance review during the 1997-1998 school year) began piloting new methods of identifying gifted students, especially gifted minority students. These methods included alternative tests and inservices to help parents and teachers recognize traits of giftedness in students. These methods were funded by a state grant and were offered to 44 individual school systems that were identified by OCR as having a significant underrepresentation of African-American students in the gifted programs (Office for Civil Rights, 1999; U.S. Department of Education, 1996).

Bayou Parish took action, within the boundaries of Bulletin 1508 regulations, to resolve the concerns raised by the Office for Civil Rights. These actions began during the 1996-1997 school year (U.S. Department of Education, 1996). Despite these actions, there is still a need to increase African-American participation in the gifted program. The following are the actions, also called interventions, which were created to address the problem of African-American underrepresentation in Bayou Parish's gifted program:

1. Inservice training was provided to principals, assistant principals, school coordinators, and School Building Level Committee members by the Bayou Parish Pupil Appraisal Staff and the special education administration staff. The inservice provided information about Title VI (non-discriminatory practices in placing students in special programs), alternative screening/evaluation of giftedness, and characteristics of giftedness.
2. Fliers were sent home to all Bayou Parish School System parents to inform them about the gifted program (Alpha), its benefits, and its admission criteria.

3. During "Child Search Month," outreach programs were provided to parents through PTA, African-American churches, and organizations.

4. A task force was created to develop a plan to improve participation of African-American students in the gifted program.

5. Gifted/Talented evaluations were provided to all minority students who scored four points (instead of five) on the initial screening matrix, in order to control for test bias. Bayou Parish also re-screened minority students who did not qualify for evaluations during the previous school year.


7. The enrichment program (Exploration) was added to three predominantly black schools in Bayou Parish.

Justification for the Study

The underrepresentation of minority students in gifted programs is a problem nationwide. Minority participation in gifted programs ranges from less than one percent in Alabama, Idaho, New Mexico, and North Carolina, to more than five percent in Louisiana, California, and Pennsylvania. Yet, it should be assumed that giftedness is distributed proportionally across gender, race, and ethnic groups (Borland & Wright, 1994; O'Tuel, 1994; Smith, LeRose, & Clasen, 1991). Despite legislation that has been directed at correcting the problem of low
enrollment of minority and low-socioeconomic status children in programs for the
gifted, too little has changed in actual practice (Ford, 1994). "A continued pursuit
for identifying underrepresented populations of gifted learners must gain
momentum" (Landrum, Katsiyannis, & DeWaard, 1998, p. 370).

"For years educators have indicated that it is much easier to identify the
problems of educating culturally diverse exceptional children than it is to solve
the problems" (Baca & Chinn, 1982, p. 41). These problems include: (a) parents'
and educators' lack of knowledge of gifted traits (Ford, 1994; Frasier et al, 1995;
Clark, 1988; Davis & Rimm, 1994), (b) inadequate identification procedures
(Maker, 1996; Frasier et al, 1995; Frasier & Passow, 1994; Ford, 1994; Baca &
Chinn, 1982), (c) researchers' lack of agreement on the definition of "gifted"
(Ford, 1994), (d) keeping culturally diverse students in gifted programs (Ford,
1994), and (e) the gap between theories or policies and actual identification
practices (Maker, 1996; Coleman & Gallagher, 1992).

Many educational researchers believe the underrepresentation of minority
students in gifted programs is primarily due to inadequate identification
procedures (Maker, 1996; Frasier, et al., 1995; Frasier & Passow, 1994; Ford,
1994; Harris & Ford, 1991). They believe this inadequacy is based on an
overreliance on standardized tests, such as IQ tests, to identify gifted children.
According to these researchers, standardized tests discriminate against minority
children and against children from low-socioeconomic status families. The IQ
tests are said to be discriminatory because they are normed on the nation's
middle-class population, to the exclusion of other populations (Frasier & Passow, 1994). The relationship between low socioeconomic status and low achievement is commonly believed to be caused by: (a) families' lack of money for educational resources, (b) lack of physiological resources, such as good nutrition, (c) cultural differences between social classes which contribute to motivation and interest in academic work, (d) poor linguistic skills, (e) genetics, and (f) society's stereotyped concept of poor children's abilities, interests, and character (Croizet & Claire, 1998). According to Smutney and Blocksom (1990, p. 50):

Giftedness can be found in every subculture – ethnic, racial, or social. However, a major problem for educators has been the identification of gifted students from these subcultures. The heart of the identification problem has been the prevailing narrow definition of giftedness and the long-time reliance on standardized aptitude and achievement tests to assess giftedness. In short, many minority and disadvantaged students exhibit giftedness in ways that conventional testing does not assess.

Along with the problem of underrepresentation is the lack of research in the area of gifted minorities. In 1991, Harris and Ford conducted a review of literature on gifted African-American students. Their research led to the discovery that "less than 2% of the articles and scholarly publications focused attention on gifted minority learners in general, and even fewer focused specifically on African-American students" (Ford, 1994, p. 1).

The underrepresentation of minority students, which is a nationwide problem, is also a problem in Bayou Parish despite the changes in screening procedures. Even though African-Americans comprise the majority of students in the Bayou Parish School System, they comprise the minority of students in the
gifted program (see Table 6). Problems indicated by researchers, such as inadequate identification procedures, were identified in Bayou Parish by the Office for Civil Rights (Office for Civil Rights, 1999; US Department of Education, 1996). However, even though interventions were undertaken, the Bayou Parish School System remained dissatisfied with the results.

Theoretical Framework

The theoretical framework of this research is based on the philosophies and studies of Ford of Ohio State University. In April of 2000, Ford was working as a consultant for the Office for Civil Rights to help reduce the underrepresentation of minority students in gifted programs in New Orleans (email from Donna Ford, April 22, 2000). John Stephens, Compliance Team Leader for the Office for Civil Rights Southern Division in Dallas, provided the researcher with a copy of one of Ford's research documents, The Recruitment and Retention of African-American Students in Gifted Education: Implications and Recommendations (Ford, 1994). "Although this document is not endorsed by the United States Department of Education, the research findings may be of some benefit in addressing questions concerning the issue of identifying and placing minority students in gifted education programs" (letter from John Stephens, October 29, 1999).

According to Ford (1994), there are existing barriers to the placement of both minority and nonminority students in gifted programs.
1. Inadequate identification practices that identify only some gifted students and miss the rest. According to Ford (1994), no states have adopted contemporary, inclusive definitions of giftedness. These may include Howard Gardner's Multiple Intelligences and Robert Sternberg's Triarchic Theory of Intelligence. Instead, most states rely on standardized test scores, such as IQ and achievement tests, to identify gifted children. These tests can exclude children from gifted programs because of biases. Ford (1994) believes test biases can result from: (a) language differences, (b) questions that are centered on middle-class experiences, (c) answers that support middle-class experiences, which are awarded more points, (d) tests that favor verbal students, and (e) tests that do not consider the influences of non-intellectual factors on achievement, such as test anxiety, motivation, and self-confidence.

2. The prevalent practice of using teacher identification as the first step in the gifted student identification process. According to Ford (1994), research shows that teachers fail to identify over 50 percent of the gifted students in their schools because they are not trained in gifted education and multicultural education. Because of their lack of training, teachers do not recognize students with traits of giftedness. These traits, which are not easily identified using conventional measures, include independence, sensitivity, exceptional memory, creativity, extensive vocabulary, problem-solving abilities, curiosity, humor, commitment to tasks, and ability to learn quickly
and easily. According to Ford, teachers generally refer students for initial
gifted screening and testing when they demonstrate excellence in cognitive
skills such as answering questions correctly, cooperation, punctuality, and
neatness.

3. A lack of parental involvement in the education process. According to Ford
(1994), this is especially true when the parents are from a less affluent
economic background. These parents may find it difficult to become involved
in their children's education, mainly because of their own negative
experiences with schools. Because of this lack of involvement, the parents
are less likely to know about gifted programs.

The Office for Civil Rights discovered the same barriers in gifted programs
in Louisiana. When the Office for Civil Rights conducted its initial compliance
reviews to examine the issue of underrepresentation of African-Americans in
Louisiana's gifted programs, problems that were common to all three school
systems were examined:

1. Gifted identification procedures relied exclusively on IQ and achievement test
   scores and the screening and evaluation tools and processes tended to
   screen out minority students.

2. Teachers were often not knowledgeable of traits of gifted children.

3. Parents were unfamiliar with the gifted program and with traits of gifted
   children.
Better understanding of the nature and extent of these barriers should have significant implication for increasing African-American representation in gifted programs.

**Current Research in Gifted Student Identification**

Often, the first step in the gifted student's identification process is nomination by the classroom teacher for a gifted screening. Reliance on teacher nomination may severely penalize students because too few teachers recognize the traits of gifted children (Cowan, 1992; Frasier, 1989; Clark, 1988; Terman, 1926). Some teachers tend to favor students who are well-behaved, well-dressed, quiet, and non-handicapped, who complete their assignments neatly and on time, and who make good grades (Bricker & Braverman, 1998; Davis & Rimm, 1994; Clark, 1988). This may cause teachers to overlook gifted students who are underachievers or who are creative yet unconventional (Davis & Rimm, 1994).

Frasier (1995) has, through her synthesis of the literature, created a list of 10 core attributes of giftedness. These core attributes would provide a better basis for identifying minority-gifted students:

- motivation (the evidence of desire to learn);
- communication skills (highly expressive and effective use of numbers, words, and symbols);
- intense and sometimes unusual interests;
- effective and often inventive strategies for recognizing and solving problems;
• highly creative and original;
• exceptional memory;
• inquiry (questions, experiments, explores);
• insight (quickly grasps new concepts, makes connections, and senses deeper meanings);
• reasoning (logical approaches to finding solutions); and
• conveys and understands humor.

According to recent research, a better way to identify gifted students (especially minority students who may be excluded through test bias) is through the use of a variety of screening and evaluation methods instead of a sole reliance on standardized tests. "Given the limitations of all tests, no single measure should be used to make identification and placement decisions....Best practices indicate that multiple measures and valid indicators from multiple sources must be used to assess and serve gifted students" (National Association of Gifted Children, on-line, 1997). Multiple measures may include combinations of IQ tests, special ability tests, portfolios, interviews, observations, performances, and products (NAGC, 1997; Nevo, 1994). Yet, the use of standardized tests should not be completely eliminated because (a) today's IQ tests are normed on a wider population which takes into consideration factors such as race, socioeconomic variables, gender, geographic region, and community size, and (b) the latest versions of IQ tests, such as the Woodcock-
Johnson, are based on recent theories of intelligence such as the theory of multiple intelligences (Glutting, Oakland, & Konald, 1994; Hicks & Bolen, 1990).

Several states have adopted the use of multiple measures of intelligence for identifying minority and nonminority gifted students. Two examples are Georgia and Alabama. Until 1991, placement in gifted programs in Georgia depended upon IQ scores in at least the 96th percentile and achievement test scores in at least the 86th percentile. In 1991, six Georgia school districts were chosen to participate in a project of the National Research Center on the Gifted and Talented; this project was called the Multiple Criteria Identification of Gifted Students from Economically Disadvantaged and Limited English Proficiency Populations. Also, Atlanta City Schools and Gwinnett Public Schools received Javits grants for identifying gifted students from underrepresented populations. In 1994, state legislators were impressed with the multiple criteria approach used by these schools, and they passed HB 1768 requiring multiple criteria identification statewide. The multiple criteria eligibility rule was presented to the Georgia State Board of Education in 1995, after which the State Superintendent and board members were faced with a deluge of calls and letters from parents and teachers who opposed the new identification rule because they believed the gifted selection standards would be lowered. Supporters of the new rule wrote and presented position papers and organized letter-writing campaigns. The multiple criteria rule was implemented in the schools by January 1997 (Krisel & Cowan, 1997). According to this rule (Georgia State Department of Education,
1998), information is gathered on these four categories: mental ability, achievement, creativity, and motivation. At least one of the four criteria must be met by a standardized test score. The standardized test cutoff scores are:

1. Mental ability, as shown by scores in the 96th percentile on a standardized mental ability test.

2. Achievement, as shown by scores in the 90th percentile on a standardized achievement test score in one of the following areas: total battery, total reading, or total mathematics. An alternative to these scores is a numerical score of at least 90 on a scale of one to 100 on a superior student-generated product or performance evaluated by a panel of three or more qualified evaluators.

3. Creativity, as shown by scores in the 90th percentile on the Total Battery score of a standardized test of creative thinking, or in the 90th percentile on a standardized creativity characteristics rating scale, or a score of at least 90 on a scale of one to 100 on a structured observation/evaluation of creative products and/or performances evaluated by a panel of three or more qualified evaluators.

4. Motivation, as shown by a GPA of at least 3.5 on a 4.0 scale in grades three through 12, or a score in the 90th percentile on a standardized motivational characteristics rating scale, or a score of at least 90 on a scale of one to 100 on a structured observation/evaluation of student-generated product or performance evaluated by a panel of three or more qualified evaluators.
The Alabama State Department of Education, the Office for Civil Rights, and the U. S. Department of Justice approved a statewide multidimensional gifted assessment in July 1999 (Grill, 1999). Gifted placement criteria is based on aptitude, achievement, grades, products/work samples/portfolios, and characteristics. Students are automatically eligible for gifted placement if they score at least 17 points on a gifted matrix. Points are acquired through a combination of the following test scores: (a) individually administered IQ test, (b) group IQ test, (c) Torrance Test, (d) Hawthorn Gifted Evaluation Scale, (e) Gifted and Talented Evaluation Scale, (f) Renzulli-Hartman, and (g) Traits, Aptitudes, Behaviors. Points may also be acquired for (a) achievement test scores, (b) products/portfolios/work samples from school or from home, and (c) grade point average from the last full semester (Alabama State Department of Education, 1999).

Students may be candidates for assessments other than the traditional IQ tests that are usually administered. These are students who are generally underrepresented in gifted programs. To make this determination, a checklist is completed to determine if any of these factors are applicable:

1. The student is a member of a group that is underrepresented in the gifted program.
2. The student has a disabling condition which affects testing performance.
3. The student has had a limited opportunity to acquire depth in English.
4. The student speaks nonstandard English, constituting a barrier to learning.
5. The student’s family is unable to afford enrichment materials and/or expenses.

6. The student’s family functions at a low-income level.

7. The student’s residence is in a depressed economic area.

8. The student lives in geographic isolation.

9. The student’s home responsibilities or necessary employment interferes with learning activities.

10. The student experienced transience in elementary school.

11. The student experienced irregular attendance.

12. The student has had limited developmental experiences.

After completion of the checklist, an evaluation team uses professional judgment as to whether or not an alternative assessment should be used in place of the traditional assessment. Alternative assessments approved by the Alabama State Department of Education (1999) include the Raven’s Progressive Matrices, Kaufmann Assessment Battery, Das-Naglieri Cognitive Assessment System, Comprehensive Test of Nonverbal Intelligence, Test of Non-verbal Intelligence – 3, and Universal Nonverbal Intelligence Test.

As earlier stated, the identification of gifted minority students is a nationwide concern. The preceding sections have underscored the barriers to increasing representation of minority participation in gifted programs and described attempts to improve the gifted student identification process. These attempts are based on the belief that giftedness is more than just high test scores; giftedness includes
academic ability, creativity, skills for producing products, and a talent for performance presentations. Yet, many states such as Louisiana are limited in their student identification practices by state laws that require only the use of standardized testing. This proposal will investigate how to overcome barriers to minority representation in a gifted program by examining two areas: (a) the constraints of state-mandated reliance on standardized tests and (b) teachers' assumptions about giftedness and gifted student identification. It is important to clarify the constraints of reliance of standardized tests because many types of gifted, such as technical skills and leadership ability, cannot be identified through the use of IQ and achievement test scores. Moreover, it is important to discover teachers' assumptions because teacher referral is often the first step in gifted student identification.

Research Questions

Research questions focused on gaining insight as to the nature of the Civil Rights compliance review in Bayou Parish, how the compliance review affected gifted student identification, and teachers' assumptions about giftedness and how it can be identified. According to Best and Kahn (1993), assumptions are statements that one believes to be facts but cannot verify.

These four broad questions guided the research:

1. What brought about the 1995-2000 Office for Civil Rights compliance review in Bayou Parish?
2. What changes took place in gifted student identification instruments and procedures as a result of this review?

3. Why were these particular changes implemented?

4. What are Bayou Parish educators' assumptions about (a) what giftedness is, (b) how it should be identified, and (c) how should it be served?

Definition of Terms

The following defines words as used in this research:

**African-American.** For the purpose of this study, African-American refers to people of African descent. Throughout this study, "African-American" and "black" will be used interchangeably.

**Alpha.** The Bayou Parish Gifted Program.

**Assumptions.** Statements that an individual believes to be facts, but cannot verify.

**Evaluation.** The last step in the identification of giftedness. Usually involves individual testing (such as an IQ test) with the resulting scores in the upper 90th percentile.

**Gifted.** To exhibit unusual strength in one or more areas, such as academic abilities, leadership skills, creative thinking, general intelligence, art, and/or psychomotor abilities.

**Minority.** People who are not members of the main racial or cultural population.

**Nomination.** The process of selecting children for a gifted screening.
**Nontraditional identification procedure.** To identify giftedness through means other than or along with measures such as IQ test scores and achievement test scores. Examples: portfolios of student work, IQ tests normed on non-English-speaking populations, etc. Often used with students who are highly intelligent but do not test well.

**Parish.** In Louisiana, "parish" is a synonym for "county."

**Screening.** One of the first steps in the identification of giftedness. Involves the use of very general identification criteria, such as IQ score of at least 115, evidence of unusual strength in a certain area, etc.

**Talented.** Non-academic giftedness, such as in art, music, and drama.

**Traditional identification procedures.** To identify giftedness mainly through the use of IQ and achievement test scores in the upper 90th percentile.

**Typical school system.** A school system that relies heavily on the use of standardized tests for gifted student identification due to state laws and regulations that must be followed in order for schools to receive state funding for gifted programs.

**Underrepresentation.** An unusually low enrollment of certain groups of students, such as female, African-American, etc.

**Summary**

The purpose of this study is to examine screening procedures and practices used by a typical United States school system to address the problem of underrepresentation of African-American students in a gifted program. The
theoretical framework of this study is based on the philosophies and studies of Ford of Ohio State University. According to Ford (1994), the following are barriers to placement of both minority and nonminority students in gifted programs: (a) inadequate identification practices, (b) the prevalent practice of using teacher identification as the first step in the gifted student identification process, and (c) a lack of parental involvement in schools. The Office for Civil Rights implemented interventions in Bayou Parish to address these three barriers. Even though the Office for Civil Rights documented its satisfaction with the results of the interventions, the Bayou Parish School System believed the improvements were marginal. They began to explore new ways to identify gifted African-American students while continuing the Office for Civil Rights' interventions. The researcher used a case study approach to find the strengths and weaknesses of the interventions for the purpose of better understanding ways to overcome systemic barriers to African-American representation in gifted programs. Improving the gifted student identification process is an important prerequisite step to the realization of this goal.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The literature review was conducted to provide information about past and present knowledge of intelligence and gifted student identification techniques. It includes summaries of both recent studies by prominent recent researchers and earlier major studies that have affected present literature and research. The purpose of the literature review is to address the many theories of intelligence, the various definitions of "gifted," and the controversy of how intelligence can best be measured. The review of literature also reflects the limited amount of published research about minority gifted students in both education journals and psychology journals.

Intelligence Quotient

The traditional definition of gifted is "high IQ." IQ stands for Intelligence Quotient, which is found through the use of a simple formula:

\[ IQ = \frac{MA}{CA} \times 100 \]
CA is "chronological age," a person's actual age. MA is "mental age," a rating based on test performance. Mental age can be defined as the level of a person's mental ability when compared to average people having the same ability. This ability may be higher or lower than average people of the same age. The mental age test score is divided by the person's actual age, then is multiplied by 100 to eliminate the decimal. The resulting number is the person's IQ (Freeman, 1955, p. 43). IQ score categories are shown in Table 11. According to Freeman (1955, p. 1), psychological tests, such as an IQ test, is "designed to measure objectively one or more aspects of a total personality by means of samples of performance or behavior....Ultimately, and most important, they are intended to contribute to the analysis and description of individuals and to the evaluation, prediction, and guidance of their behavior and education."

Opposing Views of Intelligence

Freeman (1955) described two opposing views of intelligence: Thorndike's multifactor theory and Spearman's g. Thorndike divided intelligence into three types: (a) social intelligence, the ability to work well with people, (b) concrete intelligence, the ability to work well with things such as in skilled trades, and (c) abstract intelligence, the ability to work well with verbal and mathematics symbols. According to Freeman (1955, p. 70), "this implies separate and sufficiently specialized tests may be devised to measure how effectively persons are functioning in each."
Opposed to this theory was Spearman's \( g \), in which \( g \) represented a general factor common to all mental ability. According to Freeman (1955, pp. 74-76), many psychologists believed this \( g \) factor was "possessed by all individuals, but in varying degrees, of course, since people differ in mental ability....Like all other scientific concepts, the general factor can be observed and known only through its specific manifestations — in this instance, through psychological tests....Therefore, psychologists believed they were justified in adding the test items correctly passed in the several types of activities and deriving a single total score to represent an individual's general intelligence level."
Recent Definitions of "Gifted"

On June 24, 1998, at the second session of the 105th Congress, the Gifted and Talented Students Education Act of 1998 (H.R. 4127) was enacted (U. S. Department of Education, 1999). According to the Act, gifted students give evidence of high performance capability in academics, or in areas such as intellectual, creative, artistic, or leadership capabilities. These students require services or activities not ordinarily provided by a school in order to fully develop their capabilities. Gifted children are from all cultural, racial, socioeconomic, and ethnic backgrounds. Some gifted children have disabilities and some speak English as a second language. Many of these students have been historically underrepresented in gifted education programs.

An earlier definition by Marland (1972) was used in Public Law 91-230, section 806, as the U. S. Office of Education's original definition of gifted and talented. According to this definition, gifted students are those identified by professionally qualified persons as showing evidence of outstanding abilities and are capable of high performance. These are children who require educational programs and services beyond those normally provided by the regular school program. These services are important in order for gifted children to realize their contribution to self and society. Gifted children are capable of high performance in any of the following areas: (a) general intellectual ability, (b) specific academic
aptitude, (c) creative or productive thinking, (d) leadership ability, (e) visual and performing arts, and (f) psychomotor ability.

According to Richert, Alvino, and McDonnel (1982, p. 9), "giftedness is not a single phenomenon but a complex integration of many factors that research has not yet been able to fully disentangle." Intelligence may be shaped by genetics, environment, education, personality traits, role models, prenatal influences, socioeconomic status, gender, birth order, and countless other influences (Feldman, 1999; Gagne, 1999; Deary, 1998; Richert, Alvino, & McDonnel, 1982).

According to Renzulli (1982), there are two types of giftedness:

1. Schoolhouse giftedness, which is a strong ability to successfully learn and to take tests. This is easily measured by IQ tests.

2. Creative/productive giftedness, which is a strong ability to develop original materials or products that have an impact on targeted audiences. This type of giftedness is identified through ratings of creative production, ratings of past accomplishments, and indicators of creative thinking.

These recent definitions describe giftedness as more than just general intelligence that is identified through the use of an IQ test. Giftedness is now viewed as a broader concept that includes academic ability, leadership skills, and creativity. Yet, many school systems tend to rely on the use of IQ and achievement test scores to identify gifted students even though these tests
identify only academic giftedness. As a result, many gifted students remain unidentified.

A Common Procedure for Identifying Gifted Children

Clark (1988) described a common procedure used to identify and assess gifted students. Even though the identification process includes the use of screenings for creativity, leadership, and artistic ability, IQ test and achievement test scores often remain the deciding factors in whether or not a student is gifted. The steps in the procedure are as follows:

1. Students are nominated, usually by the classroom teacher, for a gifted screening. The nomination is based on factors such as achievement test scores, quality of school or extracurricular work, creativity, motivation, and leadership skills. The nominated students are referred to a committee of professionals consisting of members such as the principal, a teacher, a counselor/psychologist, and the gifted program coordinator. The committee obtains written consent from the parent(s) before continuing with the child's screening procedure.

2. The committee develops a case study profile of each student to provide information to aid in the screening procedure.

3. As part of the generic screening process, the students are given group tests such as tests of intelligence, achievement, creativity, leadership, and art. The purpose of group testing is to reduce the cost of the testing process.
4. Students who equal or surpass the group test cutoff scores are evaluated individually with IQ tests such as the Stanford-Binet, the Wechsler, or the Kaufmann. Students who equal or surpass the evaluation cutoff scores are referred for placement in the gifted program.

5. The committee of professionals meets with the child’s parents to discuss the screening and evaluation results, and to obtain written permission to place the child in the gifted program.

6. During the committee meeting, and with the parents’ consent, an appropriate education program is developed for the child. The program is based on test results and case study material.

Historical Background of Intelligence Testing

The term “intelligence” can be traced back to the word “intelligentia,” a term introduced by Cicero, the distinguished Roman orator and statesman who lived between 106 and 143 B.C. (Guilford, 1967; Starr, 1976). The term “intelligence” was brought into the literature of psychology by Herbert Spencer around 1895. Spencer believed intelligence was the ability to combine many separate impressions, and he tied intelligence to the doctrine of evolution (Guilford, 1967).

The following sections will briefly summarize the history of intelligence testing in England, Germany, France, and the United States. Nineteenth century European research concerning intelligence and methods of measuring
intelligence formed the basis of twentieth century American research and beliefs about intelligence and giftedness.

**England**

The British were the first to use tests to determine intelligence. These tests were concerned with the connection between heredity and intelligence. England's Sir Francis Galton was the first researcher to conduct a statistical study of the theory of hereditary intelligence (Galton, 1914; Clark, 1988). Galton was a cousin of Charles Darwin and he was influenced by Darwin's theories of heredity. Galton's study of the heritability of human intelligence, with the exclusion of environmental effects, resulted in a theory of fixed intelligence. According to this theory, a person's amount of intelligence remained unchanged throughout his or her life (Clark, 1988).

The idea for the study came from Galton's curiosity about mental characteristics of different races and mental abilities that seemed to be characteristic of certain families. According to Galton (1914), when his study was first published in 1869, the human mind was popularly believed to act independently of natural laws and to be capable of almost any achievement. Galton disagreed with this belief and stated that the human mind, like the human body, can be improved through training until it reaches its hereditary limit.

Another popular belief was the close relationship between genius and insanity. Galton stated his surprise in finding, in his own research, "how often
insanity or idiocy has appeared among the near relatives of exceptional and able men. Those who are over-eager and extremely active in mind must often possess brains that are more excitable and peculiar than is consistent with soundness" (Galton, 1914, p. ix). Galton defined the word "genius," such as when used in the title of his book, as "an ability that was exceptionally high, and at the same time inborn" (Galton, 1914, p. viii).

The purpose of Galton's study was to learn whether or not natural ability was inborn and, if so, to what degree natural ability could be inherited. The statistical method that Galton used was "frequency of error" (p. xi). Eminent men (whose biographies were either familiar or easily accessible) were selected and ranked to obtain a scale of ability. The biographies were also used to gather qualitative (non-statistical) information. The men were ranked by placing them in the following sequence: (a) judges, (b) statesmen, (c) commanders, (d) literacy men, (e) men of science, (f) poets, (g) musicians, (h) painters, and (i) divines (religious writers). Published biographies were used to obtain this sequence because he believed high reputation was a reflection of high ability. He believed men rose to positions of eminence due to life's way of allotting marks (similar to test scores) to individuals for skills such as literacy expression, oration, originality of ideas, energy, administrative skills, and various acquirements (Galton, 1914). The biographies were also helpful in tracing genealogical relationships among high-ability men. These biographies came from peerages, biographical dictionaries, historical texts, and similar references that were in print circa 1865.
When possible, the research was limited to a study of Englishmen for two reasons: (a) the enormous amount of labor involved, and (b) to reduce his chance of error. Galton stated that his study could be replicated by his readers, using as few as 12 names (Galton, 1914). The results of Galton's study were as follows:

England had 286 judges between 1660 and 1865. Eighty percent of these men were found to have eminent relatives (relatives famous enough to have published biographies). The judges were so interrelated that 109 of them were grouped into only 85 families. Galton concluded that "the more able the man, the more numerous ought his able kin to be" (1914, p. 140). The nearer kinsmen (relatives within two generations, such as parent and grandparents) of the judges were more eminent than the remote kinsmen. According to Galton (1914, p. 49), "a judgeship is a guarantee of its possessor being gifted with exceptional ability; the judges are sufficiently numerous and prolific to form an adequate basis for statistical introductions, and they are the subjects of several excellent biographical treatises....A seat on the bench is a great prize, to be won by the best man."

Fifty-seven eminent statesmen (members of Parliament, excluding Judges) were chosen for the study. Galton (1914) stated that the ablest statesmen had the largest number of eminent relatives and the statesmen's type of ability was mainly hereditary. The nearer kinsmen of the statesmen were more eminent than the remote kinsmen.
Thirty-two commanders, such as Charlemagne, Cromwell, Bonaparte, Alexander the Great, and William the Conqueror, were selected. Because of interrelations, the 32 commanders were grouped into 24 families. Like the pedigrees of the judges and statesmen, the nearer kinsmen were more eminent than the remote kinsmen were.

Thirty-three families that had produced famed authors were selected. Because of numerous interrelations, families (such as Bronte and Seneca) were chosen instead of individuals. The individuals in these families were authors of novels, histories, philosophies, and scholarly texts. Several of these authors, such as Rousseau, had been labeled as "dull" or "dunce" in school. Galton (1914) believed that literary genius was the most heritable type of giftedness in his study.

Sixty-five scientific men were, because of interrelations, grouped into 43 families. Unlike the preceding categories, maternal influence was unusually strong (meaning the men in the study were either influenced by highly intelligent female relatives or the mother was the more intelligent of the two parents). Scientific men included in the study were Newton, Darwin, and Aristotle. The fathers of eminent men of science were generally unscientific (politicians, literary men, etc.).

Twenty-four poets, such as Byron, Chaucer, Milton, and Wordsworth, were chosen for the study. Most of the poets began publishing their works between the ages of 15 and 26. Almost all the poets had eminent near relatives (such as
parents or siblings) instead of eminent distant relatives. Galton believed poetic ability was "a rare character, only to be formed by some happy accident, and is therefore unstable in inheritance... Poets are clearly not founders of families" (1914, p. 220). He also believed that great poets had an unusual combination of genius and personality.

Twenty-six musicians, such as Hayden, Mozart, and Mendelssohn, were grouped into 14 families because of interrelations. Like the poets, musicians had eminent near relatives instead of eminent distant relatives. There was an "absence of eminent relations through the female lines" (Galton, 1914, p. 231). Musicians were also unique because of their precocity. "There is no career in which eminence is achieved so early in life as in that of music" (Galton, 1914, p. 230-231). Like the poets, they also had a rare combination of genius and personality.

Twenty-six great painters were grouped into 14 families. The painters included van Eyck, Bellini, and van der Velde. The great painters were unique because many had distant relatives whom were eminent.

Thirty-three divines (religious writers) were chosen and grouped into 25 families, which included individuals such as Cotton Mathematicser and John Donne. Galton believed his study showed that religious gifts and pious disposition were hereditary. He discovered that religious writers generally had these characteristics: (a) considerable intellectual capacity, (b) natural eagerness for study, (c) voluminous writings, (d) continually engaged in oration, and (e) poor
health (many religious writers were recruited from sickly portions of families, and
many others broke down under the strain of their work).

After Galton completed his 1869 study of heredity and intelligence, he set up
an "anthropometric testing laboratory" in the South Kensington Museum in 1882.
The laboratory was used to test various theories of intelligence, such as a
connection between intelligence and physical abilities, strength, and reaction
time (Guilford, 1967).

Galton was the first researcher to use a statistical method to study
intelligence. He also conducted the first major research in the area of giftedness.
After the completion of his study 1869, he compiled a list of common traits of the
gifted men he had studied. He listed these traits in the introduction to the second
publication of his research in 1914. Several of these traits are still recognized in
modern American research. These traits are: (a) leadership ability, (b) academic
ability (such as exceptional mathematicsemetical ability), and (c) a special
aptitude for a particular trade or occupation (Galton, 1914).

Germany

The concept of using statistical tests to study intelligence was continued
by Kraepelin in Germany in 1889. Kraepelin observed different types of mental
defects and experimented with the use of various tests that were more "mental"
than those of Galton. Kraepelin's student Oehm administered these early
intelligence tests which measured intellectual capacity through the use of tasks
such as memorizing digits and nonsense syllables, reading rapidly, proofreading,
cancellation of certain letters, counting letters on a page, writing from diction, addition, association, and motor functions. It is said that Oehrn was the first to determine intercorrelations of tests such as these (Guilford, 1967).

Another important German researcher was Hermann Ebbinghaus, who is said to be "the father of experimental psychology of learning" (Guilford, 1967, p. 3). Ebbinghaus conducted a study of fatigue in school children. He used three tests: computation, memory span, and sentence completion. Aptitude for these three skills is still identified through the use of modern tests of intelligence such as the Stanford-Binet IV (Glutting, 1989), the Wechsler Intelligence Scale for Children – Third Edition (Wechsler, 1991), and the Woodcock-Johnson (Hicks and Bolen, 1990). The sentence-completions test was later used in Thorndike's battery of tests for college aptitude (Guilford, 1967).

France

The use of statistical tests of intelligence was refined in France by Alfred Binet who, according to Guilford (1967, p. 3) "was a pinnacle among mental testers, in the world as well as in France." Binet was an experimental psychologist. Before he began constructing mental tests he had engaged in studies of mental functions and how memory may be measured. When he conducted his famous research on thinking processes, he used his daughters Marguerite and Armande as subjects. He investigated mental functions such as memory, reaction time, attention, imageless thoughts, imagery, imagination, ideation, and abstraction. "In his view of intelligence he was very comprehensive
and his later introduction of a single score for measurement of intelligence was in obvious contradiction to his own convictions" (Guilford, 1967, p. 4).

The first modern test of intelligence was created by Binet in the early twentieth century. In 1904, Alfred Binet and Theodore Simon, a medical doctor, were commissioned to find a method of determining how to segregate the slow learners in Paris schools. Binet was commissioned because of his readiness to contribute his skills, and Simon was commissioned because mental deficiency was regarded as the domain of medicine. The objective of the first Binet scale in 1905 was to differentiate between normal and mentally deficient children. In this scale, Binet used 30 tests with emphasis on categories such as common sense, judgment, initiative, and the ability to adapt. Binet’s 1908 scale shifted emphasis from discriminating “defective” children from “normal” children to emphasis on differentiating among the “normal” children. The 1908 scale was based on the belief that the child’s intellect was not just a miniature of an adult’s. The 1911 revision involved minor changes in the scaling of the test (Guilford, 1967). Binet’s intelligence test was brought to American and was a forerunner of the modern Stanford-Binet IV. This intelligence test is often used in schools for measuring intelligence in students for the purpose of placement in special programs (Glutting, 1989).

United States

Lewis Terman conducted the first major statistical study of intelligence in the United States. In 1906 he conducted tests at Clark University on the brightest
and the least bright boys in 500 local schools. The tests involved measures of mathematics ability, mastery of language, insight, logical processes, inventive and creative imagination, learning ability, memory ability, and motor ability. Like Alfred Binet, the results of the study lead him to the conclusion that intelligence is a single, measurable trait. This conclusion became a common belief among psychological researchers. But according to Guilford’s critique of Terman’s study, "this conclusion is based on very questionable evidence. It is not known just how much correlation there was among the tests" (Guilford, 1967, pp. 6 & 7). Guilford’s statement is important to note because intelligence tests were, for decades, based on the belief that intelligence was a general trait that could easily be measured through the use of a single intelligence test. Some modern tests of intelligence have moved away from this belief to reflect recent research about multiple types of intelligence.

While working at Stanford University, Terman adapted Alfred Binet’s intelligence test by including additional tests to the scale. He introduced this test as the Stanford-Binet Scale in 1916. Two updated forms, L and M, were published in 1937, and a combined L-M form was published around 1960 (Guilford, 1967). The Stanford-Binet has been used for decades in the United States for the purpose of measuring the intelligence of students for placement in school programs such as gifted and special education.
Stanford-Binet IV

The most recent version of the Stanford-Binet, the Stanford-Binet Intelligence Scale – Fourth Edition (SB4), was normed (averaged) on a nation-wide sample population of 5,013 individuals. When a test is normed, it is given to a sample population for the purpose of correcting errors, therefore making it valid for use with a wide variety of types of people. For the purpose of norming the SB4, the 5,013 individuals were divided into 17 age groups from ages two years zero months through 23 years 11 months. Quota sampling was used to reflect United States population in race, gender, socioeconomic status, community size, and geographic region. However, lower-socioeconomic status (SES) individuals were underrepresented and higher-SES individuals were overrepresented because higher-SES families returned research permission forms more frequently than lower-SES families. To compensate for this, each high-SES participant counted as 28 percent of a child and each low-SES counted as more than one child. This method of weighting produced estimates of higher reliability than elimination would, but the weighted estimates were not based on actual cases. Yet, according to Glutting (1989), the weighting of test scores for the purpose of norming appeared reasonable because the standardization sample was quite large. According to Popham (1993) and Crowl (1996), the use of a large sample population can help correct any problems in norming a test because a large
randomly selected population is more likely to be representative of the average nationwide population.

The Stanford-Binet IV "provides a sufficient ceiling for the identification of examinees who may be gifted at any age. The recency of its norms and its extended age range also increases the likelihood that SB4 will become a favored instrument for the assessment of giftedness" (Glutting, 1989, p. 78).

The Stanford-Binet IV, as critiqued by Glutting (1989), was updated in 1989 by combining previous editions with more recent developments found in other popular IQ tests. The basis of the Stanford-Binet IV is its composite, or general ability estimate. Replacing its traditional age format are 15 subtests: vocabulary, comprehension, absurdities, verbal relations, quantitative, number series, equation building, pattern analysis, copying, matrices, paper folding and cutting, bead memory, memory for sentences, memory for digits, and memory for objects.

Administration of the Stanford-Binet involves the use of three manuals: Guide for Administration and Scoring, Technical Manual, and Examiner's Handbook. According to Glutting (1989), the time involved in administering the test appears to be reasonable: testing takes 30 to 40 minutes for preschoolers, 60 minutes for children ages 6 to 11, and 70 to 90 minutes for higher age levels. After the test is given, the raw scores are converted to Standard Age Scores, which are synonymous with IQs. Test scores are weighted to compensate for discrepancies in test takers' socioeconomic status backgrounds.
According to Glutting (1989, p. 74), the Stanford-Binet IV's "reliabilities are quite good" and the "internal consistency for the Composite is excellent."

Glutting's compilation of studies from both independent researchers and from the technical manual showed substantial association between the composite and overall scores on the Stanford-Binet IV and its previous version (Stanford-Binet Form LM), the K-ABC, all Wechsler scales, and the Peabody Picture Vocabulary Test-Revised. "Indeed, the consistency and magnitude of these relationships speak very well for the Composite's construct validity" (Glutting, 1989, p. 75).

The Stanford-Binet IV's "greatest shortcoming is that it tries too hard to offer 'everything' school psychologists want in an IQ test. Nevertheless, SB4's potential for meeting the avowed purposes of IQ test is great, and as is far too uncommon in the field of test development, the positive features of this instrument outweigh its limitations" (Glutting, p. 78).

Because intelligence tests can be time-consuming to administer, the Stanford-Binet IV offers short-form batteries, intended for screening purposes, that contain four or fewer subtests (Glutting, 1989). McCallum and Karnes (1990) conducted a study to compare the results of the short-form version of the Stanford-Binet IV to its long-form version. The subjects of this study were 18 gifted males and 15 gifted females from a public school system in a community in the Southeast. Graduate students trained in school psychology administered the Stanford-Binet IV. To eliminate problems such as practice effects, only the long version of the test was administered. The scores of the long version (all 15
subtests) were compared to the abbreviated battery. In the short form, scores from only these sections were calculated: (a) vocabulary (verbal reasoning), (b) bead memory (short-term memory), (c) quantitative (quantitative reasoning), (d) pattern analysis (abstract-visual reasoning), (e) comprehension (verbal reasoning), (f) matrices, and (g) number series (quantitative reasoning).

The scores for the long form and short form were compared through the use of the t-ratio. The results of the study showed that the scores on the short-form version were about three points lower than the scores on the long form.

"Apparently, slightly fewer children will be eligible for placement based on short-form scores, assuming that an IQ score cutoff continues to be part of the criteria for giftedness" (McCallum & Karnes, 1990, pp. 281-282). The authors recommended that if the short form is used for gifted screening, a more conservative cutoff score for gifted placement should be used.

The modern Stanford-Binet IV test of intelligence has been normed (averaged) to control for various types of bias, such as race, gender, socioeconomic status, and geographic region. Because it has recently been normed, it reflects today's average United States population. It can be used successfully as part of the gifted student identification process because it was created for use in both initial group screenings (through the use of the short form) and in subsequent individual testing (through the use of the long form). The SB4 is a traditional intelligence test, which gives a score that estimates an individual's general intellectual ability.
Wechsler's Scales

The Stanford-Binet's first substantial competitor was Wechsler's scale. Whereas the early Stanford-Binet scales measured different abilities at different ages, the Wechsler was created to measure the same abilities at different ages by using the same tests with children of different age groups. This scale was known as the Wechsler-Bellvue Intelligence Scale, and it had two components: verbal and performance, similar to the accepted practice in college aptitude testing in which a verbal and quantitative score were obtained. The Wechsler-Bellvue scale gave more room at the top for adults, which overcame a weakness of the Stanford-Binet. Subsequent scales included the Wechsler Intelligence Scale for Children (WISC) and the Wechsler Adult Intelligence Scale (WAIS) (Guilford, 1967).

The Wechsler Intelligence Scale for Children – Third Edition (WISC-III) is "arguably the best instrument currently available for assessing students' intelligence" (Post & Mitchell, 1993, p. 541). The entire test is composed of a series of subtests for use with children ages six through 16. The use of subtests lessens client fatigue, promotes speed, and reduces the chance for error. WISC-III's subtests are the components that give it an edge over other tests such as the Stanford-Binet. The subtests are as follows: (Wechsler, 1991) picture completion, information (general knowledge), coding, similarities, picture arrangement, arithmetic, block design, vocabulary, object assembly, comprehension, symbol search, digit span, and mazes. Unfortunately, the results of the subtests are
difficult to explain to parents and interdisciplinary team members and there is also the concern that many people believe all testing is an exact science. "Intelligence tests provide only a portion of a completed cognitive assessment, insomuch as background history, behavioral observation, and academic achievement play significant roles" (Blumberg, 1995, p. 96).

Despite the shortcomings of the WISC-III, it is currently one of the best measures of intelligence available because of its updated norms, solid psychometric properties, user-friendliness, and attractive packaging. Its subtests may fairly assess the intelligence of culturally disadvantaged and minority children due to the inclusion of an additional WISC-III scale (Post & Mitchell, 1993).

Glutting, Oakland, and Konold (1994) studied the WISC-III to examine test-taking behaviors and test performance of students who differ by socioeconomic status, gender, and race/ethnicity. The subjects of the study were 472 males and 497 females. The subjects were divided into three age levels: (a) six- to eight- year-olds, (b) nine- to 12-year-olds, and (c) 13- to 16-year-olds. Within each age level the children were further divided by race (751 Anglo, 117 African-Americans, and 82 Mexican-Americans) and parent education (high was the equivalent of one or more years of postsecondary education, middle was the equivalent of high school graduates, and low was the equivalent of 11th grade education or less). The students were administered the WISC-III in which Full Scale IQ scores, Verbal Scale IQ scores, and Performance Scale IQ scores were
obtained. The students were also observed for these test-taking behaviors: avoidance, inattentiveness, and uncooperative mood. The results of the study were interpreted through the use of Potthoff's technique and a simultaneous F test. The results of the study showed the following: (a) all students who exhibited high levels of uncooperative behavior, avoidance, and inattentive behavior obtained lower scores on the WISC-III, (b) an absence of bias was found in scores comparing Anglos and Blacks, boys and girls, high and middle socioeconomic status families, and (with one exception) high and low socioeconomic status families, (c) in one instance, low socioeconomic status background children scored higher than high socioeconomic status background children, and (d) Latino children scored higher than Anglo children.

The WISC-III is another example of a traditional test of intelligence. Like the SB4, it has recently been normed to control for bias in race, gender, and socioeconomic status. Its subtests can be used to fairly assess the intellectual abilities of minority children and children from low-SES backgrounds.

**Woodcock-Johnson**

An example of a recently developed intelligence test is the Woodcock-Johnson Educational Battery-Revised (WJ-R). This test, as reviewed by Hicks and Bolen (1990) is an updated version of the original battery that was published in 1977. The battery is made up of 35 subtests to measure either cognitive abilities (WJ-R COG) or academic achievement (WJ-R ACH), and is one of a few tests that represent a multiple intelligences construct. The battery's cognitive
subtests are aligned with the nine factors of Horn and Cattell's Fluid-Crystallized Theory of Intelligence. The cognitive subtests are: memory for names, memory for sentences, visual matching, incomplete words, visual closure, picture vocabulary, analysis-synthesis, visual-auditory learning, cross-out, sound blending, picture recognition, oral vocabulary, concept formation, delayed recall-memory for names, delayed recall-visual auditory learning, numbers reversed, sound patterns, spatial relations, listening comprehension, verbal analogies, calculation, and applied problems.

WJ-R COG and WJ-R ACH were normed on a sample of 6,359 individuals from age two through age 90. The sample included gender, geographic region, community size, race (White, Black, Native American, Hispanic Origin, and other), and socioeconomic variables. “A close match between U.S. Census Bureau statistics and characteristics of the WJ-R norming sample was obtained” (Hicks & Bolen, 1990, p. 94).

After administering the test, it is easily scored through the use of WJ-R CompScore software, which Hicks and Bolen (1990, p. 96) described as “an excellent, fast, and user-friendly scoring program for either Apple or IBM compatible computers.” The percentile scores allow for grade or age comparisons, and the standard score allows for comparisons with other measures.

The WJ-R is an example of a recently created test of intelligence instead of a traditional test. Because of its recent creation, it reflects a modern "multiple
intelligences* belief; the belief that there are many types of intellectual ability instead of one general intellectual ability. It is also unique because its sample population (for the purpose of norming) closely matches U.S. Census Bureau population statistics. It can be scored through the use of user-friendly software.

Intelligence testing in the United States was initially based on studies and beliefs of France's Alfred Binet. Binet's tests were adapted for use in the United States by Lewis Terman. Terman and Binet believed a single, general type of intelligence could be measure through the use of one test. This belief persisted in the United States until the mid-twentieth century, when rapid changes in American culture took place.

A Brief History of Gifted Education in the United States

The 1950s

Before the 1950s, American public schools gave little attention to the education of gifted students. In 1950, the Educational Policies Commission expressed concern for schools' neglect of mentally superior students. In 1951, the Ohio Commission on Children and Youth reported that only two percent of schools in the state had special classes for the gifted and only nine percent of the schools had any type of gifted enrichment in the classroom. According to a 1955 report presented at the 93rd Annual Convention of the National Education Association, the consequences of neglecting the brightest students could result in the United States losing its superiority to the Soviet Union in the area of technology (Tannenbaum, 1988).
Despite the concerns expressed by educational organizations, no serious action took place until Sputnik was launched in 1957. Suddenly, the education of highly intelligent students became "a key to the survival of the free world" (Tannenbaum, 1988, p. 17). Education and defense were combined to create the National Defense Education Act of 1958, which provided funds to strengthen six components of American education. One of these components was the identification of gifted children. According to Tannenbaum (1988, p. 19), "there is no way of knowing precisely what percentage of our schools offered something special to the gifted in the years immediately after Sputnik" because many of the programs were not taken seriously enough to last long.

The 1960s

In the early 1960s, gifted adults were glamorized through President John F. Kennedy's "Whiz Kids." These were scholars at leading universities and "idea men" in industry whom the President selected as advisors. Giftedness was further reinforced through employment opportunities in science, which was considered to be "one of humanity's most exciting modern frontiers" (Tannenbaum, 1988, p. 21). These attitudes toward giftedness resulted in educational efforts such as the Georgia Governor's Honors Program in 1964 and the Louisiana Governor's Program in 1965, both of which were residential programs for gifted students.

Along with the outpouring of enrichment activities in the schools during the late 1950s and early 1960s, there was a massive amount of research activity
dealing with gifted student identification and education. This research focused primarily on topics such as: (a) social status and its effect on motivation to learn, (b) the effectiveness of gifted program design, such as acceleration, ability grouping, and classroom enrichment, (c) nonintellectual factors that affect intelligence, and (d) the causes and treatment of underachievement in children with high potential (Tannenbaum, 1988).

Changes in attitudes toward giftedness took place in the late 1960s due to factors such as the civil rights movement, school integration, compensatory education, Vietnam and its resulting disenchantment of youth, and a growing distrust of scientific discovery. The 1954 Supreme Court decision to desegregate public schools gradually changed the focus of education from saving the free world to the education of the disadvantaged in order to close the gap between the privileged and the underprivileged. President Lyndon B. Johnson's Great Society program encouraged school administrators, college professors, curriculum specialists, and educational researchers to become committed to the education of the disadvantaged. This new advocacy movement contested two features of gifted programs: (a) the use of IQ tests to identify giftedness, and (b) placing students in special classes based on their performance on these tests. The IQ test came under attack for being biased against some racial groups and against low socioeconomic status children because they were said to be normed on privileged populations. Because of these perceived test biases, critics also believed that ability grouping for gifted students was racial segregation.
The objections were not necessarily against special ability grouping per se for the gifted, or even the enriched educational experience reserved for them because of their ability. What created the furor was the practice of denying enough children from disadvantaged subpopulations their rightful access to these classes. There was an overwhelming sentiment favoring the idea that high potential is distributed equitably among all races, privileged and underprivileged, but that life’s circumstance in some groups is oppressive enough to cast a shadow over their innate competencies. And, since nobody had ever devised a way in which to locate and nurture giftedness that was thus hidden from view, it was impossible to integrate special classes for the gifted with balanced racial quotas" (Tannenbaum, 1988, p. 24).

Today, the makers of intelligence tests are still addressing this concern of bias. To reduce bias, tests are normed through the use of a large nationwide sample population that includes factors such as race, geographic location, gender, and socioeconomic status of test-takers.

The 1970s

According to Tannenbaum (1988), the decline of interest in gifted education in the late 1960s was alleviated by a 1970 Congressional mandate that added Section 806, "Provisions Related to Gifted and Talented Children" to the Elementary and Secondary Educational Amendments of 1969 (Public Law 91-230). This legislative decision caused gifted children to be among those who received help from Titles III and V of the Elementary and Secondary Education Act and the Teacher Fellowship Provisions of the Higher Education Act of 1956. It directed Commissioner Sidney P. Marland, Jr., to: (a) find the extent to which gifted education programs were necessary or useful, (b) show which federal assistance programs were being used to meet the needs of gifted children, (c)
evaluate how federal educational assistance programs could be used more efficiently to meet the needs of gifted children, and (d) recommend new programs to meet those needs. Gifted children were defined as the upper three to five percent of children who were outstanding in any of six categories: (a) general intellectual ability, (b) specific academic aptitude, (c) creative or productive thinking, (d) leadership ability, (e) visual and performing arts, and (f) psychomotor ability.

In 1971-1972, Marland issued a report of his findings and recommendations. He estimated that only a small percentage of the 2.5 million gifted school-age children were receiving programming for gifted students. Based on his findings, Marland initiated major activities at the federal level in hopes of inspiring commitment from the nation’s schools (Tannenbaum, 1988; Marland, 1972).

According to Marland (1972), the education of gifted children was of such little official concern to the federal, state, and local governments and education agencies that it best could be described as nonexistent. Gifted children were not being identified in schools, and the federal government was doing virtually nothing to solve the problem. Marland (1972) stated that “studies show that the gifted children in our schools today are locked in by structural and administrative restrictions that inhibit their development. They are denied open access to advanced materials, a cruel kind of censorship to the mind.” As a result of his report, the following changes took place: (a) an Office of Gifted and Talented was
established in the Bureau of Education for the Handicapped, (b) whereas
approximately 80,000 students nationwide were receiving gifted education, the
Office's goal was to double the figure during the following five year period, (c)
federal funds were allocated to states to encourage them to create programs for
the gifted, (d) leadership training institutes were established on the national level
to work with all state education departments, and (e) inservice workshops were
offered to educators in the absence of graduate training in the field of gifted
education.

In 1974, the Office of the Gifted and Talented was given official status by
legislation. By 1979, the following changes had taken place: (a) almost 75
percent of the states had definitions of "gifted," (b) 66 percent of the states
reported an increase of nearly 25 percent over the previous year in the number of
gifted children served, (c) 62 percent of the states increased their appropriations
for gifted education by 50 percent, and (d) 42 states required training for persons
serving the gifted, a 110 percent increase over the previous year (Tannenbaum,
1988).

In the 1970s, more activity directed toward gifted education was focused
upon creating enrichment programs than upon research. These enrichment
programs were based on instructional adaptations of these theories: (a)
Benjamin Bloom's Taxonomy of Educational Objectives, (b) Mary Meeker's
application of Guilford's Structure of Intellect, (c) Joseph Renzulli's Enrichment
Triad, and (d) E. Paul Torrance's writings on the subject of creativity
According to Clark (1999), Benjamin Bloom is probably best known for his Taxonomy of Educational Objectives (also known as Bloom's Taxonomy) published in 1956. Bloom identified three types of learning: cognitive (mental skills), affective (attitudes and feelings), and psychomotor (manual or physical skills). The levels of the cognitive taxonomy, in order from simplest to most complex, are described below. Bloom's Taxonomy is used by classroom teachers to identify instructional outcomes and to design appropriate instruction. Because the levels are in order according to degree of difficulty, the student must master the levels in this given order (Bloom, 1956; Clark, 1999):

1. Knowledge is the recall of information. Example: Recite a rule.
2. Comprehension is the understanding of information. Example: Explain in one's own words the steps in completing a task.
3. Application is the use of information in new situations. Example: Apply a written rule or formula to a real-life situation.
4. Analysis is the act of breaking down information into its basic elements. Example: Compare and contrast two sides of a current issue.
5. Synthesis is the act of putting together bits of information to form a whole. Example: Design a machine to perform a certain task.
6. Evaluation is the act of judging information. Example: Select the most effective solution to a given problem.

According to Clark (1988, p. 246), Bloom's Taxonomy "can be used to examine which process skills gifted students have developed and which need further development. The processes of analysis, synthesis, and evaluation are all within the capability of gifted students, but they do not reach their most effective level without provision of opportunities for development...It should be noted that these students possess the ability to work with abstracts, concepts, and diverse and integrative thought patterns."

J. P. Guilford

Guilford's Structure of Intellect (SOI) was a three-dimensional theory of intellectual abilities, and was illustrated as a cube that showed how information was processed in the human brain. Because it was a three-dimensional concept, "it has always been difficult to show how the cube components are separate. Many readers lack skill in third-dimensional conceptualizations. In fact, third-dimensional conceptualization is one of the 120 SOI abilities, and because this has been such a difficulty, Guilford now laughingly refers to the cube as his 'mental block'" (Meeker, 1969, p. 103).

The Structure of Intellect, the product of the factor-analytical research of J. P. Guilford and his associates at the University of Southern California, was a model of intellectual aptitude that encompassed most testable intellectual abilities. "The ideas basic to the structure-of-intellect (SOI) theory were
formulated in the late 1950s following the factor analysis of many tests, and were successively refined until the present model was formulated" (Meeker, 1969, p. 8). Its purpose was to identify those intellectual abilities in order to help educators teach students how to learn. The abilities shown on the Structure of Intellect cube consist of three major dimensions, each with a set of factors. The intersection of the factors on the cube resulted in 120 cells, each of which was a category of intellectual abilities (Meeker, 1969).

Mary Meeker was an associate of Guilford, and she became interested in practical psychological and educational implications of the Structure of Intellect model. As a result, she wrote the text *The Structure of Intellect: Its Interpretation and Uses*, which included a "Forward" section by Guilford (Meeker, 1969). She developed extensive testing materials, computer programs for analyzing ability profiles, teacher training materials, and workbooks for children for use in developing their intellectual abilities (Maker & Nielson, 1995).

"Guilford's theory of the structure of human intelligence has no doubt had a greater influence on the field of education of the gifted than any other theory or model" (Maker & Nielson, 1995, p. 357). The Structure of Intellect's most important influence was in expanding the definition of gifted from IQ scores to a multidimensional concept of intelligence. It influenced all areas of gifted programming, including definition, identification, and curriculum development. The Structure of Intellect influenced theorists and leaders in gifted education,
including E. Paul Torrance who drew heavily upon Guilford's work in the
development of the Torrance Tests of Creativity (Maker & Nielson, 1995).

Joseph Renzulli

Joseph Renzulli's Enrichment Triad, also known as Renzulli's Three-Ring Conception of Giftedness (Renzulli, 1986), was based on "research on creative-productive people [that] has consistently shown that although no single criterion can be used to determine giftedness, persons who have achieved recognition because of their unique accomplishments and creative contributions possess a relatively well-defined set of three interlocking clusters of traits" (Renzulli, 1986, p. 65). Renzulli (1980) believed that (a) giftedness was not something that one either had or did not have, (b) mistakes could be made in the gifted identification process due to deficiencies in identification instruments, and (c) despite the research on multiple criteria for gifted student identification, too much emphasis was placed on the use of predetermined cutoff scores on intelligence tests. "This approach is somewhat analogous to selecting students on the basis of hair or eye color because it assumes that giftedness is some sort of absolute and predetermined condition" (Renzulli, 1980, p. 4).

According to Renzulli, interaction among these three traits caused gifted behavior:

1. Well-above average ability, which had two definitions:
   
   (a) General ability defined as the capacity to process information and to
       integrate past experiences in new situations, and the capacity for abstract
thinking. Examples of general ability are memory, word fluency, verbal and numeric reasoning, and spatial relations. These abilities were usually measured by IQ or aptitude tests.

(b) Specific ability, defined as the capacity to acquire skills, knowledge, or the ability to perform specialized activities. Examples of specific ability are ballet, sculpture, musical composition, photography, mathematics, and chemistry. These abilities were usually measured by aptitude tests or performance-based assessments.

2. Task commitment, defined as a refined or focused form of motivation. Examples of task commitment are perseverance, self-confidence, a belief in one's ability to carry out important work, and a special fascination with the subject matter of a chosen field. These abilities were not objectively measurable.

3. Creativity, or divergent thinking, which is made up of dimensions such as originality of thinking, constructive ingenuity, and the ability to set aside conventions and procedures when appropriate. "A major issue that has been raised by several investigators deals with whether or not tests of divergent thinking actually measure 'true' creativity... Unfortunately, very few tests have been validated against real-life criteria of creative accomplishment" (Renzulli, 1986, p. 72).
The following quotation by Renzulli (1986, pp. 55-61) is from his review of past research in gifted education. It is now an excellent summary of today's beliefs about giftedness and how it should be identified:

"there is no ideal way to measure intelligence and therefore we must avoid the typical practice of believing that if we know a person's IQ score, we also know his or her intelligence....What the research clearly and unequivocally tells us is that giftedness is a condition that can be developed....Without such an approach there would be no hope whatsoever of identifying bright underachievers, students from disadvantaged backgrounds, or any other special population that is not easily identified through traditional testing procedures."

E. Paul Torrance

E. Paul Torrance is Alumni Distinguished Professor Emeritus of the University of Georgia, a former high school teacher, and former instructor at Georgia Military College. He became interested in learning how to use creativity in a positive manner during his teaching years when he taught boys who were almost intolerable due to their negative use of creativity. He later became interested in developing a creativity test during his experiences of conducting research in support of the United States Air Force Survival School (Test Developer Profiles, December 2000). According to Torrance (1962, pp. 1 & 2), "Most of the educators I know perk up when they discover a child with a high Intelligence Quotient or a high score on some other traditional measure of intellectual talent. They are impressed!...Not a counselor or psychologist among my acquaintance, however, bothers about obtaining measures of their client's creative thinking abilities." Torrance believed creativity is important because (a) it
is a resource that helps one cope with life's daily stresses, thus reducing the chance of emotional breakdowns, (b) creative thinking helps one acquire information and various educational skills, thus improving achievement, (c) in the occupational world, creativity is a distinguishing characteristic of outstanding individuals in almost every field, and (d) creative individuals make useful contributions to society by finding intelligent, imaginative solutions to problems.

Torrance believed research in the area of creativity was important because "we may be discovering a few clues that will enable us to educate to a higher degree many people whom we have not been very successful in educating, such as the vast army of dropouts and other less educated groups" (Torrance, 1963, p. 10).

Torrance (1976) believed the use of creativity tests was important for five reasons: (a) as a possible basis for individualized instruction, (b) as indicators of growth potential and future guidance needs, (c) for obtaining a more complex understanding of the human mind and human personality and their functioning, (d) as a means of assessing effects of programs, materials, teaching procedures, etc., and (e) as a part of the process of guiding mental growth.

Torrance became involved in test development when he became director of the University of Minnesota Educational Research Bureau. In 1958, Torrance and the Bureau began its studies of creative thinking, which resulted in The Minnesota Tests of Creative Thinking. These tests were originally alternate forms of Guilford-type tasks such as Problem Situations, Problems, Improvements, Unusual Uses, Impossibilities, and Consequences. After three years of
experimentation, Torrance and his colleagues developed a set of over 25 tasks that varied greatly in the type of thinking involved. The tasks were classified into three major categories: non-verbal tasks, verbal tasks using non-verbal stimuli, and verbal tasks using verbal stimuli. Examples of tasks are: Incomplete Figures (students add lines to abstract figures in order to create a picture), Unusual Uses (students brainstorm to list uses for items such as a tin can or a brick), and Consequences (students answer questions such as “What would happen if you could become invisible at will?”). When the tasks were completed, they were examined for various qualities of thinking (Test Developer Profiles, December 2000; Torrance, 1962).

Torrance (1976, p. 139) denied that there was any advocacy on his part for replacing tests of intelligence with tests of creativity. Instead, he stated that his “whole plea was to consider a wider range of abilities in both identification and in program development….The fact remains that there are racial and socioeconomic differences in measured intelligence and that these are fairly consistent.” He further stated that his tests of creativity showed “no racial or socioeconomic differences. A major reason for this, of course, is that creativity test tasks are open-ended and a child may respond to them in terms of his own life experiences whatever these may have been. This is not true of intelligence tests” (Torrance, 1976, p. 139).

Marland provided the basis for modern gifted education in the United States through his research in the early 1970s. This research, now known as
"The Marland Report," gave the first national definition of "gifted," proved that
gifted education was virtually nonexistent in our country, and brought about
legislation to provide special education services to gifted children. These
educational services were based on the research and beliefs of Bloom, Guilford,
Renzulli, and Torrance. The higher levels of Bloom's Taxonomy were used to
create learning activities appropriate for highly intelligent children. Guilford's
Structure of Intellect was modified by Meeker and was used to create ability
profiles of individuals, thus allowing for individualized instruction through the use
of workbook activities that helped children further develop their special
intellectual abilities. Renzulli was an early advocate of "multiple intelligences"
research. He developed the Three Ring Conception of Giftedness, which stated
that intelligence was not a single criterion (a belief held by creators of early IQ
tests) but an interaction between one's special abilities, creativity, and
commitment to completing a given task. Torrance developed the first tests of
creativity. He believed creative thinking skills were responsible for increased
learning and for an individual's success in life. The work of these researchers is
still used today for creating individualized educational plans (IEPs) for students
who are placed in programs for gifted children.

1980s and 1990s

"Generally, the enrichment programs initiated in the 1970s are
impressive....The same cannot be said for research productivity" (Tannenbaum,
1988, p. 31). Tannenbaum further stated that a review of literature showed only
39 reports on gifted were published from 1969 to 1974, and limited research efforts were published throughout the 1970s.

In the 1980s, there was a resurgence of interest in gifted education. This interest included both research and efforts to provide services to the gifted population. By the mid-1980s, "multiple criteria" were almost the bywords of the gifted student movement. The multiple criteria theory was based on many researchers' belief that "intelligence is not a unitary concept, but rather there are many kinds of intelligence" (Renzulli, 1986, p. 55). Because of this belief, less emphasis was placed in IQ, achievement, and aptitude test scores and more emphasis was placed on seeking out a wider variety of abilities such as creative thinking, leadership ability, artistic talent, and motivation as identified by panels of qualified judges (Renzulli, 1986).

During the 1970s, 1980s, and 1990s, the identification of gifted minority students was a concern because of the disproportionately low numbers of minority students in gifted programs (Masten, 1985; Ford, 1994; Office for Civil Rights, 1999). According to Masten's review of literature (1985), the low numbers were mainly caused by inadequate identification methods that relied heavily on standardized tests.

The need to identify gifted students from minority populations is a fairly recent concept. "That there might be gifted children among disadvantaged population was relatively unheard of prior to the 1960s" (Frasier, 1979, p. 538). According to Frasier, there was confusion as to the definition of "disadvantaged."
“Culturally deprived,” “culturally disadvantaged,” and “culturally different” were terms often used interchangeably in the literature of the 1970s. According to Good and Brophy (1977, p. 197), “a remarkable number of otherwise well-informed people believe that most of the disadvantaged are blacks and that most blacks are disadvantaged or both.” Ehrlich (1986, p. 56) stated that “disadvantaged... is a broad term that can be applied equally, for example, to children of wealthy but indifferent parents, the poor or economically deprived, the geographically isolated, the culturally different. Ethnic minorities may or may not be included among the disadvantaged.”

During the late 1970s, gifted and talented children among these “minority/disadvantaged” populations began to receive the attention of educators. This attention continued throughout the 1980s and 1990s, when research on multiple criteria (also called “best practices”) methods of gifted identification were emphasized in the identification of gifted minority students (NAGC, 1997; Ford, 1994; Richert, Alvino, and McDonnel, 1982).

Prior to the 1950s, gifted education in the United States was virtually nonexistent. The Russian’s launching of Sputnik provoked a realization of the need for emphasis on educating highly capable students, especially in science, and the need for identifying gifted students. Giftedness was glamorized in the early 1960s, and an outpouring of research began in the areas of giftedness and gifted program design. In the late 1960s, gifted education programs were viewed as racially biased due to the use of standardized tests that were believe to be
improperly normed and the placement of students in special classes based on the results of these tests. The Marland Report in the early 1970s was responsible for the rebirth of gifted education through legislation and a renewed interest in gifted research. Gifted student identification practices moved away from IQ tests of general ability and moved toward practices that recognized specialized abilities such as creativity, artistic talent, leadership ability, and self-motivation. "Disadvantaged" and "minority" were viewed as separate entities by the early 1980s, and both populations gained the attention of researchers. Emphasis is now placed on the application of this research.

Various Explanations for Giftedness

For centuries, researchers and philosophers have attempted to develop a single definition of giftedness or explanation for giftedness. The following is a summary of several of these explanations. Some are philosophical, and others are based on various types of research. The following will be addressed in this section: (a) heredity, (b) physical functions of the brain, and (c) philosophies of giftedness.

Heredity

Recent studies of the hereditary aspect of intelligence involve studies of DNA. Karen Wright (1999) conducted an interview with Robert Plomin, a 25-year research veteran at the Institute of Psychiatry in London. In 1998, Plomin reported the first evidence of a gene linked to high intelligence. In 1999, he
reported the locations of three more genetic determinants of intelligence and he hoped to find at least two dozen more in the near future.

Generally, most published studies of inherited traits report the results of comparisons of twins reared together and apart, or they report the results of comparisons of adopted children with their biological and adoptive parents and siblings. These types of studies suggest that anywhere from 30 percent to 70 percent of the differences among individuals' IQ scores can be attributed to genes. Plomin believed 50 percent would be a more likely figure (Wright, 1999). These studies also suggested that physical attributes such as height and weight could be up to 90 percent inheritable. Plomin stated that, unlike physical attributes, intelligence "is a complex phenomenon, governed by hundreds or even thousands of genes. So patterns of inheritance aren't obvious" (Wright, 1999, p. 40).

Plomin's unique study "has provoked visions – and fears – of DNA doctors tinkering with the gears of cognition" (Wright, 1999, p. 40). According to Plomin (Wright, 1999, p. 40), "I knew that nobody else would be crazy enough to do [this study]." Plomin conducted a DNA study of two groups of children. One group consisted of 51 children with an average IQ of 103; the other group consisted of 51 children with an average IQ of 136. His tests revealed differences in a gene for hormone receptors that may be responsible for learning and memory. Yet, Plomin stated that "by measuring the parents' IQ, we can already predict a kid's IQ tremendously better than we will ever be able to predict it with a DNA test.
And if schools were going to select kids on the basis of ability, they'd still do better by administering IQ tests" (Wright, 1999, p. 42). According to Wright (1999, p. 42), Plomin's studies "may soon provoke another unquiet round in the intelligence debate."

Recent psychological studies by the Gifted Development Center (Silverman, 1999) also suggest the hereditary aspects of giftedness. Their study of 148 sets of siblings showed almost 75 percent of siblings scored within 13 IQ points of each other, 60 percent within 10 IQ points of each other, and 33 percent within five IQ points of each other. Also, "parents' IQ scores, when known, are usually within 10 points of their children's; grandparents' IQ scores are often within 10 points of their grandchildren's" (Silverman, 1999, p. 1). According to Detterman and Ruthsatz (1999, p. 148), "there is no doubt that 50 percent or more of cognitive ability is genetically determined."

**Physical Functions of the Brain**

According to Clark (1988, p. 23), "in our definition of giftedness, a high level of intelligence is viewed as advanced and accelerated brain function." Clark described the human brain as follows: The basic unit of the brain is the nerve cell, or neuron. The brain is made up of approximately 100 billion neurons, which are so small that 100,000 of them could fit on the head of a pin. Each neuron is composed of a cell body (containing the nucleus), dendrites (which are finger-like projections branching out from the cell body), and an axon (a long nerve fiber which transmits signals to neighboring dendrites). Because the axon does not
actually touch the neighboring dendrites, electrochemical signals are sent across the space between the axon and dendrites. This space is called a synapse. The synapse is believed to be the most likely site for the neural process of memory and learning. "It is by increasing the strength and the speed of transmission or synaptic activity that we can affect the process of learning" (Clark, 1988, p. 27). This can be done through changes in teaching procedures, through changes in learning procedures, and through the environment we provide. "Gifted children become biologically different from average learners, not at birth, but as a result of using and developing the wondrous, complex structure with which they were born. At birth, everyone is programmed to be phenomenal" (Clark, 1988, p. 27).

Clark showed, through her synthesis of literature, that gifted learners are biologically different in these ways: (a) more coherence and synchronicity of brain waves, (b) more use of alpha wave activity, (c) more use of the activity of the prefrontal cortex, (d) an increased number of synapses and size of synaptic contact, (e) increased branching of dendrites, (f) neurons that are more biochemically rich, and (g) an increase in nourishment and support for neurons through the increase of neuroglial cell production. Clark believed these biological differences are the result of interaction between heredity and environment.

A study by Flashman, Andreasen, Flaum, and Swayze (1997) showed that brain size is related to intelligence. Ninety volunteers, recruited through newspaper ads, participated in the study. The group's average Full Scale IQ score was 113, Verbal IQ score was 110, and Performance IQ score was 114.
The volunteers were given MRI scans, and the results were analyzed using locally developed software. The results showed that general IQ was related to the size of the temporal and frontal lobes, performance IQ was related to the size of the parietal, temporal, and frontal lobes, and verbal IQ was not related to any regional brain size.

In contrast, Bruer (1999) believed that some neuroscience has been misinterpreted. He stated that often-cited PET scan (positron emission tomography) research has been conducted only on epileptic children because PET scans require injecting children with radioactive substances that cannot be administered to normal, healthy children. Many of these children had been on medication since infancy. Also, brain images are difficult to acquire and to interpret, even for the experts. Other brain studies may be misleading because samples of human brain tissues come from autopsies, which limits scientists' control over how many brains at each developmental stage can be included in a study. "While neuroscientists believe that there is some relation between brain connections and intellect, they are still trying to discover what that relation may be" (Bruer, 1999, p. 272).

**Philosophies of Giftedness**

According to Bernal (1994), giftedness is not only high intelligence, but also creativity and the motivation to pursue goals and to seek success. He believed intelligence is developed because very bright children, like average children, go through developmental stages. He also believed intelligence could
be gained and lost under certain circumstances that affect an individual's level of motivation. Another developmental theory states that intelligence is based on experience. "Intelligence rises as we get older and experience the world more" (Deary, 1998, p. 1702). According to Deary, this experience is largely unconnected with one's family upbringing and parents' efforts.

Tannenbaum (1987) believed society determines the definition of giftedness; there must be "a perfect match between a person's particular talent and the readiness of society to appreciate it" (Tannenbaum, 1987, p. 21). For example, Eine Kleine Nachtmusik would be more at home in the salons of the 18th century aristocracy than in our century. He also speculated whether or not Einstein would have made any contribution to theoretical physics if he had been born 50 years earlier or later. To further complicate matters, there is no way to determine why society prefers one activity over another; ballet is one of the most celebrated art forms, but figure skating is considered to be merely a popular form of entertainment.

Minority Underrepresentation in Gifted Programs

Nationwide, minority students are underrepresented in programs for gifted students (U.S. Department of Education, 1996; Borland & Wright, 1994; Ford, 1994; Frasier & Passow, 1994; Richert, Alvino, & McDonnel, 1982; Tannenbaum, 1979). Yet, it should be assumed that giftedness is distributed proportionally across gender, race, and ethnic groups (Borland & Wright, 1994; O'Tuel, 1994; Smith, LeRose, & Clasen, 1991). "Although minorities make up 30 percent of
public school enrollment, they represent less than 20 percent of the students
selected for gifted and talented programs" (Alamprese & Erlanger, 1988, p. v). In
1987, Milwaukee's total school minority population was 67 percent, and its gifted
minority population was 41 percent (Smith, LeRose, & Clasen, 1991). In the
southern region of the United States, African-Americans constitute 28.8 percent
of the total school population; however, they constitute only 12 percent of the
gifted school population (Baca & Chinn, 1982).

The inclusion of minority children in gifted programs is important to our
society, which may be denied their exceptional contributions if they are not
identified (Richert, Alvino, & McDonnel, 1982). A study conducted by Smith,
LeRose, & Clasen (1991) suggested that gifted education had an impact on
minority students' dropout rates and college enrollment.

new gifted program called the Lighthouse Project in Racine, Wisconsin.
Approximately 2,500 kindergartners were screened for admittance to the gifted
program. The top nine percent of each major ethnic group were identified as
gifted and were randomly assigned to either gifted treatment or no special
treatment. These students were tracked for 12 years. The results showed that
none of the minority gifted students who received gifted program treatment and
45 percent of the minority gifted students who received no treatment dropped out
of school. Sixty-three percent of the minority gifted students who received gifted
treatment and 21 percent of the minority gifted students who received no
treatment attended schools of higher education after high school graduation. Smith, LeRose, and Clasen (1991) conducted a similar study in Milwaukee’s Program for the Academically Talented (PAT). This study showed that 74 percent of the PAT nonminorities and 76 percent of the PAT minorities planned to enter college. “Had more minorities been admitted to PAT, it is likely that more would have graduated and planned for higher education” (Smith, LeRose, & Clasen, 1991, p. 83).

In 1995, Frasier et al. conducted a study through the University of Georgia. The study was conducted to learn educators’ perceptions of barriers to the identification of gifted children from economically disadvantaged backgrounds. Surveys were sent to 750 educators (mainly classroom teachers) from 14 rural and urban school sites nationwide. These educators were from a wide variety of ethnic and cultural groups. The survey results showed two major perceived barriers to identification of disadvantaged gifted children: (a) teachers’ inability to recognize traits of gifted children and (b) biased standardized tests. Less than half of the participants believed teachers’ prejudicial attitudes were a barrier to gifted student identification. In an effort to better understand these two barriers, the next section includes an examination of related literature.

**Lack of Understanding of Gifted Traits**

When identifying students for participation in gifted programs, the selection process traditionally begins with some type of screening process. Teacher nomination is usually the first step in choosing students for screening, even
though reliance on teacher nomination may severely penalize students because too few teachers recognize the characteristics of gifted children (Cowan, 1992; Frasier, 1989; Clark, 1988; Terman, 1926). Some teachers tend to favor students who are well-behaved, well-dressed, quiet, and non-handicapped, who complete their assignments neatly and on time, and who make good grades (Bricker & Braverman, 1998; Davis & Rimm, 1994; Clark, 1988). This may cause teachers to overlook gifted students who are underachievers or who are creative yet unconventional (Davis & Rimm, 1994). The following is a summary of gifted traits compiled by researchers from the 1860s to the present. The researchers in these sections are: (a) Sir Francis Galton, (b) Lewis Terman, (c) Barbara Clark, (d) Mary Frasier, and (e) Howard Spicker and Shirley Aamidor.

**Sir Francis Galton’s Research**

Galton (1914), in a study conducted in the mid-1860s, described various traits of gifted men. The traits he described are still recognized by modern researchers:

- leadership abilities;
- strategic ability;
- an understanding of abstract concepts;
- remarkable mathematical ability;
- tenacious memory;
- concentration of effort on a particular task;
- a special aptitude for a self-selected occupation or hobby;
• an instinctive craving for intellectual work;
• a self-reliance that causes one to educate himself, if necessary; and
• overcoming hindrances that block the path to one's goal.

Lewis Terman's Research

In the early 1920s, Lewis Terman of Stanford University conducted an extensive study of the behaviors and characteristics of gifted children. His study helped dispel the stereotype of the gifted child as a "bespectacled, frail youngster, ill at ease socially, lost in a world of books and lofty thoughts, usually isolated in a corner tenuously holding on to sanity" (Clark, 1988, pp. 16-17).

To briefly summarize the following research results, the participants were selected through the use of early standardized tests. The participants tended to be white children who came from educated families with good jobs. These children were usually the first or second born in the family, their parents were older than average at the time of the children's birth, they were healthy and well nourished, and they came from small families. The participants showed these personality traits:
• early speech development;
• learned to read at an early age, often before starting school;
• unusual vocabulary;
• quick understanding of new concepts;
• insatiable curiosity;
• often kept collections of items, especially of a scientific nature;
- enjoyed academics;
- preferred the company of older children;
- loved to read; and
- character development was about five years ahead of their same-age peers.

The purpose of Terman's study was to investigate how the typical child differed from the intellectually gifted child, who was defined as "well within the top 1% of the school population" (Terman, 1926, p. 19). Due to the magnitude of the testing involved, the study was limited to locating 1,000 children in large cities in California who fit the definition of "gifted." The study was conducted by Terman and his research team from Stanford University and was funded by grants from the Commonwealth Fund and the Thomas Welton Stanford Fund. Before Terman's study was conducted, no large group of gifted children had ever been studied (Terman, 1926).

Teacher selection was the first step in choosing participants for the study. From each class of 30 to 50 students, the classroom teacher chose whom he/she believed to be the top five most intelligent students. The teachers were instructed to take into consideration not only school marks, but also characteristics of intellectual curiosity, quickness and accuracy of mental grasp, independence of judgment, common sense, command of language, breadth and accuracy of information, reasoning ability, and originality. The teachers were each permitted to name one student of moderate general ability who seemed to be exceptionally gifted in one area such as science, mathematics, composition, mechanical...
ingenuity, modeling, drawing, and music. They were discouraged from underrating children who were shy, lacking in industry, or low in deportment.

For grades three through eight, the nominated students were assembled as a group at each school and were administered the National Intelligence Test, Scale B, Form I. The students who scored in the 90th percentile were given an abbreviated Stanford-Binet test. Children who attained an IQ score of 130 or more were given the complete Stanford-Binet.

For grades one and two, the same method of selection was used, with the exception of the use of the National Intelligence Test. "The results here were on the whole less satisfactory than they were in the upper grades, because the teachers' nominations were more often in error" (Terman, 1926, pp. 26 – 27). Field assistants returned to these classrooms and simply asked the teachers whether they had any students of outstanding ability. These students were tested, along with siblings of older children who had already been identified as gifted. These methods increased the number of younger gifted children who were identified.

Several of the younger gifted students were found by accident. For instance, one teacher wrote the wrong child's name on a nomination form. This child was the only one in that particular school of 300 students who tested as high as 140 IQ. "Accidental Exploration of the kind mentioned above were frequent enough to suggest that a considerable proportion of gifted pupils were being missed" (Terman, 1926, p. 27). A study was conducted in seven schools in...
Santa Barbara to investigate this problem. Thirty-three teachers were asked to complete nomination forms in the usual manner. The seven schools' entire student populations were given the National B test. The results showed that three out of every eight gifted students were not nominated by the teachers. Afterwards, the field assistants began testing more students than the identification scheme called for. By May 1, 1924, 1,444 gifted students were selected to participate in the study. Below is a brief summary of the many findings of this study.

**Racial and social origin.** Social class was not only highly correlated with adult achievement, it was also highly correlated with intelligence in early childhood. Unfavorable home conditions were reported for only 8.6 percent of the gifted group, as compared with 24.1 percent of the control (nongifted) group. Over 80 percent of the gifted children came from households where the father's occupation was either professional or semiprofessional, as opposed to the occupation of skilled, semiskilled, or unskilled laborer. One-fourth of the gifted children had at least one parent who was a college graduate. The racial origins of the majority of the gifted students were (in order): 30.7 percent English, 15.7 percent German, 11.3 percent Scotch, and 10.5 percent Jewish. The lowest percentages of the gifted population included 0.1 percent Black and 0.1 percent Hispanic. Only two Black children were identified as gifted, and they were reported to be part White.
Intellectually superior relatives. According to Terman (1926, p. 111), "the data...give considerable support to Galton's theory as to the hereditary nature of genius." Five parents, four grandfathers, and 35 other relatives of the gifted children were listed in Who's Who. One family had 34 relatives listed in either Who's Who or Cyclopedia of American Biography. The families of many gifted children included eminent relatives such as signers of the Declaration of Independence, U.S. presidents and vice presidents, supreme court judges, inventors, statesmen, generals, writers, and artists. Many of the gifted students' parents and grandparents have held posts of responsibility such as professorships, superintendents or managers, bank presidencies, college presidencies, etc.

Vital statistics. According to Terman (1926, p.133) "the average number of offspring per individual in the stratum represented by the parents of our subjects is 0.72. This is 50 percent lower than that found for the preceding generation and is far too low to maintain the stock." The average ages of the parents at the birth of a gifted child were father (33.63 years) and mother (29.10 years). The data showed a preponderance of gifted children who were the firstborn in families of two or more. Only 0.4 percent of gifted children's parents and 0.3 percent of the grandparents or great-grandparents had a record of insanity.

Anthropometric measurements. According to Terman (1926, p. 169-170), "the gifted California children as a group are above the best standards for American born children in physical and growth status for average standing
height and weight....The results of this investigation show that the gifted group is, as a whole, physically superior to the various groups used for comparison."

**Medical examinations.** Medical examinations were given to the gifted children by Dr. Albert H. Moore (of the Children's Hospital, Los Angeles) and Dr. Edith Bronson (Assistant Professor, University of California Medical School). According to Dr. Moore, "In my opinion the physical superiority of the gifted group is indicated by the higher average of nutrition and by superior stability, physical and mental" (Terman, 1926, p. 251). According to Dr. Bronson, "The home care, cleanliness, and health habits, such as diet, hours of sleep, etc., indicated superior intelligence on the part of the parents...Physically, also, the gifted child ranked above the average child of the community" (Terman, 1926, p. 251).

**Educational history.** The difference between mean age and mean mental age of the gifted children in first grade was 2.8 years, and by fifth grade this had increased to nearly five years. Fifty-four percent of the gifted boys and 70 percent of the gifted girls had a "very strong" liking of school. Nearly 50 percent of the gifted children had learned to read before starting to school. Most of these children learned to read with little or no formal instruction. Eight-five percent of the gifted children had been accelerated by one or more half grades. Twenty-one percent of the students skipped lower first grade and 10 percent skipped the entire grade. Their teachers stated that 82 percent needed additional acceleration. Traits of superior intelligence that were most often noted were early speech, unusual vocabulary, quick understanding, insatiable curiosity, extensive
information, etc. "Although the home environment of the gifted child has been, on the whole, average, nothing has been found to warrant the belief that the superior intellectual attainments of our gifted group are in any considerable degree the product of artificial stimulation or forced culture" (Terman, 1926, p. 287).

**Standardized testing.** The gifted students' superiority was greatest in reading, language use, and general information. Their superiority was least in civics and history. The gifted girls were slightly superior to the gifted boys in language usage, and the gifted boys were superior in arithmetic, spelling, and general information. Gifted children scored three to four times the standard deviation of nongifted children on the tests of accomplishment. The gifted children often scored accomplishment quotients that were higher than teachers' marks given on a basis of daily performance, presumably because either the teachers underestimated the children's accomplishment, or the teachers gave low marks as a penalty for lack of application on daily tasks.

**Specialization of abilities.** "Both the gifted children and the unselected children who were investigated show such real and varied differences between their abilities in school subjects as to warrant the statement that each child must be regarded as a unique individual with specific mental mechanisms" (Terman, 1926, p. 361).

**Scholastic and Other Abilities.** About twice as many gifted children as nongifted children had made collections, especially of a scientific nature. Gifted
children tended to enjoy reading, literature, dramatics, history, sports, games, and physical training; they tended to dislike physiology and hygiene, grammar, penmanship, and painting.

**Play interests.** Gifted children preferred older friends more so than the nongifted children, and they showed little preference for their friends' gender. Gifted children were more often regarded by the other children as peculiar, yet there was little difference (when compared to nongifted children) in the extent to which they were teased by others. The gifted children were no more or less popular than the nongifted children.

**Reading interests.** The teachers estimated that 88 percent of the gifted children read more than the average child, and zero percent read less than the average child. Gifted girls preferred emotional fiction, whereas gifted boys preferred mystery or adventure novels. With the exception of the *Book of Knowledge*, gifted boys and girls preferred fiction. Gifted girls were more likely than gifted boys to read a book several times. Gifted eight- or nine-year-olds read three times as many books as nongifted eight- or nine-year-olds.

**Social interests.** The gifted girls at all ages surpassed the gifted boys in social interest, and the gifted boys surpassed the gifted girls at most ages in activity interests. About 90 percent of the gifted children equaled or surpassed nongifted children in intellectual interests; there was no difference between the two groups in activity interests. Social interests and activity interests had no effect on the school achievement.
Character and personality. The gifted nine-year-old children had reached a level of character development corresponding roughly to that of nongifted 14-year-old children. On character issues in general, gifted children scored higher than nongifted children and girls scored higher than boys did. Yet, all boys (both gifted and nongifted) scored higher on tests of honesty than all girls.

Terman's research showed problems in the early 1920s that are still being addressed today. Teacher selection of students was the first step in his research. Terman learned that teachers failed to identify three out of every eight of the gifted students that participated in the study. Recent research shows that teachers fail to identify up to 50 percent of gifted students in their schools. Another issue is the method Terman used to select his participants. Terman used early standardized tests to select the top one percent of test-takers. Today, advocates of gifted education would question the tests' norms, and they would question the use of only standardized tests for labeling students as "gifted." Yet, Terman's process of using achievement test scores and group-IQ screenings followed by the individual administration of a full IQ test is still used in school systems today to place children in special programs.

Barbara Clark's Research

Clark (1988) stated that children might be gifted if they exhibit some of the following characteristics:

Cognitive Giftedness:

- asks a lot of questions;
• shows a lot of interest in progress;
• has lots of information on many things;
• wants to know why or how something is so;
• becomes unusually upset at injustices;
• seems interested and concerned about social or political problems;
• often has a better reason than you do for not doing what you want done;
• refuses to drill on handwriting, spelling, mathematics facts, or flashcards;
• criticizes others for dumb ideas;
• becomes impatient if work is not perfect;
• seems to be a loner;
• seems bored and often has nothing to do;
• completes only part of an assignment or project and then takes off in a new direction;
• sticks to a subject long after the class has gone on to other things;
• seems restless, out of seat often;
• daydreams;
• seems to understand easily;
• likes solving puzzles and problems;
• has his/her own ideas about how something should be done and stays with it;
• talks a lot;
• loves metaphors and abstract ideas; and
• loves debating issues.

Academic giftedness:

• shows unusual ability in some area, such as reading or mathematics;
• shows fascination with one field of interest and manages to include this interest in all discussion topics;
• enjoys meeting or talking with experts in this field;
• gets mathematics answers correct but finds it difficult to tell you how;
• enjoys graphing everything or seems obsessed with probabilities; and
• invents new obscure systems or codes.

Creative giftedness:

• tries to do things in different, unusual, and imaginative ways;
• has a really zany sense of humor;
• enjoys new routines or spontaneous activities;
• loves variety and novelty;
• creates problems with no apparent solution and enjoys asking you to solve them;
• loves controversial and unusual questions;
• has a vivid imagination; and
• seems never to proceed sequentially.

Leadership giftedness:

• organizes and leads group activities, and sometimes takes over;
• enjoys taking risks;
• seems cocky and self-assured;
• enjoys decision-making and stays with that decision; and
• synthesizes ideas and information from many different sources.

Visual or performing arts giftedness:
• seems to pick up skills in the arts (painting, music, dance, drama, etc.) without instruction;
• invents new techniques and likes to experiment;
• sees minute details in products or performances; and
• has high sensory sensitivity.

Mary Frasier's Research
Frasier (1995) stated that many educators are unable to recognize the characteristics of minority gifted students. Because of this, she has, through her synthesis of the literature, created a list of 10 core attributes of giftedness. Frasier believed that teachers' knowledge of these core attributes would provide a basis for identifying minority-gifted students.
• motivation (the evidence of desire to learn);
• communication skills (highly expressive and effective use of numbers, words, and symbols);
• intense and sometimes unusual interests;
• effective and often inventive strategies for recognizing and solving problems;
- highly creative and original;
- exceptional memory;
- inquiry (questions, experiments, explores);
- insight (quickly grasps new concepts, makes connections, and senses deeper meanings);
- reasoning (logical approaches to finding solutions); and
- conveys and understands humor.

Researchers have long attempted to identify traits of highly intelligent individuals. Galton (1914), Terman (1926), and Clark (1988) describe many similar characteristics such as leadership ability, a craving to learn a particular skill or concept, exceptional memory, and specialized abilities. Galton's list of traits from his study in the mid-1860s is an example of an early belief that giftedness can be expressed in many ways such as leadership ability, academic ability, and creative thinking, all of which are accepted by current researchers such as Clark (1988) and Ford (1994).

Howard Spicker and Shirley Aamidor's Research

Spicker and Aamidor (1996) were concerned with the underrepresentation of gifted children from various minority groups. Their concerns resulted in Project SPRING (Special Populations Rural Information Network for the Gifted). Project SPRING I presented methods that were successful in identifying gifted students of Appalachian descent in southern Indiana. Project SPRING II presented methods for identifying rural gifted African-American children in South Carolina.
and rural gifted Hispanic children in New Mexico. The identification methods were presented in workshops to teachers to help them understand that traditional identification procedures screen out many gifted students.

The following are common characteristics of gifted African-American students who come from rural, disadvantaged backgrounds. These characteristics were compiled from Spicker and Aamidor’s research (1996) in identifying gifted students who are both minority and disadvantaged:

- Bicultural (can navigate between African-American and mainstream cultures);
- Can improvise with common materials;
- Can solve real-life problems;
- Respond well to concrete experience;
- Perform better on nonverbal tests;
- Good eye-hand coordination, skilled body movements, and physical stamina; and
- Rich oral language skills with humor and imagery.

Spicker and Aamidor (1996) also identified negative characteristics of disadvantaged rural African American children who are gifted. These negative characteristics often prevent students from being recognized as gifted by their teachers because the characteristics are stereotypical of less intelligent children:

- Speak nonstandard English;
- Lack of motivation;
- Passive participants in school settings;
• poor performance on timed tests and activities; and
• difficulty with tasks that restrict movement.

Many people have a narrow idea of what constitutes giftedness. Gifted students are often stereotyped as well-behaved, quiet, academically inclined individuals. Because of this stereotype, teachers who are asked to identify students for possible placement in the school's gifted program often overlook highly intelligent children who exhibit poor classroom performance or unconventional behavior.

As the preceding review of literature pertaining to the identification of giftedness suggests, gifted individuals have common traits that have been identified as early as the mid-1860s. Yet, these traits may be hidden by negative behavior characteristics. Teachers' knowledge of both positive and negative traits may increase their awareness of the possibility of unidentified gifted students in their classrooms, thus increasing the number of students they refer for initial gifted screenings.

The Issue of Standardized Testing for Identifying Giftedness

African-American children are often underrepresented in programs for gifted children despite initiatives and efforts by the U. S. Department of Education and by various national organizations for gifted and talented education (Ford, 1994). Culturally different gifted students are often screened out of gifted programs in states that use IQ test score cutoffs. IQ cutoff scores are used due to state laws and regulations that must be followed in order for schools to obtain
state funding for gifted programs. Even in states that do not use this requirement, local schools use test scores because they are “safer” than subjective procedures (Ross, 1993). A primary or exclusive reliance on traditional standardized test scores is exclusionary because of test bias. Test bias is caused by tests that are normed using “middle-class White students who tend to have both quantitatively and qualitatively different experiences and learning opportunities than minority and economically challenged youth” (Ford, 1994, p. 3). Test bias can also occur in rural schools because “test items favor the acculturation experiences of urban children” (Spicker, Southern, & Davis, 1987, p. 156). Biases can result because of: (a) language differences, (b) the test favors verbal students, (c) the test questions are centered on the experiences and facts of White middle-class students, (d) the answers that support middle-class values are often rewarded with more points, and (e) the test does not consider the influence of non-intellectual factors such as test anxiety or self-concept of ability (Ford, 1994). As a result, African-American students’ abilities have not been fully demonstrated through commonly used standardized assessment instruments because of students’ different values, beliefs, and experiences (Schwartz, 1997; Ford, 1994; Frasier, 1980; Frasier & Passow, 1994).

Yet, a study was conducted at Cornell’s College of Human Ecology concerning the effects of race and class differences in mental ability as shown on IQ tests. The results showed that “racial differences were narrower by around
50% between 1970 and 1988 and that socioeconomic class differences between the lower and upper third income groups have steadily decreased since 1932" (Lang, 1999, p. 24). The differences have narrowed because (a) gains in test scores by African-American students, (b) the United States has spent more money for education to target minorities, (c) the educational attainment of minority parents has increased enormously, and (d) minority families have grown smaller (Lang, 1999).

According to Esters and Ittenbach (1994), intelligence tests can provide educators with a framework to better understand how children learn. The two most renowned intelligence tests are the Wechsler Intelligence Scale for Children and the Binet-Simon Measuring Scale of Intelligence (now the Stanford-Binet). The Binet-Simon scale was developed to identify students who could benefit from traditional instruction. The Wechsler scale was based on the belief that problem solving was general in nature and could be demonstrated either verbally or motorically. Neither of these tests was based on a formal theory (Esters & Ittenbach, 1994).

Today, intelligence tests are based on an organizing theory or framework and are developed using sound scientific principles. According to Esters and Ittenbach (1994), Horn and Cattell's fluid-crystallized theory of intelligence is perhaps the most well known theory of intelligence to clinic and school professionals. Also known as "Gf-Gc theory," it defines intelligence as consisting of nine factors. Portions of this theory are included in the Stanford-Binet IV, the
Wechsler scales, and the Woodcock-Johnson battery. Esters and Ittenbach (1994) identify two other major theories. The first is Carroll’s three-stratum theory of cognitive abilities, which combines Fluid Reasoning (Gf), Crystallized Intelligence (Gc), and general intelligence (g) into one broad framework of cognitive abilities. The second is Das, Naglieri, and Kirby’s Planning, Attention, Simultaneous, and Successive (PASS) theory of cognition. PASS theory combines knowledge from related areas such as psychometrics, cognitive psychology, and neuropsychology. According to PASS theory, problem solving takes place through the use of a broad range of cognitive responses that allow an individual to simultaneously process several interrelated components of a problem. According to Esters and Ittenbach (1994), today’s intelligence tests represent an improvement over earlier tests because many intellectual theorists are also psychometricians who value both instrumentation and theories such as these.

An Example of the Use of Standardized Testing

Feiring, Louis, Ukeje, Lewis, and Leong (1997) believed standardized testing is an effective way to identify gifted students. As a result, the Minority Gifted Children Project was implemented in Newark, New Jersey, as a cost-effective, non-time consuming method of identifying economically disadvantaged minority gifted kindergartners. This urban school district served over 4,000 kindergarten students. Though research has shown the promising practice of
using multiple methods for identifying diverse students, these methods are time consuming when dealing with a very large population (Feiring et al., 1997).

The cost-effective method used by the project coordinators involved three steps. First, the screening method used was the Brigance K and 1 Screen because it was a test routinely given to all kindergartners to test language development, number skills, motor abilities, and auditory and visual discrimination. The Brigance served to eliminate students who were not likely to score high on a standardized test of ability (Feiring et al., 1997).

Second, the students who scored at or above the 85th percentile on the Brigance were nominated for a gifted screening. The gifted screening was designed by the research team to identify students who were likely to perform well on a standardized IQ test. Therefore, the screening was a test containing questions similar to ones found on the Wechsler Preschool and Primary Scale of Intelligence and the Stanford-Binet, Form L-M. The screening was actually a parallel form of a standardized intelligence test (Feiring et al., 1997).

Third, 35 percent of the screened students were referred for a final assessment. This group of students included "children who did not show advanced skills on the assessment, rather than miss too many potentially gifted children" (Feiring et al., 1997, p. 79). The students were given the McCarthy Scales of Children's Abilities test, which measured overall ability (General Cognitive Index) as well as verbal, spatial, quantitative, memory, and motor skills (Scale Scores). "While we realize that giftedness is a multifaceted phenomenon
including skills other than those assessed by our measures (e.g., artistic ability, creativity, etc.), our experience is that children who perform well on the individual scales of the McCarthy adapt well to and learn the problem solving strategies used in our gifted program” (Feiring et al., 1997, p. 80). Giftedness was identified by a General Cognitive Index score of 116 along with one of these two scores: (a) one scale score within the 95th percentile or (b) two or more scale scores within the 90th percentile.

After the completion of these three steps, two percent of the total kindergarten population of approximately 4,000 students was identified as gifted. “The results of this project demonstrate that young gifted children do exist in low-income schools, and that they can be identified efficiently” (Feiring et al., 1997, p. 80). Before the implementation of this process, only 0.2 percent of kindergartners were identified as gifted. The project also lent support to educators’ and policy makers’ belief in the need for early identification of minority gifted children.

Alternative Methods of Identifying Gifted Children

Many researchers in the field of gifted education believe that giftedness is more than just a high score on a traditional test of general intelligence. Researchers have recommended the use of a combination of a variety of assessment measures to find students who are gifted in different areas and to reduce the effects of test bias. These nontraditional identification methods (Richert, Alvino, & McDonnel, 1982) are often used to supplement traditional achievement test scores to identify gifted children from disadvantaged
backgrounds. Economically disadvantaged children are students who qualify for Title I funds. Those children may also be environmentally disadvantaged due to inadequate educational opportunities, lack of successful role models, poor nutrition, family stress caused by poverty, and rural or urban environments that limit one's learning experiences. Giftedness may not be identified in disadvantaged children through the use of traditional, standardized measures. Instead, nontraditional methods are often used for identification of these students. Some nontraditional methods include norming of tests to subpopulations, development of culture-specific tests, and the use of checklists (Richert, Alvino, & McDonnel, 1982).

Ross (1994) recommended that schools identify gifted students through the use of a system that (a) uses many assessment measures to find students with different types of giftedness, (b) is free of bias, (c) assesses motivation, which is a trait that plays a key role in accomplishment, and (d) identifies students who are not obviously gifted. Some identification methods that are recommended by researchers and can be combined are: (a) nomination, (b) inventories, checklists, and scales, (c) case studies, (d) performance and product evaluations, (e) culture-fair tests, (f) culturally-biased tests, (g) instrumental enrichment, (h) developmental curriculum, and (i) multiple intelligences. The following is a brief description of each of these methods.

Nomination is the process whereby students may be nominated, or referred, for a gifted screening by teachers, parents, principals, peers,
counselors, or others (Clark, 1988). The first step in a gifted screening is often the nomination of a child by the classroom teacher. Unfortunately, classroom teachers often do not recognize students who are gifted because not all gifted children are academically inclined. Some gifted students are nonconformists who resist routines. Some may be classified as slow learners or as having behavior disorders because they are bored and uninterested in classroom material they learned long ago. Others may be perceived as "average" because they passively do only what is required in order to avoid drawing attention to themselves (Clark, 1988). Teachers can be trained through staff development to identify students for gifted programs (Ford, 1994; Office for Civil Rights, February 1999; Cowan, 1992).

Another type of nomination is self-nomination (Richert, Alvino, & McDonnel, 1982). The name "self-nomination" is misleading because it implies that students refer themselves for a gifted screening. Instead of asking students if they would like to participate in a gifted program, the student are assessed to find evidence of excellence in original production, self-initiated activities, independent study, work on real-life problems (such as genealogy, political campaigns, etc.), interaction with gifted peers or adults, and evidence of self-evaluation. The information obtained from self-nomination is intended to complement data on school achievement. The purpose of self-nomination is to identify students who are highly task-committed, whose abilities may not be obvious in a highly structured or teacher-centered classroom. Self-nomination is especially useful in
identifying underachieving gifted students and high school gifted students whose talents are masked by normal rebellion.

Many state departments of education, school districts, university faculty, and consultants have developed inventories, checklists, and scales for nomination of students for gifted programs (Frasier, 1989; Richert, Alvino, & McDonnel, 1982). These checklists may be used not only by teachers but also by parents, peers, and community members for identifying potentially gifted students. An example of a checklist is "Scales for Rating the Behavioral Characteristics of Superior Students" by Renzulli, Smith, White, Callahan, and Hartman (no date). The scales were designed for teachers to help identify students' characteristics of learning, creativity, motivation, communication, planning, leadership, art, music, and drama. Each characteristic checklist consists of up to 10 statements, which can be answered as "almost always," "considerably," "occasionally," "seldom," or "never." A sample statement is "possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters his age)."

Some checklists are poor because of their lack of validity. When selecting a checklist, the following guidelines are recommended (Richert, Alvino, & McDonnel, 1982): (a) evidence of validity through references to research, (b) clarity of checklist items in relation to the information they seek, (c) clarity of instructions for administration of checklist and interpretation of results, (d) ease of administration, (e) use of forms especially designed for certain subgroups, (f) recognition of the checklist's negative characteristics, because its purpose is to
complement standardized tests, (g) inservice training for teachers to instruct them in how to recognize gifted characteristics, and (h) nominations by individuals other than school faculty should be based on accomplishments outside the school setting.

According to Richert, Alvino, and McDonnel (1982), the information collected through case studies, interviews, and biographies is intended to complement data collected through achievement tests. During the identification stage, this qualitative information should be concentrated on non-academic or out-of-school performance. When the student is placed in a gifted program, the information can be used to create an individualized program for him/her. A case study may be information provided by the parents about the child's family history and student background. The information may include medical records, parents' educational and occupational backgrounds, description of the family, anecdotes describing the child's unusual capacities and early development, and the activities and interests of the child and family (Clark, 1988).

The concept of performance and product evaluations has long preceded standardized testing. For example, political leaders are tested through elections, gifted athletes are tested through Olympic performances, and artists are tested through the use of portfolios. For performance and product evaluations to be valid, criteria of excellence and originality must be followed and judgments must be made by professionals in the field (Richert, Alvino, & McDonnel, 1982).
An example of portfolio assessment is a program called Early Assessment for Exceptional Potential of Young Minority and/or Economically Disadvantaged Students (Coleman, 1994). This project, which was implemented in five school districts in the vicinity of Kent, Ohio, used portfolio assessment to identify and educated gifted children in kindergarten through third grade. Teachers were trained to recognize 18 primary identifiers of giftedness, such as exceptional memory, perfectionism, highly creative behavior, and highly developed curiosity. The teachers compiled student portfolios to show evidence of the 18 identifiers. The information was collected from the children, their peers, their family, and their community members. The information was collected using home-community surveys, self-questionnaires, and observations during lessons, examples of products, and anecdotal records of observed behaviors and strengths. After exceptional students were identified, the portfolio information was used to adapt the classroom curriculum to meet the children’s needs.

Another example is from the Westport School System in Connecticut. Originally, students were placed in the gifted program based on teacher referrals and test scores in the 99th percentile. The teaching staff noticed an inaccuracy in the selection process that caused gender imbalance and variations in intellectual levels. The new selection process began with professional development and parent education in the area of gifted identification process and criteria. The portfolio selection process included (a) teacher nomination forms (similar to Renzulli and Hartman’s Scale for Rating Behavioral Characteristics of Superior

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Students), (b) indicators of classroom performance, such as assignments and projects, (c) a parental assessment questionnaire to describe the child’s preschool development, (d) the Otis-Lennon School Ability Test to measure reasoning, verbal, nonverbal, and total ability index, and (e) performance-based problem-solving tasks. One year after the implementation of portfolio identification, the teaching staff completed a questionnaire, the results of which “indicated that the staff found the identification process valuable and felt it identified gifted youngsters” (Fischetti, Emanuelson, & Shames, 1998, p. 161).

Culture-fair tests are tests that are designed for children who come from culturally diverse backgrounds. This is a type of test designed to measure the intelligence of students from language and culturally different backgrounds. Examples of culture-fair tests are: (a) The System of Multicultural Pluralistic Assessment, or SOMPA, for ages five through eleven, (b) The Stallings Environmentally Based Screen for grades kindergarten through first, (c) The Cattell Culture-Fair Intelligence Series for ages eight through adult, (d) The Ravens Progressive Matrices for ages eight through adult, and (e) The Cartoon Conservation Scale for grades kindergarten through six (Richert, 1987; Richert, Alvino, & McDonnel, 1982). Frasier (1989) also recommended the use of the following tests: (a) Torrance Tests of Creative Thinking, (b) Kaufman Assessment Battery for Children, or the K-ABC, and (c) Abbreviated Binet for Disadvantaged Children.
Some standardized tests were deliberately created to be culturally biased tests in favor of a minority culture. Researchers such as Torrance (1973) believe it is not possible to create a test of intelligence that is completely culture-free. According to Torrance (1973, p. 198), "tests biased in favor of disadvantaged minorities are necessary, if we really want to find out about the true potentialities of children from such groups. Only such tests would give children from disadvantaged minorities a chance to show how well they can cope with the demands of their culture and how well they have developed the abilities that are valued by their culture or subculture." Torrance recommended the use of the Black Intelligence Test of Cultural Homogeneity, which is biased in favor of Blacks through the use of vocabulary items unique to their culture.

Reuven Feuerstein's Instrumental Enrichment (Richert, Alvino, & McDonnel, 1982) is a curriculum that teaches the skills tested by standard measures of achievement. This approach was developed to assess the intelligence of Israeli immigrant children who came from a wide range of backgrounds. The assessment procedure does not test what children have learned; instead, the children are presented with tasks and are observed to see how far they can go with mediation. The process concentrates on how to solve problems and not just on obtaining correct answers. Richert, Alvino, and McDonnel (1982) stated that the advantages to this approach are: (a) the results are culturally fair, (b) the mediated learning experiences can raise IQ scores, and (c) it has its own valid assessment.
A developmental curriculum "is the most promising for overcoming most obstacles and biases in the identification of various disadvantaged students" (Richert, Alvino, & McDonnel, 1982, p. 176). Developmental curriculum involves the modification of content, such as acceleration, an interdisciplinary approach, or student interest. It emphasizes creative thinking, critical thinking, and process rather than content. Students are given resources at higher levels beyond the classroom and are given opportunities for independent learning, creativity, self-evaluation, and relations with gifted peers. The developmental curriculum can help create an environment in which disadvantaged students' giftedness can emerge.

A gifted identification method that has recently become popular is based on Howard Gardner's theory of multiple intelligences: linguistic, logical-mathematics, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal (Gardner, 1983; Frasier, 1997). Plucker, Callahan, and Tomchin (1996) conducted a study that suggested that a multiple intelligences approach can be used as a reliable gifted assessment instrument, but one with questionable validity. The study was conducted during the 1992-1993 school year using a sample population of 1,813 kindergartners and first graders in a large school district. The school district used a desegregation plan that drew students from urban, suburban, and rural areas. The study's target population was a group of ethnically diverse and/or low socioeconomic status children (as determined by participation in a free/reduced lunch program). The student sample was as
follows: Caucasian, 18.8 percent; African-American, 71.3 percent; Asian-American, 1.8 percent; Hispanic-American, 2.5 percent; and other, 3.5 percent. Females made up 48.2 percent of the total population.

During the spring of 1993, the students were assessed using Udall and Passe’s Multiple Intelligences Assessment Technique. The technique consisted of these four activities and their subscales: (a) spatial intelligence (puzzle manipulation and construction), (b) logical-mathematics intelligence (mathematics problems and a board game), (c) linguistic intelligence (telling, writing, and drawing stories), and (d) interpersonal intelligence (based on teacher ratings and observations).

For each activity, student performance earned one of three ratings: (0) for not evident or not observed, (1) for evident, or (2) for extremely evident. Concurrent validity estimates were obtained through the use of the Iowa Test of Basic Skills, and were computed through factor analysis. Reliability was calculated through Cronbach’s alpha.

The results of the study showed test administrator bias toward linguistic and logic-mathematics intelligence, which are traditionally assessed with standardized tests. This bias is contradictory to the purpose of the multiple intelligences approach which is clearly critical of traditional assessment tools that are used too narrowly. Plucker, Callahan, and Tomchin (1996) recommended the use of intensive staff training with any high-stakes, large-scale alternative assessment effort.
Modern researchers believe there is more to giftedness than just a single score on an IQ test. They believe giftedness can be strong academic skills and test-taking skills as well as other types of skills such as those found in top performers in science fairs, 4-H programs, community theaters, debate clubs, shop classes, home economics classes, and many others who may not necessarily have the skills or self-confidence to perform well on standardized tests. The use of a variety of screenings can showcase a gifted child’s special abilities and talents more so than a single type of screening.

**Best Practices in Identification**

In 1997, the National Association for Gifted Children published a position paper entitled "Using Tests to Identify Gifted Students" (NAGC, 1997). It stated that most school districts use some form of standardized tests to identify gifted students. When these tests are selected with care and are used properly, they can give valuable information about students' abilities, strengths, and weaknesses. They can also be used to identify individual students' needs, which in turn can be used to design programs and provide services to meet these individual needs.

Unfortunately, standardized tests have their limitations. Testing instruments are not a flawless method of predicting intelligence, ability, or achievement, especially when used to assess underserved gifted students, because these tests are often misused. According to Richert (1987), there are often discrepancies between the intended use and the actual use of various
testing instruments. When identifying gifted students, IQ tests are often used interchangeably with achievement and aptitude tests, which confuses specific aptitudes with general intellectual ability. These tests can also be used inappropriately to identify creativity and leadership.

The National Association of Gifted Children (1997) believed that "given the limitations of all tests, no single measure should be used to make identification and placement decisions....Best practices indicate that multiple measures and valid indicators from multiple sources must be used to assess and serve gifted students." Multiple measures and sources may include combinations of IQ tests, special ability tests, portfolios, interviews, observations, performances, and products (NAGC, 1997; Nevo, 1994). Families, teachers, and students could contribute information about the potential gifted program participant. When standardized tests are administered, they should be given by school personnel who are qualified to do so. These qualifications should include: (a) an understanding of measurement principles, (b) knowledge of the particular test and its appropriate uses, (c) ability to use the test in a professional manner, (d) use of procedures to reduce test bias, (e) an understanding of the influences of socioeconomic disadvantages, cultural diversity, and linguistic diversity on test performance, and (f) ability to carefully weigh the results of tests with other information (NAGC, 1997).

The following sections summarize some examples of "best practices" in gifted student identification. These are statewide and nationwide programs that
were developed and funded especially for the purpose of identifying gifted students who are often screened out of special programs when traditional methods of identification are used. The examples that follow are: (a) Javits Programs, (b) student-centered curriculum, (c) A Better Chance, Inc., (d) Project Synergy, (e) Cluster Grouping, and (f) performance-based assessment.

**Javits Programs**

The Jacob K. Javits Gifted and Talented Students Education Program is Part B of Title IV of the Elementary and Secondary Education Act. Javits grants are used to fund projects and programs aimed at identifying and serving the educational needs of gifted and talented students. "Priority in making awards is given to identifying students missed by traditional assessment methods (including children who are economically disadvantaged, limited English proficient, or have disabilities) and to education programs that include gifted and talented students from such groups" (U.S. Department of Education, 1999, pp. 1-2). Javits grants for services include (a) operation of model programs that identify and educate gifted students, (b) training of personnel involved in gifted and talented education, (c) technical assistance and information dissemination, and (d) support for state education agencies and colleges to assist schools' operation of gifted and talented education programs.

The Javits Program also supports The National Research Center on the Gifted and Talented (NRC/GT). The center is a consortium led by the University of Connecticut and includes the University of Virginia, the University of Georgia,
and Yale University. The NRC/GT was directed by Dr. Joseph Renzulli at the University of Connecticut, along with associate directors Dr. E. Jean Gubbins and Dr. Francis X. Archambault of the University of Connecticut, Dr. Mary M. Frasier of the University of Georgia, Dr. Carolyn M. Callahan of the University of Virginia, and Dr. Robert J. Sternberg of Yale University (Frasier et al., 1995, U.S. Department of Education, 1999). Some examples of NRC/GT projects are: (a) investigating the characteristics of gifted economically disadvantaged and limited English proficient student, (b) evaluating students' academic and affective outcomes resulting from Gifted class participation, and (c) identification of gifted secondary students through the use of Sternberg's Triarchic Theory of Human Intelligence (Renzulli, 1991).

Student-Centered Curriculum

The Academic Programs for Gifted with Excellence and Equity (APOGEE) was implemented in 30 schools in New Jersey. The program serves over 3,000 students in first through 12th grades, and is partially funded by a Javits grant. The students in this program participate in a student-centered reading/language arts curriculum (as opposed to a pullout program) that emphasizes group work and projects, with less emphasis on textbooks. The students' projects include writing and producing a movie, creating a haunted house with a script of happenings in each room, and rewriting a schoolwide survey to make the questions more comprehensible to children in lower grades. Almost all the APOGEE students keep a journal as part of their daily activities (O'Tuel, 1994).
To address equity in the identification of students, the top 25 percent of students in various categories (such as minorities, underachievers, disadvantaged, students with disabilities, and limited English speakers) were identified and placed in APOGEE classes. According to O'Tuel (1994, p. 75), if conventional testing measures had been used, "only about 5% of the student population would be identified." Instead, a demographic profile of each school was created. The profile included percentages of ethnic groups, students receiving free or reduce-price lunch, students whose home characteristics place them at risk, learning disabled student, etc. Using grades, previous test scores, nominations, and outside activities and products, the top 25 percent of each subgroup was identified. Results from the first year of the program showed increased self-esteem, increased critical thinking skills, increased attendance, and decreased behavioral problems (O'Tuel, 1994).

A Better Chance, Inc.

A Better Chance (ABC) is a national talent search agency that identifies minority and disadvantaged high school gifted students. ABC's network of over 3,000 volunteers distributes 15,000 applications each fall. Criteria for ABC includes (a) academic performance, (b) SSAT Verbal, Quantitative, and Total Scores, (c) a mathematics/science assessment, (d) a language assessment, (e) a self-assessment of strengths and abilities, and (f) a rating based on all applicant information. ABC also looks for qualitative information, such as (a) logical thinking, (b) using stored knowledge to solve problems, (c) reasoning by
analogy, and (d) extending prior knowledge to new situations. Students identified as gifted by ABC have had SSAT scores as low as the 12th percentile, yet they have gone on to graduate with honors. Students identified by ABC are placed in excellent college prep schools such as Wellesley, Amherst, Phillips Exeter, and Choate Rosemary Hall. Many students attend day schools while residing in an ABC house, which is funded by local contributions. "Over 29 years, 20% of ABC's total number of graduates have gone on to just 10 colleges: Brown, Columbia, Cornell, Dartmouth, Harvard, Penn, Stanford, Tufts, Wesleyan, and Yale" (Griffin, 1992, p. 129).

**Project Synergy**

Project Synergy (Borland & Wright, 1994) is an identification method funded by the U. S. Department of Education. The project was home-based at the Leta Hollingworth Center at Teachers College, Columbia University. It was designed to identify economically disadvantaged, potentially gifted kindergartners in urban schools.

Project Synergy was piloted in a school in central Harlem in New York City. The student body consisted of African-American and Hispanic students, most of whom were economically disadvantaged. The researchers involved in this project (Borland & Wright, 1994) counted 30 crack vials within a 10-foot radius of the school's front door. The school was classified as a School Under Registration Review, with a possibility of decertification. Only 14.1 percent of its
students were reading on grade level. Yet, the principal and teachers believed there were students at the school who could be classified as gifted.

The goal of Project Synergy was to identify 15 to 18 potentially gifted students out of every 100 students in the Kindergarten classes each year. These students, once identified, were placed in a five-week summer program followed by transitional services during the regular school year in first grade. During the first study, 15 students were identified, but three refused to participate in the program. When these children reached second grade, five of the original 12 were transferred to a school for gifted students and one was admitted to parochial school. Three were removed from the program due to severe behavior problems (one was diagnosed as behavior disordered), two moved, and one disappeared from the program when placed in foster care after the mother's arrest (Borland & Wright, 1994).

Project Synergy used both traditional and nontraditional screenings and assessments. The screenings included teacher nominations, observations, and portfolio assessments, along with giving all the classroom students exposure to enrichment activities for art, language, and mathematics. The candidate pool for gifted assessment was created through the use of individual case studies. The gifted candidates were given diagnostic assessments such as the Test of Early Mathematics Ability-2, the Test of Early Reading Ability-2, and the Peabody Picture Vocabulary Test. Lisa Wright (Borland & Wright, 1994) developed a literature-based activity/assessment that required students' use of imagination,
divergent thinking, logical reasoning, and factual knowledge. The researchers also used interviews with the children, an assessment strategy that was still in the developmental stage. According to Borland and Wright (1994, p. 168), “although quantitative data are included in the files, no attempt is made to assign a single composite score to each child. The wealth of information that has been collected over 2 months is too valuable to be lost by placing it on a matrix and attempting to sum nonadditive data.” After the assessment process, the students who showed potential for high ability were placed in the summer school program.

**Cluster Grouping**

In a small rural school district in the Midwest, cluster grouping was implemented as part of a schoolwide program in third through fifth grades. Using Iowa test scores and Scales for Rating the Behavioral Characteristics for Superior Students, children were grouped into categories such as high achieving, above average, average, low average, and low. Additional groups included special education and Chapter I students, with aides or teacher consultants assisting with these students. Students with behavior problems were evenly distributed among the groups. All teachers received training sessions regarding cluster grouping and Renzulli and Reis’ Schoolwide Enrichment Model for gifted education and talent development. As a result, gifted education was integrated with the general education program. A three-year longitudinal study showed a significant increase in achievement test scores for all students, and fewer students were identified as low achieving. The researchers believed this was a
result of replacing the practice of remediating weakness with the practice of
talent development and enrichment. They also believed that, once the high
achieving students were placed in a separate group, students in all groups were
provided with more opportunity to achieve because teachers were better able to
meet students' individual needs. (Gentry & Owen, 1999).

Performance-Based Assessment

An example of performance-based assessment is DISCOVER, which is an
acronym for Discovering Intellectual Strengths and Capabilities through
Observation while allowing for Varied Ethnic Responses. This performance-
based assessment is used to identify gifted students from diverse cultural
groups. Its theoretical base is Gardner's Multiple Intelligences and Maker's
definition of gifted (Sarouphim, 1999).

During the assessment, groups of children interact while conducting these
activities: Tangrams (spatial/logical-mathematics), Pablo (spatial), and
Storytelling (linguistic). During the activities, trained observers take notes and
record all observed behaviors on standardized observation forms. Afterwards,
the observers meet to discuss each child's strengths and to complete a behavior
checklist on each child. The students' strengths are classified as definitely,
probably, maybe, and unknown. "Definitely" corresponds to high ability in that
particular intelligence. A child with a rating of "definitely" in at least two activities
is referred for gifted placement or for further testing as a prerequisite.

DISCOVER seems to be an effective method for identifying strengths and
weaknesses in spatial, logical-mathematical, and linguistic intelligences (Sarouphim, 1999).

Summary

The traditional definition of giftedness is "high IQ," yet decades of research has suggested there is more to giftedness than a high score on a standardized test of intelligence. When identifying students for placement in a gifted program, over-reliance on IQ tests can cause many gifted students to be eliminated from the identification and placement process for two main reasons: (a) no test is flawless and (b) there are many types of intelligence that cannot be identified through the use of an IQ test.

According to the review of literature, high intelligence is a combination of many factors such as creativity, perseverance, logical thinking, memory, and specialized abilities (such as sculpture or science). Many researchers believe giftedness is equally distributed among all cultures. The problem is to be able to identify giftedness despite language barriers, poor test-taking skills, low-self esteem, classroom underachievement, unconventional behavior, and lack of opportunity to develop and express their creativity. Researchers offer the following solutions:

1. Use IQ tests and achievement tests to evaluate one type of giftedness: academic giftedness.

2. Use standardized tests that are appropriate for the individual, such as culture-fair tests or tests that have been recently normed to reduce test bias.
3. Use a variety of tests, such as creativity and achievement tests along with the IQ tests.

4. Because no test is flawless, use more than one type of test (such as both IQ and creativity tests). Combine the test scores with other types of data.

5. Use qualitative data, such as observations of learning behaviors, portfolios of the student’s best work, and inclusion of the student’s award-winning projects in the identification process.

6. Make parents and teachers aware of the gifted program, and of traits exhibited by gifted children. Teacher and parent referrals are usually the first step in a child’s gifted identification process.

“People value their thinking skills, and woe betide anyone who tries to measure them. The measurer and the yardstick are liable to be sacrificed on the altar of public ridicule” (Deary, 1998, p. 1701). Identifying gifted children, no matter what their background, can be difficult when there is much disagreement as to the definition of intelligence and the definition of giftedness. It is difficult to measure a concept that cannot be easily defined. Fortunately, the new identification methods that have been adopted by states such as Georgia and Alabama address both traditional and nontraditional concepts of giftedness through their use of a variety of assessments. The identification of gifted children is important in order to serve their individual needs (which may be hidden under passive or nonconformist personality traits), whether their needs are served in the regular classroom or in a special program. By meeting their exceptional
needs, they may be better able to obtain higher education opportunities and to
obtain and perform in high-level or innovative jobs, therefore helping our country
compete successfully in a global economy. Overcoming the barriers to identifying
minority gifted students is an important step in reaching this goal.
CHAPTER III

METHODOLOGY

Introduction

In 1995, the Office for Civil Rights conducted compliance reviews throughout Louisiana. The reviews addressed the overrepresentation of African-American students in special education classes and the underrepresentation of African-American students in special education classes. According to an interview with a member of the Bayou Parish School System's Pupil Appraisal Team, the Office for Civil Rights concentrated its efforts on the African-American population instead of the minority population overall. This was because the remaining minority population (Native American and Asian) was very small and was a mix of students with different strengths and needs when compared to each other and to the African-American populations. These populations are being addressed by the school system during the 2001-2002 school year.

In 1995 in Bayou Parish, the Office for Civil Rights created interventions, within state guidelines, to promote research-based methods to increase the gifted African-American population. The interventions (described in Chapter I) were documented from 1995 through 1999. The Office for Civil Rights
documented its satisfaction with the results of these interventions, and discontinued its monitoring in 1999. The Bayou Parish School System was not totally satisfied with the results because they wanted a greater increase in the gifted African-American population. For the purpose of increasing this gifted population an additional fifteen percent, the interventions were continued and a Task Force was created to monitor and adjust the interventions.

The researcher was interested in this study because of the Office for Civil Rights' participation in improving Bayou Parish's gifted African-American population. The researcher assumed the Office for Civil Rights would create an exemplary plan for gifted African-American student identification based on research and past experience.

This study is a case study of the Bayou Parish gifted program. Its purpose is to examine practices and instruments that may be effective for identifying gifted African-American students. In this study, the researcher (a) attempted to identify positive aspects of the interventions that have taken place so the interventions will be continued or enhanced, (b) attempted to identify weak areas that may need to be addressed, (c) obtained professional opinions of Bayou Parish educators regarding improvements that could be made in the gifted student identification process, and (d) created a brief summary document that can be used by Bayou Parish, other school systems, or researchers to help increase the gifted minority population. These objectives were accomplished through the following steps:
1. Bayou Parish compliance review documents were obtained from the Office for Civil Rights. These documents list both the interventions that took place each year and the changes in African-American/nonminority gifted student populations.

2. A table was created to document the increase in the numbers of gifted African-American students in Bayou Parish from 1994 (the year before the compliance review) to the present.

3. Teachers in magnet schools and non-magnet schools were surveyed using an instrument (see Appendix A) designed to gather their professional opinions about various methods of gifted student identification. The researcher obtained a 66 percent return rate on the surveys. The teacher sample and survey will be described in more detail in the Sample and Data Management and Analysis sections of this chapter.

4. A follow-up of the survey information was conducted by interviewing a selection of approximately 10 percent of the teachers who participated in the surveys. The teacher sample and interview guide will be described in more detail later in the Sample and Data Management and Analysis sections of this chapter.

5. An interview guide (see Appendix B) was used to interview a member of the Bayou Parish Pupil Appraisal Team. The purpose of the interview was to (a) gather more detailed information about the interventions, (b) learn her professional opinion of the strengths and weaknesses of these
interventions, (c) gather information about former and present identification instruments and practices, and (d) learn their strengths and weaknesses. The interview participant and interview guide will be described in more detail in the Sample and the Data Management and Analysis sections of this chapter.

The researcher chose to study Bayou Parish based on a recommendation by a contact at the Louisiana Department of Education. Bayou Parish was one of the first school systems in Louisiana to address the underrepresentation concern, and has spent over six years seeking gifted African-American students in the school system. Its interventions (and this case study) were based on a study by Ford of Ohio State University (summarized in Chapter I). The study, *The Recruitment and Retention of African-American Students in Gifted Education Programs: Implications and Recommendations* (Ford, 1994), is available from the National Research Center on the Gifted and Talented.

**Research Design**

This study is a qualitative case study. According to Bogdan and Biklen (1992), a case study is a detailed examination of one setting, event, or subject. This particular case study is an examination of one subject. The subject of this study is examining methods of increasing the African-American population in a gifted program.

In a case study, "the data analysis focuses on one phenomenon, which the researcher selects to understand in depth regardless of the number of sites,
participants, or documents for a study" (McMillan & Schumacher, 1997). This case study is an instrumental case study, which is a case study that is conducted to provide insight into an issue (Stake, 1994). In this case study, the issue is the underrepresentation of African-American students in gifted programs. The case study involved the use of documents, interviews, and a survey.

**Purpose of the Case Study Approach**

The researcher chose a case study approach to learn more than just the statistical aspects of the underrepresentation concern. According to Worthington (1989), "case study research can provide holistic views of complex processes, institutions, and events....Numbers often hide as much as they reveal, and if we are ever to make inroads into improving education, we must look at the whole picture." The researcher examined not only the numeric changes in the Bayou Parish gifted student population over a five-year period, but also attempted to discover why these changes took place and how further positive changes may be brought about. "A case study that portrays an educational problem in all its personal and social complexity is a precious discovery" (Stake, 1978, p. 254). This case study presents more than statistics and charts. It presents the knowledge of educators who work directly with gifted children. Their knowledge is important for the purpose of contributing to the understanding of the strengths and weaknesses of Bayou Parish's gifted student identification process.
Case Selection

In an instrumental case study, a case is chosen to advance the understanding of an issue. Looking at a case in depth facilitates this understanding. The case may be typical of other cases or not (Stake, 1994). This case may be considered typical because:

1. The underrepresentation of minority students is a problem nationwide.
   Minority participation in gifted programs is as low as one percent in states such as Alabama, Idaho, New Mexico, and North Carolina (Borland & Wright, 1994).

2. A typical school system relies heavily on the use of standardized test scores to identify gifted students. This is due to state laws and regulations that must be followed in order for schools to obtain state funding for gifted programs (Ross, 1993). This definition of a typical school system fits Bayou Parish.

3. Teacher referral is often the first step in gifted student identification. This is true both nationwide and in Bayou Parish. Yet, research shows that teachers are unable to identify over 50 percent of the gifted students in their schools (Ford, 1994).

This case study may also be considered unique because:

1. Unlike the demographics of many modern cities, Cypress is lacking in wide diversity. The area is limited to mainly Black and White populations with very
little other influence such as Asian, Hispanic, etc. (U.S. Census Bureau, 2000).

2. The gifted student identification process that is the subject of this case study is based on interventions that were implemented and monitored by the Office for Civil Rights. These interventions were implemented throughout the school system.

3. The schools that were selected for participation in this study were chosen based on their Louisiana Educational Assessment Program (LEAP) scores. LEAP is a statewide criterion-referenced test that is unique to Louisiana. The selection of participating schools will be described in detail in the Sample section of this chapter.

The case study approach is not universally respected by social scientists because some believe the "study of a particular case is not as important as studies to obtain generalizations pertaining to a population of cases" (Stake, 1994, p. 238). They believe case studies should lead to generalizations, which in turn should lead to building theories. Stake (1994) believes a case study should be viewed as an opportunity to learn about a phenomenon, and the selected case should be chosen to represent a population of cases. In this study, the phenomenon is the underrepresentation of minority students in gifted programs, which is a problem both in Bayou Parish and nationwide (U.S. Department of Education, 1996; Ford, 1994). This particular case was chosen because:
1. Bayou Parish was one of the first school systems in Louisiana to actively seek gifted African-American students. They have been seeking gifted African-American students since 1995.

2. The Office for Civil Rights worked with Bayou Parish from 1995 through 1999. During this time, the Office for Civil Rights implemented new gifted student identification procedures, and they monitored and documented progress. In 1999, the Office for Civil Rights documented their satisfaction with the results, and they discontinued their monitoring. Bayou Parish continues to seek improved methods of gifted African-American student identification.

3. The identification procedures used by the Office for Civil Rights were based on research. This research was by Ford of Ohio State University. Ford is a consultant for the Office for Civil Rights. Consequently, this is a study of a gifted identification process that is based on comprehensive research, was implemented with careful monitoring, and was implemented in a school system that is still eager to improve its gifted student identification process.

Qualitative and Quantitative Aspects of This Study

This research is a combination of qualitative (descriptive) and quantitative (statistical) methods. According to Merriam (1988, p. 68), this is an effective approach to conducting a case study because "quantitative data from surveys or other instruments can be used to support findings from qualitative data."
A qualitative study, which is a type of research used by journalists, anthropologists, ethnographers, and educational researchers, is descriptive instead of experimental (Bogdan & Biklen, 1992; McMillan & Schumacher, 1997). A qualitative study typically uses a variety of methods including collecting data through interviews, observations, and documents (Denzin & Lincoln, 1994; Bogdan & Biklen, 1992).

The researcher chose to use qualitative methods along with quantitative methods because a statistical study alone would not measure affective concerns such as "How can school systems improve their methods of identifying gifted African-American children?" According to Crowl (1996, p. 16), "qualitative research methods are used to examine questions that can best be answered by verbally describing how participants in a study perceive and view various aspects of their environment," whereas "quantitative research methods are used to examine questions that can best be answered by collecting and statistically analyzing data that are in numerical form." The combination of these two methods is important for addressing the question put forth in this research project. According to Merriam (1988, p. 78), "quantitative data from surveys or other instruments can be used to support findings from qualitative data."

**Ethical Concerns**

Punch (1994) stated that, in social science research, "concern revolves around the issues of harm, consent, deception, privacy, and confidentiality of data." The researcher addressed each of those concerns as follows:
1. Before beginning the study, the researcher obtained written permission from the test developers to use their survey as a part of this study (see Appendix C). The researcher also obtained written permission from the Bayou Parish Superintendent to conduct the case study (see Appendix C).

2. Before beginning the study, the participants were given a copy of the Human Subjects Consent Form to read and sign (see Appendix D).

3. During and after each interview, the subject was given the opportunity to revise or delete statements that may be considered sensitive. The researcher used interview guides that were examined and approved by Louisiana Tech's Human Use Committee.

4. As recommended by Punch (1994), the subjects of the research were informed that they were being researched and were informed of the nature of the research. This was accomplished through the use of correspondence with the subjects and through the use of a Human Subjects Consent Form that was examined and approved by Louisiana Tech's Human Use Committee.

5. The researcher did not use deception to gain access to data.

6. The names of all participants were withheld to insure their privacy, and pseudonyms were used when necessary.

Sample

In this study, sample populations included (a) a sample of schools in Bayou Parish that were chosen to participate in this study, (b) kindergarten
through fifth grade teachers in each of these schools who volunteered to be surveyed, (c) the kindergarten through fifth grade teachers who volunteered to be interviewed, and (d) the Bayou Parish Pupil Appraisal Team member who volunteered to be interviewed. Each of these populations is described as follows.

**Participating Schools**

Three elementary magnet schools and three elementary non-magnet schools, covering a wide range of student performance (as described below), were selected to participate in this study. The purpose of this sampling method is to create a small group of individuals that is representative of a given larger group (Crowl, 1996). The researcher's intent was to create an overall representative sample population of Bayou Parish schools for participation in the interviews and surveys.

In order to obtain a sample population that is representative of the entire Bayou Parish school system, schools were selected based on their Iowa Test of Basic Skills performance rankings. In Louisiana, schools are assigned performance rankings based on students' LEAP scores, Iowa test scores, attendance, and dropout rates. The performance rankings are as follows: (a) School of Academic Excellence score is 1, (b) School of Academic Distinction is 2, (c) School of Academic Achievement is 3, (d) Academically Above Average is 4, (e) Academically Below Average is 5, and (f) Academically Unacceptable is 6 (School Accountability Report, 2000).
At the time of this study, there were only three elementary magnet schools in the Bayou Parish School System. Only the magnet schools fell into the highest categories of 1 and 2, described above. One elementary magnet school attained the category 1 status and one elementary magnet school attained the category 2 status. These two schools were included in this study. The third elementary magnet school earned a category 3 ranking. It, too, was included in this study. Thus, all three elementary magnet schools in Bayou Parish were placed in this study.

Three non-magnet schools were randomly selected to participate in this study. The non-magnet schools in Bayou Parish all attained one of these three categories: 3, 4, or 5. No school was placed in category 6 at the time of this study. Therefore, one non-magnet school from each of these three categories was randomly selected for participation in this study. Random selection took place by writing the names of all the category 3 schools on separate pieces of paper and drawing one of the names from a box. This random sampling is called simple random sampling (Popham, 1993). The same selection method was used to obtain the names of schools in the 4 and 5 categories.

**Survey Participants**

After obtaining verbal and written permission to conduct the study from the Bayou Parish Superintendent of Schools, surveys were sent to the participating schools. The survey instrument used in this study was administered to Bayou Parish kindergarten through fifth grade classroom teachers in the six selected
schools. Only the elementary schools were used because most students are referred for initial gifted screenings in elementary school. Of the 150 surveys that were mailed, 99 were completed and returned. All six schools returned surveys, thus the researcher believes a representative sample was obtained. The purpose of the surveys was to learn about Bayou Parish teachers' beliefs concerning what giftedness is and how it should be identified. The survey's demographics allowed for comparisons of beliefs between many groups of teachers, such as groups based on school setting, educational level, years of teaching experience, ethnicity, etc.

**Teacher Interview Participants**

The researcher contacted the principals of each of the six participating schools. The principals were contacted by telephone. Each principal was asked to send the researcher a list of kindergarten through fifth grade teachers who would be willing to participate in an interview. The purpose of the list of teachers was to allow the researcher to randomly select two teachers from each list to participate in the interviews. Unfortunately, only one or two teachers from each school (a total of nine teachers) volunteered. As a result, the researcher interviewed all of the volunteers.

Nine of the 99 classroom teachers (approximately ten percent) who participated in the survey volunteered to be interviewed. The sample covered the entire span of school academic rankings (1-5), thus the researcher believes a representative population was obtained. The purpose of the interview was to
expand the researcher's understanding of Bayou Parish teachers' knowledge and professional opinions of (a) what giftedness is, (b) how it can be identified, (c) how it should be served, and (d) what improvements could be made in the gifted student identification process. The researcher also sought to discover how this knowledge and these opinions were attained.

Random sampling was not an option in this situation because "interview participants must consent to be interviewed, so there is always an element of self-selection in an interview study" (Seidman, 1998, p. 44). As for choosing the number of participants in the interviews, Seidman (1998) does not recommend using a certain percentage or number of participants. Seidman (1998, p. 44) stated that he "would be reluctant to establish such a number. 'Enough' is...different for each study and each researcher."

The teachers were contacted by mail at their schools. They were sent a letter of introduction and a Human Subjects Consent Form to be signed and returned in the enclosed self-addressed stamped envelope. They were also sent a simple form requesting convenient days and times for interviews, a contact number, and their home address. The researcher also sent them a copy of the interview questions to (a) ensure the fact that the researcher was not requesting sensitive information and (b) to mentally prepare the participants to give their best possible responses without their feeling the need for a follow-up interview at a later date to discuss questions they believed they answered inadequately.
Pupil Appraisal Team Member Interview Participant

The researcher interviewed a member of the Bayou Parish Pupil Appraisal Team because she is involved with the schools' gifted identification policies and procedures, such as gifted student screening, testing, placement, selection of identification instruments, etc. Only one team member agreed to be interviewed. The researcher had hoped to interview the Bayou Parish gifted program supervisor who is knowledgeable about state law concerning gifted placement, one of the school psychologists who is knowledgeable about intelligence testing, and a member of Pupil Appraisal who is actively involved in placing students in the gifted program. Unfortunately, because of Bayou Parish school board office personnel's job transfers within and out of the school system, only one individual (a member of Pupil Appraisal) was available to be interviewed. This individual was knowledgeable of the Bayou Parish gifted student identification process and was recommended by the gifted program supervisor as a person who could provided the information needed for this study. She participated in a telephone interview after office hours at her home. She later invited the researcher to her office to share the documents shown in Appendix E and Appendix F.

Data Management and Analysis

In this case study, the researcher used three types of data: documents, interviews, and a survey. These three types of data are described as follows. The validity and reliability of the instruments used in data collection will be described in detail in a separate section.
Documents

Sets of documents were obtained from the Office for Civil Rights in Dallas by sending a written request that included a brief description of the proposed study. The written request was followed by a telephone call. The documents described the compliance review that took place in Bayou Parish during the 1995-1999 school years. The compliance review includes a five-year record of Bayou Parish's gifted populations and the interventions that took place during that time span. The documents also showed the African-American/nonminority gifted student populations in Bayou Parish during the years following the compliance review.

By using these documents, the researcher gathered demographic data to show overall African-American and nonminority gifted student populations in the Bayou Parish school system during the 1994-1995, 1995-1996, 1996-1997, 1997-1998, and 1998-1999 school years. The researcher also obtained Bayou Parish gifted student population data to show the 1999-2000 and 2000-2001 minority and nonminority gifted student populations. This data is on file at the Bayou Parish Pupil Appraisal Office. The purpose of this longitudinal approach was to show the changes in gifted student population before, during, and after the Office for Civil Rights compliance report and interventions.

Data Management

Data management was based on comparing the 1995 information in Chapter 1 to recent information obtained from the Office for Civil Rights. In
Chapter IV, a table similar to Table 5 (Chapter I) was created to show the Bayou Parish gifted African-American and nonminority enrollment from 1994 through 2001. The recent steps in gifted student referral and placement are presented in a manner similar to the 1995 steps presented in Chapter I. The list of Office for Civil Rights interventions in Chapter I is described in detail.

**Data Analysis and Presentation**

The researcher examined the compliance review documents to (a) describe the interventions in detail, (b) create a comparison of the 1995 gifted student identification process to the 2000 identification process to show improvements that have taken place, and (c) create a table to show the increase in the gifted African-American population from 1994 through 1999. The table was expanded to include the 1999-2000 and 2000-2001 school years through the use of the Bayou Parish Pupil Appraisal student population data.

**Survey**

A brief survey instrument was used to obtain Bayou Parish classroom teachers' assumptions about giftedness. The survey, "Assumptions Underlying the Identification of Gifted and Talented Students," was developed by the National Research Center on the Gifted and Talented at the University of Connecticut. This survey was used to examine the strength of teachers' agreement or disagreement with the use of standardized tests, case studies, panels of judges, non-intellectual data, and other criteria that may be used for identifying giftedness in all students. The survey was also used to describe the
characteristics of the groups of respondents through the use of demographic questions.

**Data Management**

One set of 25 surveys was sent to the principal of each participating school. Twenty-five surveys were sent to each school based on the assumption that each grade level (kindergarten through fifth grades) would have approximately four sections (four kindergarten classes, four first grade classes, etc.) The principals were asked to give the surveys only to their kindergarten through fifth grade classroom teachers, then return the set of surveys in the enclosed self-addressed stamped envelopes. The principals were given a cutoff date (two weeks) by which to return the surveys (see Appendix C). Only one of the six schools required a second mailing. This was because the first set of surveys was lost in the mail. The completed surveys were photocopied and placed in fireproof storage in separate locations.

**Data Analysis and Presentation**

The survey data were coded by the researcher and were analyzed by using a statistical software package with the help of the researcher's doctoral committee statistician and the statistician's graduate assistant who was completing a doctorate in educational statistics. The type of statistics that was run was ANOVA, which is analysis of variance. ANOVA is used to determine if the means of two or more groups show a statistically significant difference at the
.05 level (McMillan & Schumacher, 1997; Crowl, 1996). Instructions for the
survey's ANOVA and interpretation were included with the survey.

The survey consists of a five-response Likert scale. The five responses are
Strongly Agree, Agree, Uncertain, Disagree, and Strongly Disagree. The 20
survey statements place respondents' replies into five categories. None of these
categories is superior to the others.

1. Restricted, in which teachers believe gifted children should be identified
   primarily through the use of achievement test and IQ test scores.

2. Individual Expression, in which teachers believe in the use of methods that
   identify an individual's giftedness. Individual expression methods of
   identification would include case study data, student-selected tasks (such as
   science fair projects, 4-H projects, etc.), and non-intellectual factors (such as
   creativity and leadership).

3. On-Going Assessment, in which teachers believe periodic reviews should be
   carried out on both identified and non-identified students. On-Going
   Assessment is based on the belief that the adequacy of the identification
   system should be assessed on a regular basis.

4. Multiple Criteria, in which teachers believe students may develop giftedness
   at certain ages and in specific areas of interest. Gifted student identification
   would require the use of several types of information about the student.

5. Context-Bound Identification, in which teachers believe gifted student
   identification should take into consideration the students' cultural
backgrounds, such as through the use of instruments normed on certain populations (culture-fair tests) and through the involvement of assessment personnel who understand the students' cultural background.

The survey results are presented in the form of descriptive narrative and tables in Chapter IV. ANOVA was computed separately for each of these five categories listed below. (Crowl, 1996). ANOVA was computed as follows:

- Dependent variable: Restricted category; independent variables: two groups of educators;
- Dependent variable: Individual Expression category; independent variables: two groups of educators;
- Dependent variable: On-Going Assessment; independent variables: two groups of educators;
- Dependent variable: Multiple Criteria; independent variables: two groups of educators; and
- Dependent variable: Context-Bound; independent variables: two groups of educators.

The tables show the extent of agreement (strongly agree, agree, undecided, disagree, strongly disagree) of each group of educator for each dependent variable described above. The groups of educators that were compared are: (a) magnet school and non-magnet school teachers, (b) older teachers and younger teachers, (c) minority teachers and non-minority teachers, (d) teachers with only a bachelors' degree and teachers with advanced degrees,
(e) experienced teachers and less experienced teachers, based on years of teaching experience, (f) teachers who have and have not received inservice training concerning gifted education, and (g) teachers who have and have not taken college courses in which gifted was discussed. Each ANOVA is followed by Descriptives to describe the teachers' differences in opinion. The survey's demographic information is presented in the form of a Profile of Subjects chart in Chapter IV.

**Interviews**

An interview was conducted with a member of the Bayou Parish Pupil Appraisal Team. The purpose of this interview was to obtain (a) qualitative information to supplement statistical data obtained from the Office for Civil Rights, (b) a descriptive comparison of current and previous gifted student identification practices and instruments, and (c) professional opinions of the present gifted student identification practices and instruments.

Nine teachers at the six participating schools were interviewed to obtain more in-depth information as to their knowledge and beliefs about giftedness. An interview guide was created based on the survey's statements.

Interviewing is one of the best-known representatives of qualitative research (Bogdan & Biklen, 1992). It is "a powerful way to gain insight into educational issues through understanding the experience of the individuals whose lives constitute education" (Seidman, 1998, p. 7).
There is no interview procedure that is superior to another. According to Seidman (1998, p. 15), "relatively little research has been done on the effects of following one procedure over others....The governing principle in designing interviewing might well be to strive for a rational process that is both repeatable and documentable....It is almost always better to conduct an interview under less than ideal conditions than not to conduct one at all."

The researcher used the following interview guidelines by Seidman (1998):

1. Use primarily open-ended questions. This allows the interviewer to explore participants' responses to questions. The researcher used interview guides (see Appendix B) to increase comprehensiveness, as recommended by McMillan and Schumacher (1997). The interview guides were approved by Louisiana Tech's human use committee.

2. Make contact with each participant before conducting the interview. This will build a foundation for the interview relationship. As described earlier, the researcher contacted each participant by mail to briefly describe the study and the interview and to assure the participant of confidentiality. The mailing included a copy of the Human Subjects Consent Form (see Appendix D), which each participant signed and returned.

3. Create a participant information form during this first contact. The form included the participant's home addresses and phone numbers, and the best times, dates, and places to interview. Some participants preferred to meet
with the researcher in person on a given day and time at their school, others preferred a telephone interview at home.

4. Obtain consent through the use of a consent form. The researcher used the consent form required by Louisiana Tech University. This form was approved by Louisiana Tech’s human use committee.

Data Management

According to Seidman (1998), the goal of data management in the interview process is to be able to trace the interview data to the original source at all stages of the research. Data management requires that forms are copied and filed safely, and audiotapes are labeled accurately. Seidman (1998) recommended that the researcher should avoid in-depth analysis of the interview data until all interviews are complete. This prevents the researcher from imposing meaning from one participant’s interview to the next.

Three of the nine teacher interviews and both of the central office interviews were tape-recorded. The remaining six teacher interviews were not taped at the request of the participants. In these instances, the researcher took careful notes with direct quotations and allowed the participants to review the notes. According to Seidman (1998), taping is preferable to note-taking because (a) paraphrasing and summarizing substitutes the researcher’s consciousness for that of the participant, (b) tape recording preserves the words of the participants, giving the researcher original data, (c) if the researcher is accused
of mishandling interview material, the tapes can be used for accountability, and (d) taping assures the participant that their words will be treated responsibly. Unfortunately, most of the teachers were uncomfortable with tape recording.

**Data Analysis and Presentation**

Transcribing the audiotapes and interview notes is the first step in data analysis. Seidman (1998) recommends hiring a transcriber not only because it can take four to six hours to transcribe one 90-minute interview but also because the work is tiresome and demanding, and the interviewer can easily lose enthusiasm for interviewing as a research process. The researcher hired a college student to transcribe the five interview tapes. The student was instructed to transcribe verbatim. The transcripts were saved on the "Microsoft Word" word processing program.

Because in-depth interviewing can generate an enormous amount of text, the researcher must reduce the text to a manageable amount. Seidman (1998) recommended that the researcher read the text and mark passages that are interesting. This requires simply reading and using good judgment instead of agonizing over what level of analysis the researcher should be using.

After the material was marked, it was reduced into a form in which it could be analyzed and presented. Seidman (1998) recommended the following steps:

1. Create themes by using the word processor to create a new document for each theme. By cutting and pasting, divide the selected excerpts from the transcripts into categories that have emerged through reading and comparing.
These categories are called "themes". The teacher interview themes were: Teachers' Acquisition of Knowledge (subthemes: inservice training, college courses, and teaching experience) and Teachers' Knowledge and Assumptions About Giftedness (subthemes: gifted student characteristics, teachers' awareness of the identification process, and teachers' descriptions of the gifted program). These themes are presented in this chapter, along with interpretations. The Pupil Appraisal Team member was interviewed to supplement data obtained from the Office for Civil Rights. The interview was conducted using an interview guide.

2. Interpret the information by addressing these statements, then write the findings in narrative form: (a) what the researcher has learned from doing the interviews, (b) what connective threads have been found, (c) how the researcher may explain these connections, (d) what the researcher understands as a result of the interviews, (e) what unexpected information was found, and (f) how the interviews have been consistent or inconsistent with the literature. The researcher used these guiding statements to assist in managing the data.

Validity and Reliability

This case study is both qualitative (descriptive) and quantitative (statistical). This section addresses the validity and reliability of (a) the overall study, (b) the interviews, and (c) the survey instrument.
The Overall Study

In statistical studies, validity traditionally is defined as "the extent to which a test actually measured what it claimed to measure" (Crowl, 1996, p.110). "Validity in quantitative research includes both internal (causal inferences) and external (generalizability), and issues of objectivity and reliability. Qualitative research employs different assumptions, designs, and methods to develop knowledge" (McMillan & Schumacher, 1997, p. 404). According to McMillan and Schumacher (1997), the most common criteria for qualitative research are validity and extension of findings. Validity, in a qualitative study, is based on data collection and analysis techniques. In this study, more than one measuring instrument was used to strengthen validity. The use of three data collection strategies is called "triangulation" (Denzin & Lincoln, 1994; Popham, 1993). Triangulation strengthens validity in a qualitative study because "a single measuring instrument will ordinarily not, all by itself, tell us what we need to know" (Popham, 1993, pp. 158-159). For the purpose of triangulation, the researcher used documents, interviews, and a survey to gather information.

In qualitative studies, extension of findings is used instead of external validity. External validity is used in statistical studies, and is concerned with the replication of studies. "Extension of the finding...enables others to understand similar situations and apply these findings in subsequent research" (McMillan & Schumacher, 1997, p. 411). According to McMillan and Schumacher (1997), extension of findings can be accomplished through the use of these components,
which were addressed in this study: (a) description of information selection, allowing future researchers to contact similar informants, (b) detailed description of data collection and analysis, (c) thick descriptions and lengthy quotations, and (d) a conceptual framework, which is the primary design component for generating further research.

The Interviews

To further strengthen validity, especially when conducting interviews, the following strategies were also used (McMillan & Schumacher, 1997): (a) prolonged and persistent field work using in-depth interviews and legal documents, (b) verbatim accounts using extensive direct quotations, (c) mechanically recorded data, such as using a tape recorder during interviews, (d) member checking, such as rephrasing topics during an interview to obtain more information, and (e) participant review, in which the person who was interviewed is asked to review the transcripts of the interview for the purpose of clarifying and interpreting the data.

In statistical studies, reliability can be defined as a consistency in results when the study is conducted by different researchers (Popham, 1993; Bogdan & Biklen, 1992). This consistency is difficult to achieve in qualitative research because different researchers studying the same subjects in the same setting may reach different conclusions because they spent more time in some parts of the school or spoke to certain people rather than others (Crowl, 1996; Bogdan & Biklen, 1992). Instead, "qualitative researchers tend to view reliability as a fit
between what they record as data and what actually occurs in the setting under study" (Bogdan & Biklen, 1992, p. 48). This researcher addressed the problem of reliability by looking at accuracy and comprehensiveness of the data, as recommended by Bogdan and Biklen (1992).

The Survey

The questionnaire’s creators documented the validity and reliability of the survey instrument. In this study, the researcher used the survey to gather the professional opinions of Bayou Parish classroom teachers regarding giftedness. The survey, "Assumptions Underlying the Identification of Gifted and Talented Students" (see Appendix A), was a national survey created in 1993 by Gubbins, Siegle, Renzulli, and Brown at the National Research Center on the Gifted and Talented, located at the University of Connecticut. As recommended by Popham (1993), the content validity of the survey is shown by its questions’ congruence with the specifications that guided its creation. In other words, content validity indicates that the survey items measure predetermined criteria (McMillan & Schumacher, 1997). This predetermined criteria, according to Gubbins et al (1993), was a set of guidelines for gifted student identification that were written by Dr. Marshall Sanborn of the University of Wisconsin. Dr. Sanborn’s guidelines were studied to create an item pool that would become the basis for the national survey.

The survey’s reliability (internal consistency) was assured through the process of the questionnaire’s construction (as recommended by Popham,
The questionnaire was written, then it was field-tested, revised, and field-tested again on (a) participants at the 1991 National Association for Gifted Children Conference, (b) graduate students majoring in gifted and talented education, and (c) content area experts. A large number of questions on the original survey were either eliminated or revised until 20 items were retained (Gubbins et al., 1993).

**Instrumentation**

The researcher created an interview guide (see Appendix B) to assist in conducting the interview with the Bayou Parish Pupil Appraisal Team member. The questions were based on information from the Office for Civil Rights compliance review (U. S. Department of Education, 1996) which was briefly summarized in Chapter I. An interview guide was created for use with classroom teachers. The questions were based on the survey’s statements.

A survey was used to gather teachers’ assumptions about the concept of giftedness and how it can be identified. The survey (see Appendix A) is called “Assumptions Underlying the Identification of Gifted and Talented Students” (Gubbins et al., 1993), which was developed by directors of the National Research Center on the Gifted and Talented at the University of Connecticut.

This instrument has been reproduced with the permission of the National Research Center on the Gifted and Talented. Research for this study was supported under the Javits Act Program (Grant No. R206R00001) by the Office of Educational Research and Improvement, U.S. Department of Education.
Grantees undertaking such projects are encouraged to express freely their professional judgment. This study, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.

Procedure

The researcher began by meeting with the Bayou Parish school superintendent to discuss the proposed case study and to obtain his written permission to conduct the study (see Appendix C). After this official permission was obtained, the researcher contacted the Office for Civil Rights in Dallas to obtain documentation of Bayou Parish's compliance process and resulting gifted student populations for each year of participation in the compliance review. The researcher wrote a summary of the documents and created tables to illustrate the results of the compliance review.

The principals of the six selected schools were each sent a letter of introduction (see Appendix C), Human Subjects Consent Forms (see Appendix D), and a copy of the written permission obtained from the superintendent. They were asked to distribute the 25 surveys to their kindergarten through fifth grade classroom teachers and to return the completed surveys in the enclosed self-addressed stamped envelope (SASE).

After receiving the surveys, the principals of the six schools were sent a letter, followed by a telephone call, requesting the names of teachers who would be willing to participate in a brief interview (see Appendix C). The principals
talked to their faculty members and obtained the names of 16 teachers who were interested in taking part in the interview. The names were returned to the researcher by phone, fax, and mail.

The researcher sent a letter of introduction to each selected teacher (see Appendix C). The letter included an SASE, Human Subjects Consent Form, a list of the interview questions, and a simple information form to complete. Nine of the 16 teachers returned to the researcher in the enclosed SASEs. These teachers were interviewed as requested, either in person or by telephone.

The Pupil Appraisal Team member was sent a letter of introduction (see Appendix C), Human Subjects Consent Form, and a copy of the interview questions. She was contacted by telephone to set up the actual interview.

With permission, many interviews were tape recorded to ensure accuracy. A college student was employed to assist the researcher in transcribing the tapes. The results of all the interviews were written in the form of descriptive narrative.

The survey data were coded and entered into a computer statistics program. After the ANOVA was run and interpreted, the results were presented in descriptive form and charts.

**Limitations and Delimitations**

According to Best and Kahn (1993), limitations are conditions that are beyond the control of the researcher that may affect the conclusions of a study
and delimitations are the boundaries of a study. The delimitations (boundaries) in this study were:

1. This study describes only the gifted program in the Bayou Parish, Louisiana, school system.

2. The study took place in three magnet and three non-magnet schools in Bayou Parish.

3. The interviews were only conducted with the Bayou Parish Pupil Appraisal team member and nine classroom teachers in the six participating schools.

4. The surveys were conducted with classroom teachers in the six participating schools.

5. The study itself was delimited to investigating the school years 1995-1996 through 2000-2001.

The limitations (beyond the control of the researcher) in this study were:

1. The limited number of teachers who volunteered to participate in the interview.

2. The Pupil Appraisal Team member who participated in the interview.

3. The assumption of truthfulness of participants' responses to survey and interview questions.

4. The fact that the Office for Civil Rights and the Bayou Parish School System concentrated specifically on African-American gifted students instead of minority students overall.
Summary

This chapter described in detail the purpose, design, and procedure of the case study. Its ethical concerns were addressed, its sample population was described, and its validity and reliability were assured. Its procedure was meticulously recorded for the benefit of future researchers who may wish to conduct a similar study. The results of the case study are presented in Chapter IV.
CHAPTER IV
RESULTS OF STUDY

Introduction

The data collected for the case study of the Bayou Parish, Louisiana, gifted program are presented in the following sections. The data collection includes teacher surveys, teacher interviews, an interview with a member of the Pupil Appraisal Team, and documents from the Office for Civil Rights (Southern Division – Dallas), the Louisiana Department of Education, and the Bayou Parish Pupil Appraisal Office. The data are presented in tables and in descriptive narrative. The results of the case study are summarized and discussed in Chapter V.

The purpose of this study was to examine screening procedures (e.g., IQ tests) and practices (teacher referrals, parental involvement, etc.) used by a typical school system to address the problem of underrepresentation of African-American students in a gifted program. According to Ross (1993), a typical school system relies heavily on the use of standardized test scores to identify gifted students. This is due to state laws and regulations that must be followed in order for schools to obtain state funding for gifted programs.
Documents from the Office for Civil Rights often used the terms "minority" and "African-American" interchangeably, yet their compliance review and interventions were concerned with increasing, not the overall gifted minority population, but the gifted African-American population. This was evident in Table 5 (Chapter I), where the Asian/Other Minority population was not documented during the 1998-1999 school year. According to an interview with a member of the Bayou Parish School System’s Pupil Appraisal Team, this was because the remaining minority population was very small and was a mix of Asian and Native American students with different strengths and different needs when compared to each other and to the African-American population. These populations will be addressed beginning in the 2001-2002 school year.

This study was based on Ford’s (1994) theory that barriers exist, particularly in terms of screening practices, in the placement of minority and nonminority students in gifted programs. These barriers are: (a) inadequate identification practices that may serve to eliminate certain types of intelligent students from gifted programs, (b) the prevalent practice of using teacher identification as the first step in the gifted student identification process even though nationwide research shows that teachers fail to identify up to 50% of the gifted students in their schools due to lack of knowledge about giftedness, and (c) a lack of parental involvement in the schools.

This case study’s research questions were concerned with (a) describing the changes that took place in Bayou Parish’s gifted student identification
practices and instruments during the 1995-2000 compliance review, (b) presenting the changes in gifted student population as a result of these changes, and (c) describing teachers' assumptions about giftedness and how these assumptions were attained. By answering these questions, educational stakeholders may better understand ways to overcome barriers to minority representation in gifted programs.

Document Analysis Results

State Department Guidelines

To better understand the basis for Bayou Parish's gifted student identification process, the researcher examined the Pupil Appraisal Handbook (2000) which has been recently updated and was formerly known as Bulletin 1508. The bulletin/handbook is updated every year. The handbook is published by the Louisiana Department of Education and is available at all school board offices in Louisiana. The Pupil Appraisal Handbook describes the matrix and cutoff scores that must be used for screening and evaluating students for placement in a gifted program. Each school system is allowed to choose the screening and evaluation tests that are used with the matrix. As a result, one school system may be using tests that are completely different from those used by other school systems.

According to the handbook, the Louisiana Department of Education defines gifted students as "students who demonstrate abilities that give evidence of high performance in academic and intellectual aptitude" (Pupil Appraisal
Handbook, 2000, p. 50). For the initial gifted screening, the handbook states that “each school system shall develop and implement procedures for screening students suspected of being gifted” (p. 50). The individual evaluation requires the use of “an individually administered test of intellectual abilities appropriately standardized on students of this age and administered by a certified school psychologist or licensed psychologist” (Pupil Appraisal Handbook, 2000, p. 50).

Concern for cultural differences is evident in this statement: “Few, if any, standardized assessment instruments adequately control for the effect of such factors as environmental impoverishment, cultural differences, or the lack of opportunity to learn….The recommendation of the multidisciplinary team either to classify or not to classify a student as gifted must be based on a thorough evaluation of the student's abilities” (p. 55).

The state department of education's definition of giftedness and the guidelines for evaluating students for giftedness are strictly limited to high scores on standardized IQ and achievement tests, despite the leniency given to the school systems in the development of screening procedures and test selection that was described in the Pupil Appraisal Handbook (p. 50). According to research in the area of gifted education (outlined in Chapter II), relying heavily on such testing strictly limits the gifted student population to those who are academically gifted and overlooks students who have specialized skills, are highly creative problem-solvers, or have strong leadership abilities. Bayou Parish's gifted student identification process follows the state department's
guidelines; therefore, IQ and achievement tests are heavily relied upon in the screening and evaluation process.

Office for Civil Rights Documents

Through correspondence and telephone calls, the researcher obtained three sets of documents from the Office for Civil Rights, Southern Division, in Dallas. Two sets of documents contained a summary of the compliance review that had taken place in Louisiana (Office for Civil Rights, 1996) and in Bayou Parish (U.S. Department of Education, 1996). According to these two sets of documents, six compliance reviews had taken place in Louisiana in 1995. The Office for Civil Rights examined three randomly selected school systems for evidence of overrepresentation of African-American students in special education classes and three randomly selected school systems were examined for underrepresentation of African-American students in gifted programs. Bayou Parish was found to have a significant underrepresentation of African-American students in its gifted program.

These two Office for Civil Rights documents also gave a general overview of the problems facing gifted and special education in the state of Louisiana. The problems with gifted student identification included (a) the underrepresentation of African-American students in gifted programs, (b) state-mandated testing procedures for student placement in gifted programs that limited individual schools systems in piloting innovative gifted identification procedures, (c) teachers and parents not knowledgeable of how to recognize giftedness, and (d)
parents not well informed about the gifted program and its eligibility requirements.

The third set of documents from the Office for Civil Rights (U.S. Department of Education, 2001) described in detail the interventions that took place in the Bayou Parish school system. The purpose of the interventions was to address the problems listed in the previous paragraph. The interventions were created through collaboration between the Bayou Parish school system and the Office for Civil Rights. These interventions are summarized below.

**Interventions**

The Bayou Parish School System’s gifted student identification policy was limited by state law to the use of standardized test scores to choose students for placement in gifted programs. The Office for Civil Rights created a set of interventions, within the bounds of state law, to help recruit more African-American students into the gifted placement (testing) process, in hope that if more students were tested, then more students would be identified as gifted and would be placed in the gifted program. The interventions were as follows.

*Inservice training* was provided to all school system personnel who were responsible for gifted student referral, identification, or evaluation. The purpose of the inservice was to ensure that culturally diverse students would not be overlooked in the gifted student identification process. This one-time inservice was required to take place by November 15, 1996, and sign-in sheets were sent to the OCR to provide documentation that the inservice was conducted. The
inservice was presented by the Bayou Parish Pupil Appraisal staff and Special Education administration staff. Principals, assistant principals, school coordinators, and School Building Level Committee (SBLC) members were required to attend. The inservice provided information about Title VI (non-discrimination of students in program placement), characteristics of giftedness, and alternative methods of identifying giftedness. However, it should be noted that the survey and interview data (presented later in this chapter) suggest that not all teachers are participating in these inservices.

A task force was organized during the 1996-1997 school year, and is still in existence. Its purpose was to develop plans to improve African-American student participation in the gifted program. The task force is comprised of a volunteer group of parents, teachers, Pupil Appraisal members, and any other concerned individuals. The task force created a "child search" plan and a "Gifted Child Search" month, both of which are described as follows. Interview data presented and discussed in the next section provide further insight into the nature of the task force.

Fliers, called "Child Search" fliers (see Appendix E), were sent home to all parents beginning with the 1996-1997 school year. The fliers were given to all students to take home. The fliers were also mailed to African-American churches, daycare/preschool centers, private schools, physicians offices, health centers, educational organizations, dance centers, and recreations centers. The fliers provided the following information: (a) the gifted program's admission criteria,
benefits, and referral process, (b) characteristics of gifted children, and (c) contact names and numbers for parents who wished to refer their children for a gifted screening. These fliers are still in use.

*Child Search Month* and its community outreach activities began in 1996. Gifted Child Search Month originally was during October to coincide with Special Education's Child Search Month. Gifted Child Search Month was changed to February in 1998, and is still in place. Its activities have included (a) disseminating posters, fliers, and color brochures throughout schools and communities, (b) presenting information to newspapers, television news stations, and cable public access programs, and (c) presenting information to parents during “back to school” orientation meetings, PTA meetings, and Kiwanis Club meetings.

Bayou Parish began *monitoring* the interventions by collecting documentation that each intervention was taking place each year. Gifted African-American and nonminority population data was collected each year, also. The population data are presented later in this chapter.

The *Exploration Enrichment Program* (see Appendix F) was placed in three predominantly African-American schools in fall of 1996 and in four additional predominantly African-American schools in spring of 1997. The Exploration program was described in detail in Chapter I. Exploration is an enrichment program for elementary students. It is not a state or federal program, but is funded solely by the Bayou Parish School System. It is an honors-type
program for students who are high achievers but do not quite qualify for the gifted program due to standardized test cutoff scores. According to teacher and Pupil Appraisal Team member interviews, Exploration teaches higher-level thinking skills through the use of units (just like the gifted program) such as Egypt, Titanic, Chocolate, etc. At one school, nine of 29 of the first grade Exploration children were placed in the gifted program at the end of the 2000-2001 school year.

*Gifted/Talented evaluations* were given to all minority students who scored four points instead of five points on the gifted group-screening matrix. The purpose of this cutoff score was to allow as many minority students as possible the opportunity to obtain an individual evaluation. The evaluation process will be explained in detail in the following section. Also, during the 1995-1996 school year, all minority students who had been evaluated but did not qualify for the gifted program during that school year and the previous school year were re-evaluated. These were minority students who achieved IQ scores of 115 or higher and obtained scores in the 84th percentile or higher on a standardized achievement test. This resulted in the placement of 16 additional African-American students in the gifted program.

The purpose of the OCR's interventions was to move as many highly intelligent minority students as possible into the gifted identification process. This four-step process is described as follows.

Chapter I contained a detailed description of the gifted student identification process used in Bayou Parish in 1995, the year the Office for Civil Rights conducted its compliance review and interventions. The following is a description of the gifted student identification process used in Bayou Parish in May of 1999 (Office for Civil Rights, May 2000). This process was documented by the Office for Civil Rights during their on-site visit on May 17, 1999. This process was still in place as of June 2001.

The steps in the placement process and the matrices and tests that are now used are outlined as follows (Office for Civil Rights, May 2000). Some of the placement tests and matrices have changed since 1995. In 1995, Bayou Parish followed guidelines set forth in Bulletin 1501, which is published by the Louisiana Department of Education. This was updated recently and renamed "Pupil Appraisal Handbook." The California Achievement Test was recently replaced by the Iowa Test as the statewide norm-referenced test.

These steps will be described in more detail on the following pages. The steps used in 1995 are the same as the steps used in 1999, but changes have been made within each step.
Table 12

Overview of Steps

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Referral for Gifted Screening</td>
</tr>
<tr>
<td>Step 2</td>
<td>Gifted Screening</td>
</tr>
<tr>
<td>Step 3</td>
<td>School Building Level Committee Meeting</td>
</tr>
<tr>
<td>Step 4</td>
<td>Full Evaluation</td>
</tr>
</tbody>
</table>

Except for the use of one different test, Step 1 in the year 1999 was the same as Step 1 in 1995. In Step 1, students are referred to the Pupil Appraisal Team for a gifted screening. Referrals were made by any of the following: teachers, parents, counselors, and the students themselves. Referrals were based on the following: evidence of gifted characteristics, creativity, classroom performance, grades, and standardized test scores, such as the Iowa Test of Basic Skills. In 1995, the California Achievement Test was the statewide norm-referenced test. In 2001, at the time of this study, the Iowa Test was the statewide norm-referenced test.

In Step 2, a Pupil Appraisal member scheduled a day and time when the referred students could be given a brief group screening for giftedness. The screening involved the use of an IQ test. Each student’s IQ score was placed on a matrix along with his/her reading and mathematics achievement test scores.
Students had to score at least five points on a matrix (see Table 13) before being referred to the next step. In 1995, all students were required to score at least five points on the matrix.

In Step 2, several differences can be seen when 1999 is compared to 1995. In 1999, all minority students were required to score at least four points instead of five on the matrix (see Table 13). This allowed more minority students the opportunity for individual testing in Step 4. Also, the Slosson Intelligence Test, the California Achievement Test, the Test of Cognitive Ability, and the Kaufman Test of Educational Achievement were eliminated from the list of screening devices (Office for Civil Rights, May 2000). Interviews with testing personnel revealed that these tests were eliminated due to their poor performance in identifying potential gifted students, and that other tests were being examined as possible replacements. However, the screening matrix itself (see Table 13) remains unchanged. In 1999, the Kaufman-Brief Intelligence Test (K-BIT) was the intelligence test used for gifted student identification. According to Frasier (1989), the Kaufman was considered to be a culture-fair test due to its assessment of a broader range of mental functions than was usually associated with IQ tests. The achievement tests used were the Iowa Test of Basic Skills, the Wide Range Achievement Test – Revised (WRAT-R) and the Louisiana Educational Assessment Program (LEAP) state proficiency test.
Table 13

Gifted Screening Matrix

<table>
<thead>
<tr>
<th>Points</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptitude (IQ)</td>
<td>115-122</td>
<td>123-129</td>
<td>130+</td>
</tr>
<tr>
<td>Reading</td>
<td>84-92%</td>
<td>93-97%</td>
<td>98%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>84-92%</td>
<td>93-97%</td>
<td>98%</td>
</tr>
</tbody>
</table>

Note. % represents percentile.

Step 3 remained unchanged when 1995 was compared to 1999, except for that school personnel (including teachers and the School Building Level Committee members) had received yearly inservices regarding gifted student identification after 1995. The students who obtained the required number of points on the Gifted Screening Matrix (see Table 13) were referred to the School Building Level Committee (SBLC). The purpose of the SBLC meeting was to compose a case file of additional information about each student. This information described the strengths, weaknesses, and traits of each student. If a student had health problems or social adjustment problems, these could be addressed as a part of the evaluation process. The SBLC members at each school were as follows: the principal, the student's teacher, the school counselor, and a member of pupil appraisal. Information discussed at the SBLC meeting included screening results, current grades and test scores, social adjustment,
health history, and observed behavioral characteristics (a questionnaire completed by the student's teacher to determine gifted characteristics).

Step 4, the full evaluation, involved the use of an IQ test administered to individual students instead of to a group of students. The IQ score was placed on a matrix along with reading and mathematics achievement test scores (see Table 14). This individual administration allowed the Pupil Appraisal personnel to identify particular strengths and weaknesses during the testing process and in the IQ test results. These strengths and weaknesses were added to the student's case file. If the student successfully completed the full evaluation, the case file was used to compose an individual education plan (IEP) for the student. The IEP directed the student's instruction in the gifted program.

Step 4 has been changed almost completely since 1995. The present version of Step 4 includes the use of a simplified matrix (compare Table 14 to Table 10) that is used with students in first through 12th grades and a revised list of IQ and achievement tests that are used for full evaluation. No information was reported to the Office for Civil Rights concerning preschool and kindergarten evaluation criteria.

To be eligible for gifted program placement, students had to (a) obtain at least 3 points on an IQ test, or (b) obtain 7 or more total points on the matrix, or (c) obtain 6 or more total points on the matrix with at least 1 point in IQ and with the tester's recommendation. The Woodcock-Johnson Revised (WJ-R) was the achievement test used. The IQ tests used were the Wechsler Intelligence Scales
for Children (WISC III), the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), and the Kaufman Assessment Battery for Children (K-ABC). The WISC-III, according to Post and Mitchell (1993, p. 541) is “arguably the best instrument currently available for assessing students’ intelligence.” Its norms were updated in the early 1990s to fairly assess the intelligence of culturally disadvantaged and minority children due to the inclusion of an additional scale. According to Hicks and Bolen (1990), the Woodcock-Johnson can be used as either an IQ test or an achievement test. It is one of a few tests that is based on the theory of multiple intelligences. It was normed using a sample of individuals from ages two through 90, and the sample included gender, geographic region, community size, race, and socioeconomic variables.

Table 14

Gifted Student Evaluation Matrix

<table>
<thead>
<tr>
<th>Points</th>
<th>84th-93rd percentile (1 point)</th>
<th>94th-97th percentile (2 points)</th>
<th>98th-99th percentile (3 points)</th>
</tr>
</thead>
</table>

IQ Test Score

Reading Achievement Test Score

Mathematics Achievement Test Score
Results of the Interventions

Table 15 shows the Bayou Parish gifted population the year before the Office for Civil Rights interventions began (1994-1995), the years during the monitored interventions (1995-1997), the year of the follow-up visit by the Office for Civil Rights (1999), and the two following years. The table shows the gradual increase in the African-American population identified as gifted students. The drop in the Other Minority category is being addressed by Bayou Parish during the 2001-2002 school year.

The Office for Civil Rights personnel (U.S. Department of Education, 2000) believed the increase in the gifted African-American population took place without lowering the standards and within the guidelines of the Louisiana Department of Education. The three barriers identified by Ford (1994) were addressed by the interventions. Identification practices were made more inclusive by allowing more minority students the opportunity to take an individually administered IQ test and by allowing more African-American students the opportunity to take gifted-type enrichment classes. Tests that showed poor performance in identifying gifted students were eliminated, and other tests were being examined during the 2001-2002 school year as possible replacements.

Parents and teachers were made aware of giftedness and the gifted program through the use of posters, fliers, presentations, newspaper articles, and television news features. In addition, a task force of concerned educators,
parents, and community members was formed to carry out the interventions and to seek new methods that may also be effective.

Table 15

**Bayou Parish Gifted Program Enrollment**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Black</th>
<th>White</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>1,322</td>
<td>106 (8.0%)</td>
<td>1,173 (88.7%)</td>
<td>43 (3.3%)</td>
</tr>
<tr>
<td>1995-96</td>
<td>1,238</td>
<td>106 (8.6%)</td>
<td>1,093 (88.3%)</td>
<td>39 (3.2%)</td>
</tr>
<tr>
<td>1996-97</td>
<td>1,330</td>
<td>122 (9.2%)</td>
<td>1,162 (87.4%)</td>
<td>46 (3.5%)</td>
</tr>
<tr>
<td>1997-98</td>
<td>1,384</td>
<td>140 (10.1%)</td>
<td>1,193 (86.2%)</td>
<td>51 (3.7%)</td>
</tr>
<tr>
<td>1998-99</td>
<td>1,493</td>
<td>159 (10.6%)</td>
<td>1,278 (85.6%)</td>
<td>56 (3.8%)</td>
</tr>
<tr>
<td>1999-2000</td>
<td>1,498</td>
<td>163 (10.8%)</td>
<td>1,273 (85.1%)</td>
<td>62 (4.1%)</td>
</tr>
<tr>
<td>2000-2001</td>
<td>1,550</td>
<td>200 (12.9%)</td>
<td>1,314 (84.8%)</td>
<td>36 (2.3%)</td>
</tr>
</tbody>
</table>

**Summary of Document Analysis**

The Office for Civil Rights worked with the Bayou Parish school system to find a way to increase the number of gifted African-American students throughout the school system. The interventions that were implemented were within the guidelines mandated by the Louisiana Department of Education. The interventions were based on the belief that if more African-American students were given the opportunity for a gifted screening, then more African-American students would have the opportunity of being placed in the gifted program.
Teachers and parents became more familiar with giftedness and gifted education through the use of presentations at various organizations, local news coverage, fliers, posters, and "Child Search Month" activities. A task force was established to develop ongoing plans to further increase the gifted minority population. The task force also examined student screening and evaluation instruments. They eliminated the instruments that were considered to be ineffective and are considering new instruments as replacements. A member of Bayou Parish's Pupil Appraisal Team was interviewed to gather further information about the gifted student identification procedure. The interview is summarized below.

Pupil Appraisal Team Interview Results

The Bayou Parish Pupil Appraisal Team consists of the Supervisor of Gifted Programs, a Pupil Appraisal Team coordinator, psychologists, and educational diagnosticians, all of whom work as employees of the Bayou Parish school system and are housed at the Pupil Appraisal Office. The number of these employees is uncertain at the time of this study (July 2001) because, during this time of year, employees often change jobs. Because several employees had recently been promoted to other jobs or had transferred to other jobs, the remaining employees were working to take up the slack left by the changes. Thus, only one Pupil Appraisal Team member (who also happened to be a member of the Task Force, described earlier) consented to be interviewed by the
researcher. This was a tape-recorded telephone interview that took place after
hours. The following is a narrative summary of the interview.

In 1995, the Office for Civil Rights conducted a compliance review of the
Bayou Parish gifted program. Bayou Parish was chosen through random
selection and not due to parent complaints. The impact of the compliance review
was that it made people in Bayou Parish (teachers, parents, etc.) more aware of
the problem of the underrepresentation of minority students in the gifted program.

As shown previously in Table 15, the Office for Civil Rights examined the
following gifted populations in Bayou Parish: White, Black, and Other Minority.
Other Minority included Asian and Native American students. Other Minority did
not include any Limited English Proficiency students until the 1999-2000 school
year.

As a part of the interventions created by the Office for Civil Rights, a Task
Force (described in the previous section of this chapter) was established and still
exists. The Task Force was (and still is) a group of eight to ten members that
now includes the special education supervisor, the gifted program supervisor,
members of Pupil Appraisal, and some teachers. Some members were
appointed by supervisors, but most members volunteered. Some teachers
volunteered because being on the Task Force was part of their Professional
Growth Plan. The team is now examining new identification instruments (IQ
tests) that are said to be less culturally biased, and some of these instruments
are being field-tested by the Task Force members. They have discovered that
some instruments seem to be more effective in identifying gifted African-American children; these instruments are being more closely examined, and the others have been eliminated. It is hoped that some of these instruments will prove to be effective and will be adopted for use by the school system.

As outlined in the previous section, Bayou Parish does not use screening or evaluation methods or instruments other than IQ and achievement tests. The Pupil Appraisal Team selects the testing instruments (IQ tests) that are adopted for use in Bayou Parish. The testing instruments that are selected are chosen because they are deemed to be not culturally biased. The instruments are administered by Pupil Appraisal, and the cutoff scores are the ones found on the matrix (see Table 14) that is required by the state department for use in the schools. Students who score one or two points below the cutoff score do not qualify for gifted education. This is because "students are not placed in G/T if they do not meet state guidelines." They cannot be retested until at least one year has passed, provided they meet the requirements for testing at that time. In a situation such as this, parents will sometimes take their children to a psychologist in a private practice to be retested, but this costs around $300. "Minority parents rarely go to private testing." This is because they often cannot afford the cost of a private test.

More students are referred for screenings at these grade levels: third, fifth, sixth, eighth, and ninth. This is because the students in these grades take the Iowa Test of Basic Skills, and the scores from these tests are used to determine
which students qualify for an initial gifted screening. Students are screened
during the school year, not during the summer months. The screening is ongoing
during the school year, not just during the fall or spring. "We are constantly
looking for gifted students." The interview participant believes the ongoing
screening is effective because it allows more students to be identified than if
there were deadlines that could be missed. Once students are placed in the
gifted program, they are permanently in the program unless they drop out or their
evaluation expires. "This rarely happens in Bayou Parish."

The Task Force continues to distribute Gifted Child Search brochures
throughout the community (see Appendix E). Along with the Child Search efforts,
the gifted screening matrix cutoff score was lowered to four points instead of five
when used with African-American students.

Each year, Pupil Appraisal Team members conduct inservices at all the
schools in Bayou Parish. Pupil Appraisal conducts the meetings because they
are the ones who do the testing; therefore, they stay up-to-date on current gifted
student literature and gifted student identification procedures and requirements
that are mandated by the state department. The teachers are required to attend
the meeting and to sign a roster to prove they have attended. The meetings are
like a regular faculty meeting at the beginning of the school year. The goal of
these meetings is to make school employees aware of the gifted and special
education placement requirements and process. During the last few years, the
meetings have focused on minorities and gifted education. It is effective because, as a result, "more minority students are identified as gifted."

Community meetings have been conducted at community centers on Saturday mornings, and the meetings are a part of the compliance review. Few parents attend even though "the meetings are well-advertised through a special education newsletter that goes out to all parents". Another community outreach method is the Child Search program, in which about 350 packets of fliers are sent to area businesses and African-American churches. The fliers are effective because Pupil Appraisal receives responses (but not a large number of responses - "we're lucky if we get five or six") from parents in the form of referrals for gifted screening. These are from all parents, not just African-American parents.

Bayou Parish's philosophy and definition of giftedness is published in the Alpha information booklet. This booklet is given to parents at the IEP (Individual Educational Program) meeting, when their children are first placed in the gifted program. The booklet describes the classes the students will take in Alpha throughout their school years, from elementary school through high school.

Parental involvement in gifted education is, according to the interview participant, "a weak point for us," but could give no recommendations of ways this could be improved. A few parents belong to state gifted organizations, but there are no local organizations or support groups. The Bayou Parish School System's website has links to gifted resources for use by teachers and parents, and the
Pupil Appraisal Office subscribes to gifted student journals that are loaned to teachers and parents.

Bayou Parish's gifted program is called the Alpha program. According to the interview participant, "it is not offered in every school because not all schools refer students for testing." A Pupil Appraisal Team member examines the standardized test scores of all the Bayou Parish public schools to find students whose scores (85 percent or higher in mathematics and reading) would qualify them for a gifted screening. Each list of names is sent to the appropriate school. Yet, it is up to the schools to begin the placement procedure and many do not. During the 2000-2001 school year, a screening specialist was sent to each school with lists of students that qualified for a gifted screening to help the principals start the screening process. This was effective, because schools that usually do not participate in the placement process were able to place students in the gifted program.

Some schools do not have an Alpha program due to lack of (or very low number of) gifted students. For instance, the magnet schools have as many as 300 to 500 students in the gifted program but other schools have as few as five. If a student is identified as gifted at a school that does not offer Alpha, the student is allowed to transfer to a school that has the program. The schools do not want to lose their best students, so they do not refer their top students for screenings. Itinerant teachers are also used to provide gifted education to these students, but this is not considered by many parents to be as good a service as
the full-time Alpha program. Many parents are eager to have their children identified as gifted in order to transfer them to the “better schools.” Other parents “just don’t care.” For instance, school personnel identify students who qualify for an initial gifted screening. The parents are contacted, but they never sign and return the forms to allow Pupil Appraisal to screen their children.

Once they are identified as gifted, most students tend to stay in their own schools. As for the magnet schools taking the gifted students, the only way a student can be placed in a magnet school is to apply and meet the requirements. The magnet schools are mathematics/science schools. They have taken students from neighborhood schools, though. The magnet schools have as many as 300-500 students in their Alpha programs.

The Alpha program is a pullout enrichment program for kindergarten through third grades, a daily language arts acceleration program for fourth through fifth grades, and a departmentalized program for high school. The Superintendent has requested a pilot program in one school that has Alpha. In this pilot program, gifted programming would take place through inclusion instead of using a pullout program. In inclusion, the Alpha teacher would come into the regular classroom and conduct enrichment with the gifted students there. Ability grouping in the regular classroom is also a possibility that is being discussed with the principals. Any changes in the gifted program would be based on the recent literature, and no changes have been made yet.
The Exploration program is an enrichment program for high-achieving students (see Appendix F), and is loosely based on the Renzulli model (which was described in Chapter II). In Exploration, high-achieving students receive enrichment through the use of a pullout program. The students must earn their privilege to stay in the program by keeping their grade point average high and by exhibiting good behavior.

The Exploration program is not a part of Special Education (like the gifted program); it is a regular education program with a regular education teacher. It is funded by the Bayou Parish school board. The Exploration students must qualify for the program based on their grade point average ("all As and Bs, no Cs") and on conduct. "In the gifted program, you can make Ds and Fs!" Exploration is a pullout program that students go to once or twice a week depending upon the school's schedule, and the students receive no grades for their projects. Some schools have an itinerant Exploration teacher, others have a full-time teacher who teaches Exploration and another class such as computer lab. "It's up to the principals as to how they use their Exploration teachers." The Exploration classes teach higher-level learning and creativity. They are taught through the use of units, such as Egypt or Whales, and the units incorporate many subjects areas such as mathematics and science. "It's the fun stuff that the regular teacher never has time to do!" Many Exploration students are eventually placed in the gifted program due to referral by the Exploration teacher.
As for how the identification process for the gifted program could be improved, the interview participant stated that "there is always room for improvement. But we have reached more students for screenings." During the 2000-2001 school year, "we had a 19 percent increase in the number of African-American students in the gifted program when compared to last year." She stated that if there were no guidelines offered by the state department for gifted student identification, she would "just use standardized test scores, like Texas does. If we eliminated IQ, then we would have to change the services that G/T provides. But we would probably reach more students if we didn't have to go by the state guidelines."

Yet, upon examination of the Alpha information booklet, the researcher found that the Alpha gifted program not only offered accelerated and enriched Reading/Literature and Mathematics classes, it also provided enrichment in critical thinking, problem solving, creativity, and independent research. These areas seemed to represent a broad spectrum of abilities beyond those identified by IQ tests alone.

Another area that needs to be improved is school participation in the screening process. Many schools do not want the students identified as gifted because the parents may place them in another school. These schools do not refer students to Pupil Appraisal even when a list of names of students qualifying for a screening has been sent to their schools. "We need to make sure the schools follow through in the screening process."
The preceding sections described, through the use of documents and an in-depth interview, the interventions that were implemented by the Office for Civil Rights to address the underrepresentation of minority students in Bayou Parish's gifted program. It also described the present gifted student identification procedure and instruments, the guidelines that are mandated by the Louisiana Department of Education, and the perceptions of a member of the Pupil Appraisal Team and Task Force concerning the interventions, testing procedures, and student programs.

The following sections describe, through the use of surveys and interviews, teachers' assumptions about giftedness, how gifted students should be identified, and how gifted students can be effectively served in special programs.

Survey Results

Surveys were sent to kindergarten through fifth grade teachers in the six participating schools. Of the 150 surveys that were sent, 99 were completed and returned. Seventy-five of the 150 surveys were sent to three magnet schools and seventy-five were sent to three non-magnet schools. The magnet schools completed and returned 41 of the surveys and the non-magnet schools completed and returned 58 of the surveys.

According to the demographics on the surveys received (see Tables 16-22), the majority of the respondents were white, non-Hispanic females between the ages of 48 and 58. Their highest earned degree was a bachelor's degree,
and they had acquired an average of more than 15 years teaching experience.

When asked about their knowledge of giftedness, the majority of the respondents replied that they had taught gifted students in their classrooms, and their formal knowledge of gifted had come from college courses more so than from inservice training.

Table 16

**Genders of Survey Participants**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>39</td>
<td>57</td>
</tr>
</tbody>
</table>

Table 17

**Ages of Survey Participants**

<table>
<thead>
<tr>
<th>Age</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>25-35</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>36-46</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>37-47</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>48-58</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Over 58</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
### Table 18

**Ethnic Background of Survey Participants**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian or Pacific Islander</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Black Non-Hispanic</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>White Non-Hispanic</td>
<td>38</td>
<td>46</td>
</tr>
</tbody>
</table>

### Table 19

**Highest Academic Degree Earned by Survey Participants**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Specialist's Degree or work past a Master's Degree</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 20

Years of Teaching Experience by Survey Participants

<table>
<thead>
<tr>
<th>Years</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or less</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3-5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>6-10</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>11-15</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>More than 15</td>
<td>19</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 21

Survey Participants' Experience in Teaching
Gifted Students in Their Classrooms

<table>
<thead>
<tr>
<th>Experience</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have taught gifted students in their classrooms during their years of teaching experience</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Have never taught gifted students in their classrooms during their years of teaching experience</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>
Table 22

Survey Participants' Training in Gifted Education

<table>
<thead>
<tr>
<th>Training</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inservices</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>College Courses</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Both inservices and college courses</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

Factor Analysis of Survey Statements

The actual survey, "Assumptions Underlying the Identification of Gifted and Talented Students" (Gubbins, Siegle, Renzulli, and Brown, 1993) was sent to the researcher by Gubbins, who was one of the survey's four creators. The survey was accompanied by a newsletter article that described the factor analysis that had been conducted by the tests' creators and their research assistants. The factor analysis divided the 20 survey statements into the following five factors (Gubbins et al., 1993):

1. Factor 1 is Restricted, in which teachers believe gifted children should be identified primarily through the use of achievement test and IQ test scores.

2. Factor 2 is Individual Expression, in which teachers believe in the use of methods that identify an individual's giftedness. Individual Expression
methods of identification would include case study data, student-selected
tasks (such as science fair projects, 4-H projects, etc.), and non-intellectual
factors (such as creativity and leadership).

3. Factor 3 is On-Going Assessment, in which teachers believe periodic reviews
should be carried out on both identified and non-identified students. On-Going
Assessment is based on the belief that the adequacy of the identification
system should be assessed on a regular basis.

4. Factor 4 is Multiple Criteria, in which teachers believe students may develop
giftedness at certain ages and in specific areas of interest. Gifted student
identification would require the use of several types of information about the
student.

5. Factor 5 is Context-Bound Identification, in which teachers believe gifted
student identification should take into consideration the students' cultural
backgrounds, such as through the use of instruments normed on certain
populations (culture-fair tests) and through the involvement of assessment
personnel who understand the students' cultural background.

**Comparisons Based on School Type**

The survey data were coded by the researcher and entered into an SPSS
statistics software program. This process was completed with the help of a
statistician at a local university. Analysis of Variance (ANOVA) and Descriptives
were run by the statistician to determine the results of the surveys.
ANOVA was used to compare the responses of the magnet school teachers (Group 1) to the responses of the non-magnet school teachers (Group 2). The purpose of ANOVA was to determine if there was a statistically significant difference between the two groups' responses to any of the five factors. A statistically significant difference would mean that magnet school teachers had a different opinion about giftedness than non-magnet school teachers on that factor. Table 23 shows the results of ANOVA.

According to Crowl (1996), an alpha level is the probability of making an incorrect generalization. Educational researchers have generally set the alpha level for ANOVA at .05. If the alpha level is less than .05, then there is a statistically significant difference between the responses of the two groups that are being examined. According to Crowl (1996, p. 193), "when we say that findings are statistically significant, we mean that the probability that the findings are due to chance is less than 5%.

As seen in Table 23, there is a significant difference of opinion between these two groups of teachers concerning Factor 1. The two groups of teachers had no statistically significant difference of opinion concerning factors 2 through 5. Because there was a statistically significant difference between the responses of magnet school teachers and non-magnet school teachers concerning Factor 1, the researcher found that one's teaching environment may affect one's opinion of the use of standardized testing in identifying gifted students.
Table 23

**ANOVA Results Based on School Type**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.039</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.833</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.295</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.648</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.735</td>
</tr>
</tbody>
</table>

Descriptives (Table 24) were run to find out more about the magnet school and non-magnet school teachers' opinions of Factors 1 through 5. The "mean" is the statistical average of the teachers' responses (Crowl, 1996). The mean was interpreted through the use of the following Likert scale, the same as the one used with the survey items: (a) 5.0 to 4.51 is Strongly Agree, (b) 4.50 to 3.51 is Agree, (c) 3.50 to 2.51 is Uncertain, (d) 2.50 to 1.51 is Disagree, and (e) 1.50 to 1.0 is Strongly Disagree.

Looking at the "Mean" column in Table 24, the researcher found that in Factors 2 through 5, the mean scores of the magnet school teachers were almost identical to the mean scores of the non-magnet school teachers. By using the
Table 24

Descriptives Based on School Type

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Magnet</td>
<td>41</td>
<td>2.5524*</td>
</tr>
<tr>
<td>Non-Magnet</td>
<td>58</td>
<td>2.8069*</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>2.7015</td>
</tr>
<tr>
<td>Factor 2: Magnet</td>
<td>41</td>
<td>3.9512</td>
</tr>
<tr>
<td>Non-Magnet</td>
<td>58</td>
<td>3.9267</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.9369</td>
</tr>
<tr>
<td>Factor 3: Magnet</td>
<td>41</td>
<td>4.0671</td>
</tr>
<tr>
<td>Non-Magnet</td>
<td>58</td>
<td>3.9569</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.0025</td>
</tr>
<tr>
<td>Factor 4: Magnet</td>
<td>41</td>
<td>4.5691</td>
</tr>
<tr>
<td>Non-Magnet</td>
<td>58</td>
<td>4.5230</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.5421</td>
</tr>
<tr>
<td>Factor 5: Magnet</td>
<td>41</td>
<td>3.4492</td>
</tr>
<tr>
<td>Non-Magnet</td>
<td>58</td>
<td>3.3922</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.4158</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
Likert scale, one can determine teachers' assumptions about giftedness based on the mean scores shown in Table 24. For instance, in Factor 2, magnet school teachers' mean scores was 3.9512. According to the Likert scale, this falls into the Agree category, which is 4.50 to 3.51. This means that magnet school teachers agreed with Factor 2: Individual Expression, in which teachers believe gifted student identification methods should include qualitative data such as case study data, projects, and non-intellectual factors such as creativity and leadership.

There was a significant difference in opinion concerning Factor 1. The non-magnet school teachers' mean score was 2.8069. Since this score falls into the 3.50 to 2.51 range, the data show that the non-magnet group was uncertain about this factor. The magnet school teachers' mean score was 2.5524, which also falls into the Uncertain range (3.50 to 2.51). Because the non-magnet school teachers' mean scores were higher and closer to Agree, it can be stated that magnet school teachers were more uncertain about Factor 1 than the non-magnet school teachers.

Table 25 summarizes the results of the Descriptives shown in Table 24. The magnet school teachers were more uncertain about Factor 1, the assumption that gifted children should be identified primarily through the use of IQ and achievement test scores, than the non-magnet school teachers. Both groups of teachers were also uncertain about Factor 5, methods that targeted
certain types of children, such as the use of culture-fair tests that are tests that are normed on certain populations. They strongly agreed with Factor 4, the belief that giftedness in children can develop over a period of time. They also agreed with Factor 2, the use of multiple criteria identification methods and methods that used screenings other than standardized tests. These methods include portfolios, projects, and screenings for creativity and leadership. They also agreed with Factor 3, the use of on-going assessment, in which gifted student identification systems are periodically re-examined.

Table 25

Summary of Responses Based on School Type

<table>
<thead>
<tr>
<th>Factor</th>
<th>Magnet Schools</th>
<th>Non-Magnet Schools</th>
<th>Statistically Significant Difference Between Magnet and Non-Magnet Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>Magnet was more uncertain</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
</tbody>
</table>

In the following sections, the researcher continues to make comparisons using the same group of 99 teachers. ANOVA, Descriptives, and the Likert scale are used in the same manner as described in this section.
Comparisons Based on Degrees Earned

ANOVA was run to compare the responses of teachers who had earned bachelor’s degrees (Group 1) to teachers who had earned advanced degrees (Group 2). The respondents’ advanced degrees included a master’s degree, a specialist’s degree, and work past a master’s degree. As in the previous section, the ANOVA was run to determine if there was a statistically significant difference between the two groups’ mean responses on any of the five factors.

Table 26 shows the results of this ANOVA. By examining the Significance column, one can see that none of the numbers is less than .05. Because none of the numbers is significant at the .05 level, there is no significant difference in the beliefs of the two groups of teachers concerning these five factors. Therefore, the analysis shows that teachers’ opinions of these five factors are not influenced by their educational level.

Table 27 provides the Descriptives for this analysis. Even though ANOVA showed no statistically significant results, Descriptives were run to find out more about the two groups of teachers’ opinions of Factors 1 through 5. In each factor, the mean scores of the "Bachelors" group were almost identical to the mean scores of the "Masters and Above" group. Statistically, the two groups of teachers show almost identical opinions of each of the five factors.

Table 28 summarizes the results of the Descriptives shown in Table 27. Both groups were uncertain about Factor 1, the belief that giftedness should be identified through the use of standardized tests with strict cutoff scores. Both
groups agreed with Factor 2, the belief that giftedness should be identified through case study data and non-intellectual factors such as creativity and leadership. Both groups agreed with Factor 3, the belief that the gifted identification process should be re-evaluated periodically. Both groups strongly agreed with Factor 4, the belief that students may develop giftedness in certain areas as they grow older. Both groups were uncertain about Factor 5, the belief that gifted student identification should take into consideration the students' cultural backgrounds by using screening and evaluation methods normed on certain populations.

Table 26

ANOVA Results Based on

Highest Degree Earned

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.829</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.598</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.812</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.440</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.858</td>
</tr>
</tbody>
</table>
Table 27

Descriptives Based on Highest Degree Earned

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Bachelors</td>
<td>60</td>
<td>2.6908</td>
</tr>
<tr>
<td>Masters and Above</td>
<td>39</td>
<td>2.7179</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>2.7015</td>
</tr>
<tr>
<td>Factor 2: Bachelors</td>
<td>60</td>
<td>3.9125</td>
</tr>
<tr>
<td>Masters and Above</td>
<td>39</td>
<td>3.9744</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.9369</td>
</tr>
<tr>
<td>Factor 3: Bachelors</td>
<td>60</td>
<td>4.0125</td>
</tr>
<tr>
<td>Masters and Above</td>
<td>39</td>
<td>3.9872</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.0025</td>
</tr>
<tr>
<td>Factor 4: Bachelors</td>
<td>60</td>
<td>4.5111</td>
</tr>
<tr>
<td>Masters and Above</td>
<td>39</td>
<td>4.5897</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.5421</td>
</tr>
<tr>
<td>Factor 5: Bachelors</td>
<td>60</td>
<td>3.4278</td>
</tr>
<tr>
<td>Masters and Above</td>
<td>39</td>
<td>3.3974</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.4158</td>
</tr>
</tbody>
</table>
Table 28

Summary of Responses Based on Highest Degree Earned

<table>
<thead>
<tr>
<th>Factor</th>
<th>Bachelor's Degree</th>
<th>Master's Degree and Above</th>
<th>Statistically Significant Difference Between Bachelor's and Master's/Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
</tbody>
</table>

Comparisons Based on Years of Teaching Experience

ANOVA was used to compare the responses of less experienced teachers (those having taught for five years or less) to highly experienced teachers (those having taught for more than 15 years). Table 29 shows no significant difference in the responses of the two groups at the .05 level. The Descriptives in Table 30 show that the opinions of less experienced teachers are almost identical to the opinions of highly experienced teachers. In each factor, the mean score of one group is almost identical to the mean score of the other group. Based on these statistics, the researcher believes years of teaching experience do not influence one's beliefs about giftedness and gifted student identification.
Table 29

ANOVA Results Based on

Years of Teaching Experience

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.724</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.979</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.600</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.757</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.304</td>
</tr>
</tbody>
</table>
Table 30

Descriptives Based on

Years of Teaching Experience

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Participants</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: 5 years or less</td>
<td>16</td>
<td>2.7750</td>
</tr>
<tr>
<td>More than 15</td>
<td>49</td>
<td>2.7153</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>2.7300</td>
</tr>
<tr>
<td>Factor 2: 5 years or less</td>
<td>16</td>
<td>3.9844</td>
</tr>
<tr>
<td>More than 15</td>
<td>49</td>
<td>3.9796</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>3.9808</td>
</tr>
<tr>
<td>Factor 3: 5 years or less</td>
<td>16</td>
<td>3.9479</td>
</tr>
<tr>
<td>More than 15</td>
<td>49</td>
<td>4.0323</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>4.0115</td>
</tr>
<tr>
<td>Factor 4: 5 years or less</td>
<td>16</td>
<td>4.6250</td>
</tr>
<tr>
<td>More than 15</td>
<td>49</td>
<td>4.5782</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>4.5897</td>
</tr>
<tr>
<td>Factor 5: 5 years or less</td>
<td>16</td>
<td>3.5625</td>
</tr>
<tr>
<td>More than 15</td>
<td>49</td>
<td>3.3265</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>3.3846</td>
</tr>
</tbody>
</table>
Table 31 summarizes the results of the Descriptives shown in Table 30.

Both groups were uncertain about Factor 1, the belief that giftedness should be identified through the use of standardized tests with strict cutoff scores. Both groups agreed with Factor 2, the belief that giftedness should be identified through case study data and non-intellectual factors such as creativity and leadership. Both groups agreed with Factor 3, the belief that the gifted identification process should be re-evaluated periodically. Both groups strongly agreed with Factor 4, the belief that students may develop giftedness in certain areas as they grow older. In Factor 5, the belief that gifted student identification should take into consideration the students' cultural backgrounds by using screening and evaluation methods normed on certain populations, the difference

<table>
<thead>
<tr>
<th>Factor</th>
<th>5 or Less</th>
<th>More Than 15</th>
<th>Statistically Significant Variance Between 5 or Less and More Than 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Agree</td>
<td>Uncertain</td>
<td>None</td>
</tr>
</tbody>
</table>
was not statistically significant even though one group agreed and one group was uncertain.

Comparisons Based on Ethnicity

ANOVA was conducted to find any significant difference between the responses of minority teachers and non-minority teachers. In this study, minority respondents were African-American, Asian/Pacific Islander, and Hispanic. Non-minority refers to Caucasian, non-Hispanic respondents. The ANOVA (see Table 32) shows a statistically significant difference between the beliefs of the two groups concerning Factor 1, the use of standardized testing to identify gifted students. Table 33 shows the statistical means of opinions of each group of teachers toward each factor.

Table 33 shows that teachers are uncertain about Factor 1, the use of standardized tests for identifying gifted student. On the Likert scale, Uncertain is 3.50 to 2.51. Non-minority teachers’ mean score of 2.6435 leans toward Disagree more so than the minority teachers' score of 3.0267. Even though Factor 3 showed no statistically significant difference in the opinion of the two groups, non-minority teachers agreed more strongly with the use of ongoing assessment. Both groups were uncertain about Factor 5. Non-minority teachers strongly agreed with Factor 4, whereas minority teachers agreed. This difference was not statistically significant. The results of these Descriptives are summarized in Table 34. Based on the results of the ANOVA and Descriptives,
Table 32

ANOVA Results
Based on Ethnicity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.023</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.375</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.080</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.226</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.929</td>
</tr>
<tr>
<td>Factor</td>
<td>Number of Participants</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Factor 1: Non-Minority</td>
<td>84</td>
</tr>
<tr>
<td>Minority</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
<tr>
<td>Factor 2: Non-Minority</td>
<td>84</td>
</tr>
<tr>
<td>Minority</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
<tr>
<td>Factor 3: Non-Minority</td>
<td>84</td>
</tr>
<tr>
<td>Minority</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
<tr>
<td>Factor 4: Non-Minority</td>
<td>84</td>
</tr>
<tr>
<td>Minority</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
<tr>
<td>Factor 5: Non-Minority</td>
<td>84</td>
</tr>
<tr>
<td>Minority</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Table 34

Summary of Responses Based on Ethnicity

<table>
<thead>
<tr>
<th>Factor</th>
<th>Non-Minority</th>
<th>Minority</th>
<th>Statistically Significant Difference Between Non-Minority and Minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>Non-minority closer to Disagree</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
</tbody>
</table>

the researcher believes that one's culture may influence one's beliefs about methods of gifted student identification.

Comparisons Based on Inservice Training

ANOVA was run to determine if teachers who received inservice training concerning gifted would have different opinions than teachers who received no inservice training. As shown in Table 35, there was a statistically significant difference between the two groups' responses to Factor 3. This data suggest that inservice training may influence teachers' beliefs about giftedness and gifted student identification.
Table 35

ANOVA Results Based on Inservice Training

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.073</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.235</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.001</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.081</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.539</td>
</tr>
</tbody>
</table>

Table 36 shows the statistical means in opinions of each group of teachers' beliefs about each factor. Table 37 summarized the Descriptives in Table 36. Even though there was no statistically significant difference between the two groups of teachers' responses to Factor 4, those who received inservice training strongly agreed that students may develop giftedness at certain ages and in certain areas of interest. Both groups were uncertain about Factors 1 and 5. Both groups agreed with Factor 2. There was a statistically significant difference between the two groups' responses to Factor 3, the belief that a gifted program should be periodically re-evaluated. Even though both groups agreed with Factor 3, the teachers who received the inservice training agreed more strongly.
Table 36

Descriptives Based on Inservice Training

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Participants</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Received training</td>
<td>28</td>
<td>2.5286</td>
</tr>
<tr>
<td>No training</td>
<td>70</td>
<td>2.7721</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>2.7026</td>
</tr>
<tr>
<td>Factor 2: Received training</td>
<td>28</td>
<td>4.0446</td>
</tr>
<tr>
<td>No training</td>
<td>70</td>
<td>3.8929</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>3.9362</td>
</tr>
<tr>
<td>Factor 3: Received training</td>
<td>28</td>
<td>4.2768*</td>
</tr>
<tr>
<td>No training</td>
<td>70</td>
<td>3.8893*</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>4.0000</td>
</tr>
<tr>
<td>Factor 4: Received training</td>
<td>28</td>
<td>4.6786</td>
</tr>
<tr>
<td>No training</td>
<td>70</td>
<td>4.4857</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>4.5408</td>
</tr>
<tr>
<td>Factor 5: Received training</td>
<td>28</td>
<td>3.4911</td>
</tr>
<tr>
<td>No training</td>
<td>70</td>
<td>3.3774</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>3.4099</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Table 37

Summary of Responses Based on Inservice Training

<table>
<thead>
<tr>
<th>Factor</th>
<th>Received Training</th>
<th>No Training</th>
<th>Statistically Significant Difference Between Received Training and No Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>&quot;Received Training &quot; group agreed more strongly</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
</tbody>
</table>

Comparisons Based on College Education in Gifted

The last ANOVA compared responses of teachers who had learned about giftedness in college courses to teachers who had not. Table 38 shows a significant difference in responses concerning Factor 2 (identifying an individual’s giftedness through case studies) and Factor 5 (culture-fair methods). This is the only ANOVA that showed significant differences for more than one factor. Table 39 shows the Descriptives for Table 38.

Table 40 summarized the means shown in Table 39. ANOVA (see Table 38) had shown that there was a statistically significant difference between the mean scores of the two groups of teachers concerning both Factors 2 and 5. In
Factor 2, both groups of teachers agreed that gifted identification procedures should include qualitative methods such as case study data; teachers who received gifted education in college agreed more strongly with Factor 2. In Factor 5, teachers who received gifted education in college agreed with the use of culture-fair methods of gifted student identification; teachers who did not receive gifted education in college were uncertain. Both groups of teachers disagreed with Factor 1, and both groups agreed with Factors 3 and 4.

Table 38

ANOVA Results Based on College Education in Gifted

<table>
<thead>
<tr>
<th>Factors</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.985</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.041</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.091</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.056</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.005</td>
</tr>
</tbody>
</table>
Table 39
Descriptives Based on College Education in Gifted

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Participants</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Received gifted ed.</td>
<td>36</td>
<td>2.7000</td>
</tr>
<tr>
<td>No gifted ed.</td>
<td>63</td>
<td>2.7024</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>2.7015</td>
</tr>
<tr>
<td>Factor 2: Received gifted ed.</td>
<td>36</td>
<td>4.0903*</td>
</tr>
<tr>
<td>No gifted ed.</td>
<td>63</td>
<td>3.8492*</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.9369</td>
</tr>
<tr>
<td>Factor 3: Received gifted ed.</td>
<td>36</td>
<td>4.1181</td>
</tr>
<tr>
<td>No gifted ed.</td>
<td>63</td>
<td>3.9365</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.0025</td>
</tr>
<tr>
<td>Factor 4: Received gifted ed.</td>
<td>36</td>
<td>4.6667</td>
</tr>
<tr>
<td>No gifted ed.</td>
<td>63</td>
<td>4.4709</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>4.5421</td>
</tr>
<tr>
<td>Factor 5: Received gifted ed.</td>
<td>36</td>
<td>3.7153*</td>
</tr>
<tr>
<td>No gifted ed.</td>
<td>63</td>
<td>3.4158*</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>3.4158</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Table 40

Summary of Responses Based on Education in Gifted

<table>
<thead>
<tr>
<th>Factor</th>
<th>Received Gifted Education</th>
<th>No Gifted Education</th>
<th>Statistically Significant Difference Between Received and No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Uncertain</td>
<td>Uncertain</td>
<td>None</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Agree</td>
<td>Agree</td>
<td>Teachers who received gifted ed. agreed more strongly</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>None</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Agree</td>
<td>Uncertain</td>
<td>Teachers who received gifted ed. agreed with Factor 5</td>
</tr>
</tbody>
</table>

Summary of Survey Data

ANOVA and Descriptives were used to analyze survey data in a non-experimental study. Even though comparisons were made between two groups of teachers in each ANOVA, the study did not control for outside influences. The researcher is making assumptions based on the truthfulness of the participants’ responses.

In summary, the survey data suggest that several variables may influence teachers’ beliefs about giftedness and gifted student identification. The variables that showed statistically significant differences in responses were (a) school type,
(b) ethnicity, (c) inservice training, and (d) college education in giftedness. College education was the only variable that caused a statistically significant difference in the mean scores of more than one factor. The data suggest that this variable may be more influential in teachers' beliefs about giftedness than the other variables. Two variables showed no statistically significant difference in mean scores: years of teaching experiences and number of college degrees earned. The data suggest that these variables had little to no influence on teachers' beliefs about giftedness and gifted student identification.

Because this was a non-experimental survey study, more information is needed to supplement the findings of the ANOVA and Descriptives. For this reason, the researcher interviewed a small sample (approximately 10 percent) of the participating teachers to learn more about their assumptions about giftedness.

Teacher Interview Results

In this section, the researcher reports the findings of interviews with nine teachers from the six schools that participated in the survey. The purpose of the interviews was to supplement the information gathered through the use of the surveys. The researcher created questions based on the survey statements to acquire more in-depth information about teachers' assumptions about giftedness and to discover how these assumptions may have been acquired.

Nine teachers participated in these interviews. Three taught in magnet schools and six taught in non-magnet schools. Four had acquired bachelors
degrees, two had masters degrees, and three had earned their +30 (30 hours of graduate work after earning a masters degree). All had degrees in education. Six acquired all their degrees in Louisiana, one acquired her degree in Texas, and two acquired bachelors degrees out of state (Texas and Pennsylvania) and masters degrees in Louisiana. Five taught lower elementary grades and four taught upper elementary. Only one participant was male. All participants were non-minority.

**Teachers’ Acquisition of Knowledge**

The researcher examined three ways that teachers could acquire knowledge about giftedness: (a) through inservice training at their schools, (b) through teacher education programs, and (c) through their own experience in working with gifted children. The researcher hoped to find the strengths and weaknesses of each of these methods of knowledge acquisition. In the interviews, the teachers referred to “gifted” as “G/T,” which is short for “gifted and talented.”

**Inservice Training**

Only two of the nine teachers had attended an inservice related to giftedness. The remaining teachers said they had never been to a gifted education inservice. One teacher stated that she had been teaching in Bayou Parish for 28 years and had never received inservice training about gifted students. This conflicts with the interview with the Pupil Appraisal Team member who stated that it is required for all Bayou Parish schools to present an inservice
about giftedness to all teachers at the beginning of the school year. Teachers
must sign a roster to document their presence at these meetings.

One classroom teacher asserted that she had recently been to an
inservice training. She said it was at her school during the fall of that school year.
The inservice focused on how to recognize gifted students. She suggested that
"gifted students don't necessarily make the highest grades, because they're
bored and unchallenged." She stated that her school did not have a gifted
program.

Another teacher said that her school had a gifted inservice for all the
teachers around 1995. They learned how to identify gifted students, how to refer
them for gifted testing, and how to help them in the classroom.

According to one teacher, "We need more classes to help teachers learn
about G/T. The inservices are only for the G/T teachers." The Alpha and
Exploration teachers have an inservice every month to learn about new trends,
methodology, and curriculum, and to share materials. The monthly inservices are
only for the teachers in these two programs.

The teachers recognized their need to know more about giftedness and
gifted student identification. According to the survey data, even a yearly inservice
can influence teachers' beliefs about giftedness.

**College Courses**

The nine classroom teachers unanimously agreed that when they were in
college, giftedness was mentioned only briefly in a psychology class or a special
education class, either at the graduate or undergraduate level. They did not remember what was discussed for one of two reasons: (a) they were in college many years ago, or (b) giftedness was mentioned so vaguely that they were not sure what was said about it. The teachers stated that the only gifted classes they knew about were taught at Louisiana State University's branch campus. These classes are only for certification in gifted education and are all taught by one person. These findings are revealing because the survey data in this study suggest that the greatest influence on teachers' beliefs about giftedness and gifted student identification come from college courses in which teachers formally learn about giftedness.

**Teaching Experience**

All of the teachers had experience with gifted children. One teacher said she had never taught gifted students, and that her experience with gifted children came from being the parent of two children who are in a gifted program. Another teacher who was teaching in a magnet school during the time of this interview said "all the students here are basically gifted." According to another teacher, "most of the students I refer are placed in gifted, but I feel I refer the best qualified students based on my years of experience in teaching."

The teachers gave the following descriptions of gifted students. These descriptions suggest that teachers understand that gifted students need instruction beyond that of the average child.
1. "The students are challenging and hard to keep motivated. They need extra projects, and they are more self-directed than the other students."

2. "They're self-motivated. They're creative in their writings, in the information they give. They put a different slant on things." (This teacher showed the researcher a book that one of her gifted first graders wrote. The class was learning about butterflies and the student had completed the unit long before the rest of the class. He took it upon himself to write a book to show what he knew about butterflies. It included crayon illustrations and a sample butterfly that he had caught and pressed.)

3. "I had a student who was brilliant in mathematics and average in reading. They wouldn't put him in the gifted program. He's working on his Ph.D. now. Another was bored with G/T and wouldn't stay in the program and is in med (sic) school now."

**Teachers' Knowledge and Assumptions About Giftedness**

**Gifted Student Characteristics**

According to research, teachers tend to believe that gifted students are the ones who make good grades and are well behaved. The teachers who were interviewed for this study appeared to know that giftedness was more complex than that. According to one teacher, "the intelligence is obvious, but not always reflected in grades."

The most common characteristics that the teachers mentioned were: (a) quick learners, (b) leaders of group projects, (c) creative, (d) need extra projects
to keep them motivated, (e) inquisitive, (f) problem-solvers, and (g) advanced knowledge of language and vocabulary. These characteristics are similar to those listed on the Alpha information flier (Child Search Brochure) that is sent home with the students each year (see Appendix E).

Two teachers from different schools did not give a list of characteristics. Instead, they said each gifted student is different. According to one of these teachers, "they are not always high achievers, and some are behavior problems. They don't act like a 'gifted' child."

The teachers knew that gifted children have characteristics that cause them to stand out in a group of average students. Some descriptions of these unique characteristics are as follows:

1. "They all seem to be lacking in social skills because they each live in their own little world and they don't know how to deal with people. I work with them on social skills every day. I tell them that one day they'll be out in the real world and they'll have to work with other people, so they might as well learn how to now."

2. "They are highly verbal, energetic, perceptive, have advanced thinking skills. You can tell by the way they talk, it's hard to describe. They come up with many solutions to problems and they don't like to follow one given formula."

3. "Mostly, they are inquisitive, leaders, and they stress themselves. Or maybe the parents put extra stress on them. They're great to work with. They're
creative — literary, artistic, mathematics. They're the leaders and problem-solvers of group activities."

Awareness of Identification Process

Most of the teachers named all of the steps involved in the gifted student placement process, but they did not know details or which tests were used. These steps are listed on the Alpha Child Search flyer (see Appendix E). Only one teacher said she did not know about the testing process. Her school did not have an Alpha program.

Several teachers disagreed with the use of standardized tests, which screen out the poor test takers. One teacher stated that "students miss the cutoff score by one point, which keeps them out of gifted. This is not fair." One teacher said other teachers at the school do not refer their students for gifted testing because once the students are identified as gifted, their parents transfer them to a school that has a gifted program. The teachers do not want to lose their best students. These teachers' statements were confirmed in the interview with the Pupil Appraisal Team member.

The teachers believed Bayou Parish's gifted identification process was generally effective. These are some areas that teachers believed needed improvement:

1. "Many children don't do well on the tests and are overlooked....They need to look at portfolios or do a case study and look at the whole child instead of just test scores."
2. "I think the length of the process is too long. It takes all year."

3. In reference to young children being tested, "Some gifted children fall through the cracks and are not identified. This is because the children are tested individually by a stranger when they have always been taught not to talk to strangers. This is scary to the children, and they often do not perform well because of this."

**Teachers' Descriptions of the Gifted Program**

Only one school in this study did not have a gifted program or any type of gifted service. The school had an Exploration enrichment program, but the two teachers who were interviewed were not familiar with it because their students did not qualify. According to teachers whose schools had gifted programs, the program is beneficial because (a) it alleviates boredom and increases academic motivation, (b) students receive both regular and gifted education at the same time, and (c) they receive education beyond that of the regular classroom. Only one teacher stated a problem with the gifted program. She said it was a pullout program that takes students out of the classroom at inconvenient times, and they do not get grades for their work. She stated that this was true only through third grade. Students above third grade go to the gifted program to take language arts for a grade instead of taking it with their classroom teacher. Yet, another lower elementary teacher liked the pullout program and said she wished it lasted longer because the gifted students need the enrichment that she could not give them.

Another teacher stated that "we need to develop the good students and the G/T
students and help them to achieve. They help pull up our scores and help our country achieve."

**Summary of Teacher Interviews**

The interview data suggested that classroom teachers may be receiving minimal education concerning giftedness. They have not been offered college courses on giftedness. Instead, giftedness is mentioned briefly in psychology or special education classes. Several of the teachers that were interviewed have not attended inservices that deal with gifted student identification. The knowledge they have comes from their work with gifted children in the classroom. Yet, the teachers expressed a desire to learn more about giftedness and they expressed a concern for their limited ability to educate gifted children in their classrooms.

Despite their lack of formal education in gifted, the teachers were knowledgeable about giftedness. They listed the traits of their gifted students, and the traits were compatible with the research. They were familiar with the identification process used in Bayou Parish. In agreement with the research on gifted education (outlined in Chapter II), several teachers believed standardized tests screen out highly intelligent students who are poor test takers. The teachers believed the gifted program is beneficial to the students because the students receive enrichment, which often cannot be provided in the regular classroom.

**Summary**

The purpose of this case study was to explore methods of reducing African-American underrepresentation in a gifted program. The results from
these data showed that the percent in the identified gifted African-American population increased from 8.0 percent in 1994 to 12.9 percent in 2001.

In this case study, three sources of data were used: (a) documents from the Office for Civil Rights and the Louisiana Department of Education, (b) teacher surveys, and (c) teacher and testing personnel interviews. The use of only one of these three sources would not have presented a clear picture of Bayou Parish's gifted student identification process.

Louisiana's statewide gifted student placement criteria are published in the Pupil Appraisal Handbook, which is updated each year. According to the handbook, students can only be placed in a gifted program if they meet certain IQ and achievement test cutoff scores when these scores are placed on a matrix. Because they were limited to the use of these criteria, Bayou Parish and the Office for Civil Rights worked together to find alternative ways to bring more highly intelligent African-American students into the gifted program. They concentrated only on the African-American population because the Other Minority group was small in number and diverse in needs. Other Minority students will be addressed by Bayou Parish during the 2001-2002 school year.

The gifted African-American population was increased by bringing more African-American students into the screening and evaluation process. According to Office for Civil Rights documents and an interview with a member of Pupil Appraisal, this was accomplished through (a) the adoption of tests that were considered to be less biased, (b) Pupil Appraisal's examination of Iowa test
scores to find students who qualify for an initial screening, and (c) lowering the initial screening cutoff score by one point to allow more African-American students the opportunity for a full evaluation.

The Bayou Parish School System began a community outreach effort in 1995 that is still in effect. The effort included sending brochures to African-American churches, community centers, doctors' offices, and local businesses. Parents and community members were informed about giftedness and the gifted program through television news articles, newspaper articles, and presentations at community centers and meetings of the PTA and Kiwanis Club. According to an interview with a Pupil Appraisal member, the community center meetings were poorly attended and the fliers resulted in only a few students' referrals for screenings.

At the beginning of each school year since 1995, Pupil Appraisal members attend school faculty meetings to present information to teachers about giftedness and gifted student identification. All teachers are required to attend these meetings and they must sign a roster to document their attendance. Only two of the nine interviewed teachers and 61 percent of the surveyed teachers had attended these inservices.

According to a statistical analysis of the surveys, four variables influence teachers' beliefs about giftedness and gifted student identification: (a) the type of school in which the teachers' work (magnet or non-magnet), (b) one's cultural background, (c) whether or not one has received inservice training to learn about
giftedness, and (d) whether or not one has received education in college courses concerning giftedness. Little to no impact came from the degrees one has earned in education and one’s years of teaching experience.

The data suggest that college education in giftedness affects teachers’ beliefs about giftedness more so than the other variables. According to teacher interviews, giftedness is only briefly mentioned in special education and psychology classes, and gifted education courses are only offered to those seeking certification in gifted education. Yet, the survey results show that even this brief coverage of giftedness in college seems to have the strongest influence on teachers’ beliefs about giftedness.

In Chapter V, the researcher will present conclusions and recommendations based on examining the data that were gathered in this study.
CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study

The purpose of this study was to examine screening procedures (IQ tests, etc.) and practices (teacher referral, parental involvement, etc.) used by a typical school system to address the problem of underrepresentation of African-American students in a gifted program. The Bayou Parish School System may be considered a typical school system for the purpose of this study. According to Ross (1993), a typical school system relies heavily on the use of standardized test scores to identify gifted students. This is due to state laws and regulations that must be followed in order for schools to obtain state funding for gifted programs. Bayou Parish may be considered a typical school system because (a) its underrepresentation of minority students in its gifted programs reflects a problem nationwide and (b) it follows Louisiana’s state law that gifted students must be identified solely on IQ and achievement test scores. It may also be considered a unique school system due to it predominantly Protestant culture and its lack of wide ethnic diversity.
The theoretical framework for this study was based on the philosophies and studies of Ford (1994) of Ohio State University. According to Ford (1994), there are barriers to placement of both minority and non-minority students in gifted programs. These barriers are: (a) inadequate identification practices that may serve to eliminate certain types of intelligent students from gifted programs, (b) the prevalent practice of using teacher identification as a first step in the gifted student identification process even though nationwide research shows that teachers fail to identify up to 50 percent of the gifted students in their schools due to lack of knowledge about giftedness, and (c) a lack of parental involvement in the schools. These barriers were evident in the Bayou Parish School System. When these barriers were addressed through the use of research-based interventions implemented by the Office for Civil Rights, the percent in the gifted African-American population increased from 8.0 percent in 1994 to 12.9 percent in 2001.

The researcher conducted a review of literature to learn about past and present research in the areas of intelligence and gifted student identification techniques. The researcher learned that intelligence testing formally began in England in the mid-1860s when a statistical study of the theory of hereditary intelligence was conducted by Sir Francis Galton. Tests of intelligence using statistics and scaled scores were refined by researchers such as Binet and Terman during the early twentieth century. Similar tests with updated norms are still used today. The updated norms include considerations toward race, gender,
socioeconomic status, community size, geographic region, and ages of test-takers. As a result of these updated norms, test-makers consider many modern IQ tests to be nonbiased and, therefore, appropriate for identifying gifted students from a wide range of cultures.

Also evident in the review of literature are the beliefs of those opposed to using only IQ tests for identifying gifted students. They believe that (a) no test is flawless and (b) there are many types of intelligence that cannot be identified through the use of an IQ test. They believe giftedness is a combination of many factors such as memory, creativity, perseverance, logical thinking, and specialized abilities (such as sculpture or science). These factors are not identified through the use of IQ tests. Many researchers also believe that a major problem is to be able to identify giftedness despite language barriers, poor test-taking skills, low self-esteem, classroom underachievement, and unconventional behaviors that are evident in some highly intelligent students. Also, because of lack of opportunities for enrichment, many students do not have a chance to develop and express their special abilities. This prevents these students from being formally identified as gifted. Those opposed to using only standardized tests for gifted student identification would prefer to see school systems combine traditional IQ tests with other criteria such as portfolio assessment, award-winning projects, and tests such as those of creativity or tests that are normed on specific populations such as African-American or Hispanic.
To begin this case study, the researcher obtained documents from the Office for Civil Rights, Southern Division, Dallas, which described in detail the interventions that took place in Bayou Parish as a part of the 1995 compliance review. The purpose of the interventions was to bring as many highly intelligent students as possible (both minority and nonminority) into the initial screening process. It was hoped that if more students were screened, then more students would qualify for placement in the gifted program. Statistical data were provided by documents from the Office for Civil Rights and the Bayou Parish School System to show the change in gifted student enrollment before, during, and after the interventions. A member of the Pupil Appraisal Team and Task Force in Bayou Parish was interviewed to gather further information to supplement the documents.

The teachers who participated in this study were kindergarten through fifth grade teachers in three magnet and three non-magnet schools in Bayou Parish. Ninety-nine teachers completed surveys to learn their assumptions about giftedness and various gifted student identification practices. The survey used in this study was "Assumptions Underlying the Identification of Gifted and Talented Students," and was provided for use by the researcher from the National Research Center on the Gifted and Talented at the University of Connecticut. Its validity and reliability were assured by the survey's creators (Renzulli, Brown, and Gubbins) through the use of field-testing, and was used by its creators as part of a nation-wide study. Analysis of Variance was used to compare the beliefs
of groups of teachers. The groups that were compared included (a) more experienced teachers and less experience teachers, (b) teachers with bachelor's degrees and teachers with advanced degrees, and (c) teachers who had received inservice training and teachers who had not received inservice training in identifying giftedness. Afterwards, nine of the 99 teachers who completed surveys volunteered to participate in an interview to gather more in-depth information about their knowledge and beliefs about giftedness.

Discussion

The findings of this study will be discussed and interpreted in this section. First, the research questions will be answered. Next, Ford's (1994) barriers to gifted student identification as they relate to Bayou Parish will be addressed.

Research Questions

This case study was guided by the use of these research questions:

1. What brought about the 1995-2000 Office for Civil Rights compliance review in Bayou Parish?
2. What changes took place in gifted student identification instruments and procedures as a result of this review?
3. Why were these particular changes implemented?
4. What are Bayou Parish educators' assumptions about (a) what giftedness is, (b) how it should be identified, and (c) how should it be served?

This section answers the research questions by briefly summarizing the study's data that were presented in Chapter IV.
The Compliance Review

The first research question was concerned with what brought about the compliance review in Bayou Parish. The statewide 1995 Civil Rights compliance review was conducted through a random selection of school systems in Louisiana. The selection was strictly random and was not the result of parent complaints or referral by any agency. Six Louisiana school systems were examined by the Office for Civil Rights; three were checked for overrepresentation of minority students in special education programs and three were checked for underrepresentation of minority students in gifted programs.

Changes in Identification Methods

The second research question was concerned with the changes that took place in gifted student identification instruments and procedures as a result of the compliance review. The Office for Civil Rights worked with Bayou Parish to find ways to increase the number of highly intelligent minority students in the gifted program. The Office for Civil Rights began by examining the state gifted identification guidelines published in Bulletin 1508 (later revised and renamed Pupil Appraisal Handbook). According to the guidelines, each school system could establish its own screening criteria and select its own tests for use in individual evaluation as long as the placement criteria was based on (a) standardized IQ and achievement test scores and (b) high scores when the test results were placed on a state-mandated matrix.
Bayou Parish's Task Force and Pupil Appraisal Team are examining a variety of tests that are considered to be non-biased and are piloting them for possible adoption. If a student does not attain the gifted student screening and evaluation cutoff scores, his/her parents are allowed by the state of Louisiana to take the child to a psychologist in a private practice for a gifted screening instead of waiting one year for the child to be retested. Testing through private practice cost about $300 at the time of this study.

Bayou Parish used two matrices: one for group screenings (which was developed by the school system) and one for individual evaluations (which was mandated by the state department for use in all Louisiana school systems). If a student received five points on the group screening matrix (which involved the use of high achievement test scores and an IQ test administered to children in a group setting), then he/she qualified for an individual evaluation. This evaluation was conducted by a member of the Pupil Appraisal Team who tested each student individually. By earning high mathematics and reading points on the state matrix, the student could be placed in the gifted program.

As a part of the interventions implemented by the Office for Civil Rights, Bayou Parish began to allow minority students an individual evaluation if they scored four points instead of five on the group screening matrix. These students were still required to attain the state-mandated cutoff score on the individual evaluation matrix, but the lower cutoff score on the group screening matrix gave
them a better opportunity to reach that point in the placement process by helping control for test bias early in the process.

Due to strict state-mandated testing criteria, the Office for Civil Rights decided to concentrate on student referral, which is the first step in gifted student identification. They believed that if more minority students are referred for a gifted screening, then more of them would have a chance for placement in the gifted program.

The Office for Civil Rights set up interventions to help more minority students into the first step of the process, which is referral for a group screening. This was accomplished by educating parents and teachers about giftedness and gifted student identification through the use of television news articles, newspaper articles, fliers that were sent home with students, fliers and posters that were sent to local businesses, and presentations at meetings such as PTA, Kiwanis Club, and back-to-school night. As a result, more students were referred for gifted screenings. A Pupil Appraisal Team Member and member of the Task Force stated that the fliers resulted each year in the referral of a few students by parents for gifted screenings, and that the parent meetings that were held on Saturday mornings for the purpose of providing information about the gifted program were poorly attended.

Recently, a member of the Pupil Appraisal Team has begun examining individual students' scores on the Iowa Test of Basic Skills (the state's norm-referenced test) to find students who qualify for an initial gifted screening. This
method of student identification is only partially effective because (a) the Iowa
Test is not given to all students, it is only given to students in grades levels that
are not taking the state's criterion-referenced test and (b) once the students are
identified by the Pupil Appraisal Team member as qualifying for a gifted
screening, many schools do not follow through with the referral process. This is
because gifted students are allowed to transfer to schools that have the gifted
(Alpha) program. If a school has very few gifted students, the school will not have
an Alpha program (it is not cost-effective to place an Alpha program in a school
with as few as five gifted students) and will have an itinerant teacher instead.
Many parents prefer the daily Alpha program to the intermittent gifted service,
therefore, they transfer their children to other schools. The schools without the
Alpha program do not want to lose their best students; because of this, they do
not refer students for gifted screenings. Placing Alpha programs in predominantly
African-American schools may be a way to increase the number of African-
American students in the gifted program.

A task force was organized to continue these interventions. It was
comprised of parents, educators, testing personnel, and other concerned
individuals. Recently, the task force chose to eliminate some of the standardized
tests that have been used to screen and evaluate students for gifted program
placement. The instruments were eliminated due to their poor performance in
gifted student identification. The task force is now examining new instruments to
replace these.
In summary, many changes took place in the gifted student identification process as a result of the compliance review. These changes were (a) the adoption of new, less biased testing instruments, (b) allowing minority students to score one point lower on the screening matrix to allow more students the opportunity for individual evaluation, and (c) concentration on increased student referral, which included educating teachers and the community about giftedness and examining Iowa test scores to find students who qualify for an initial screening.

**Reasons for the Changes**

The third research question dealt with the reasons for the changes that took place in Bayou Parish's gifted student identification process. The Louisiana Department of Education has strict guidelines for gifted student identification. To be placed in a gifted program, students must reach or surpass the IQ and achievement test scores required by the state-mandated matrix (see Table 14 in Chapter IV). Because they could not change the state law, the Office for Civil Rights concentrated on bringing more students into the screening and evaluation process in hopes that, as a result, more highly intelligent minority students would be identified as gifted and placed in the gifted program.

**Teachers' Assumptions About Giftedness**

The fourth research question explored teachers' assumptions as to (a) what giftedness is, (b) how it should be identified, and (c) how it should be served. According to Best and Kahn (1993), assumptions are statements that
one believes to be facts but cannot verify. The fourth research question was answered through the use of a survey instrument and by interviewing a sample of teachers.

One may wonder what the fourth research question has to do with the previous three. Teacher referral is often the first step in gifted student identification, and teachers’ support of gifted programs is important to the programs’ continued existence. These two facts suggest that teachers’ assumptions about giftedness and how it should be served are important for the survival of gifted programs. Therefore, the researcher sought to learn about teachers’ knowledge of giftedness and to see how this knowledge is compatible with recent literature. The researcher also sought to find out how teachers acquire their knowledge of giftedness. To accomplish these goals, the researcher conducted surveys and interviews with a sample of the Bayou Parish teachers.

Teachers’ Acquisition of Knowledge About Giftedness

The survey data suggest that several variables may influence teachers’ beliefs about giftedness and gifted student identification. The variables that showed statistically significant differences in responses were (a) school type, (b) ethnicity, (c) inservice training, and (d) college education in giftedness. College education was the only variable that caused a statistically significant difference in the mean scores of more than one factor. The data suggest that this variable may be more influential in teachers’ beliefs about giftedness than the other variables. Two variables showed no statistically significant difference in mean
scores: years of teaching experiences and number of college degrees earned. The data suggest that these variables had little to no influence on teachers' beliefs about giftedness and gifted student identification.

**Teachers' Definitions of Giftedness**

According to research, teachers tend to believe that gifted students are the ones who make good grades and are well behaved. This study suggests that the Bayou Parish teachers knew giftedness was more complex than that. The interview data indicated that teachers believed gifted students exhibit these characteristics: (a) leadership ability, (b) creativity, (c) problem-solving ability, (d) inquisitiveness, (e) quick in learning, (f) advanced knowledge of language and vocabulary, and (g) high motivational needs require their involvement in extra projects. These characteristics are in agreement with the ones listed on the Alpha Child Search fliers (see Appendix E), which, in turn, are in agreement with the recent literature.

**How Giftedness Should Be Identified**

The teacher survey was used to examine five beliefs about gifted student identification: (a) gifted students should be identified through the use of standardized tests, (b) identification methods should include qualitative data such as case studies and projects, and non-intellectual factors such as creativity and leadership, (c) the gifted student identification process should be re-evaluated periodically to determine its effectiveness, (d) giftedness can develop over a period of time in a certain area of interest, and (e) identification should take into
consideration the students' cultural background through the use of culture-fair tests. The researcher sought to determine the opinions of different types of teachers concerning these beliefs.

ANOVA and Descriptives were used to compare the opinions of these types of teachers: (a) magnet school teachers and non-magnet school teachers, (b) teachers who earned a bachelors' degree and teachers who earned a master's degree or higher, (c) teachers who had taught up to five years and teachers who had taught 15 or more years, (d) minority teachers and non-minority teachers, (e) teachers who had received inservice training in gifted education and teachers who had not, and (f) teachers who had learned about giftedness in college courses and teachers who had not. The five beliefs about giftedness and the teachers' opinions of each are described in the following sections.

Factor 1: Restricted, which is the use of standardized testing for gifted student identification. The teachers were uncertain about the use of standardized tests for gifted student identification. Statistical significance was shown between each of these two groups: (a) magnet school teachers were more uncertain than non-magnet school teachers, and (b) non-minority teachers and minority teachers were uncertain, but non-minority teachers leaned toward Disagree.

The teachers who were interviewed expressed concern about the use of only standardized tests for gifted identification. They believed the tests overlooked many gifted students because they are poor test-takers or are
uncomfortable being alone in a room with a stranger who is giving them the test. Two teachers in one non-magnet school (in which there was no gifted program) were unfamiliar with the tests and the testing process. The teachers who were familiar with the procedure believed (a) the testing instruments were poor because they were not age-appropriate, (b) the standardized tests screened out gifted students who were poor test-takers, and (c) the cutoff scores were too strict, and eliminated students who failed the admission criteria by one point. The teachers' uncertainty about the sole use of standardized tests for gifted student identification may be a reflection of current literature in which some researchers believe IQ tests are an adequate measure of giftedness, whereas other researchers believe multiple measures should be used. This current literature was summarized in Chapter II in these sections: (a) "The Issue of Standardized Testing for Identifying Giftedness" and (b) "Alternative Methods of Identifying Gifted Children."

Factor 2: Individual Expression, which is the use of qualitative methods such as case studies for gifted student identification. The teachers agreed, both in the surveys and in the interviews, that qualitative methods should be used to identify each child's area of giftedness. Qualitative methods are non-statistical and may include case studies, exemplary projects or performances, and non-intellectual factors such as creativity and leadership. This agrees with researchers who believe there is more to intelligence than just scores on standardized IQ and achievement tests. Renzulli (1986) believed intelligence was
interaction between general and specific abilities, commitment to completing
tasks, and creativity. Torrance (1962) believed creativity was an important trait of
individuals who became successful in life. This literature was summarized in
Chapter II, in the section entitled “A Brief History of Gifted Education in the
United States.”

**Factor 3: On-Going Assessment, in which periodic re-evaluations should be conducted of the school system’s gifted placement process.** The teachers agreed with the practice of conducting periodic re-evaluations of the gifted student identification process. According to survey data, teachers who received inservice training to learn about giftedness and gifted student identification agreed more strongly on this point than teachers who received no inservice training (this comparison was statistically significant).

This is in agreement with beliefs that are represented nationwide. In many states, system-wide and state-wide changes have taken place due to cultural inequities that have been documented in their gifted programs. Two examples of state-wide changes (in Alabama and Georgia) were briefly summarized in Chapter I under “Current Research in Gifted Student Identification.”

**Factor 4: Multiple Criteria, in which teachers believe students develop giftedness at certain ages and in specific areas of interest.** The teachers agreed that students may develop giftedness at certain ages and in specific areas of interest. This agrees with research by Clark (1988), which was described in detail in Chapter II under “Physical Functions of the Brain.” Clark believed that gifted
children become different from other children because they have developed and used accelerated brain function through the learning procedures they use and through interaction with an enriched environment.

Bernal (1994) believed giftedness is developed because gifted children go through developmental stages, and that intelligence can be gained or lost through one’s level of motivation. This belief of developmental giftedness forms the basis of Bayou Parish’s Exploration enrichment program, in which students develop higher level thinking skills, develop ideas based on themes or problems, and complete products that are unique to their area of interest (Bayou Parish Exploration Program Handbook, 2001). The Exploration program is a form of Renzulli’s Enrichment Triad. Renzulli believed that giftedness was not something one either had or did not have, and that too much emphasis is placed on the use of predetermined cutoff scores on intelligence tests when identifying gifted students (Renzulli, 1980; Renzulli, 1986).

Factor 5: Context-Bound Identification, in which teachers believe gifted student identification should involve the use of culture-fair methods. The surveyed teachers tended to be uncertain about the use of culture-fair identification methods. The surveyed teachers who had received college education in the area of giftedness agreed with the use of culture-fair methods, whereas teachers who had received no college education in giftedness were uncertain. The interviewed teachers seemed unfamiliar with culture-fair methods.
One teacher had heard of the use of what she called "SOMPA points" for minority gifted student identification, but did not know what SOMPA points were.

The literature often advocates the use of culture-fair tests, which are standardized tests that are normed on particular cultures, such as African-American or Hispanic. Some examples of culture-fair tests are: (a) the System of Multicultural Pluralistic Assessment (SOMPA), (b) the Ravens Progressive Matrices, and (c) the Stallings Environmentally Based Screen (Richert, Alvino, and McDonnel, 1982). The state of Alabama often uses tests such as these in place of traditional tests as described in Chapter I (Alabama State Department of Education, 1999).

In summary, the interviews and surveys show that teachers' beliefs about gifted student identification are generally in agreement with the beliefs of prominent researchers in this field. Teachers were uncertain about the use of standardized tests for identifying gifted students. Interview data showed that teachers who were uncertain about the use of standardized testing were teachers who worked in a non-magnet school that had no gifted program. The interview data suggest that teachers who work in schools with no gifted programs may be less familiar (or unfamiliar) with the testing process. Teachers agreed, both in interviews and in the survey, that (a) gifted identification processes should include qualitative data, (b) the school system's gifted identification process should be periodically re-evaluated, and (c) giftedness can be developed over a
period of time and in specific areas of interest. They were uncertain about the use of culture-fair methods of identification.

The survey data suggest that the strongest influence on teachers' beliefs about gifted student identification come from college courses in which giftedness is discussed. Other influences are inservice training and exposure to their schools' gifted program.

How Giftedness Should Be Served

Analysis of interview data suggest that teachers believed in the importance of a special program for gifted students. For example, the these teachers stated that the gifted program is beneficial because (a) it alleviates student boredom and increases academic motivation, (b) students get to receive both regular and gifted education at the same time, and (c) the students receive education beyond that of the regular classroom. The teachers believed gifted education was most beneficial when (a) students receive grades for their work, (b) the classes are small enough for the gifted teacher to give them individual attention, and (c) they receive education beyond that of the regular classroom through enrichment and acceleration. The teachers were in disagreement over pullout programs versus enrichment in the regular classroom. Those who disagreed stated that the only negative aspects of the pullout program were that students missed classwork and they often did not receive a grade for their work in the gifted class.
Whereas this case study was guided by the use of four research questions, the compliance review and interventions in Bayou Parish were guided by Ford’s (1994) barriers to gifted student identification. This section will show how Bayou Parish sought to eliminate each barrier.

Ford’s (1994) Barriers to Gifted Student Identification

According to Ford (1994), there are existing barriers to the placement of both minority and nonminority students in gifted programs. Not only do these barriers exist nationwide in gifted programs, they were also identified by the Office for Civil Rights in Bayou Parish’s gifted program.

1. Inadequate identification practices that identify only some gifted students and miss the rest. According to Ford (1994), no states have adopted contemporary, inclusive definitions of giftedness such as Howard Gardner’s Multiple Intelligences. Instead, most states (such as Louisiana) rely on standardized test scores, such as IQ and achievement tests, to identify gifted children. These tests can exclude children from gifted programs because of biases. Ford (1994) believes test biases can result from: (a) language differences, (b) questions that are centered on middle-class experiences, (c) answers that support middle-class experiences, which are awarded more points, (d) tests that favor verbal students, and (e) tests that do not consider the influences of non-intellectual factors on achievement, such as test anxiety, motivation, and self-confidence.
2. The prevalent practice of using teacher identification as the first step in the gifted student identification process. According to Ford (1994), research shows that teachers fail to identify over 50 percent of the gifted students in their schools because they are not trained in gifted education and multicultural education. Because of their lack of training, teachers do not recognize students with traits of giftedness.

3. A lack of parental involvement in the education process. According to Ford (1994), this is especially when the parents are from a less affluent economic background. These parents may find it difficult to become involved in their children's education, mainly because of their own negative experiences with schools. Because of this lack of involvement, the parents are less likely to know about gifted programs.

This section will describe how the Office for Civil Rights' interventions addressed these three barriers.

**Inadequate Identification Practices**

Because of state law, Bayou Parish could not adopt a variety of gifted identification methods such as the use of multiple criteria. Instead, Bayou Parish was limited to the use of achievement test and IQ test scores to identify gifted students. According to an interview with a member of the Pupil Appraisal Team, it would not be cost-effective to change the identification criteria statewide because if the identification criteria changed, then the gifted programs would have to change also to accommodate the different types of gifted students. This is
because identification practices and the gifted programs are both based on reading and mathematics.

However, the Bayou Parish identification practices are being improved in several other ways. One way is by piloting new IQ tests that are considered to be non-biased. Another way is by lowering the screening matrix cutoff score by one point to allow more minority students the opportunity for an individual evaluation, which is a one-to-one testing session with a member of Pupil Appraisal. Also, if students do not pass the gifted screening or evaluation, they are allowed to be tested by a psychologist in a private practice.

The most unique identification method is the use of the Exploration enrichment program. This program gives gifted-type enrichment to high achieving students (students who make grades no lower than Bs and who exhibit good behavior). This enrichment allows students to further develop good work habits, study skills, and creativity. Many students in Exploration are later recommended for a gifted screening by their Exploration teacher.

Parental Involvement

Parental involvement was addressed by a task force of eight to 10 members that was created by the Office for Civil Rights. It is made up of Bayou Parish teachers, Pupil Appraisal Team members, supervisors, and other concerned individuals. The task force meets at least twice a year to discuss ways to increase the number of highly intelligent minority students in the gifted program. Twice a year they send approximately 350 fliers to area businesses.
and African-American churches. The fliers describe the characteristics of gifted children and give contact numbers for parents who wish to refer their children for a gifted screening. Fliers were also sent home with the students. Other efforts include newspaper articles, local television news coverage, and presentations at meetings of organizations such as PTA and Kiwanas Club. Several meetings have been held at local community centers on Saturday mornings for the purpose of bringing information about giftedness and the gifted program to parents. The meetings at the community centers were not well attended. According to an interview with a member of Pupil Appraisal, these efforts resulted in the referral of about six students for a gifted screening.

**Teacher Identification**

From 1995 to the present, at the beginning of each school year, all the teachers in Bayou Parish are required to attend an inservice concerning gifted education. The teachers must sign a roster to prove they attended. The inservices are held at each school and are presented by a member of the Pupil Appraisal Team. At these inservices, teachers learn about gifted traits, the gifted student identification process, and how to refer students for a screening. According to survey results, approximately 61 percent of teachers attend these meetings.

Teachers are also exposed to the task force's parent and community involvement efforts, described above. Teachers read the brochures they send home with students, they attend parent meetings such as PTA and back-to-
school night where gifted information is presented, and they read the newspaper articles and see the television news articles concerning the Bayou Parish gifted program.

Conclusions

The following is a discussion of the strengths and weaknesses of the Bayou Parish gifted program's student identification process. The purpose of this discussion is to highlight the outstanding features of this program and to acknowledge areas of concern for the purpose of continued improvement.

Strengths of the Identification Process

The strengths of the identification process greatly outnumber the areas that need improvement. Years of time and effort (including a lot of volunteer work) have been spent on these improvements. A major strength of the identification process is the existence of the Task Force, which meets at least twice a year to continue the Office for Civil Rights' interventions and to brainstorm for further improvement. This shows a great deal of concern on the part of Bayou Parish in its efforts to improve its gifted identification process. The Task Force works to continue news coverage, teacher inservices, Child Search Month, and parental involvement. It works with the superintendent to meet yearly goals to increase the gifted minority population.

Another unique strength is the Exploration enrichment program. The review of literature shows that many researchers believe some students are not identified as gifted because they never receive enrichment to help them develop
their strengths and creativity. The Exploration program does just that — students are enriched in all subject areas through the use of units. Exploration is for high-achieving students who do not quite qualify for the gifted program due to IQ and achievement test scores. The program allows students to develop their academic abilities to the point where many qualify for gifted one year after placement in Exploration.

Because the statewide gifted identification criteria are based on standardized test scores, the Task Force and Pupil Appraisal work together to pilot new IQ tests for use in the school system. These are tests that are considered to be non-biased and appropriate for use with a diverse student population.

In an effort to further increase the number of students who qualify for a gifted screening, a member of Pupil Appraisal examines the Iowa Test scores of each school to find students who qualify for a gifted screening. Because some schools do not follow through with the referral process, another Pupil Appraisal member hand-delivers the lists of student names to individual schools to encourage school personnel to begin the screening process. As a result, more students are screened for the gifted program.

**Areas That Need Improvement**

There are a few areas that need improvement. Seven out of nine teachers who were interviewed stated that they had never attended a meeting about gifted and they did not know about these meetings. Thirty-nine percent of teachers who
completed surveys indicated the same. There are several possible explanations: (a) some schools are not presenting the inservices to their teachers, (b) some teachers are unaware of the meetings, (c) some teachers are veteran teachers in Louisiana but have just started teaching in Bayou Parish this year, or (d) giftedness was only briefly mentioned in a faculty meeting. The interviewed teachers stated that they were teaching in Bayou Parish at the first of this year (and many previous years), yet they had never heard of a gifted inservice.

Some schools do not follow through with the gifted screenings after the Pupil Appraisal member creates lists of students for the schools to refer. In 2000, this problem was addressed by having the lists hand-delivered to the appropriate school personnel. This practice will continue during the following school years.

Few parents attend the meetings that are held at local community centers, even though the meetings are well advertised. Perhaps the problem is because (a) the meetings are on Saturday mornings, or (b) the parents cannot find child care in order for them to attend the meetings.

Some parents do not complete and return the forms that allow their children to be screened for gifted. These parents need to become aware of the importance of gifted education, but these may be the parents who do not attend the gifted information meetings, read the brochures in the community, read the newspaper articles, or watch the news stories on television. As the Pupil Appraisal Team member stated, it may be possible that "some parents just don't care."
Some schools do not have an Alpha program. According to a member of Pupil Appraisal, it is not cost-effective to have an Alpha program in a school that has only five gifted students. Gifted students in schools that have no Alpha program are allowed to transfer to a school that offers Alpha. Because of this, many teachers (and entire schools) do not refer students for a gifted screening because they do not want to lose their top students.

**Teachers' Suggestions for Improvement**

The teachers that were interviewed gave suggestions for improvement in the gifted student identification process. Most of their concerns had to do with testing. They believed that the evaluation procedure needs to include something other than standardized tests. They recommended the use of screenings for interests and talents as well as the use of portfolios and case studies. They believed in the importance of looking "at the whole child instead of just test scores." They stated that the present process screens out poor test-takers and students who miss the screening or evaluation cutoff scores by one point. They believed this was unfair to the students.

The teachers were also concerned about testing very young students, such as kindergartners and first graders. They believed the tests were too hard for these children to pass. A member of Pupil Appraisal stated that the tests were more difficult for younger children because if the tests are made too easy, they will place children in gifted who are not truly gifted. Once placed in gifted, they will remain in gifted throughout their school years unless they are removed by
their parents. Gifted classes would be extremely difficult for students who do not meet the entrance requirements.

One teacher believed the testing process was too long because "it takes all year." She would refer a student for a screening in September and the child would be placed in gifted at the end of the school year. She believed the child needed to be receiving gifted services as soon as possible.

Some teachers stated that they would like more opportunities to learn about giftedness, such as college classes or inservices. They stated that the gifted program teachers meet once a month, but the classroom teachers are not invited to attend.

Another teacher expressed dismay at the lack of money that is spent on the gifted programs in Louisiana. She stated that "they don't mind spending money on special education." Her concern was that federal dollars are poured into what she called "the lower end of the spectrum," and gifted students receive a small percent of the funding. Unfortunately, this is not a problem that can be solved by Bayou Parish.

Recommendations

As stated in Chapter I, a better way to identify gifted students (especially minority students who may be excluded due to test bias) is through the use of a variety of screening and evaluation methods instead of a sole reliance on standardized intelligence and achievement test scores. Research shows that these standardized tests only identify one type of giftedness, and that is
academic giftedness. Other types of giftedness include creativity, motivation, and leadership ability. Several states, such as Alabama and Georgia, have adopted the use of multiple measures of intelligence for identifying both minority and non-minority gifted students. These measures were described in detail in Chapter I. For example, a state such as Louisiana could create gifted selection criteria that would include meeting these four cutoff scores (at least one of which must be met by a standardized test score):

1. Mental ability, as shown by a score in the 96th percentile on either a standardized test of intelligence or a culture-fair assessment such as the Raven's Progressive Matrices or the Comprehensive Test of Non-verbal Intelligence.

2. Achievement, as shown by a score in the 90th percentile on either a standardized achievement test, or a numerical score of at least 90 on a scale of one to 100 on a superior student-generated product or performance evaluated by a panel of three or more qualified evaluators.

3. Creativity, as shown by a score in the 90th percentile on a standardized test of creative thinking, or a score of at least 90 on a scale of one to 100 on a structured evaluation of creative products or performances evaluated by a panel of three or more qualified evaluators.

4. Motivation, as shown by a grade point average of at least 3.5 on a 4.0 scale, or a score in the 90th percentile on a standardized motivational characteristics rating scale, or a score of at least 90 on a scale of one to 100 on a structured
evaluation of a student-generated product or performance evaluated by a panel of three or more qualified evaluators.

The following recommendations are presented for the benefit of other school systems that are bound by state laws, yet are interested in the optimal inclusion of highly intelligent minority students in their gifted programs.

Parent and teacher involvement in gifted student identification is crucial because, more often than not, they are the ones responsible for beginning the gifted screening process. As discussed earlier in Chapter IV and in this chapter, based on survey and interview data, teachers need college courses and inservice training to inform them about what giftedness is, how it can be identified, and how it can be served. Parents need the same information. They also need to understand the importance of gifted education for their children, otherwise they will be less likely to allow their children to be screened for the gifted program.

Sometimes, school systems use the tests that they have always used to identify gifted students even though the school system's culture has changed since the tests were adopted. Perhaps it would be wise to re-evaluate the school system's gifted identification procedure every three years by piloting a couple of new tests, by talking to gifted program teachers and classroom teachers to ascertain the needs they perceive, and by collaborating with school systems whose gifted identification process is highly successful.
Direction for Future Study

After the 1995 compliance review, the Louisiana Department of Education awarded a grant to be divided among 16 Louisiana school systems to allow them to pilot methods of increasing the number of highly intelligent minority students in their gifted programs. This grant began in 1997. Enough time has passed for a study to be conducted to find the common and unique strengths and weaknesses of the school systems that received the grants. Some of the 16 school systems considered their changes to be successful, and they continued to reapply for their grants; others considered their changes to be unsuccessful and they discontinued their grants.

The ANOVAs that were run in this study offer more ideas for future research in gifted education. For instance, a more controlled study could be conducted to find the effects of gifted education courses on teachers' beliefs about giftedness. Minority teachers' beliefs about giftedness need to be further studied also.

It would also be beneficial to conduct a case study of a state educational system that changed its gifted identification procedures at the state level to include identification methods other than just IQ and achievement tests. Two of these states are Georgia and Alabama. Brief summaries of their programs are presented in Chapter I of this study. The researcher was initially interested in a study of one of these school systems, but decided to conduct a local study that may be of more immediate benefit to her own school system.
Implications

The results of this study show that the percent of highly intelligent African-American students in a gifted program can be increased within the constraints of strict, state-mandated IQ achievement test cutoff scores. In fact, in Bayou Parish the percent not only rose during the time that the Office for Civil Rights conducted interventions, it also continued to rise in the years afterwards. Researchers have stated that many modern IQ and achievement tests are virtually non-biased due to new norming methods. This research suggests that they may be correct, but one must bear in mind that other factors were involved such as increased parent and teacher knowledge of giftedness which resulted in more students (both African-American and non-minority) being referred for gifted screenings. The percentage of minority students in the gifted program is still low, when one considers that the majority of the students in the school system are minority students.

Still, the opposing view of giftedness cannot be ignored. Many researchers believe there are types of giftedness which require a variety of identification methods. Yet, if the definition of giftedness becomes more than just exceptionally high reading and mathematics scores, then more testing instruments must be purchased and more money spent on expanding the services provided by the gifted programs statewide. In this situation, cost-effectiveness becomes an issue. However, if millions of dollars are poured into special education programs, why not richly fund programs for our brightest students?
As was stated earlier in this study, by meeting the exceptional needs of gifted children, these students have a greater opportunity to achieve academic excellence. By extension, they may be better able to obtain and perform in high-level or innovative jobs, therefore helping our country compete successfully in a global economy. Overcoming the barriers to identifying gifted minority students is an important step in reaching this goal.
REFERENCES

Agreement addresses one-race schools, unequal education. (2000, December 1). Cypress Times Online (note: web address withheld to protect the privacy of the participants in this study.)


A look at school desegregation through the years. (2000, December 1). Cypress Times Online (note: web address withheld to protect the privacy of the participants in this study).


*Cypress Points of Interest* (2000) [on-line]. (note: web address withheld to protect the privacy of the participants in this study.)


ERIC Clearinghouse on Disabilities and Gifted Education (email from ERIC gifted education specialist on April 19, 2000)


Evans, B. N. (2000, December 1). Bayou school plan stirs debate about system's racial equity. *Cypress Times Online* (note: web address withheld to protect the privacy of the participants in this study.)

Evans, B. N. (2000, December 1). Latest forum draws concerned parents. *Cypress Times Online* (note: web address withheld to protect the privacy of the participants in this study.)

Evans, B. N. (2000, December 4). Bayou schools may face student exodus under proposed plan. *Cypress Times Online* (note: web address withheld to protect the privacy of the participants in this study.)


Ford, D. Y. (email from Dr. Donna Ford on April 22, 2000)


Georgia State Department of Education (1999). Impact of Georgia’s multiple-criteria rule on number and racial diversity of identified gifted students. Atlanta, GA: Author.


Grill, L. (email from Alabama State Department of Education, August 16, 1999)


Louisiana Cooperative Extension Service, Bayou Parish (2000) (note: web address withheld to protect the privacy of the participants in this study.)


Office for Civil Rights, Southern Division, Dallas, TX (report to the Superintendent, Bayou Parish Public School System, May 2000)

Office for Civil Rights, Southern Division, Dallas, TX (report to the Superintendent, Louisiana State Department of Education, February 25, 1999)


Overview of Cypress (2000) [On-line] (note: web address withheld to protect the privacy of the participants in this study.)


School Accountability Report (2000, October 19). Cypress Times Online (note: web address withheld to protect the privacy of the participants in this study.)


U.S. Census Bureau (2000). Population estimates by age, sex, and race – Bayou Parish [On-line] (note: web address withheld to protect the privacy of the participants in this study.)


APPENDIX A

SURVEY
Assumptions Underlying the Identification of Gifted and Talented Students

The following survey was developed by the National Research Center on the Gifted and Talented at the University of Connecticut. Its purpose is to gather teachers' beliefs about gifted students and how giftedness can be identified.

Gifted students are children who are highly intelligent, even if they have not been formally identified and placed in a gifted program.

Please complete the demographic section that follows, then complete the survey. The survey results may be used to help improve the Bayou Parish gifted student identification procedures.

Thank you very much for your assistance.

Demographic Data

Circle the best response to each question.

What is your gender?
1 = Male
2 = Female

What is your age range?
1 = Less than 25 years old
2 = 25-35 years old
3 = 36-46 years old
4 = 37-47 years old
5 = 48-58 years old
6 = Over 58 years old

What best describes you?
1 = Asian American or Pacific Islander
2 = Hispanic, regardless of race
3 = Black, not of Hispanic origin
4 = White, not of Hispanic origin
5 = Native American
6 = Other
What is your highest academic degree?
1 = Bachelor's degree
2 = Master's degree
3 = Education specialist or work past the master's degree level
4 = Doctorate

Counting this year, how many years of teaching experience do you have?
1 = Two or less
2 = Three to five years
3 = Six to ten years
4 = Eleven to fifteen years
5 = More than fifteen years

Have you ever had a student in your classroom who was in a gifted program?
1 = yes
2 = no

Have you ever received inservice training (in any school system) to learn how to recognize gifted students and their characteristics?
1 = yes
2 = no

Have you even taken a college course where you learned how to recognize gifted students and their characteristics?
1 = yes
2 = no
Assumptions Underlying the Identification of Gifted and Talented Students
Joseph S. Renzulli, Scott W. Brown, & E. Jean Gubbins

Listed below are 20 assumptions related to the identification of gifted and talented students. Read each statement, and indicate the degree to which you agree or disagree by circling the appropriate response using the following scale.

SA = Strongly Agree  A = Agree  U = Uncertain  D = Disagree  SD = Strongly Disagree

1. Gifted and talented students may express their abilities in many ways.
2. Giftedness in some students may develop at certain ages and in specific areas of interest.
3. An effective plan of identification requires the use of several types of information about the student.
4. Identification should be based primarily on an intelligence or achievement test.
5. Identification should take into consideration the cultural and experiential background of the student.
6. At least part of the identification process should be individualized, using case study data unlikely to be obtained by group standardized instruments.
7. Identification should include the assessment of tasks selected by the student as well as required activities.
8. A precise cut-off score should be set for all tests in identification.
9. Information obtained during the identification process should provide the basis for follow-up programming experiences and opportunities.
10. Identification should include options that allow students to express themselves in many ways (e.g., written, visual, oral, constructed, interpersonal).
11. Teacher judgment and other subjective criteria should not be used in identification.
12. Identification techniques can be locally developed using methods and criteria that are appropriate for a particular population.
13. The identification process should include the judgments of persons best qualified to assess the quality of performance in particular areas of study.
14. Identification should be restricted to a fixed percentage of the total student population.
15. Only identified students should have access to special program services.

16. Identification should include the involvement of persons who understand the cultural and environmental background of individual students.

17. Alternative identification criteria should be developed for identifying artistically talented students.

18. Regular, periodic reviews should be carried out on both identified and non-identified students.

19. The identification process should include the assessment of nonintellectual factors such as creativity and leadership as well as academic performance.

20. The identification process should reflect the types of services and activities provided by individual schools and school districts.
APPENDIX B

INTERVIEW GUIDES
TEACHER INTERVIEW GUIDE

DEMOGRAPHIC INFORMATION

____ Male
____ Female
____ Magnet School
____ Non-Magnet School
____ Grade level taught
____ Degree achieved
____ Area of degree
____ LA or out of state?

1. Have you ever received inservice training about gifted students? Where? Describe the nature of the training.

2. Have you ever taken a college class where you learned about gifted students? (Graduate classes? Undergraduate?) If so, what did you learn about giftedness (Traits? How to educate students? Etc.) Was it a course on Gifted Education, or was it taught as a part of another class, such as education or psychology?

3. Have you ever taught gifted students, either in the regular classroom or as a gifted program teacher? Describe your experience.

4. What do you believe are the characteristics of a gifted student?

5. What procedure is used to identify and place students in a gifted program in Bayou Parish? Do you believe it is effective for identifying gifted children? If so, why? If not, how could it be improved?

6. Does your school have a gifted program? Do you believe it is beneficial to the students? Why or why not? What would make it more beneficial?

7. Do you have any additional comments?
INTERVIEW GUIDE

Pupil Appraisal Member


   - What impact did this have on the minority/nonminority gifted student population?
   - Why were gifted students reported as White, Black, and Other Minority?
   - Did Other Minority include Limited English Proficiency students?
   - Describe the Task Force that was formed at the beginning of the compliance review.
   - How were the members chosen?
   - How were they involved in the changes that took place in the Bayou Parish gifted identification process?

2. What identification procedure is now used in Bayou Parish? (Compare the present procedure to the 1995 procedure described in Chapter 1.) (Obtain a copy of the present procedure/guidelines.)

   - Why was each change made?
Do you believe each change was effective? Why or why not?

Do you believe the identification process for the Alpha program could be improved? If so, how?

If there were no guidelines offered by the State Department for gifted student identification, what process would you use?

What do you believe would further increase the chances of identifying gifted minority students in the present identification system?

3. Who refers students for an initial gifted screening? (Parents? Teachers? Automatic referral due to Iowa test scores?)

Could the referral process be improved in any way? If so, how?

4. Which screening and evaluation instruments are used?

Who selected the instruments?

Why were these particular instruments chosen?

Are any of them designed specifically for the identification of minority students?

How are the tests controlled for test bias?

Who administers the instruments?

What cutoff scores are used?

What happens when a student scores 1 or 2 points below the cutoff score in the screening/evaluation process?
• Do students sometimes receive an outside evaluation in a situation such as this?
• Please describe the outside evaluations that are sometimes sought.

5. Does the school system use screening and evaluation methods/instruments other than IQ and achievement tests? If so, please describe.

6. At approximately what grade level (kindergarten, lower elementary, upper elementary, etc.) are more students referred for gifted screenings?
• Why do you believe more referrals take place at this level?

7. Under what conditions are the students screened/evaluated? (Small groups? Large groups? During school? During vacation time? Etc.)
• How often does the identification process take place? (Yearly? Twice a year? Ongoing? Etc.)
• Why is this time frame used?
• Do you believe it is effective? Why or why not?

8. Once students are placed in the gifted program, are they permanently in the program or can they lose their gifted placement?
• Does this loss happen frequently/occasionally?
• If so, why?
• Does this tend to happen at any particular grade level, or to a particular gender, race, personality type, etc.?

9. Are gifted students sought in all the schools?
• If not, state possible reasons.
10. Do you believe the current child search/screening/evaluation process is broad enough to allow for the fullest possible participation of minority students in the gifted program?
• Why or why not?
• What do you believe is the most important component of the placement process? (Teacher/parent awareness, testing instruments, cutoff scores, etc.)
• Which component do you believe needs the most improvement?
• How could this component be improved?

11. Are there any instances in which minority students may qualify for the gifted program but the child’s family refused to give permission for screening/evaluation/placement?
• If so, please describe.
• Are there minority students that you believe are gifted, but they refused to be screened or perhaps failed the screening deliberately?
• If so, please describe.

12. The kindergarten and pre-K identification cutoff scores look like they are more difficult to attain by the students when compared to the 1st – 12th grade criteria.
• Do you believe the criteria are actually more difficult?
• Why or why not?

13. What is Bayou Parish’s philosophy or definition of giftedness?
14. Do classroom teachers and other school system personnel receive training each year concerning gifted education? (Obtain copies of handouts that are used)

- If so, please describe the nature and length of the training.
- What is the goal of the training?
- Is the training effective? Why or why not?
- Does this training take place in all the schools?
- Who conducts the inservices?
- Why was this person chosen?
- Do parents receive similar training?

15. Describe the gifted Child Search efforts that are used by the school system. (Obtain copies of any brochures/newspaper articles/etc. that are used.)

- Do you believe the efforts are effective?
- Why or why not?

16. Does Bayou Parish work collaboratively with another school system or organization to select and implement gifted identification instruments, procedures, and education?

- If so, describe the collaboration.

17. How are parents and other family members encouraged to become involved in gifted education?
• Has this involvement increased the awareness of giftedness throughout the school system?
• If so, in what way?
• Do you believe this involvement could be improved in any way?

18. What gifted education resources (such as lists of gifted websites, gifted organization magazines, etc.) are made available for use by teachers and parents?
• If so, how are these resources funded and distributed?

19. Please give a brief description of the “Alpha” program.
• Is “Alpha” offered in all the schools in Bayou Parish, including the magnet schools?
• If not, please state reasons.
• Do you believe the identification process for the Alpha program could be improved? If so, how?
• If there were no guidelines offered by the State Department for gifted student identification, what process would you use?
• What do you believe would further increase the chances of identifying gifted minority students in the present identification system?

20. Once students are identified as gifted, do they tend to participate in their school’s gifted program or do they tend to transfer to the magnet schools?
• What impact do the magnet schools have on the regular public schools?
• How are students placed in the magnet schools?

21. Please give a brief description of the "Exploration" enrichment program.

• Is "Exploration" offered in all the schools in Bayou Parish, including the magnet schools?

• What is the purpose of "Exploration"?

• Does the Exploration program help identify students for placement in the Alpha program? Why or why not?

• How is "Exploration" funded?

• Has the Exploration program affected the awareness of giftedness throughout the school system (teachers, parents, students, etc.)?
October 19, 2000

Donna Sutton
1401 Lewisville Road #207
Minden, LA 71055

Dear Donna:

I am pleased that you are interested in using our survey entitled "Assumptions Underlying the Identification of Gifted and Talented Students" (Renzulli, Brown, & Gubbins, 1992) for your dissertation. The instrument is not copyrighted. You certainly may use this instrument. Please add the following statement to your dissertation:

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

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

Once you have completed your dissertation, we would love to receive a brief summary of your findings.

Sincerely,

E. Jean Gubbins, Ph.D.
Associate Professor
Educational Psychology

At: Equal Opportunity Employer
213 Hillside Road, U-7
Storrs, Connecticut 06269-3007
Telephone: (860) 486-4826
Facsimile: (860) 486-2900
web: www.gifted.uconn.edu

284

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
August 27, 2000

Superintendent
Parish School System
PO Box 32000
LA

Dear,

I teach Gifted at Ringgold and Castor schools. I am also a doctoral student at Louisiana Tech, and I am working on my dissertation proposal. The purpose of my proposed study is to examine effective methods of identifying minority students for placement in Gifted programs.

In May, I read an article in the Times about Parish's desire to increase their Gifted minority population. I am interested in conducting a case study of your new Gifted identification methods. I want to conduct a study that is useful to Parish, not just a study to complete my degree.

May I make an appointment with you to discuss a proposed study? I will only take a few minutes of your time. I will call your office later this week.

I know you are busy, and I appreciate your help.

Sincerely,

Donna Sutton

Advisor:

Dr. Carolyn Talton, College of Education, Louisiana Tech University

Phone:
September 18, 2000

Superintendent
Caddo Parish School System
PO Box 32000
Shreveport, LA 71130-2000

Dear [Name],

Thank you for meeting with me, and for referring me to [Name]. I met with her after leaving your office, and she was very interested in my study.

Enclosed are selected portions of my dissertation proposal, which describe a possible case study for your school system. The purpose of the study is to describe the procedures and instruments that make [Parish] successful in identifying gifted minority students. Chapter I describes the purpose of the study and contains the research questions. Chapter III describes the procedures. The Appendices contain the research instruments.

I will call your office next week to discuss any changes that you would like for me to make to my proposed study. I hope I have created a study that is beneficial to your school system.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Tatton, College of Education, Louisiana Tech University
Phone: [Number]

Superintendent's approval needed so that Ms. Sutton can interview some of our personnel and obtain some information from our records in order to complete her case study.
October 4, 2000

Superintendent
Parish School System
PO Box 32000
LA

Dear [Name],

Thank you very much for your approval of my case study of the Parish gifted program. I will formally present the proposed study to my doctoral committee this month. I should be able to collect my data during November and December. The data will include:

1. Gifted program data to show changes in the minority/nonminority student population since 1995
2. Interviews with the gifted program supervisor and gifted testing personnel to learn about gifted identification procedures
3. A brief survey (which can be completed in 10 minutes or less) to learn personnel's beliefs about giftedness and about effective gifted identification procedures. The survey will be sent to four groups for comparison: (a) central office instructional supervisors, (b) elementary principals, (c) k-5 teachers in three lab/magnet schools, and (d) k-5 teachers in three non-lab/magnet schools.

I know you are very busy, and I appreciate the help you have given me to begin my study. Please contact me by email or telephone if you have any questions or concerns about the study.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Talton, College of Education, Louisiana Tech University
Phone: [redacted]
Dear (name of principal):

I teach Gifted at ■ ■ ■ and ■ ■ ■ schools in ■ ■ ■ Parish. I am also a doctoral student at Louisiana Tech, and I am working on my dissertation. The purpose of my study is to examine effective methods of identifying students (especially minority students) for placement in Gifted programs.

Enclosed is a brief survey from the National Research Center on the Gifted and Talented, and Human Subject Consent Forms. The purpose of the survey is to gather teachers’ beliefs about giftedness and gifted identification. No names (not even the name of your school) will be used in this study. Please ask your K-5 classroom teachers to take a few minutes to complete the survey and forms, then return the surveys and forms to me in the enclosed self-addressed stamped envelope. Please return the surveys within the next two weeks so I can begin my statistical analysis as soon as possible.

I know you are busy, and I appreciate your help.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Talton, College of Education, Louisiana Tech University
Phone: [redacted]
Dear (name of principal):

Thank you very much for participating in my recent survey. To complete my study, I would like to interview two classroom (K-5) teachers from your school. The purpose of the interviews is to supplement the information obtained through the surveys. The interviews are on a voluntary basis, and no names (of individuals or schools) will be used in the final report. The interviews will be tape recorded to ensure accuracy. I can conduct the interviews in person at your school or after hours by telephone at the teachers' convenience.

Enclosed is a list of the interview questions, a Human Subjects Consent Form, and a self-addressed stamped envelope. Please ask your staff for about 6 interview volunteers, then mail the list of names to me. I will randomly select 2 teachers from the list.

I will call you during the next few days to answer any questions you may have about my study. I know you are busy, and I appreciate your help.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Tatton, College of Education, Louisiana Tech University
Phone: [redacted]
(Name of School)
(Address)
(City, State, Zip)

Dear (name of teacher):

I teach Gifted at [Name of School] and [Name of School] in [Parish]. I am also a doctoral student at Louisiana Tech, and I am working on my dissertation. The purpose of my study is to examine effective methods of identifying students (especially minority students) for placement in Gifted programs.

Thank you very much for participating in my recent survey. To complete my study, I would like to interview two classroom (K-5) teachers from each participating school. The purpose of the interviews is to supplement the information obtained through the surveys. The interviews are on a voluntary basis, and no names (of individuals or schools) will be used in the final report. The interviews will be tape recorded to ensure accuracy. I can conduct the interviews in person at your school or after hours by telephone at your convenience.

Enclosed is a list of the interview questions, a Human Subjects Consent Form, and a self-addressed stamped envelope. Please sign and return the Human Subjects Consent Form as soon as possible. Also, please send me a day and time in which I can conduct the interview. If you have any questions about the interview or about my study, please call or email me.

I know you are busy, and I appreciate your help.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Talton, College of Education, Louisiana Tech University
Phone: [Phone Number]
Dear (name of pupil appraisal member):

I teach Gifted at [Name of Office] and [Name of Address] schools in [City, State, Zip] Parish. I am also a doctoral student at Louisiana Tech, and I am working on my dissertation. The purpose of my study is to examine effective methods of identifying students (especially minority students) for placement in Gifted programs. I recently sent surveys to K-5 teachers in 6 schools in your school system, and I interviewed teachers from each of those schools.

To complete my study, I would like to interview 3 members of Pupil Appraisal. The purpose of the interviews is to learn more about [Name of Office] gifted student identification methods and gifted program. The interviews will be tape recorded to ensure accuracy. I can conduct the interviews in person at your office or after hours by telephone at the your convenience.

Enclosed is a list of the interview questions, a Human Subjects Consent Form, and a self-addressed stamped envelope. Please sign and return the Human Subjects Consent Form as soon as possible. Also, please send me a day and time in which I can conduct the interview. If you have any questions about the interview or about my study, please call or email me.

I know you are busy, and I appreciate your help.

Sincerely,

Donna Sutton

Advisor: Dr. Carolyn Talton, College of Education, Louisiana Tech University
Phone: [Name of Phone]
HUMAN SUBJECTS CONSENT FORM

The following is a brief summary of the project in which you have been asked to participate. Please read this information before signing the statement below.

TITLE:
Identifying Gifted Minority Students: A Case Study of the Parish, Louisiana, Gifted Program

PURPOSE OF STUDY:
To examine screening procedures and practices used by a typical United States school system to address the problem of underrepresentation of minority students in a gifted program.

PROCEDURE:
K-5 teachers in 3 magnet schools and 3 non-magnet schools will voluntarily complete a survey to learn their assumptions about giftedness and how gifted students can be identified. Two teachers from each of the 6 schools will be interviewed to gather more in-depth information about their assumptions about giftedness.

The Parish gifted program supervisor will be interviewed to obtain information about Parish’s 1995-1996 compliance review conducted by the Office for Civil Rights. The school psychologist will be interviewed to learn in detail how students are identified and placed in the gifted program. An interview guide will be used to assist in conducting interviews with teachers, the supervisor, and the school psychologist.

INSTRUMENTS:
A survey developed at the National Research Center on the Gifted and Talented will be used to assess teachers’ assumptions about giftedness and gifted student identification. Interview guides will be used to assist the researcher in interviewing teachers, the gifted program supervisor, and the school psychologist.

MEASURES TO INSURE PROTECTIONS OF CONFIDENTIALITY/ANONYMITY:
No names will be put on the surveys. The survey data will be reported as part of a group, such as "magnet schools". Interviews will be taped, with permission, to ensure accuracy of statements. The tapes’ transcripts will be edited to eliminate sensitive material. No actual names will be used in the reporting of data. All collected data will be confidential and will be viewed only by the researcher.

RISKS/ALTERNATIVE TREATMENTS:
There are no risks associated with participation in this study. No alternative treatments will be used. Participation is voluntary.

BENEFITS/COMPENSATION:
None.

I, ____________________________________________, attest with my signature that I have read and understood the description of this study, its purpose, and its methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study will not affect my relationship with the Parish School System in any way. I understand that my interview will be taped and that names and sensitive material will be deleted from the tape. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey and interview will be confidential, available only to the researchers, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participation in this study.

Signature of Participant ___________________________ Date ____________

CONTACT INFORMATION: The researchers listed below may be reached to answer questions about the research, subjects’ rights, or related matters.
Donna Sutton 318-382-6742
Dr. Pauline Leonard (advisor), Louisiana Tech University, 318-257-3229

The Human Subjects Committee of Louisiana Tech may also be contacted if a problem cannot be discussed with the researchers.

Dr. Terry McConathy 318-257-2224
Dr. Don Wells 318-257-4088
**PURPOSE**

Alpha is the name of the gifted program in Bayou Parish. It provides a differentiated program for identified students.

Alpha provides a curriculum which includes:

- Enriched and accelerated areas
- Higher level thinking skills
- Creative and critical thinking skills
- Logic and reasoning skills
- Problem-solving activities
- Independent research
- Lower pupil-teacher ratio

**CHARACTERISTICS**

Most gifted children are:

- Independent workers
- Problem solvers
- Task committed
- Self-motivated
- Peer leaders
- Analytical
- Creative
- Critical thinkers
- Inquisitive
- Broad knowledge base

**IDENTIFICATION AND PLACEMENT**

**Screening:** Students may be nominated by parents, teachers, other individuals, and school personnel. A school committee refers students who pass screening to a testing team for a full evaluation.

**Evaluation:** Culturally non-biased tests are given in aptitude, reading, and math. A child must meet the state requirements on these tests to be identified as gifted.

**Placement:** A conference is held for each child who qualified as gifted. Test results are reviewed, an educational plan is developed, and parental permission is obtained so that the child can receive services. A conference to review progress is held yearly.
APPENDIX F

EXPLORATIONS PROGRAM DESCRIPTION
PROGRAM DESCRIPTION

EXPLORATION: Creative Time for High Achievers

PURPOSE: The project will challenge high achieving students to extend critical and creative thinking skills in order to explore, develop, and present products on subjects of their choice.

GOALS:

1. To provide an enrichment program for high achievers who are in the regular instructional program.
2. To identify students who are eligible for Exploration
3. To plan schedules and activity modules.

OBJECTIVES:

1. The students will be engaged in activities designed to develop higher level thinking skills.
2. The students will exhibit fluency, flexibility, and originality in producing ideas.
3. The students will show an ability to recognize the skills and talents of others by sharing their products and by reinforcing the efforts of other students.
4. The students will develop ideas related to broad-based issues, themes, or problems.
5. The students will be involved in in-depth learning experiences related to self-directed topics.
6. The students will generate original ideas by completing a model, plan, or product that is unique to their area of interest.

STRUCTURE:

1. Renzulli's Triad
2. One resource teacher per school with 90-100 qualifying students
3. Students who are screened and chosen according to the criteria listed below.

CRITERIA FOR STUDENTS: Students should be

1. enrolled in grades 2-5
2. maintaining A's and B's in all graded areas, including conduct
3. highly motivated and task committed
4. nominated by a teacher
5. in the 75th percentile or above on the total battery of the school administered standardized test or
6. in the above average range on the K-BIT or other appropriate aptitude tests
SCHEDULE:
1. One 45 minute period twice a week or
2. One 90 minute period once a week

ENROLLMENT:
1. 90-100 students in Exploration Pool
2. 6-12 students per class