Summer 1997

A Study of the "Pride" Program: A Residential, Summer-School Program for At-Risk Middle-School Students in an Urban Community

Maria Teresa Amillategui Grimm

Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/urbanservices_education_etds

Part of the Curriculum and Instruction Commons, Elementary and Middle and Secondary Education Administration Commons, and the Secondary Education Commons

Recommended Citation

Grimm, Maria T. 'A Study of the "Pride" Program: A Residential, Summer-School Program for At-Risk Middle-School Students in an Urban Community" (1997). Doctor of Philosophy (PhD), dissertation, Old Dominion University, DOI: 10.25777/f2bp-wx33

https://digitalcommons.odu.edu/urbanservices_education_etds/25

This Dissertation is brought to you for free and open access by the College of Education & Professional Studies (Darden) at ODU Digital Commons. It has been accepted for inclusion in Theses and Dissertations in Urban Services - Urban Education by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.
ABSTRACT

A STUDY OF THE PRIDE PROGRAM: A RESIDENTIAL, SUMMER-SCHOOL PROGRAM FOR AT-RISK MIDDLE-SCHOOL STUDENTS IN AN URBAN COMMUNITY.

Maria Teresa Amillategui Grimm
Old Dominion University, 1997
Director: Dr. Stephen J. Tonelson

This research examined the Pride Program (1991 and 1992)—a residential, summer-school program for at-risk middle-school students. It was conducted with subjects from two large, urban middle schools for the purpose of determining if, after five school years, differences existed among three selected groups (treatment, control and comparison) of at-risk students in the areas of academic achievement, attendance and conduct. Treatment-group self-esteem was examined over a three-year period. Furthermore, this study provided a qualitative program evaluation of the Pride Program for the first two years of its existence.

The results are as follows: The qualitative evaluation indicated that all participants were generally satisfied with the program, although it needed some corrections, particularly in the academic component. Primary quantitative findings at the end of tenth grade were that there were no significant differences between groups in mean English grades, mathematics grades, grade-point average, number of absences and discipline referrals. At the end of middle school (eighth grade), the treatment group was found to have significantly better math grades in school than the other two groups and significantly lower ITBS Total Language scores than the control group. No significant difference was found in Total Self-esteem over the three-year period.
Secondary findings were that mathematics grades declined for all groups between the first semester and the fourth semester of high school; the three groups combined mean numbers of absences and discipline referrals increased significantly between Grades 6 and 10; positive significant differences in Total Self-esteem were found between the pre-treatment scores and the ninth grade scores; a positive time effect was found on the subscales of General Self, Social Self-Peers and Home-Parents.

Quantitative analysis of academic achievement, attendance and conduct demonstrated no statistically significant impact based on a student’s attendance in the Pride Program. The only area which demonstrated significant results was self-esteem in the three subareas of General Self, Social Self-Peers and Home-Parents. Various recommendations for program improvement are discussed.
This work is dedicated to my parents who have always supported me in any and all endeavors which I have pursued, particularly in the academic vein.
ACKNOWLEDGMENTS

It is my pleasure to acknowledge all those people who have been instrumental in making my coursework and my dissertation come to fruition. A very special thanks to Dr. Maurice Berube, Program Advisor and committee member, for guiding me through the coursework; Dr. Stephen Tonelson, my committee chairman, for his always positive, and sometimes humorous, feedback as he read draft after draft of my dissertation chapters; and Dr. Rebecca Bowers, committee member, for keeping me under her wing, even after she took on a whole new nest of things to do as Concentration Area Director. I am also indebted to Dr. Bill Ficenec, Dr. Beth Smith and the staff of the Research and Evaluation Department of Newport News Public Schools who were always kind, gracious and helpful when I went seeking information in files, manuals, and computer databases; and to the teachers, assistant principals, principals, and secretaries who were especially patient as I tackled their student files.

No endeavor as monumental as a dissertation can be sustained without the support of one’s family and co-workers. A very heartfelt thank you is in order for my husband, Dr. Chuck Grimm, and my daughter, Susanna Grimm. Also, I would be greatly remiss if I did not acknowledge the staff in the Student Services Department of Newport News Public Schools who were my co-workers for 11 years. They were always supportive and spurred me on by asking, “What chapter are you on now?”

And in conclusion, I must thank those who gave their support in the form of technical assistance or “just get it done” assistance. Again, I need to thank my husband, Dr. Chuck Grimm, for his computer expertise and Andrea Berndt for her patience when I called her on the phone, more times than I can count, and said, “I have a question.” Finally, I would like to extend my thanks to Dr. Mary Bicouvaris, who always said, “Just
get it done, Terry” and to my current principal, Louise Wylie, who allowed me to take some time when I needed it to “just get it done.”
**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xvii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>1</td>
</tr>
<tr>
<td>The Urban Education Issues</td>
<td>4</td>
</tr>
<tr>
<td>The Need for Viable Alternatives for At-risk Youth</td>
<td>8</td>
</tr>
<tr>
<td>Middle School as a Crucial Intervention Point</td>
<td>9</td>
</tr>
<tr>
<td>School/Business Partnership and Mentoring</td>
<td>10</td>
</tr>
<tr>
<td>Summer School Interventions</td>
<td>11</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>12</td>
</tr>
<tr>
<td>The Newport News Pride Program</td>
<td>13</td>
</tr>
<tr>
<td>Study Design and Environment</td>
<td>14</td>
</tr>
<tr>
<td>Study Limitations</td>
<td>15</td>
</tr>
<tr>
<td>Overview and Summary</td>
<td>16</td>
</tr>
<tr>
<td>2. SURVEY OF LITERATURE</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>17</td>
</tr>
<tr>
<td>Prevalent Notions and Research About At-Risk Students</td>
<td>20</td>
</tr>
<tr>
<td>Definitions of risk</td>
<td>20</td>
</tr>
</tbody>
</table>
### 3. RESEARCH METHODOLOGY AND PROCEDURES

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>47</td>
</tr>
<tr>
<td>Qualitative Research Component</td>
<td>52</td>
</tr>
<tr>
<td>Quantitative Research Component</td>
<td>52</td>
</tr>
<tr>
<td>Research Questions</td>
<td>52</td>
</tr>
<tr>
<td>General Hypotheses</td>
<td>53</td>
</tr>
<tr>
<td>Method</td>
<td>54</td>
</tr>
<tr>
<td>Selection of sample</td>
<td>54</td>
</tr>
<tr>
<td>Instruments: Qualitative</td>
<td>60</td>
</tr>
<tr>
<td>Pride End-of-Program Evaluation Questionnaires</td>
<td>60</td>
</tr>
<tr>
<td>Survey Instrument for Student Behavior, Goal Setting, and Academic Skills</td>
<td>61</td>
</tr>
<tr>
<td>Semantic Differential Technique</td>
<td>61</td>
</tr>
<tr>
<td>Instruments: Quantitative</td>
<td>61</td>
</tr>
<tr>
<td>IOWA Tests of Basic Skills (ITBS)</td>
<td>62</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Schools' Demographic Profiles (Entire School) for SY 1990-1991</td>
<td>49</td>
</tr>
<tr>
<td>3.2</td>
<td>Schools' Demographic Profiles – Grade 6 for SY 1990-1991</td>
<td>50</td>
</tr>
<tr>
<td>3.3</td>
<td>Initial Banding Parameters for Matching and Group Comparisons</td>
<td>51</td>
</tr>
<tr>
<td>3.4</td>
<td>Demographic and Scholastic Profiles for SY 1990-1991</td>
<td>57</td>
</tr>
<tr>
<td>3.5</td>
<td>Demographic and Scholastic Profiles for Treatment Group Students on Coopersmith Self-Esteem Measure Only, for SY 1990-1991</td>
<td>59</td>
</tr>
<tr>
<td>3.6</td>
<td>Treatment Group Students by Ethnicity/Race and Sex in 1991-1992</td>
<td>60</td>
</tr>
<tr>
<td>3.7</td>
<td>Research Design Matrix</td>
<td>66</td>
</tr>
<tr>
<td>4.1</td>
<td>Pride 1991 and 1992 Budget</td>
<td>80</td>
</tr>
<tr>
<td>4.2</td>
<td>Results of Fisher's Exact Test (2 tail) for the reduced sample and the complete sample</td>
<td>91</td>
</tr>
<tr>
<td>4.3</td>
<td>GLM ANOVA Summaries for ITBS Reading Comprehension Standard Scores – Grades 5, 7, and 8</td>
<td>93</td>
</tr>
<tr>
<td>4.4</td>
<td>GLM Repeated Measures ANOVA Summaries for ITBS Reading Comprehension z-scores – Grades 5, 7, and 8</td>
<td>94</td>
</tr>
<tr>
<td>4.5</td>
<td>GLM ANOVA Summaries for ITBS Total Language Scores – Grades 5, 7, and 8</td>
<td>96</td>
</tr>
<tr>
<td>4.6</td>
<td>GLM Repeated Measures ANOVA Summaries for ITBS Total Language z-scores – Grades 5, 7, and 8</td>
<td>97</td>
</tr>
<tr>
<td>4.7</td>
<td>GLM ANOVA Summaries for ITBS Total Mathematics Standard Scores – Grades 5, 7, and 8</td>
<td>100</td>
</tr>
<tr>
<td>4.8</td>
<td>GLM Repeated Measures ANOVA Summaries for ITBS Total Mathematics z-scores – Grades 5, 7, and 8</td>
<td>103</td>
</tr>
<tr>
<td>4.9</td>
<td>GLM ANOVA Summaries for School Letter-Grades in Reading – Grades 6, 7, and 8</td>
<td>104</td>
</tr>
<tr>
<td>4.10</td>
<td>GLM Repeated Measures ANOVA Summaries for School Letter-Grades in Reading – Grades 6, 7, and 8</td>
<td>104</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>4.11</td>
<td>GLM ANCOVA Summaries for School Letter-Grades in English – Grades 7 and 8</td>
<td>107</td>
</tr>
<tr>
<td>4.12</td>
<td>GLM Repeated Measures ANCOVA Summaries for School Letter-Grades in English – Grades 6, 7, and 8</td>
<td>108</td>
</tr>
<tr>
<td>4.13</td>
<td>GLM ANOVA Summaries for School Letter-Grades in Mathematics – Grades 6, 7, and 8</td>
<td>110</td>
</tr>
<tr>
<td>4.14</td>
<td>GLM Repeated Measures ANOVA for School Letter-Grades in Mathematics – Grades 6, 7, and 8</td>
<td>111</td>
</tr>
<tr>
<td>4.15</td>
<td>Results of Kendall’s tau-b for High-School English Levels</td>
<td>114</td>
</tr>
<tr>
<td>4.16</td>
<td>GLM ANOVA Summaries for School Letter-Grades in English – Grades 9 and 10</td>
<td>115</td>
</tr>
<tr>
<td>4.17</td>
<td>GLM Repeated Measures ANOVA of Summaries for School Letter-Grades in English – Grades 9 and 10</td>
<td>116</td>
</tr>
<tr>
<td>4.18</td>
<td>Results of Kendall’s tau-b for High-School Mathematics Levels</td>
<td>118</td>
</tr>
<tr>
<td>4.19</td>
<td>GLM ANOVA Summaries for School Letter-Grades in Mathematics – Grades 9 and 10</td>
<td>119</td>
</tr>
<tr>
<td>4.20</td>
<td>GLM Repeated Measures ANOVA of Summaries for School Letter-Grades in Mathematics – Grades 9 and 10</td>
<td>121</td>
</tr>
<tr>
<td>4.21</td>
<td>GLM ANCOVA Summaries for Attendance (Number of Absences), Grades 7-10</td>
<td>128</td>
</tr>
<tr>
<td>4.22</td>
<td>GLM Repeated Measures ANCOVA Summaries for Attendance (Number of Absences), Grades 7-10</td>
<td>129</td>
</tr>
<tr>
<td>4.23</td>
<td>GLM ANOVA Summaries for Discipline Referrals, Grades 6-10</td>
<td>132</td>
</tr>
<tr>
<td>4.24</td>
<td>GLM Repeated Measures ANOVA Summaries for Discipline Referrals, Grades 6-10</td>
<td>133</td>
</tr>
<tr>
<td>4.25</td>
<td>GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, General Self</td>
<td>137</td>
</tr>
<tr>
<td>4.26</td>
<td>GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, Social Self/Peer</td>
<td>137</td>
</tr>
<tr>
<td>4.27</td>
<td>GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, Home/Parents</td>
<td>138</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>4.28</td>
<td>GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, School/Academic</td>
<td>138</td>
</tr>
<tr>
<td>4.29</td>
<td>GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, Total Self</td>
<td>139</td>
</tr>
<tr>
<td>4.30</td>
<td>GLM Repeated Measures ANOVA for Lie Scale Scores</td>
<td>140</td>
</tr>
</tbody>
</table>
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Comparison of ITBS Reading Comprehension Group Mean z-scores</td>
<td>95</td>
</tr>
<tr>
<td>2.</td>
<td>Comparison of ITBS Total Language Group Mean z-scores</td>
<td>99</td>
</tr>
<tr>
<td>3.</td>
<td>Comparison of ITBS Total Mathematics Group Mean z-scores</td>
<td>102</td>
</tr>
<tr>
<td>4.</td>
<td>Comparison of Mean Reading Grades – Grades 6, 7, and 8</td>
<td>105</td>
</tr>
<tr>
<td>5.</td>
<td>Comparison of Mean English Grades – Grades 6, 7, and 8</td>
<td>109</td>
</tr>
<tr>
<td>6.</td>
<td>Comparison of Mean Mathematics Grades – Grades 6, 7, and 8</td>
<td>112</td>
</tr>
<tr>
<td>7.</td>
<td>Comparison of Mean English Grades – Grades 9 and 10</td>
<td>117</td>
</tr>
<tr>
<td>8.</td>
<td>Comparison of Mean Mathematics Grades – Grades 9 and 10</td>
<td>122</td>
</tr>
<tr>
<td>9.</td>
<td>Comparison of Cumulative High-School GPA Means</td>
<td>124</td>
</tr>
<tr>
<td>10.</td>
<td>Comparison of Number of Absences</td>
<td>130</td>
</tr>
<tr>
<td>11.</td>
<td>Number of Absences Per Year</td>
<td>131</td>
</tr>
<tr>
<td>12.</td>
<td>Comparison of Discipline Referrals</td>
<td>134</td>
</tr>
<tr>
<td>13.</td>
<td>Number of Discipline Referrals Per Year</td>
<td>135</td>
</tr>
<tr>
<td>14.</td>
<td>Coopersmith SEI Comparison for General Self</td>
<td>141</td>
</tr>
<tr>
<td>15.</td>
<td>Coopersmith SEI Comparison for Social Self-Peers</td>
<td>142</td>
</tr>
<tr>
<td>16.</td>
<td>Coopersmith SEI Comparison for Home-Parents</td>
<td>143</td>
</tr>
<tr>
<td>17.</td>
<td>Coopersmith SEI Comparison for School-Academic</td>
<td>144</td>
</tr>
<tr>
<td>18.</td>
<td>Coopersmith SEI Comparison for Total Self</td>
<td>145</td>
</tr>
<tr>
<td>19.</td>
<td>Coopersmith SEI Comparison for the Lie Scale</td>
<td>146</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Purpose of the Study

"Children are our most valuable resource." "A mind is a terrible thing to waste."
These statements have become ubiquitous in the popular media. However, despite the
multitude of social and educational programs targeted for children "at risk," in 1993 there
were still over 3.4 million persons ages 16 through 24 who had dropped out of school
(National Center for Education Statistics, 1994); in 1991 approximately 25 million
(America 2000, 1991) who had left school functionally illiterate; and in recent decades
"millions of others [who] fail[ed] in school and become the disposable children of
America" (Hombeck, 1987, p. 4). Schools, one of the primary social institutions tasked
with producing skilled, productive workers and good citizens, can increase the chances of
helping children meet their full potential.

One manner in which schools can approach this formidable task is by learning to
collaborate with other societal institutions--businesses, communities and families. In
order to understand which approaches, models, methods and programs are most
beneficial for the "at-risk" populations in American schools, it is necessary to examine
each program carefully. The intent of this study is to provide a clear analysis of such a
collaborative program, the Pride Program, initiated by the Newport News Public Schools
in conjunction with Newport News Shipbuilding and Dry Dock.

Pride was a program which interwove family and community involvement into its
program design. It was the first, and only program in the Newport News Public Schools
which utilized a residential, summer-school model combined with mentoring and school-
year follow-up to affect positive changes in at-risk students. The Pride Program is still in existence today, but its form and format have been completely altered so that it no longer resembles the original Pride Program examined in this study.

The original Pride was a complex and varied program which encompassed goals such as improving student self-esteem; increasing academic achievement; encouraging acceptable student behavior; improving attendance; fostering cooperation and trust; affecting the development of career goals and long-range career plans; developing self-awareness; providing a structured, drug-free, and safe environment; and heightening parent involvement. However, the components of this original program which the researcher has chosen to address in this study are student academic achievement, school attendance, student conduct and total self-esteem. These four factors have been found to be pivotal in determining a student's prognosis for high school completion, which can be tied to future societal and economic success (Alpert & Dunham, 1986; Barrington & Hendricks, 1989; Commission on the Skills of the American Workforce, 1990; Ekstrom, Goertz, Pollack, & Rock, 1986; Hawkins, 1988; National Center for Education Statistics, 1993; Orfield, 1988; Pallas, 1991; Rumberger, 1987; Secretary's Commission on Achieving Necessary Skills [SCANS], 1991; Vacha & McLaughlin, 1992; Velez, 1989; William T. Grant Commission Report, 1988). In addition to being considered highly predictive of high school completion, the four components chosen can be measured systematically through school records, standardized instruments, or both. In order to study three of the preceding components (academic achievement, attendance and conduct), three groups of children, a total of 52 students, were studied over a five year period: those who participated in Pride for two years; those who were selected to participate in Pride, but who opted not to attend; and those who were a group closely matched to the Pride students, but who were never offered the opportunity to participate in the program. All three groups were composed of children from an inner-city, urban
community in Newport News, Virginia. The fourth component, total self-esteem, was examined by repeated testing of 19 students in the treatment group over a period of three years.

The research design employed in this study (first three components) focused on the comparison of groups as opposed to individual children. The groups were tracked over a period of five school years, from the end of their fifth-grade year to the end of their second year in high school (or Grade 10). The first three questions investigated differences, over a five-year period, among the groups relative to academic achievement, attendance and student conduct. The fourth question investigated the treatment group differences on a measure of total self-esteem. The self-esteem portion of the study was tracked over a three-year period and focused on those students who attended Pride for two years. The final portion of the study incorporated a qualitative scrutiny of participants' perceptions of the program effectiveness, teacher observations and perceptions of student conduct and progress, and researcher observations concerning the implementation and cost of the program.

In order to provide a context for this study and to understand the reasoning behind the structure of the Program, a discussion of the broader relevant issues is necessary. For this reason, the balance of this chapter is employed to discuss the problems associated with urban education in general and the need for viable alternatives to urban education as it is structured presently. Furthermore, middle school as a crucial intervention point in the education of urban youth is examined. Other critical issues investigated are school/business partnerships, mentoring, summer school programs and self-esteem as related to at-risk students. To complete the discussion, the Newport News Pride Program, itself, plus the study design, environment and limitations are addressed.
The Urban Education Issues

A major problem for American society and American schools today is the plight of children, especially those who are termed "at-risk" or "disadvantaged." Disadvantaged students are in serious jeopardy of underachieving, dropping out of school, or both. Not only do these circumstances produce a loss of human potential, but underachievement and dropouts become problematic to the community at large (Frymier & Robertson, 1991). Kozol (1985) described disadvantaged students as "the children of those who are not literate, who have been disenfranchised and remain excluded from the exercise of power, [and who] learn to accommodate themselves to impotence and capitulation" (p.76). These children follow similar patterns of illiteracy and disenfranchisement as did their parents with the same results—failure in school, and all too frequently, failure in life: incarceration; welfare dependency; marginal employment possibilities; dysfunctional families, or combinations of the aforementioned (Bempechat & Gingsburg, 1989; Frymier & Robertson, 1991; U.S. Bureau of the Census, 1994).

Poor, minority children who are relegated to living in dilapidated neighborhoods in decaying inner cities fit Kozol's (1985) description of "disadvantaged." Baas (1991) contended that "those at risk tend also to be among the 'disadvantaged': disproportionate numbers of them come from families at or below the poverty level and are members of minority groups" (p. 1).

A great number of these at-risk children are reared by poor, minority, single women (Bempechat & Ginsberg, 1989). Between 1970 and 1980 the overall number of households headed by females grew by 91 percent, and by 1985 that number had increased by another 10 percent (Orfield, 1988). By 1991, approximately four million children under the age of 18 lived with mothers (single parent household) who had not completed high school (U.S. Bureau of the Census, 1993). Possibly, another five million children could live with a mother (both parents in household) who had not completed
high school (U.S. Bureau of the Census, 1993). In general, poor, Black or Hispanic single mothers are very likely to have dropped out of school themselves (Bempechat & Ginsberg, 1989). Research has indicated that parental education, particularly that of the mother, is related closely to the school success of the children (Orfield, 1988; Pallas, 1991).

Current demographic trends do not indicate that the disturbing percentages reported are decreasing. In fact, demographers predict that the disadvantaged segment of the population will increase significantly by the year 2020 (Pallas, 1991, p. 14). Gary Orfield (1988) reported that

In 1985, 54 percent of black children lived with only one of their parents. According to a Census Bureau study, young black families headed by females typically found themselves in a self-perpetuating and nearly hopeless cycle of educational and economic disadvantage. (p. 57)

By 1993, the percentage of Black children under the age of 18 who lived with one parent had risen to 57 percent (U.S. Bureau of the Census, 1994). Furthermore, the National Center for Education Statistics' (1993) report on youth indicators stated, "The proportion of poor children coming from female-headed households has risen dramatically, from 24 percent in 1960 to 59 percent in 1991 for all children and from 29 percent to 83 percent for black children" (p. 49). As can be seen, the proportion of poor children coming from female-headed households has increased 35 percent in 31 years for all children, and even more dramatically, that proportion has risen 54 percent between 1960 and 1991 for Black children. Furthermore, the National Center for Educational Statistics (1992) reported that after adjusting for socio-economic status (SES), race-ethnicity, and sex, students from single-parent families were still more likely to fail to perform at the basic proficiency levels and two and a half times as likely to drop out of school as were students from two-parent families. Interestingly, "...males drop out of high school more than do females when they live with a single mother, but the reverse is true when they live with a single
father" (Zimiles and Lee, 1991 as found in National Center for Educational Statistics, 1992, p. 11).

Coincidental to the increase of children living with one parent, is the fact that the number of live births to unmarried women has increased, as measured by the National Center for Health Statistics (1995). This agency states that the number of births to unmarried women rose by 54 percent between 1980 and 1991. There were approximately 1.2 million births to unmarried mothers in 1991, 1992 and 1993, representing three out of 10 total births in those years. In 1980 there were 0.7 million births, which equates to fewer than two out of ten total births to unmarried mothers. In 1993, births to unmarried mothers accounted for 31 percent of all births. "Births to unmarried women comprised 20 percent of white births, 69 percent of black births, and 40 percent of Hispanic births [in 1993]" (National Center for Health Statistics, 1995, p. 1).

The birth rates for women under age 20 were highest for Black and American Indian women. Also, Hispanic teenagers, ages 15-19, have substantially higher birth rates than non-Hispanic White teenagers (National Center for Health Statistics, 1995). "In most cases, the groups with high proportions of births to teenaged mothers also have high proportions of nonmarital births...Thus, unless the birth rate for unmarried women declines, the number of nonmarital births may continue to increase" (National Center for Health Statistics, 1995, p. 9). These circumstances have tended to generate escalating rates of teen pregnancy, although all unmarried females giving birth are not all teens, minorities or poor. Frymier and Robertson (1991) have illustrated this problem quite clearly by stating that "poor children give birth to poor children; and in the process, our society gives birth to a permanent underclass" (p. 29).

The preceding information does not imply that schools have control over poverty, single parenthood or the birth rates of the population; however, schools can influence some of the life decisions of students in general, and poor minorities in particular, by
implementing appropriate programs which address the problems of these students. Understanding some of the life circumstances (poverty, single mothers, teen pregnancy, etc.) of minority children and the effects these circumstances have on a student's ability to learn are crucial initial steps. Although schools may not be able to offer aid in the form of monetary compensation or medical services, schools should be able to provide a safe, nurturing environment, conducive to learning and reflective of a more hopeful future.

Because demographic trends for the future do not appear to offer any relief from the dilemma of at-risk youth, schools must prepare themselves to educate these individuals. American education must not ignore this problem of youth in increasingly deteriorating circumstances, nor can educators declare that schools are not the cause of the problem. Schools may not be able to cure the problem, but they must deal with it. Census projections for the under-age-18 population in the United States, which incorporates the school-age population, predict that this age group will become increasingly non-White. The ratio of under-18 Black and Hispanic minorities is expected to increase 20 percent by the year 2020, changing the current ratio of 30:70 (30 percent Black and Hispanic to 70 percent White and non-Hispanic) to 50:50 (50 percent Black and Hispanic to 50 percent White and non-Hispanic) (Pallas, 1991). This is not to say that all Black and Hispanic children are at risk either in their socio-economic status or their educational success; but, barring any dramatic changes in the economic or educational resources of many Black and Hispanic families, or the schools which serve them, more, rather than fewer, children will be placed at risk. Consequently, unless viable school interventions or alternatives for at-risk students are sought and found, this school-aged population of the future will be at even greater risk than the children of today.
The Need for Viable Alternatives for At-risk Youth

Educators in urban schools which draw from these disadvantaged populations must confront the mind-set that results from poverty and the spirit of failure inherent in the students who flood their classrooms. Teachers, administrators, and other professionals in these urban schools not only must teach "the three R's," but also must provide more for these at-risk children (Macchiarola, 1988).

Therefore, at-risk students need school-based intervention programs which are designed to break the cycle of illiteracy and disenfranchisement. It is disconcerting to note that the U.S. public education system has been perceived widely as one which is failing American children (Chubb & Moe, 1990; Hirsh, 1992; Mumane, 1975; National Commission on Excellence, 1983; Pallas, 1991). In particular, the system has not been successful with the at-risk student population. Sinclair and Ghory (1987) stated that "one in four students drop out of school before graduation...and 40 percent of all junior high students probably have trouble with their reading materials" (p. 34). Further evidence of the failure of American schools to meet the needs of the at-risk population was brought to light in the Secretary's Commission on Achieving Necessary Skills (SCANS) Report of America 2000 (1991). This report acknowledged that "we are failing to develop the full academic abilities of most students and utterly failing the majority of poor, disadvantaged, and minority youngsters" (p. 3). The academic and social failure of at-risk students suggests the need for school programs, methods and strategies which are different from those currently in place in most urban schools. These new programs must consider the life environments of the at-risk students. If nothing else, alternative or supportive programs must offer windows to a better world and an accessible door through which urban students can gain entrance to that world. Methods and strategies must draw on the strengths and interests of these urban students instead of magnifying their
deficiencies. The aforementioned paradigm shift is necessary in that no child wishes to face failure every day in every aspect of life.

Although many at-risk children have faced considerable failure in their elementary school years, the problem is exacerbated during middle school and beyond. The focus on middle-school youth is necessary and appropriate in that pre-adolescents and adolescents are sensitive particularly to their deficiencies, whether perceived or real. The pre-teen and teen years are a critical time of awareness and the commencement of separation. If all one has seen previously is poverty and hopelessness, what better time than adolescence, when awareness is dawning, for some person or some institution to offer hope and the possibility of a better future through education (Wells, 1989).

Middle School as a Crucial Intervention Point

For those who believe that middle school interventions are too little and too late, Wehlage (1988) suggested the middle school/junior high age was "a crucial point at which intervention could take place...[and] unfortunately there is not much research on interventions for at-risk students at the middle-school level" (p.37). In response to early intervention programs, Pallas (1991) contended that at-risk youth need on-going interventions (not only early interventions) throughout their education careers because of their continuous exposure to family and community environments which usually are not conducive to normal educational progress.

Furthermore, Van Hoose and Strahan (1987) postulated that early adolescence (middle school age) is a developmental period when intellectual changes enable children to utilize their newly discovered ability for introspection. In turn, this capability causes their views of themselves to be affected by all their actions and all their personal contacts. Programs which seek to be effective with middle school, at-risk students must take into
account the sensitive nature of these students and the crucial, impressionable life-stage of the middle-school age group.

Because personal contacts are so important during the early adolescent phase of development, it is not surprising that middle school students who are at risk, especially those considered seriously at risk, need serious nurturing. Honest, caring adults must help these youth change their perceptions of others (adults and peers) and of the education process from negative to positive. These children particularly need supportive treatment from adults who honestly care about them as human beings (Frymier & Robertson, 1991). With this support, at-risk adolescents at least have a chance of breaking the constraints of poverty.

School/Business Partnerships and Mentoring

Elaborating on Frymier and Robertson's (1991) position, Hirsh (1992) connected the critical nature of the middle-school years to attitudes during later life and to business partnerships. He stated, "It is very difficult for vocational education, higher education or adult education to correct for attitudes created during secondary schooling [grades 6-12]. So partnership between businesses and secondary schools is crucial" (p. 25). Programs which provide interested, caring adults in the form of dedicated teachers, mentors, or both serve a much needed function for at-risk students. Assisting at-risk middle-school populations provides an ideal starting point for school/business collaborations since critical life choices are at stake.

Although economic necessity has driven education and business together, the alliance can be mutually beneficial and work to the advantage of students. "In a time of fiscal stringency and widespread criticism, schools are in search of allies" (Ruffin, 1983, p.4). Almost a decade later, Hirsh (1992) wrote,

The assertion of a link between economic failure and weaknesses in education has been a powerful stimulant for both schools and businesses to
get involved in partnerships: schools for fear that their pupils will become unemployed; firms in the hope that a better-educated workforce will increase productivity. (p. 45)

These school/business partnerships can take many forms; however, one type which involves mentorship can be particularly effective. Research on mentoring indicates that mentoring of disadvantaged youth frequently has a greater effect on the disadvantaged than the advantaged youth since there is a greater possibility for mobility (Harrington, 1987, as cited in Flaxman, Ascher & Harrington, 1988). The alienation resulting from fewer natural opportunities for at-risk youth to maintain enduring relationships with adults necessitates programs which provide the adult relationships absent in the lives of these young people (Flaxman et al.). Mentoring young adolescents can be beneficial because according to Erikson (1963, 1980, cited in Flaxman et al.)

...the task of adolescence is to determine where one fits into the larger social context outside of the family. Earlier social learnings, identifications and personal endowment place limits on the adolescent identity, but because it is a social formulation, opportunities offered by the environment offer a second chance for new social learnings and internal identifications. (p. 44)

Mentors and mentorship programs might provide that second chance that at-risk youth need so desperately.

**Summer School Interventions**

Two additional factors in the equation addressing the education of at-risk children are the decline of skill levels over the summer for inner-city children and the lack of exposure to important stimuli during the summer period. Murnane's (1975) micro level study, *The Impact of School Resources on the Learning of Inner City Children*, bolstered the contention that the reading and math skills of inner-city children "stagnate" during
the summer. Unlike their middle-class counterparts whose skills increased during the summer months, inner-city children's skills declined. Over a period of many summers, this decline was so great that it accounted for "more than half of the differences in word knowledge skills between older ghetto children and older middle class children" (Hayes & Grether 1969 study, as cited in Murnane, 1975, p. 88). Murnane posited that experiences such as camp, travel and family vacations, in which many middle class children engage, may provide important stimuli to learning. He concluded that "possibly one of the most effective ways to improve the achievement of inner city children would be to enrich their summer environment" (p. 89).

Self-Esteem

The link between self-esteem and achievement is convoluted at best. There are those researchers who believe that making students feel better about themselves will help students perform better academically (Beane, 1986; Fiscus, 1991; Friedland, 1992; Nave, 1990; Strahan & Strahan, 1988), those who argue that performing better academically is more likely to raise self-esteem (Black, 1991; Covington, 1992; Holly, 1987), and those who see self-esteem and academic achievement as having a more kaleidoscopic relationship with each other (Admundson, 1991; Purkey, 1970). Whatever the philosophical position, it is agreed that students need to be valued for themselves, not hollowly praised for performances and actions which are not acceptable. At-risk students, in particular, need to feel that their existence and those tasks required of them are worthwhile. The development of successful interventions for at-risk adolescents necessitates an awareness of those things which are relevant to this population and those programs and teachers who value the children for themselves.
The Newport News Pride Program

One intervention for at-risk adolescent students is the Pride Program, which was initiated as a cooperative effort between the Newport News (Virginia) Public Schools and Newport News Shipbuilding and Dry Dock. The program targeted teacher-selected seventh- and eighth-grade, at-risk students at Huntington Middle School, an inner-city middle school, which primarily serves inner-city youth. Pride students were identified in the spring of their sixth-grade year and entered the program during the summer prior to the beginning of seventh grade. The Pride treatment examined in this study consisted of two summers of residential placement for periods of four weeks and three weeks respectively. Students, their mentors, teachers and parents engaged in follow-up activities during the seventh-grade and eighth-grade school years. These follow-up endeavors included meetings, dinners, get-togethers and individual/student mentor activities. School district teachers and shipyard employees served as teacher/mentors during the program. Specifically, Pride consisted of academic classes to support skills remediate skills, or both; field trips, excursions or programs to enhance cultural, social or behavioral aspects of students; and physical/social activities to provide enjoyment. An in-depth description of the Pride Program for 1991 and 1992 is in Appendix A -- 1991 Executive Summary of the Pride Program and Appendix B -- 1992 Executive Summary of the Pride Program.

Pride's importance and uniqueness stem from the combination of the school/business partnership, the summer school time frame, the mentorship model and the enriched environment provided for these at-risk, middle-school students. Due to the paucity of middle-school program studies alluded to earlier and the need for additional information on the effectiveness of school/business partnership programs which target at-risk students, this study will contribute a vital and interesting segment to the contemporary body of educational research.
Study Design and Environment

This study was designed to examine the academic achievement, attendance, student conduct and self-esteem of students who participated in Pride for two consecutive summers. Academic achievement was measured using standardized test scores and school grades; attendance was measured using number of absences; student conduct was measured using number of discipline referrals; and total self-esteem was measured using a standardized instrument, the Coopersmith Self-Esteem Inventory. For the purpose of studying academic achievement, attendance and student conduct, 15 Pride students (treatment group) were compared to one group of 22 students from Huntington Middle School who were selected to attend Pride, but who opted not to (comparison group), and a group of 15 closely matched students (not afforded the opportunity to attend Pride) from a Newport News school demographically and geographically similar to Huntington Middle School (control group). Students were compared quantitatively across a period of five years—baseline—5th grade and 6th grade; treatment and post treatment—7th grade, 8th grade, 9th grade and 10th grade (or second year in high school) in three areas: academic achievement, attendance, and student conduct. These three components were analyzed because the Pride program managers determined these specific factors to be significant, both as selection criteria and outcome measures (Newport News Public Schools & Newport News Shipbuilding, 1991). Concomitantly, research has identified achievement levels, attendance and student conduct as important factors in determining "at-riskness" (Frymier and Gansneder, 1989, p. 142).

Since self-esteem enhancement was one of the objectives of Pride, 19 of the Pride students also were measured quantitatively by the use of the Coopersmith Self-Esteem Inventory, a standardized self-esteem measure, over a period of three years—baseline
Because there were many program effects which could not be examined quantitatively, this study has included a qualitative component to illuminate the following program aspects: participants’ perceptions of the effectiveness of the program; teacher observations and perceptions of student behavior and progress; and researcher observations of the implementation/conduct of the program.

Study Limitations

In applied research, rarely is the social setting controllable. Nevertheless, the researcher can increase generalizability of the intervention by selecting comparable comparison groups, taking multiple measures through time, or using some combination of these controls. The research design used for this study was a combination of the nonequivalent control group and the multiple measurement strategies. This combination was considered to be the best quasi-experimental design for urban settings and provided the necessary control for making cause-effect inferences (Andranovich & Riposa, 1993). Additionally, a narrative based on questionnaires, surveys, scales and researcher observations comprised the qualitative component of this research.

However, there are still limitations which need to be addressed which could not be controlled in the conduct of this study. These limitations included multiple treatment interference, lack of generalizability to other populations, uncontrolled variation in the treatment due to a variety of teachers and mentors, experimental mortality and the possibility of unknown intervening variables. More in-depth explanation of the limitations will be conducted in Chapter 3, the methodology portion of this dissertation.
Summary and Overview

In summary, Pride was not a "formal" or "standard" educational exercise. Pride incorporated a public school collaborating with a community employer in an effort to make an impact on the lives and futures of students at risk. The Pride Program was a realization that the success of future generations of urban youth lies in education and business working together. Hopefully, through the combined efforts of these two entities, the cognitive, affective and behavioral aspects of urban youth will be shaped to form productive, literate and skilled young adults.

The following chapter (Chapter 2) investigates the literature pertinent to the salient aspects of the study, while Chapter 3 discusses the methodology used in the conduct of the study. Chapter 4 contains the results of the study in narrative and graphic form, and Chapter 5 summarizes the research conclusions and discusses directions for future research.
CHAPTER 2
SURVEY OF THE LITERATURE

Introduction

In the United States, urban at-risk students are in great jeopardy of failing in school and in life (Crocker, 1994; Frymier & Robertson, 1991; Greer, 1991; Pallas, 1991). Innovative and calculated action is needed to help these young people. Some critics have ascertained that the American system of education has not been providing what is necessary for the vast majority of at-risk youngsters to be successful (America 2000, 1991; Comer, 1988; Greer, 1991; Hornbeck, 1987; Luke, 1986).

Other sources (National Center for Education Statistics, 1993) indicated that the high school completion rates for Blacks and Hispanics, who have historically been at greater risk than students in the general population, have improved between 1950 and 1991. Also, the large gap between Whites, Blacks and Hispanics on the National Assessment of Educational Progress (NAEP) test scores in reading, mathematics and science has narrowed slightly due to the rise in scores of Blacks and Hispanics, although a sizable gap still remains (National Center for Education Statistics, 1993). However, a local appraisal of student information on at-risk youth indicated that achievement, self-esteem, and attendance were low, whereas absenteeism, discipline referrals, and undesirable conduct were high in the at-risk population (Commission to Address the Needs of Students At Risk of School Failure, 1990). At the national and local level, a variety of programs, utilizing a multitude of formats, have been implemented throughout the nation's schools (Committee for Economic Development, 1987) to attack the problems of at-risk students. The Pride Program of Newport News, Virginia, is one such
A necessary and legitimate role for scholarly research is the study of at-risk programs, such as *Pride*, to determine effectiveness.

A survey of the literature is presented to provide a broad representation of those issues pertinent to at-risk students and the programs which serve them, particularly the *Pride* Program. Specifically, the literature review reflects those concerns and notions which have comprised the set of dependent variables in this study—academic achievement, attendance, student conduct and total self-esteem. Furthermore, the review takes into consideration the guiding philosophies and underlying intents of the original *Pride* program managers. Their philosophies and intents directed them in the planning and implementation of the program.

To understand why certain items were chosen for inclusion in this review, one must understand some of the prime philosophical and educational views espoused by the *Pride* program managers. Because of these views, certain goals were incorporated in *Pride*. The program managers had notions about how sixth- and seventh-grade, at-risk students at Huntington Middle School in downtown Newport News, Virginia, could be served best. These managers believed that academic achievement, attendance, student conduct and total self-esteem would be affected positively by the *Pride* Program. Although it had encompassed other goals, the anticipated outcomes of *Pride* selected for this study were measurable, either by standardized tests, additional standardized instruments or school records. However, some of the other envisioned effects of the *Pride* Program were not quantifiable, but the philosophical underpinnings and the program implementation still needed exploration. Qualitative observations were necessary to address the unmeasurable goals.

First, the long term goals of the *Pride* Program were to prevent students from dropping out of school and to help the students become productive members of society. To this end, the *Pride* Program purposefully restructured the school and living
environments of the students for approximately one summer month (for each of two consecutive summers) because the managers believed that both school and home environments played pivotal roles in effecting changes in at-risk students. Provisions were made for a caring, safe and drug-free environment with appropriate role models and significant amounts of structure. Newport News Public School teachers and Newport News Shipbuilding volunteers, who received training to work with Pride students, filled the roles of both teachers and mentors for the students, twenty-four hours a day. Heightened self-esteem and trust were the focal points of the program climate. The mainstays of the Pride Program were an emphasis on hands-on approaches to mathematics and communication (reading and language arts) combined with cultural enrichment outings. Other program activities were designed to develop goal setting strategies, skills for dealing with conflict and self-control, cooperation, appropriate social behaviors and a connection between academic learning, life goals and future work in the "real world."

Second, the students chosen for the Pride Program and for this study came from the population of an urban, inner-city middle school with a high concentration of students who had been labeled "at risk." The term "at risk" can take on a multiplicity of definitions, some of which are explored in this review; however, for the purposes of this study, "at risk" has been defined as it was delineated by the Pride Program managers for the purposes of student inclusion in the program: "(a) being over-age for grade placement and/or by low achievement; (b) lacking in social competence and personal adjustment; (c) having a poor attendance record and having frequent discipline referrals" (Newport News Public Schools & Newport News Shipbuilding, 1991, p. 3).

With the program aims and the student population of Pride in mind, this survey of the literature incorporates an investigation of the relevant topics noted in the two previous paragraphs. The survey contains five sections: (a) prevalent notions and research about
at-risk students, particularly middle- and high-school students; (b) an address of the four dependent variables—academic achievement, attendance, student conduct and total self-esteem and their various interactions; (c) research about middle school and summer school as intervention points for at-risk students; (d) research on the utilization of the mentorship model with at-risk students; (e) information about school/business partnerships.

Prevalent Notions and Research About At-risk Students

Definitions of risk. There are probably as many definitions of "at risk" as there are people defining the term. Frymier and Gansneder (1989) began with the assumption that, "children are at risk if they are likely to fail—either in school or in life" (p. 142). Pellicano (1987) stated that the current definition of "at risk" is those who

...are uncommitted to deferred gratification and to school training that correlates with competition and its reward, achieved status. Thus, we perceive them as being at risk of becoming unproductive, underdeveloped, and noncompetitive—of becoming a domestic 'Third World.' (p. 47)

Pallas (1991) defined at-risk youth as "young people [who] have been exposed to inadequate or inappropriate educational experiences in the family, school, or community" (p. 21). Greer (1991) characterized at-risk students as those who "are 'at risk' of not developing their potential and not succeeding in school" (p. 390). Furthermore, "these students are generally defined as children who, due to a combination of academic and social problems, are likely to drop out of school before graduating" (Lee, 1990, p. 12). Pellicano (1987) viewed at-risk students as those who were poor and alienated within the "modern" society (p. 47). In this same vein, Whitmore (1988) stated that "many of our at-risk students feel alienated from their schools, alienated from society, alienated from
the future, and alienated from any sense of self-worth or any sense that anyone cares" (p. 39).

Definitions of risk in the term "at risk" have a basis in specific factors, either demographic, academic or psychological, which have been found to correlate with negative school and life performances of children. Although there appeared to be many factors, certain themes recurred in the literature. The following section investigates those themes and the factors most relevant to the current study.

**Risk factors.** Since demographic factors were used to match students in the Pride Program study, it was necessary to determine which factors were the most related to risk. Also, this researcher noted that at least one teacher who recommended students for the Pride Program informally (hand-written teacher notes next to specific names on list of students) considered demographic factors, specifically family composition, when making recommendations for program inclusion. Both the matching of treatment-group students to control-group students and the teacher comments led to the need for an examination of certain risk factors.

Vacha and McLaughlin (1992) stated that "the single most consistent factor characterizing at-risk students is social class" (p. 9). A broader perspective was taken by Wehlage (1988) as he identified three broad correlates of dropping out of school. The first set of correlates was related to family and social background and included low socioeconomic status, race and ethnicity, single-parent home, low educational attainment by parents and siblings, English not the primary language of the home, and mobility (frequent family moves). The second set of correlates related to personal problems such as drug/alcohol abuse, pregnancy, psychological depression and low self-esteem, physical health problems and trauma produced by death or divorce in the family. School-related factors comprised the third set of correlates: course failure, credit deficiency, retention in
grade, suspension, disciplinary difficulties and a belief that the school is hostile to, or unconcerned about, the student.

Furthermore, Wehlage (1988) stated that individual students are affected by some, but usually not all, of these factors. He did not deny the complexity of the drop-out phenomenon which has both long-term and immediate, or precipitating, causes. However, he said that "it is important to note that studies show school factors to be the most powerful predictors of dropping out. School failure and disciplinary difficulties produce the highest correlations with dropping out" (p. 37).

In 1988, Frymier and Gansneder conducted a study for Phi Delta Kappa on students at risk (data published in 1989). The study involved 22,018 students in 276 schools throughout the United States. Data on 45 previously identified risk factors were collected on 6,173 fourth-graders, 7,762 seventh-graders, 7,417 high school sophomores and 666 others. The study sample was large, but it was neither stratified nor random. Each chapter of Phi Delta Kappa identified three schools (in some cases more) that were representative of the area that it served. Teachers and counselors studied school records of 100 "typical" students in each school. These professionals were people who knew each student best. They provided factual information about individual students to local researchers regarding the 45 factors identified by earlier research. It was found that between 25 percent and 35 percent of the 22,018 students in this study were seriously at risk and that one out of eight had a negative sense of self-esteem. Even these percentages were considered an underestimate because of the nature of the data collection. "If information was not available, that factor was not identified as contributing to a student's risk level" (Frymier and Gansneder, 1989).

For their study, Frymier and Gansneder (1989) agreed upon 45 risk factors, which had been identified by their review of previous research, as contributing to risk in at-risk youth. Then these risk factors were divided into five clusters: academic failure,
socioeconomic status, family instability, family tragedy and personal pain (Frymier & Robertson, 1991). Some of the factors of the 45 identified in research included number of parents in the home, parents' education level, age (over-age) for grade level, retention, attendance, suspension, self-esteem, primary language, school transfers, extracurricular activities, drug usage, life in a drug usage environment, physical or sexual abuse, and pregnancy. Frymier and Gansneder (1989) stated that "At-riskness is a function of what bad things happen to a child, how severe they are, how often they happen and what else happens in the child's immediate environment" (p. 142).

In other work with student risk factors, Pallas (1991) identified five prime demographic factors most associated with risk for school failure: (a) racial and ethnic identity, (b) poverty status, (c) family composition, (d) mother's education, and (e) language background. The National Education Longitudinal Study of 1988 (NELS:88) (National Center for Education Statistics, 1992) studied a cohort of 25,000 eighth-grade students in public and private schools across the United States. Baseline data was accumulated in 1988, with longitudinal, follow-up research completed in 1990. The findings of NELS:88 supported Pallas's listing of risk factors and reported that six percent of the eighth-grade class of 1988 had dropped out of school by the 10th grade. Relative to race and ethnic identity, NELS:88 stated that

Compared with other students, a larger percentage of male students, of black, Hispanic, or Native American students, and of students from low-socioeconomic backgrounds were deficient in basic skills. A larger proportion of black, Hispanic, or Native American students and low-SES students were also dropouts. (p. 5)

Furthermore, NELS:88 studied poverty status and family composition. Although single parent households (particularly female-headed households) and low socio-economic
status (SES) were known to be highly correlated, the NELS:88 report, after adjusting for SES, race/ethnicity and sex, found that

...students from single-parent families were still more likely to fail to perform at the basic proficiency levels. They were about one-quarter to one-third more likely to perform below the basic reading and math levels and were more than two and a half times as likely to drop out of school as were students from two-parent families. (p. 14)

Also, mother's education level has been found to be one of the primary, and possibly the most reliable, predictors of academic and economic success (Bempechat & Ginsburg, 1989; Natriello, McDill & Pallas, 1990; Pallas, 1991; William T. Grant Foundation, 1988). "Evidence suggests that children's academic outcomes are negatively affected by low levels of parent education....Relative to children of well-educated mothers, children of poorly educated mothers have lower grade point averages and lower achievement test scores" (Bempechat & Ginsburg, 1989, p. 9). Therefore, having a poor, undereducated mother becomes a risk factor. The Statistical Abstract of the United States, 1994 (U.S. Bureau of the Census, 1994), stated that in 1993, there were 4,531,000 children, of all races, under the age of 18, living with mothers (one-parent household) who had no high school diploma.

The fifth demographic factor was language background. This factor was not considered in the current study because none of the treatment group had English-as-a-second-language backgrounds.

Other characteristics identified by Wehlage (1988), Frymier & Gansneder (1989) or NELS:88 (1992) as predictors of risk status were academic or behavioral in nature. These factors included history of poor grades in mathematics and English, minimal or non-existent levels of homework completion, lack of preparedness for class, frequent
class cutting, frequent tardies or absences, frequent disruptive, inattentive or passive behaviors, and attendance at schools with large minority populations.

Barrington and Hendricks (1989) conducted a longitudinal, four-year study with an initial population of 651 students from a small city (35,000) and the surrounding rural area. Their study compared absences, achievement scores on the Iowa Tests of Basic Skills (composite), achievement/intelligence ratios, number of failing grades, grade point average (GPA) and teachers' negative comments for high-school graduates, dropouts, four-year nongraduates and five-year nongraduates. They found that graduates differed significantly from dropouts across all six variables. However, graduates differed significantly from nongraduates (after four years and five years of high school attendance) across one variable only—teachers' negative comments. These teacher comments successfully identified nongraduates (four years), nongraduates (five years) and dropouts when these students were at the elementary-school level. Possibly, this early identification by teachers may be attributed to a teacher's sense of the student's attitude and the student's actions which reflect that attitude.

Locus of control theory, as hypothesized by Greer (1991), might explain what teachers (in Barrington and Hendricks [1989] study) had noted in their comments. These teachers had extensive personal interactions with students. A child's sense of control, or lack of control, over his life situation was apt to be reflected in that child's attitudes and actions in the classroom. The teacher, out of necessity, would become familiar with, and have to manage, the child's attitudes and actions on a daily basis. Greer (1991), quoting from the Research Roundup, Fall 1990, stated that "at-risk students differ from their peers along a critical variable: locus of control" (p. 390). At-risk students frequently believe that their successes (if they have any) are attributable to luck or other outside influences rather than to their own efforts. "These children, because of the at-risk factors that have shaped them, lack any sense of mastery over their own lives" (Greer, 1991, p. 390).
**Working definition of at-risk students.** In 1991, the program managers for the Pride Program defined at-risk students as those students who met one or more of the following criteria: being over-age for grade placement and/or low achieving; lacking in social competence and personal adjustment; having poor attendance; and having frequent discipline referrals (Newport News Public Schools & Newport News Shipbuilding, 1991). For the purposes of this study, the above definition of at-risk students will be used as a working definition. Those sixth-grade students who met these criteria at Huntington Middle School were selected for inclusion in the Pride Program.

**At-risk students and educational systems.** Formal educational systems often create situations that impede learning for certain students, particularly at-risk students, by ignoring the complex interactions of the cognitive and affective domains. The extent of the influences of prior knowledge and the role of environment in filtering knowledge are factors frequently overlooked. Prior knowledge, as shaped by environment, influences all incoming information (Kozma & Croninger, 1992; Beane & Lipka, 1984). The extent of prior knowledge and the type of home environment (non-stimulating v. enriching, abusive v. nurturing and lacking in appropriate role models v. having appropriate role models) frequently constrict learning (Beane & Lipka, 1984). Pallas (1991) terms the lack of a stimulating environment as cultural deprivation. Vacha & McLaughlin (1992) describe this "nexus of family characteristics" as "cultural capital" (i.e., certain parental attitudes, values, and behavior patterns that account for the remarkable success of middle-class students) (p. 12). Depleted deposits of "high culture" (scoring well on tests about literature, music and art; participating in cultural events such as concerts), which is an element of cultural capital, have been shown to correlate highly with at-risk students who are academically unsuccessful, particularly males (Results of a study conducted by Paul DiMaggio, 1982, as reported in Vacha & McLaughlin, 1992).
Closely related to the cultural capital theory is another theory espoused by Coleman and Hoffer (1987). The "social capital" theory introduced by Coleman and Hoffer is similar to the cultural capital concept and concerns the impact of family and community on the achievement of children. Social capital was defined by these sociologists as the social relations which exist within the family or the community. Coleman and Hoffer stated that

...this research shows, just as has much other research, that outcomes for children are strongly affected by the human capital possessed by their parents. But this human capital can be irrelevant to outcomes for children if parents are not an important part of their children's lives, if their human capital is employed exclusively at work or elsewhere outside the home. The social capital of the family is the relations between children and parents (and when families include other members, relationships with them as well). That is, if the human capital possessed by parents is not complemented by social capital embodied in family relations, it is irrelevant to the child's educational growth that the parent has a great deal, or a small amount, of human capital. (p. 222)

Since early experiences of frustration and/or failure forge a formidable barricade to achievement (Brookfield, 1986) and cultural capital and social capital have been shown to be correlated highly with student academic achievement, some form of education different from the norm appears to be necessary in the case of at-risk youth.

The standard American education system is basically a one-size-fits-all proposition. However, if at-risk students are to benefit from education, some accommodations must be made prior to, or simultaneous with, at-risk students' inclusion in the standard curriculum. Vacha & McLaughlin (1992) strongly suggested that schools can help at-risk students overcome the scarcity of "cultural capital" and the cycle of low achievement. Self-defeating attitudes such as Ignoffo's (1988) "inner critic" (p. 704) must
be silenced, and repair work must be done on students' affective as well as their cognitive domains if public school education is to have a significant impact on students at risk.

**Academic Achievement, Attendance, Discipline and Self-esteem**

Not only are there many definitions of "at risk" and many ideas about the causes and characteristics of risk, but there is the basic problem of "more and more students [who] are lurching through school, out of control. More and more students, as the statistics testify, [who] are 'at risk' of not developing their potential and succeeding in school" (Greer, 1991, p. 390).

In Barrington and Hendricks' (1989) study (previously delineated in this chapter), the researchers found that dropouts showed "a clear indication of academic problems by the third grade. Achievement test scores [were] below the scores of his or her classmates and also below the level one would expect, given the student's ability" (p. 316). In contrast, the same study showed that typical nongraduates after four years or five years of high school (NG-4 or NG-5) did well in terms of achievement scores up until middle school, which indicated that NG-4's and 5's had a good mastery of basic skills. At the middle-school level "serious problems in academic work clearly begin to appear. In seventh grade a pattern of failing grades in some courses and a poor GPA is established, and that pattern generally continues throughout middle school and high school" (p. 317).

However, one critical difference between dropouts and the other three groups (graduates, NG-4 and NG-5) was the attendance pattern. Attendance for dropouts became increasingly poor (high rate of absences) into middle school and high school. Although attendance declined somewhat in the middle school and high school years for NG-4's and NG-5's, it still remained commensurate with the attendance pattern of high-school graduates. NELS: 88 reported that after holding constant race/ethnicity, sex and SES, regular absenteeism, tardiness, cutting classes, coming unprepared to class and smoking
were all found to be associated with school failure—scoring below basic proficiency levels in mathematics and reading—and to dropping out between the 8th and 10th grades (National Center for Education Statistics, 1992).

In summarizing information about underachievement in the areas of reading and mathematics, NELS:88 stated that "school failure does not happen in a single day or year, but is a culmination of a gradual process of school disengagement over time" (p. 37). Some of the factors involved in this disengagement were poor attendance, cutting class, disruptive behaviors and other actions which demonstrated the student's disinterest in school. Similarly, Pallas (1991) stated that "histories of school failure are cumulative, and with each passing year, it becomes more and more difficult to escape the weight of a growing mass of failure" (p. 18). However, Pallas's second issue was that schools tend to reinforce "preexisting social inequities" (p. 18). Because of this, the advantages and disadvantages that students bring with them are reinforced and perpetuated.

After adjustments for socio-economic status (SES) and sex, the NELS:88 report found that "students from all minority groups appeared to drop out at much more similar rates as those of white students" (p. 9). However, even after the adjustments for SES and sex, Black, Hispanic and Native American students were underachieving significantly in reading and mathematics. Black students were 77 percent more likely, Hispanic students 60 percent more likely and Native American students twice as likely to "perform below the basic math skill level" (p. 9). A comparison of basic proficiency levels in reading indicated similar results to those in mathematics: Black students were twice as likely as White students to fall below, Hispanic students were 74 percent more likely and Native American students were 187 percent more likely.

Bempechat and Ginsburg (1989), while allowing that statistics demonstrated the poor academic performance of Black, Hispanic and Native American students, suggested that other pertinent information about students' poor performance existed. These authors
asserted that although there was no difference in the cognitive skills of majority and minority students (Ginsberg, 1986, as cited in Bempechat & Ginsburg, 1989) or between middle- and lower-class children (Ginsberg & Russell, 1981, as cited in Bempechat & Ginsburg, 1989), there was a difference in the basic motivation to achieve. Even as early as first grade, that achievement gap was noticeable and growing.

Fordham and Ogbu's (1986) work on caste-like minorities indicated that an anti-academic achievement ethic might be mushrooming among Black and Hispanic children. Possibly, this ethic stemmed from years of discrimination and exploitation suffered by some minorities, particularly Blacks, Puerto Ricans and Native Americans. In turn, this exploitation fostered views that self-betterment did not provide uniform and consistent positive outcomes and that achievement and academic pursuits were solely the domain of Whites. Thus, one would be denying one's ethnic identity if one pursued academic success. Strong peer pressure was exerted to discourage students from academic success by viewing this behavior as "acting white" (p. 177).

In 1982, Fordham and Ogbu (1986) began an intensive study of 33 Black eleventh-grade students from Capital High in Washington, D.C. This school is a predominantly (99 percent) Black school located in a historically Black section of Washington, D.C., in what can be described as a relatively low-income area. When Black high-school students from Capital High were interviewed, it was found that both male and female underachievers purposefully undermined their own achievement by not studying or studying minimally, by cutting classes or having excessive absenteeism, or by becoming athletes, if possible. High achievers, although committed to doing well in school, reported that they had developed strategies for coping with academic success that included avoiding friendships with other high achieving individuals or shunning organizations which spotlighted high achievement, acting "crazy," being the class clown,
keeping their efforts a secret, putting "brakes" on their class participation and generally maintaining a low profile.

Fordham and Ogbu (1986) concluded that "The sources of their [Black students] school difficulties—perceptions of and responses to the limited opportunity structure and the burden of acting white—are particularly important during the adolescent period in the children's school careers" (p. 201). Similar findings were reported for Hispanics (Ogbu & Matute-Bianchi, 1986 as cited in Fordham & Ogbu, 1986) and, to a certain extent, American Indians (Erickson & Mohatt, 1982; Philips, 1983 as cited in Fordham & Ogbu, 1986).

Like Ogbu and Fordham's thesis, Farrell, Peguero, Lindsey, and White (1988) (cited in National Center for Education Statistics, 1992) conjectured that "disengagement from the educational process had less to do with disinterest in learning than with a self-protective disengagement from a system in which they had consistently been unable to earn scarce rewards" (p. 31). This observation, apparently, reflected attitudes of students at risk, regardless of their racial or ethnic label.

Although much of the research views underachievers and dropouts as helpless and hopeless individuals, Fine (1988) suggested a very different profile of dropouts. In her study of forty students enrolled in a special program in an alternative high school in the South Bronx, New York City, she found that "the dropout profile was of a student relatively nondepressed, critical of social injustice, willing to take initiative, and unwilling to conform mindlessly" (p. 90).

In explaining Fine's findings, it is helpful to examine Beane and Lipka's (1984) construction of four patterns of behavior relative to the student's choice of staying in school or dropping out: those students who have a clear self-concept and stay in school; those students who have a clear self-concept, but drop out of school; those students who have an unclear self-concept and stay in school; and those students who have an unclear
self-concept and drop out of school. As can be noted, all four patterns revolve around the students' self-concept—whether it is clear or it is unclear—and the relationship of self-concept to issues of self-fulfillment in adolescence. Before proceeding with further investigations of self-concept, self-esteem, or both, it is necessary to understand Beane and Lipka's definitions of these terms. They define self-concept and self-esteem as elements of self-perception. However, self-concept and self-esteem are not the same.

Self-concept was described as the roles and attributes one believes one possesses, while self-esteem was value laden—an evaluation one makes of those roles and attributes perceived in self-concept. For example: I am talkative. This is a self-concept. On the other hand, the value one places on being talkative (good, bad or indifferent) would indicate self-esteem. Beane and Lipka (1984) differentiate between self-concept and self-esteem in the following manner.

In short, self-concept is defined as the description of self in terms of roles and attributes....Self-esteem, on the other hand, refers to the evaluation one makes of the self-concept description and, more specifically, to the degree to which one is satisfied or dissatisfied with it, in whole or in part. (p. 5)

Many students do have clear and realistic goals (clear self-concept) which they feel their school experiences support. They enjoy success in school and their self-concept is compatible with the school's expectations and values; therefore, staying in school is a beneficial thing to do, and they stay in school. Others, who have a clear self-concept and do not drop out of school, do not necessarily internalize the school's values and expectations; however, these students find that they need something the school offers (a diploma, engaging in a sport or other specific activity) in order to fulfill their own future desires. As soon as the school fails to deliver what they need, they might choose to drop out.
A second pattern of behavior is that of a student who has a clear and realistic self-concept, but who does not perceive the school as supportive or beneficial in the fulfillment of needs. Usually this type of student does feel capable, independent and confident. He or she is the kind of adolescent who consciously and physically drops out of school and seeks some other environment which will lead to self-fulfillment. This kind of student appeared to be the type which Fine (1988) reported finding in her study.

The third and fourth patterns involve students who do not have clear and realistic self-concepts. Generally, they are confused adolescents. One type stays in school only because school serves as a kind of haven. In-school status, although not personally meaningful, appears to be more acceptable than dropout status. The other type (pattern four) of confused adolescent drops out of school. Unfortunately, students of the fourth type are the ones who are "likely [to] face unemployment, or at best, unsatisfactory employment [sic] and they perhaps become susceptible to negative influences or anti-social behavior standards" (Beane & Lipka, 1984, p. 64).

Two patterns of behavior reflect frustration with school experiences: the physical dropout (clear self-concept, but drops out of school) and the mental dropout (unclear self-concept, but stays in school). Beane and Lipka (1984) suggested that within these four patterns, one set of behaviors for dropouts represents withdrawal and the other represents submission. As a whole, however, both types of dropouts perceived school to be a personally pointless experience. Furthermore, Bloom (1977) stated that "Studies have indicated that school drop-outs tend to have more negative self-esteem as learners than those who stay in school, and that these feelings are a result of cumulative school failure which often begins early in the elementary school" (as cited in Beane & Lipka, 1984, p. 61).

However, only one facet of self-perception is represented by self-concept and self-esteem as learner. In other words, some dropouts leave school because they believe they
cannot succeed within it, but others may leave because school does not represent "a self-enhancing experience" (Beane & Lipka, 1984, p. 61) and other alternatives appear to be more appealing. Additionally, some young people may be physically present in school, but have mentally dropped out in terms of acquiescing to the institutional requirements and curricular objectives of the school.

As stated earlier, self-esteem is derived from the value base of the individual. Thus, when discussing the connection between self-esteem and academic achievement, one must be "sensitive to the dangers of inferring self-esteem on the basis of values held by anyone other than the learner" (Beane & Lipka, 1984, p. 7). This notion which incorporates the value system of the learner, relative to the self-esteem and achievement of students, appears to speak to some of the information gleaned about at-risk students. In particular, the notion is applicable to the theories and studies conducted by Fordham and Ogbu (1986) and the findings of Bempechat and Ginsberg (1989) concerning the "anti-academic achievement ethic." In essence, this ethic and self-esteem also are based on the value system of the learner (Beane & Lipka, 1984; Holly, 1987).

There are great disparities in the thinking and research about the connection of achievement and self-esteem. Black (1991) found that

...schools can have some influence on a child's self-esteem. However, research also shows that self-esteem, whether high or low, is [a] rather fixed and stable psychological state, not too amenable to change.

...Research consistently shows that improved self-esteem is an outcome rather than a cause of success and achievement. (p. 29)

In addition to Black's findings, Friedland (1992) stated:

Substantiating the critical importance of self-esteem are dozens of reputable research studies that show a high correlation between healthy self-esteem and the following behaviors: Higher educational aspirations; superior academic achievement; less chance of dropping out of school;
lower chance of becoming involved with drugs and alcohol; less chance of anti-social behaviors; greater acceptance of other people and less prejudice; [and] more involvement in pro-social behavior such as helping others. (p. 97)

The degree to which self-perceptions, and self-esteem in particular, enter into school achievement, has been, and continues to be the topic of considerable research. Purkey (1970) contended that there is a "persistent relationship" (p. 23) between the two variables of self-concept and school achievement. This interaction is kaleidoscopic in nature and results in self-perceptions influencing school achievement and school achievement influencing self-perceptions. Purkey (1970) describes the relationship and the interaction of variables as follows:

Although the data do not provide clear-cut evidence about which comes first--a positive self concept or scholastic success, a negative self concept or scholastic failure—it does stress a strong reciprocal relationship and give us reason to assume that enhancing the self concept is a vital influence in improving academic performance. (p. 27)

Not totally in contrast, but providing an alternative view of the self-esteem and achievement issue, Holly (1987), citing numerous studies (Bachman & O'Malley, 1986; Pottebaum, Keith & Ehly ,1986; Scheirer & Kraut, 1979; Wells & Marwell, 1986; Wylie, 1974), asserted that self-esteem is an effect, not a cause of academic achievement. Generally, these studies found no causal relationship between self-concept and academic achievement. Additionally, Scheirer and Kraut's study concluded that "the evidence for a causal relationship between self-concept and academic achievement was overwhelmingly negative" (Holly, 1987).

Holly (1987) stated that high self-esteem does not always lead to high academic achievement, although it can enhance the chances for a student's success because it gives him confidence to try. He further explained:
Self-esteem, then, can indeed increase chances of success by reducing depression and fear of failure. But it does not do so by providing a motive to succeed. There are two subsidiary conclusions relevant to teaching. First, the best way for students to increase confidence in their abilities is to actually acquire competencies that will justify feeling confident. Second, the best way to motivate students to do their best is to lead them to see for themselves the value of the goals we wish them to pursue. (p. 32)

As indicated by the previously presented perspectives on self-concept, self-esteem and academic achievement, many factors are actively involved. Student motivation is affected by fear of failure; therefore, he may not attempt learning tasks. Success as a learner is dependent on motivation. Self-esteem as a learner cannot be enhanced unless the student succeeds. Motivation to be a learner is stifled because he is afraid to attempt learning tasks because he has failed so frequently. Thus the cycle of failure perpetuates itself. The conundrum of which comes first, healthy self-esteem or good academic achievement still persists. However, what can be concluded is that situations which promote negative self-esteem, poor academic achievement, or both are not beneficial to anyone.

Middle School and Summer School Intervention Points

Middle school. "There is probably no more dramatic age period in the human lifespan than transescence or emerging adolescence" (Beane & Lipka, 1984, p. 20). Generally, a child's entrance into the transescence stage [ages of 10 to 14 (Bromberg, Commins, & Friedman, 1980 as cited in Beane & Lipka, 1984, p. 20)] occurs simultaneously with entrance into middle school. Thus, the fact that middle school is a critical time cannot be ignored. It is a momentous period for physical development as well as cognitive, psychological and emotional development. "Since transescence is
virtually unique in the dramatic changes that characterize it, the period might also be considered as one of acute vulnerability" (Beane & Lipka, 1984, p. 23).

For those who believe that middle school interventions are too little, too late, this misconception could not be less accurate. In reality, as Wehlage (1988) stated, middle school/junior high age is "a crucial point at which intervention could take place...[and] unfortunately there is not much research on interventions for at-risk students at the middle school level" (p. 37). In 1958, Piaget and Inhelder (as cited in Beane & Lipka, 1984) concluded that the onset of formal cognitive operations occurs in transcence. Although it is not implied that cognitive development reaches maturity during transcence, it can be said that most middle-school children do begin to develop a capacity for abstract or conceptual thought. This emergence of abstract thought leads to questioning of values and ideas, particularly those held by significant adults (e.g., parents and teachers). Peer group interaction and need for acceptance also becomes significantly stronger. All of these physical, emotional and cognitive changes carry with them the price of uncomfortable dissonance for the transcent. Thus, the years of transcence are the optimal times at which to clarify cognitive goals, educational and life values, and personal roles.

Research has shown that many of the problems related to poor high school performance have their foundations in the middle school years (Barrington & Hendricks, 1989; Committee for Economic Development, 1985). Significant differences in attendance, number of failing grades, and serious problems in academic work begin to appear at the middle-school level. Barrington and Hendricks' (1989) longitudinal study found that the typical nongraduate (student who had attended 4 or 5 years of high school, but had not earned a diploma) maintained a pattern of good attendance and achievement in elementary school, followed by failing grades and reduced academic achievement in middle school, while the graduate's level of attendance and academic achievement
remained relatively consistent. For nongraduates, seventh grade was found to be the point at which a pattern of failing grades in some courses and a poor GPA were established. The pattern, once established, was found to continue throughout middle school and into high school. On the other hand, the dropout showed clear manifestations of academic and attendance difficulties by third grade, three to four years earlier than the manifestations of nongraduates. For dropouts, poor attendance and underachievement increased significantly from fifth grade on. However, significant patterns of poor attendance and underachievement were not established by both nongraduates and high-school dropouts until the middle school level.

There has been speculation about the reason for the critical nature of the middle school phase of education. The probability exists that this phase might be the breaking point for at-risk students. It has been posited that middle school is "the point at which lower achievers internalize negative attitudes toward school and demonstrate chronically poor school performance" (Committee for Economic Development, 1985, p. 48). Becker (1990) contended that middle school is a critical time period because students are developing a "long-term attitude toward the role of education in their lives" (p. 450). Wehlage (1988) maintained that "this is the time when a student develops a clear academic self-concept. This is when students begin to sort themselves into 'winners' and 'losers' in school" (p. 37).

At-risk students already have significant burdens of poverty, alienation and/or other deleterious environmental or school related factors. Wells (1989) emphatically stated that "dropout prevention strategies, therefore, must be targeted toward the middle-school grades, when the stresses of schooling related to academic achievement, behavior, and membership pose grave danger to already disadvantaged students who have the fewest resources to cope with new hurdles" (p. 27). Some of the resources they lack, due to cost factors, might be educational or cultural summer activities.
Summer school. Although research on summer school learning is quite sparse. Ascher (1988) indicated that "disadvantaged students lose ground dramatically during the summer" (p. 3). In his study on inner-city children, Murnane (1975) concluded that "the summer appears to be a period when the reading skills of inner city children stagnate and their math skills decline" (p. 88). He postulated further from a study conducted by Hayes and Grether (1969) that the reason for the decline in the skills of inner-city, poor children and the maintenance or increase of skills of children living in middle-class neighborhoods could have been due to middle class children having had opportunities to go to camp, on Vachations, or both, while most inner-city children lack these chances. Murnane concluded that "these experiences may provide important stimuli to learning....Possibly one of the most effective ways to improve the achievement of inner city children would be to enrich their summer environment" (p. 88).

Vacha and McLaughlin (1992) suggested that schools can compensate for the lack of experiences poor at-risk children suffer by providing them free or low-cost summer programs and cultural experiences like those which middle-class children receive at home. Thus, the school could provide at-risk children the summer opportunities which could stimulate learning and decrease the summer stagnation of skills exhibited by at-risk youth.

In contrast Heyns (1986) and Ascher (1988) suggested that the limited, and generally weak evaluation attempts of summer school programs have indicated that school performance is not enhanced significantly by summer school attendance. Until more uniform and more rigorous research is conducted on summer school interventions, it is doubtful that an accurate picture of the effects of those interventions on academic achievement will be obtained.

Although previously cited research has shown no conclusive proof that summer school interventions provide significant benefits, intuition and logic suggest that any
intervention which affords additional help to an at-risk student may be beneficial to that
student socially, academically, or both. Thus, when students are found to be at risk
because of low self-esteem or a variety of other factors, school districts look for ways to
help those students. One of the helping strategies is initiating new interventions such as
summer school programs.

A program which proved successful for high school students was the Porterville
Union High School District (California) Summer Work Camp. This program, for at-risk
high school students, offered a two-week volunteer work experience camp in the Sequoia
National Forest. Results indicated improved grade point average, reduction of absences
and reduction in behavioral referrals. The majority of summer programs are employment
programs which target high school students. Although, the Boston Compact is one of this
type of program, it has broadened its scope in order to bring it into closer touch with
middle schools. Boston Compact's essential elements include exchanging jobs for
improvements in school performance in areas such as basic skills and attendance. The
lack of literature on, or the actual lack of, summer school programs for at-risk middle-
school youth is indicative of a serious service gap for a critical student population
(Wehlage, 1988; Wells, 1989).

Mentorship and At-risk Students

The Education Commission of the States (1988) described mentoring as a very
personal, one-on-one relationship. The Commission further stated that mentoring is an
effective way of helping at-risk youth because it encourages and guides personal growth
and development in an individual. More definitively, the Education Commission
concluded that "Whether by peers, college students or caring adults, one-on-one
mentoring addresses the major need of at-risk students--the need to build self-confidence
and see the connection to a positive future" (p. 47).
Since transesence and adolescence are times of dramatic physical change, emotional dissonance, and usually identity crisis, they are times when a child, particularly a disadvantaged child, could be helped by a caring adult. Flaxman, Ascher & Harrington (1988) stated that "earlier social learnings, identifications and personal endowment place limits on the adolescent identity, but because it is a social formulation, opportunities offered by the environment offer a second chance for new social learnings and internal identifications" (p. 36).

Adolescent experiences for "advantaged" middle-class youth can modify self-concepts and roles; however, these experiences generally reinforce earlier self-concepts and roles. Socializing experiences and acceptable roles are more similar to past childhood encounters in the social arena. However, disadvantaged youth must cope with the incongruity of acceptable social roles which usually are at odds with their previous experiences and roles. "For less socially, economically, and educationally advantaged youth, often from an urban and minority background, available social roles may be less congruent and more confusing" (Flaxman, et al., 1988). This dissonance can make the task of navigating adolescence much more stressful, confusing and perilous. Those few at-risk youth who do become successful adults often have had supportive social resources, opportunities and an individual quality of personality and character which has contributed to their success. Most disadvantaged youth do not have these assets at their disposal. For these reasons mentoring can offer a vital dimension to programs which target at-risk students. Mentoring offers the opportunity for social capital (Coleman & Hoffer, 1987), networks of caring relationships between and among people, to be developed or increased. This social capital can sustain and encourage at-risk youth.

Research has found that successful mentoring occurs when mentor and mentee are proximal in social class; however, social class and gender matching are not the only ways to bridge social gaps. Some of the critical aspects of a viable mentor-mentee relationship
include trust, sensitive support, timely contacts and other appropriate resources (Ascher, 1988).

Basically there are two types of mentoring: instrumental mentoring and psychosocial mentoring. Instrumental mentoring utilizes the mentor in the role of sponsor, patron, host, advocate, teacher, advisor or coach for the mentee. The general thrust of instrumental mentoring is to change the social circumstances of the mentee. In psychosocial mentoring the mentor acts as a role model, an example, confirmor, counselor and general source of support. The conscious or unconscious intent of psychosocial mentoring is to change the mentee personally (Flaxman, et al., 1988).

Planned mentoring has been considered a modest intervention because its power to substitute for missing adults or inappropriate role models is limited, and it can not serve all who need it. Also, in many programs, mentoring is not usually of sufficient duration to make significant, notable impacts. However, mentoring can improve the social chances of some adolescents by leading them to new resources, instilling in them an orientation to individual achievement and providing them with much-needed support (Ascher, 1988; Flaxman, et al., 1988).

Some successful programs which involve mentoring include Ogilvy and Mather: Mentoring in the Graphic Arts (1976); U.S. Navy Saturday Scholars (1983) involving the Chicago Public School System and the Naval Training Center; "Project Mentor: Adult Attention for Kids Who Need It" in Austin (Texas) using mentors from the business community; and Partners in Education, Tulane University collaborating with Live Oak Middle School in New Orleans. These and other mentoring programs which are being implemented cooperatively by school districts and businesses or organizations, target at-risk students. Such programs enlist adults to provide much needed guidance for, and personal contact with, at-risk youth. These programs and other programs like them can
provide safety nets for at-risk students, and they can prevent alienation and conflicts over meeting new social and academic demands.

**School/Business Partnerships**

"Strong schools are not possible without strong businesses. Strong businesses are not possible without strong schools" (Wynne, 1986, p. 94). In an increasingly global economy, these two deceptively simple statements have major implications. Maintaining the edge in an extremely competitive world market demands that the citizens and workers of a society be highly educated, skilled and knowledgeable. For schools to produce the type of worker and citizen necessary, help is needed.

Economic necessity has been the force which has driven schools and businesses into collaborative arrangements; however, the alliance can be mutually beneficial, and definitely can work to the advantage of students, particularly at-risk students. Ascher (1987) contended that the "school and the family have become too frail for the enormous tasks at hand" (p. 4). Coleman and Hoffer (1987) also hold similar views to those stated by Ascher (1987). In the chapter titled "Schools, Families, and Communities," Coleman and Hoffer (1987) stated that

...preceding sections have examined the implications of the social context surrounding a school and changes in the social context that have reduced the social capital available to children and have reduced the school's ability to educate its students. It is important to ask a further question as well: Given the changes that have reduced the social capital outside the school, what can be done to increase the social capital available to children? (p. 233)

A broadened view of those who must be called upon to participate in the task of educating our nation's children is needed. The Committee for Economic Development (1987) urged the combined efforts of many institutions to educate children, and in
particular advocated a particularly strong role for business. The role of business would be both that of pacesetter in educational change and advocate in support of educational programming and funding. "School-business partnerships are a valuable part of the education system" (Ruffin, 1983, p. 2).

In particular the public/private partnerships supporting at-risk youth can provide several potential benefits to collaborative efforts. These efforts include: greater visibility to child and family issues; additional legitimacy to policy proposals addressing those concerns; seed funding for new and innovative approaches to child and family concerns; volunteers for one-to-one guidance, support and role models for children and families; and oversight which generally improves public sector accountability (Bruner, 1991). Justiz and Kameen (1986) noted that "as the only social institution into which all our youth are drawn for prolonged exposure, the school is unquestionably the chief battleground on which today's largely unchecked unemployment-poverty threat to human dignity and economic growth can be fought" (p. 107). Because of this, Justiz and Kameen argued that there is a convincing case for schools and businesses to become allies in a "battle for the minds of alienated youth, [so] they too will return to fight the good fight" (p. 107).

Conclusion

At risk-students pose many problems for society, for schools and for themselves. Many of those who are considered at risk of failure in school, in society, or both come from poor, minority, urban backgrounds. These individuals have been exposed to deleterious environmental and educational experiences. American society and American schools in particular, are faced with the enormous task of helping these youth. The Pride Program of Newport News Public Schools and Newport News Shipbuilding was one program which was tasked with providing some help and some alternatives for at-risk,
middle-school students. **Pride** students, who resided in the inner city of Newport News, had been identified by their teachers as low achieving or over-age, lacking social competence and personal adjustment, or having poor attendance records and/or frequent discipline referrals. **Pride** utilized public school teachers and Newport News Shipbuilding employees as instructors and mentors. The program addressed the following needs: a link between education and business; an enhancement of the cognitive aspects of students, as well as a rigorous address of the affective domain; and a restructuring of the student's environment to produce the desired effects.

In today's fiscal reality of diminishing public funds for special alternative or enhanced educational programs such as **Pride**, more and more school districts are looking for business partnerships, and concurrently, businesses are looking to influence the shaping of the "product" produced by American education. Because of this growing mutual interest, it becomes increasingly important to evaluate programs which utilize the public/private model relative to urban education. The at-risk population, which seems to be increasing at an alarming rate (Frymier and Gansneder, 1989), either by better reporting or actual numbers, is of major concern not only to school systems and employers, but also to society in general. Pallas (1991), who defines at-risk youth as "young people [who] have been exposed to inadequate or inappropriate educational experiences in the family, school, or community," (p. 21) stated that 40 percent of the school-aged population is at risk.

Therefore, evaluations of programs which target at-risk students and involve cooperative efforts of the private and the public sector are essential. Furthermore, Becker (1990) noted that, "it is particularly important that schools serving the middle grades pay careful attention to the what and the how of instructional practice, because early adolescents are developing long-term attitudes toward the role of education in their lives" (p. 450). For these reasons, program evaluations, and subsequent longitudinal
research on student achievement of at-risk students who have participated in special programs, are critical in the formulation of concepts, models, policies and strategies which can provide a better educational framework for effective intervention with at-risk children. The chain of illiteracy and disenfranchisement must to be broken. One way to do this is to provide alternative school programs to educate at-risk youth and study the outcomes over time.
CHAPTER 3
RESEARCH METHODOLOGY AND PROCEDURES

Introduction

This study examined the intervention, the Pride Program, and the perceptions of the participants qualitatively. Furthermore, the study sought to determine if differences existed among three selected groups of at-risk students after exposure of one group to a treatment (Pride Program). The treatment group (Pride Program participants for two summers) was compared to two other groups (comparison and control) who had not participated in the program. Four program components (academic achievement, attendance, student conduct and total self-esteem) were examined quantitatively.

The objective of the Pride Program was to influence the academic and personal futures of selected at-risk students at Huntington Middle School—an urban, inner-city middle school in Newport News, Virginia. The program's long-term goals were to prevent dropouts and to promote the formation of responsible and productive young adults and future workers. As an intermediate step to attaining the two stated long-term goals, the Pride Program endeavored to influence the academic achievement, attendance, conduct and total self-esteem of the participants in a positive manner. Newport News Public Schools teachers and Newport News Shipbuilding employees were employed as instructors and role models. This study sought to examine the intermediate goals by measuring academic achievement (as reflected by standardized test scores and school grades), attendance (as reflected by number of absences) and student conduct (as reflected by the number of discipline referrals) over a five-year period and total self-esteem (as reflected by a standardized self-esteem inventory) over a three-year period.
The qualitative component of this study examined the Pride Program itself. This component examined three Pride Program aspects: the program impact on self-esteem, cooperation, trust (Pride '91), social behaviors, goal setting, and academic skill levels; the implementation/operation of the program; and the participants' perceptions of the program over the first two years of its operation (summers of 1991 and 1992). This component was descriptive in nature and focused on the aspects aforementioned.

For the quantitative component, three groups of students comprised the study's purposeful sample: the treatment group, which included at-risk, sixth-grade (initial grade) students whose names were submitted by sixth-grade teachers at Huntington Middle School for inclusion in the program, and who in fact did attend the program for two summers; the comparison group, comprised of at-risk, sixth-grade students from that same list of submitted names, who opted not to participate in the Pride Program; and a control group (matched to students in treatment group) of at-risk, sixth-grade students from another middle school, demographically similar and within close physical proximity (0.8 of a mile) to Huntington, who were not afforded the opportunity to participate in Pride. Table 3.1 contains the demographic profiles (entire school) of the two schools, Huntington and the matched school. Demographic profiles (sex and ethnicity/race only) for sixth grade only at Huntington and at the matched school are contained in Table 3.2.

Although neither the comparison group nor the control group received the specific treatment, or any part of the treatment, this researcher considered the possibility of systematic differences between the treatment group and the comparison group due to the "volunteer" nature of the treatment group. To control for this possible bias, a matched control group was constructed using eight variable parameters on which control-group students were matched to treatment-group students. Five parameters were demographic and included race, gender, socio-economic status (participation in free or reduced lunch program), parent constellation (number of parents in the home) and student age. The
Table 3.1

**Schools' Demographic Profiles ( Entire School) for SY 1990-1991**

<table>
<thead>
<tr>
<th></th>
<th>Huntington</th>
<th>Matched School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total School n =</strong></td>
<td>890</td>
<td>602</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>471</td>
<td>316</td>
</tr>
<tr>
<td>female</td>
<td>419</td>
<td>286</td>
</tr>
<tr>
<td><strong>Ethnicity/Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Black</td>
<td>716</td>
<td>351</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>White</td>
<td>170</td>
<td>242</td>
</tr>
<tr>
<td><strong>Economically Disadvantaged</strong></td>
<td>643</td>
<td>301</td>
</tr>
<tr>
<td>Over-age</td>
<td>453</td>
<td>255</td>
</tr>
<tr>
<td>Transiency</td>
<td>156</td>
<td>108</td>
</tr>
<tr>
<td>Talented and Gifted</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Special Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resource</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>self-contained</td>
<td>88</td>
<td>38</td>
</tr>
<tr>
<td><strong>Percent ADA</strong></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Absent &lt; 11 Days</strong></td>
<td>457</td>
<td>349</td>
</tr>
<tr>
<td><strong>Regular Term Dropout</strong></td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**Note.** Source of information was Division and School Demographic Profile 1990-91, Newport News Public Schools.

* Students currently receiving free and reduced lunches;  * Students whose age (as of 9-30) is 6 or more years greater than their grade level;  * The students who withdrew from school for any reason;  * Average Daily Attendance (ADA): The sum of the number of the student days in attendance divided by the sum of student days in membership times 100.
Table 3.2

Schools' Demographic Profiles—Grade 6 for SY 1990-1991

<table>
<thead>
<tr>
<th></th>
<th>Huntington</th>
<th>Matched School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade Level n =</strong></td>
<td>262</td>
<td>215</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>132</td>
<td>111</td>
</tr>
<tr>
<td>female</td>
<td>130</td>
<td>104</td>
</tr>
<tr>
<td><strong>Ethnicity/Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Black</td>
<td>207</td>
<td>117</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>White</td>
<td>55</td>
<td>93</td>
</tr>
</tbody>
</table>

Note. Information obtained from Newport News Public Schools Membership Count for June 14, 1991.

other four initial parameters, which were later reduced to three, were school related: achievement (fifth-grade composite percentile scores on the Iowa Tests of Basic Skills [ITBS]; fifth-grade ITBS standard scores [SS] in reading comprehension, total language, and total math); number of absences; discipline referrals; and inclusion in special education. The last variable parameter, special education inclusion, was dropped when it was found that special education students had no fifth-grade ITBS scores available during the year that baseline data were collected. Thus, since no standardized academic baseline data were available, those students (2 in treatment group) were eliminated from the study of academic achievement, attendance and student conduct. Therefore, only eight parameter variables were used in the construction of the matched control group.
For initial matching of the treatment to the control group and for gross comparisons between all three groups to determine comparability, ITBS scores, number of absences and number of discipline referrals were collapsed (number ranges were constructed). See Table 3.3 for parameters used to collapse data. For the full statistical analysis, ITBS scores, number of absences and discipline referrals were disaggregated and individual numbers were used.

Table 3.3

Initial Banding Parameters for Matching and Group Comparisons

<table>
<thead>
<tr>
<th>Bands</th>
<th>Band 1</th>
<th>Band 2</th>
<th>Band 3</th>
<th>Band 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th-ITBS Composite %ile</td>
<td>(80-120)</td>
<td>(121-140)</td>
<td>(141+)</td>
<td>--</td>
</tr>
<tr>
<td>5th-ITBS Standard Scores*</td>
<td>(0-10)</td>
<td>(11-20)</td>
<td>(21-30)</td>
<td>(31+)</td>
</tr>
<tr>
<td>Attendance</td>
<td>(0-3)</td>
<td>(4-7)</td>
<td>(8-11)</td>
<td>(12+)</td>
</tr>
<tr>
<td>Discipline Referrals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Banded parameters were used for initial matching of the control group subjects to the treatment group subjects. Also, banded parameters for fifth-grade ITBS standard scores, attendance and discipline referrals were used for the Fisher's Exact Test

* Reading Comprehension, Total Language and Total Mathematics; b Number of days absent per school year; c Number of total referrals per school year.

The primary independent variable of the research was participation in the Pride Program for two consecutive summers. Three of the four dependent variables, academic achievement, attendance and student conduct, were measured quantitatively utilizing the Fisher's Exact Test to determine initial group comparability; Kendall's tau statistic to determine group comparability relative to high school English and math levels; general linear models (GLM) procedure for analysis of variance (ANOVA) and Student-
Newman-Keuls post hoc comparisons, when applicable; GLM procedure analysis of covariance (ANCOVA); GLM procedure for repeated measures ANOVA; and GLM procedure for repeated measures ANOVA of contrast variables, when applicable. The fourth variable, total self-esteem, was measured using GLM multivariate analysis of variance (MANOVAs) with the Wilks’ lambda criterion and contrasts (GLM repeated measures ANOVAs). For the purposes of brevity and clarity, all procedures utilizing the general linear models (GLM) procedure mentioned in the remainder of the study will simply be identified as ANOVAs, repeated measures ANOVAs, ANCOVAs or MANOVAs. The remaining portion of this chapter is a detailed reporting of the methodology employed in this research.

**Qualitative Research Component**

The qualitative portion of this research has examined the Pride Program itself: the program impact on students in the areas of self-esteem, cooperation, trust (Pride ’91), social behaviors, academic skill levels and goal setting; the implementation/operation of the program; and the participants' perceptions of the program. Based on researcher observations, field notes, surveys, scales and interviews, this portion of the study was utilized to monitor and adjust program components and to aid program managers in making decisions. This segment of the study is comprised of narrative summaries of two program evaluations conducted by this researcher in 1991 and 1992—the first and second years of the Pride Program.

**Quantitative Research Component**

**Research Questions.** This study examined the differences among three at-risk groups of students on the dependent variables of academic achievement, attendance and student conduct over a period of five years. Furthermore, the study investigated total
self-esteem over a period of three years for those students who were in the treatment group only. Specifically, this study explored the following questions in a quantitative manner:

1. Did the students who attended the Pride Program for two summers achieve significantly higher scores on measures of academic achievement, over a five-year period, than students who opted out of the program, students who were not offered the program, or both?
2. Did those same Pride students exhibit significantly better attendance (fewer absences), over a five-year period, than the comparison group students, control group students, or both?
3. Did Pride students exhibit significantly better student conduct (fewer discipline referrals), over a five-year period, than students in the comparison group, the control group, or both groups?
4. Within the treatment group (Pride students), was there a significant difference in scores on a measure of total self-esteem, over a three-year period?

**General hypotheses.**

1. There are no significant differences on measures of academic achievement between the treatment group, the comparison group and the control group subjects at the end of a five-year period (end of Grade 5 to end of Grade 10—or second year of high school).
2. There are no significant differences on measures of attendance between the treatment group, the comparison group and the control group subjects at the end of a five-year period (Grade 6 to end of Grade 10—or second year of high school).
3. There are no significant differences on measures of student conduct between the treatment group, the comparison group and the control group subjects at the
end of a five-year period (Grade 6 to end of Grade 10—or second year in high school).

4. There are no significant differences on measures of total self-esteem over a three-year period (end of Grade 6 to end of Grade 9) for the treatment group students (at-risk students who participated in the Pride Program for two summers).

Method

Selection of sample. Ninety-four sixth-grade students from Huntington Middle School, an inner-city middle school, were selected by their sixth-grade teachers for inclusion in the Pride Program based on the following program criteria (Newport News Public Schools and Newport News Shipbuilding, 1991): (a) being over-age for grade placement (2 or more years older than grade level age), low achieving (grades in the D range), low scores (1st or 2nd quartile) on the composite score of the Iowa Test of Basic Skills, or all of the aforementioned; (b) lacking social competence, defined as socially acceptable behavior in a variety of social contexts, and personal adjustment (socially acceptable, interpersonal behavior when relating to peers or adults); and (c) having a poor attendance record and frequent discipline referrals. The parameters for "poor" (as defined by Newport News Public Schools) and "frequent" (as defined by the researcher with input from assistant principals) were set at 11 or more days absent and 4 or more discipline referrals in the past school year.

Additionally, students needed to return signed parent permission slips for inclusion. Forty-seven students returned permission slips, 44 students began the program on July 7, 1991, and 38 students completed the program on August 1, of 1991. Twenty-nine students returned on July 26, 1992, for the second summer of Pride, and 26 of the returning students completed the program on August 13, 1992. Fifty students of the
original selection group opted out of the program and did not attend the Pride Program at all. The comparison group was comprised of those students who were selected at the same time, by the same teachers (using the same criteria), but who did not participate in the program.

In order to construct a more robust research design for the study, a control group was created. Matching, rather than random selection, was chosen as a control technique because of the nature of the population being studied (extreme characteristics). The control group was created to guard against self-selection bias which could create a confounding-variable situation. Students who self-selected into, or self-selected out of, the treatment group could possess a systematic difference. It is possible that this selection bias could influence the outcome of the study. Thus, the statistical differences could be due to selection and not treatment.

This situation could prove to be a threat to internal validity, thus providing a false research finding. The control group was selected from a group of sixth-grade students who attended a Newport News middle school which was the most demographically similar (based on school district statistics for the school year [SY] 1990-91) and geographically proximal (0.8 of a mile apart) to Huntington Middle School. The total 6th-grade population (N = 215) of this school for SY 1990-91, was used for the purposes of extracting matching students for the treatment group, thus creating a control group. Students for the control group were matched to the students in the treatment group for whom baseline data were available, who had complete data sets and who had not participated in formal summer school during their middle school years (n = 15). The initial matching was based on nine criteria: race, sex, SES (as identified by free or reduced lunch status in SY 1990-91), number of parents in the home in SY 1990-91, achievement as measured by the composite scores on the Iowa Test of Basic Skills (ITBS) in fifth grade, number of absences in sixth grade, age (over-age or not, as
determined by school district records in SY 1990-91), number of discipline referrals in sixth grade and special education classification in sixth grade. Special education classification was eliminated as a criterion when no ITBS baseline data was available for those students. The final reduced sample for the study included 15 treatment group students, 22 comparison group students and 15 matched control group students. The specific demographic and scholastic profiles of the three groups—treatment, comparison and control—are contained in Table 3.4.

Although the actual treatment began during the summer prior to the students' seventh grade year, historical data for fifth and sixth grades were gathered to provide baseline information, determine pre-treatment group equivalency, control for selection-maturation interaction and regression (which poses a significant threat when studying groups with extreme characteristics).

Equivalency of student samples was established by using demographic information, historical test data for achievement (fifth-grade ITBS standard scores on reading, total language and total math subtests and sixth-grade letter grades for reading, English and math) and Newport News School District historical records on attendance and discipline. A series of Fisher's Exact Tests, which is the recommended alternative to the chi-square tests if cell sizes are less than five, was conducted to determine the initial equivalency of the three groups. The Fisher's Exact Tests were run on the initial sample of 61 students (the N prior to data elimination) and on the 52 students remaining after data elimination to insure that initial group comparability was maintained. Furthermore, high school levels of English and mathematics were examined for equivalency among the three groups using Kendall's tau. Because of the nominal and ordinal nature of the two variables—group (treatment, control, comparison) and level (of English and mathematics), the Kendall's tau statistic was used to find if there were any initial significant differences between groups (N = 52) relative to the levels of English and mathematics which were
Table 3.4

Demographic and Scholastic Profiles for SY 1990-1991

<table>
<thead>
<tr>
<th>Groups</th>
<th>Treatment</th>
<th>Comparison</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Sample n =</td>
<td>15</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>9</td>
<td>60</td>
<td>14</td>
</tr>
<tr>
<td>female</td>
<td>6</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>Ethnicity/Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>11</td>
<td>73</td>
<td>21</td>
</tr>
<tr>
<td>White</td>
<td>4</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>Socio-economic Status (SES) a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>free and reduced</td>
<td>12</td>
<td>80</td>
<td>19</td>
</tr>
<tr>
<td>not</td>
<td>3</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Parent Constellation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>both parents</td>
<td>2</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>mother only</td>
<td>13</td>
<td>87</td>
<td>12</td>
</tr>
<tr>
<td>father only</td>
<td>0</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>guardian</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Over-age b</td>
<td>6</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Low Achieving c</td>
<td>5</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>Poor Attendance d</td>
<td>3</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Discipline Referrals e</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Special Education Students</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. The number of students in each group reflects the number of students for whom complete data sets were available.

a Based on free and reduced lunch for SY 1990-1991; b Two years older than peers who entered 1st grade at age 6; c Bottom quartile composite ITBS scores on 5th grade ITBS; d Eleven or more days absent during SY 1990-1991; e Four or more discipline referrals during SY 1990-1991.

being taken by the students in each group at the high school level. Available levels of English and mathematics could have ranged from remedial to accelerated. No significant differences were found.
Each dependent variable was examined separately for each year using ANOVAs. The Student-Newman-Keuls post hoc test was used after significant ANOVA. Repeated measures ANOVAs were used to examine each variable over time. When appropriate, ANCOVAs were utilized for repeated measures to statistically hold constant any initial group differences. If warranted, a repeated measures ANOVA of contrast variables also was applied to locate significant differences.

To measure self-esteem, nineteen students in the treatment group were administered the Coopersmith Self-Esteem Inventory (pre-post) in the summer of 1991, pre-post in the summer of 1992 and post in May of 1994 (end of ninth grade). Since treatment group students served as their own controls, no statistical analysis was conducted to ascertain comparability. Table 3.5 presents the demographic and scholastic profiles of these nineteen treatment group members. MANOVAs, using the Wilks’ lambda criterion, were employed to determine overall differences in total self-esteem utilizing nineteen sets of student scores of the Coopersmith Self-Esteem Inventory (SEI) and five point-in-time measurements for each subscale. The Total Self score (a score representing the combined subscale scores minus the Lie Scale score) and the Lie Scale score itself were also analyzed with this same type of analysis. Repeated measures ANOVAs followed significant MANOVAs to determine the source of the variation.

At the baseline, the treatment, comparison and control groups were comparable across selected variables except in two areas: the comparison group was found to have significantly more absences at the sixth-grade level than the treatment group and the control group, and the treatment group had significantly higher sixth-grade English letter-grades than the comparison and control groups. The treatment group served as its own control for the measurement of self-esteem.

The sample for the qualitative component was as follows: 47 students applied, 44 students entered the Pride Program the first summer, and 38 students completed the
Table 3.5

Demographic and Scholastic Profiles for Treatment Group Students on Coopersmith Self-Esteem Measure Only, for SY 1990-1991

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample n =</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>13</td>
<td>68</td>
</tr>
<tr>
<td>female</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Ethnicity/Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>14</td>
<td>74</td>
</tr>
<tr>
<td>White</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Socio-economic Status (SES) a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>free and reduced</td>
<td>14</td>
<td>74</td>
</tr>
<tr>
<td>not</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Parent Constellation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>both parents</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>mother only</td>
<td>15</td>
<td>79</td>
</tr>
<tr>
<td>father only</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>guardian</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>Over-age b</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>Low Achieving c</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Poor Attendance d</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Discipline Referrals e</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>Special Education Students</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

Note. The n for this sample of treatment group students was 19 because complete data sets of Coopersmith Self-Esteem measures were available for 19 students. Only treatment group students were administered the Coopersmith.

a Based on free and reduced lunch for SY 1990-1991; b Two years older than peers who entered 1st grade at age 6; c Bottom quartile composite ITBS scores on 5th grade ITBS; d 11 or more days absent during SY 1990-1991; e 4 or more discipline referrals during SY 1990-1991.

For the second summer, 79 students applied, 75 students entered the program (29 returnees and 46 new students—mostly rising 7th graders), and 71 students completed...
the program. New students were chosen for inclusion by their sixth-grade teachers, using the same criteria which had been used the year before.

This research for the qualitative component has examined the Pride Program, inclusive of all the subjects for both summers. Since the qualitative portion of the research was examining the construction/implementation, impact and reactions to the program, complete demographic data for the students was not considered necessary. However, Table 3.6 does provide a description of subjects based upon ethnicity and gender.

Table 3.6

Treatment Group Students by Ethnicity/Race and Sex in 1991-1992

<table>
<thead>
<tr>
<th></th>
<th>Summer 1991</th>
<th>Summer 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total n =</td>
<td>44</td>
<td>75</td>
</tr>
<tr>
<td>Ethnicity/Race &amp; Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/male</td>
<td>26</td>
<td>38</td>
</tr>
<tr>
<td>Black/female</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>White/male</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>White/female</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>


Instruments: Qualitative

Pride End-of-Program Evaluation Questionnaires. These instruments were researcher constructed, and were based upon what the program managers and the researcher ascertained to be areas in which program participant feedback was needed. The results of the surveys were used for future program planning. Four sets of survey
questionnaires (student, teacher, mentor and parent) were administered at the end of the program for each summer (1991 and 1992). Samples of Pride program evaluation forms for 1991 are in Appendix C (1991 Pride Program – Evaluation Forms for Mentors, Parents, Students, and Teachers) and 1992 samples are in Appendix D (1992 Pride Program – Evaluation Forms for Mentors, Parents, Students, and Teachers).

Survey instruments for student behavior, goal setting, and academic skills. The instrument for student behavior was researcher constructed and observational in nature. A sample is provided in Appendix H (1991/1992 Observation Forms - Directions and Sample Forms). This form was used by teachers to record social behavior and cooperation during various activities throughout the Pride sessions. The goal-setting instrument was a researcher constructed questionnaire administered by the mentors. A sample can be seen in Appendixes J and K. Academic skills were surveyed during the Pride '92 using a Know-Want to know-Learned strategy (K-W-L) survey technique. Appendix Q (1992 Academic Skills Results and K-W-L Strategy Form) contains a sample of this instrument.

Semantic differential technique. Two semantic differential scales were constructed by the researcher based upon information provided by Henerson, Morris & Fitz-Gibbon (1978) in How to Measure Attitudes. The purpose of these scales was to measure self-esteem and trust. The reason they were included as evaluation instruments was that they were requested by one of the program managers. Samples of the two semantic differential scales administered in Pride '91 may be seen in Appendix G.

Instruments: Quantitative

This study employed two measures of academic achievement, one measure of attendance, one measure of student conduct and one measure of self-esteem. The Iowa Test of Basic Skills (spring of 5th, 7th and 8th-grade years), a standardized, norm-
referenced test was one measure of academic achievement. The second measure of academic achievement was the subjects' school grades for 6th-, 7th-, 8th-, 9th-, and 10th-grade years. Attendance and student conduct were measured using data from the school district's historical records database. Self-esteem was measured using a standardized instrument, the Coopersmith Self-Esteem Inventory (SEI).

**IOWA Test of Basic Skills (ITBS).** The ITBS is a nationally recognized standardized test of academic achievement (reliability coefficients ranged from 0.844 to 0.912, depending on the subtest). The ITBS is comprised of a battery of assessments (subtests) in the areas of vocabulary, reading comprehension, work study, language, mathematics, social studies and science skills. The items generally are presented in a multiple-choice format and have time limitations. ITBS standard scores for Grades 5, 7, and 8 on three subtests (Reading Comprehension, Total Language and Total Mathematics) were examined for all three groups. Because Newport News School District does not administer the ITBS to sixth-grade students, no ITBS scores were available for the subjects for their sixth-grade school year. In this research, one of the dependent measures for achievement was the ITBS standard scores in Reading Comprehension, Total Language and Total Mathematics for Grades 7 and 8. Grade 5 scores were used as baseline data.

**School letter grades.** School letter grades (obtained from cumulative folder files and computer records) in reading, English and mathematics for Grades 6, 7, 8, 9 and 10 were converted to numeric equivalents (A = 4, B = 3, etc.) and utilized as the second measure of academic achievement. In Grades 7 and 8, reading, English and mathematics were used as dependent measures; Grade-6 grades were used as baseline data. For grades 9 and 10, English and mathematics grades were used as dependent measures; reading was not offered as a subject at the high-school level. Instrumentation could be considered a limitation using this type of data; however, the comparison and control groups were
subject to the same limitations as the treatment group in that there was the lack of standardization for teacher issued grades.

Coopersmith Self-Esteem Inventory. The Coopersmith Self-Esteem Inventory (SEI) is a standardized measure which "is designed to measure evaluative attitudes toward the self in social, academic, family and personal areas of experience" (Coopersmith, 1987, p. 1). The inventory also contains a Lie Scale which indicates "extremely socialized response sets" (Coopersmith, 1987, p. 1). A high Lie Scale score is indicative of defensiveness or test wisdom on the part of the subject.

The School Form of the SEI was used in the current research. It consisted of 58 items: 50 self-esteem items and eight items that constituted the Lie Scale. This form is used with students aged 8 through 15. The Adult Form is used with persons aged 16 and above and exceeds a correlation of 0.80 with the School Form. The Adult Form was adapted from the School Short Form with modifications in language and situations referred to in the School Short Form for the purpose of making the inventory more meaningful to persons whose lives are not as closely tied to their parents or school.

For the purposes of this research and to maintain consistency, the School Form was used for all observations from summer prior to seventh grade to ending ninth grade. The correlation between the School Form and the Adult Form was considered to be sufficient to warrant the use of the School Form even for those five students in the sample who had just turned sixteen prior to the administration of the SEI at the ninth-grade level. Coopersmith (1987) also stated that "the results of the different forms are readily comparable" (p. 8).

Reliability coefficients for the SEI ranged from 0.86 to 0.90—sixth grade, 0.88; seventh grade, 0.89; eighth grade, 0.90; and ninth grade, 0.86 (Coopersmith, 1987). Studies (Kimball, 1972 and Kokenes, 1974 & 1978, as reported in Coopersmith, 1987) of 7,600 school children and another 7,600 sample, respectively, on the construct validity of
the SEI "confirmed the construct validity of the subscales proposed by Coopersmith as measuring sources of self-esteem" (p. 13).

Both total scores and separate scores for the four subscales (General Self, Social Self-Peers, Home-Parents and School-Academic) can be computed. "The subscales allow for variances in perceptions of self-esteem in different areas of experience" (Coopersmith, 1987, p. 2).

**Design and Variables: Qualitative**

A discrepancy evaluation model was used for the qualitative portion. This type of evaluation model compares what program documents and managers say should be implemented and achieved to what actually is implemented and achieved. Program implementation/operation, program impact on students and participant perceptions were studied using researcher observations, interviews and researcher constructed questionnaires, surveys, and scales.

**Design and Variables: Quantitative**

A quasi-experimental, repeated measures (e.g., time series) design using a three group comparison (one treatment, one nonequivalent comparison group and one equivalent control group) for academic achievement, attendance and student conduct was employed for three quarters of the quantitative component. The self-esteem portion used the same design but only one group (treatment group) was examined. Andranovich and Riposa (1993) consider "the best quasi-experimental design is a combination of the nonequivalent and multiple measurement strategies. In the urban setting, these design strategies provide the necessary control for making cause-effect inferences" (p. 58). The three groups were examined with repeated measures over time (five years—Grades 5/6 thru 10) to ascertain the impact of the Pride Program on the dependent variables of
academic achievement, attendance and student conduct. Self-esteem was assessed over a three-year period using repeated measures of the treatment group only. Table 3.7 depicts the research design (graphic form) employed in the quantitative component of this study.

Procedures

Qualitative Component

The implementation and conduct of the Pride Program was evaluated via field observations and notes as well as open-ended conversations conducted by the researcher with the staff and students. A week prior to the beginning of the Pride Program (both summers) the researcher met with the staff to explain the goals of the study and to elicit suggestions from the staff as to what would be the best way to accomplish the objective. During the 1991 program, the researcher made six field observations of varying lengths and at various times of the day and night, including one over-night, and attended three staff meetings during the program. Dates of the observations were as follows: July 7, 8, 9, 10, 15 and 21 of 1991. During the 1992 program, the researcher made eleven field observations of varying lengths at various times of the day and night and attended one staff meeting during the program. Dates of the observations were as follows: July 23, 26, August 2, 4, 6 (2 observations this day), 7, 9, 10, 12 and 13 of 1992.

Directions, either written or verbal, always were provided by the researcher to those who would be collecting the data (see Appendixes E, H, J, L). All procedures and processes were modeled by the researcher, except for the administration of the program evaluation surveys. Observers and interviewers (teachers, on-site director, program manager or mentors) were briefed thoroughly about the nature of the observations and interviews which they were to perform and the manner in which they were to be conducted. Professionally trained observers and interviewers were not available for use.
If incomplete or incorrectly completed forms were returned to the researcher, the researcher asked the participants to complete or correct the forms.

Table 3.7

Research Design Matrix

Achievement (Treatment, Control and Comparison Groups) IOWA Test a

<table>
<thead>
<tr>
<th>Grade</th>
<th>5</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
</tr>
</tbody>
</table>

Reading (letter grades end of school year)

<table>
<thead>
<tr>
<th>Grade</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
</tr>
</tbody>
</table>

English (letter grades 9 and beyond are semester grades)

<table>
<thead>
<tr>
<th>Grade</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Grade-varied</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
<td>O 3</td>
<td>O 4</td>
</tr>
</tbody>
</table>

Mathematics (letter grades 9 and beyond are semester grades)

<table>
<thead>
<tr>
<th>Grade</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Grade-varied</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
<td>O 3</td>
<td>O 4</td>
</tr>
</tbody>
</table>

Attendance (Treatment, Control and Comparison Groups)

<table>
<thead>
<tr>
<th>Grade</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Grade-varied</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
<td>O 3</td>
<td>O 4</td>
</tr>
</tbody>
</table>

Discipline referrals (Treatment, Control and Comparison Groups)

<table>
<thead>
<tr>
<th>Grade</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Grade-varied</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
<td>O 3</td>
<td>O 4</td>
</tr>
</tbody>
</table>

Self-esteem (Treatment Group only)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Summer 1991</th>
<th>Summer 1992</th>
<th>End of SY 93/94</th>
</tr>
</thead>
<tbody>
<tr>
<td>O 1</td>
<td></td>
<td>X</td>
<td>O 2</td>
</tr>
</tbody>
</table>

Note. O = observations  X = treatment

a Administered March of each year except grade 6 and not beyond grade 8.
1, 2, 3, 4, 5, 6, 7 = First, second, third, fourth, fifth, sixth, and seventh measurements.
The information about the participants (students, mentors, teachers/administrators and parents) perceptions of the program were gathered via sets of questionnaires. The questionnaires differed, depending on the group from which they were designed to extract information. During the 1991 program, program evaluation questionnaires were administered to students, mentors and teachers during the last week of Pride. Parents' questionnaires were mailed home. This method provided a good return rate for students (100 percent), mentors (76 percent) and teachers (100 percent). However, the return rate for parent questionnaires was poor—29 percent. At the termination of the second Pride Program, the same procedure was used for students, teachers/administrator and mentors; however, parents were handled differently. At the beginning of the culminating student program, parents who attended were handed surveys, which they completed before they departed the program. These surveys were collected from the parents as they exited the auditorium after the program. This proved to increase the rate of return to 46 percent. The other return rates for the second Pride Program were as follows: students (100 percent), mentors (48 percent), and teachers (82 percent).

One problem which occurred with the mentor questionnaires during the second program (summer 1992) was that there was a poor initial response. This was due to the fact that a questionnaire—a copy of one used for mentors the previous summer—was administered (unknown to, and unauthorized by, the researcher) to the mentors during the second week of Pride. Since the program was only three weeks in length, and the researcher administered a similar questionnaire during the third week as a pre-planned part of the evaluation, the response rate was extremely low. The questionnaire administered during the second week was the same one which was designed by the researcher for the 1991 Pride Program. The unauthorized questionnaire was administered by a Newport News Shipbuilding representative without the knowledge or permission of the researcher. The specific reason is unknown; however, it is speculated that some
mentors had voiced negative comments about the operation of the program, and more information from all mentors was desired by Newport News Shipbuilding administrators.

The poor response necessitated the mailing of the questionnaire to all the mentors after the second-year program was completed. This did increase the number of responses (researcher was receiving questionnaires until December of 1992), but the number was still about one-third lower than the number received the first year (summer 1991).

**Student Academic Achievement**

ITBS data for all three groups were obtained from school records for Grades 5, 7 and 8. The standard scores for Reading Comprehension, Total Language and Total Mathematics were used for the statistical data analysis. Fifth-grade ITBS scores were used to establish equivalency of groups and also as baseline data. Additionally, sixth-grade letter grades in reading, English and mathematics were examined to establish group equivalency and baselines. When groups were found to be initially non-equivalent at a statistically significant level on any given variable, an analysis of co-variance was used to hold the difference constant over time.

School letter grades for Grades 6, 7 and 8 in reading, English and mathematics were obtained from school records. English and mathematics grades for 9th and 10th grades (coded as 1st and 2nd years in high school) were obtained from the school district's computerized data base.

At the high-school level, some students who were attending their second year in high school were not classified as 10th graders because they had not earned sufficient credits for that classification; therefore, data for those two high-school years was coded as first-year and second-year high-school grades. Furthermore, since high-school students are enrolled in different English and mathematics classes, the type of class was also coded in the data. At the high-school level, students were assigned letter grades for each
semester; therefore, data was divided into two letter-grades per year, per subject. At the middle-school level, students were assigned only one letter-grade per subject, per year. A cumulative grade-point average (for high-school years) also was entered as a data set.

Letter-grades were converted to numeric equivalents. Any pluses or minuses were systematically dropped. A's were assigned a numeric value of 4, B's—3, C's—2, D's—1 and F's—0. Sixth-grade letter-grades were used to ascertain initial group comparability.

**Student Attendance**

Computerized, historical attendance records were utilized to determine how many days a student was absent during the school year for Grades 6 through 10. This information was retrieved for each student, for each year, in each of the three groups being studied. The number of absences for Grades 6, 7, 8, 9 and 10 were entered separately into the data set so that school years could be compared separately across groups and also within years. Sixth-grade absences were used to determine group comparability and as baseline data.

**Student Conduct**

Discipline referrals were used as a measure of student conduct. Computerized, historical, discipline-referral records were used to determine which students had discipline referrals, and how many discipline referrals those students had obtained per school year. The number of referrals per year, beginning with Grade 6 and ending with Grade 10, composed the data set for student discipline. Each year was entered separately to enable analysis of single years between groups and across time. Again, sixth-grade discipline data was used to determine group comparability and as baseline data. Degree of severity of offenses was not considered for the sixth-grade data because offenses were
found to be minimal at this grade level. Severity of offenses was not considered at any other level either, and possibly could be a topic for further analysis in another study.

**Student Self-Esteem**

Treatment group students were administered the Coopersmith Self-Esteem Inventory (SEI) during the first week of the program (summer of 1991 and 1992). A post test was administered during the last week of each summer session. A post test also was administered during the ninth-grade year between the dates of May 3 and June 2, 1994.

Tests were administered in group sessions by the researcher who is trained in test administration, two other professionals trained in test administration, the Pride Program manager or Pride Program teachers. Written and oral directions for test administration were discussed with, and modeled for, the program manager and the teachers on each occasion. Appendix E (1991 Coopersmith Self-Esteem Inventory (SEI) Directions for Administration and Results) contains a sample of instruction for test administration.

**Data Analysis**

**Data Elimination**

This study used six selective data elimination criteria to reduce possible confounding variables during the statistical analysis. In the final analysis, all students who did not have fifth-grade ITBS standard scores for Reading Comprehension, Total Language and Total Mathematics or who had not attended 2 summers of the Pride Program were eliminated from the sample. Within the treatment group, and for the self-esteem analysis only, even those without the fifth-grade ITBS were retained as part of the self-esteem analysis sample. However, within the treatment group, if the student did not have a complete data set for all three years of the Coopersmith SEI, the subject was eliminated from the self-esteem analysis sample.
All students who had moved out of the school district between Grade 6 and Grade 10 were eliminated from the samples. Also, all students who had attended Newport News School District summer school during Grades 7 and 8 were eliminated from the data analysis of achievement, attendance and student conduct, but not the self-esteem analysis.

Official dropouts (those students indicated as dropouts on school records) were eliminated from the analysis of achievement, attendance and student conduct; however, all data available on them was set aside in a separate category and their data was included in the Fisher's Exact Test analysis for initial comparability of the three groups (complete sample). The control group had no official dropouts because those students were matched only with treatment group students who had complete data sets and had met the other selective criteria mentioned above. Students who did not return after the summer, but had no withdrawal codes, also were eliminated from the analysis.

Analysis Model

An explanation of the discrepancy model evaluation procedure used in the qualitative component of the study was given earlier in this chapter. Results will be presented in narrative form.

Preliminary analyses of demographic and school variables, when variables were nominal, as in the initial analysis for group comparability, utilized the Fisher's Exact Tests for group contrasts. When variables were nominal and ordinal, as in the analysis of high school English and math levels, the Kendall's tau criterion was used. The main analyses of academic achievement, attendance and student conduct data were conducted using separate ANOVAs for each variable for each year. Subsequently, repeated measures ANOVAs were applied to each dependent variable separately, contrasting the three groups of students (treatment, comparison and control) across years (end of 5th-.
6th-, 7th-, 8th-, 9th- and 10th-grade years). Finally, repeated measures contrasts were applied to determine the source(s) of variability.

In order to determine if significant differences existed among the three groups, general linear models (GLM) procedures ANOVAs were utilized rather than regular ANOVAs because of the unequal cell sizes present in the groups being studied. An ANOVA assumes equal cell sizes. Therefore, when unequal cell sizes are present, an ANOVA tends to over estimate or underestimate the effects. As the three groups under consideration in this study did not always have complete data sets for all measures of achievement, attendance, student conduct and self-esteem, and therefore were unbalanced, GLMs were performed to compensate for these differences. It is interesting to note that given equal cell sizes in an analysis, a GLM ANOVA and an regular ANOVA would provide equivalent information. A post hoc comparison (Student-Newman-Keuls test \( p < .05 \)) examined significant main effect findings. The .05 probability level was established as the minimum level of significance for all analyses.

After the ANOVAs, repeated measures ANOVAs were conducted to determine differences over time. The intent of this research was to examine each variable separately across time to see if their were any group differences or trends. Although probably interesting, studying the interaction among the dependent variables of academic achievement, attendance and student conduct was not the purpose of this particular study. With this distinction in mind, repeated measures ANOVAs were conducted on data measuring achievement, attendance and student discipline instead of MANOVAs per se. The use of the MANOVA would have made interpretation difficult, at best. Although using repeated measures ANOVAs slightly inflates the chance of finding significance, most of the significance levels were sufficiently strong to withstand this bias. After each repeated measures analysis, post hoc contrasts were conducted to determine the source(s) of the significant differences.
However, MANOVAs, using the Wilks’ lambda criterion, were conducted on the Coopersmith SEI data for the variable of total self-esteem. Following the MANOVAs, repeated measures ANOVAs were used as contrasts to determine the sources of variance. The four subscale scores (General Self, Social Self-Peers, Home-Parent, and School-Academic), as well as the Total Self scores, were analyzed. Means for the Lie Scale scores were computed and compared across years and within the group. It should be noted that for the reporting of results in the two formative evaluations of the Pride Program described in this study, one-tailed t tests were used to compare pre-post Coopersmith SEI data. MANOVAs were conducted after all longitudinal data was gathered.

Limitations

The research utilized a combination of data gathered through standardized tests and inventories, non-standardized survey instruments and inventories, interviews, evaluator observations and existing student records. Although non-standardized survey instruments and inventories were used for data gathering in some cases, their main purpose was to provide feedback from participants in areas determined to be pertinent by those who sought to use the information (program managers) for program planning purposes. Field testing of the researcher-prepared surveys and inventories was not possible due to lack of available time. Also, it is possible that instrumentation might not have been uniform across the area of letter-grades assigned by different teachers, since this can be quite subjective; however, there were two different measures (ITBS and letter-grades), and repeated measures used to ameliorate this problem. Results should be considered valid.

Subjects were included in the samples because they possessed certain characteristics which identified them as at-risk students. A stratified sample was
consciously selected. However, within that sample, randomization was not possible in the conduct of this study. Both of these factors limit the generalizability of the results.

In a study of this nature, one inevitably encountered missing data and some sample mortality. Sometimes test scores, grades or other information were missing because students were absent, did not take a certain class or dropped out for a period and then came back to school. Where possible, students with complete data sets were included. The specific number of students used in each comparison was reported with that specific comparison.

Some missing data in the qualitative component was due to students being ill, or unavailable for other reasons. Data collection procedures were generally efficient; however, it is possible that some data was misplaced, not turned into the researcher, or both, since the researcher had to work through intermediaries at times. Some participants may have simply failed to complete or return the data forms. Overall, a concerted effort was made to ensure as complete and accurate a collection of data as possible.
CHAPTER 4
RESULTS

Introduction

Chapter 3 discussed pertinent demographic information about the subjects, the methods employed in the research and the procedures followed in the study. Chapter 4 presents the results of the study, both qualitative and quantitative. In order to simplify the organization and presentation of the data, this chapter is divided into two sections. Part I presents descriptive and narrative information based on a qualitative examination of the Pride Program. Part II provides results for the analyses of quantitative data with regard to academic achievement, attendance, student conduct and total self-esteem.

Part I discusses the evaluation findings of two Pride Program sessions, Pride '91 and Pride '92. The narrative will focus on five evaluation questions which formed the basis of the formative evaluations of each Pride Program session. These questions examine the following components of the program: Pride Program impact on student self-esteem, cooperation, trust (Pride '91), social behaviors, academic skill levels and goal setting; the maintenance of a drug-free environment during the program; the implementation of planned activities; the program cost; and the perceptions of the program participants with regard to the Pride Program.

Part II presents the results of the quantitative analyses of two measures of academic achievement: Iowa Test of Basic Skills (ITBS) Reading Comprehension, ITBS Total Language and ITBS Total Mathematics (Grades 5, 7 and 8); and school grades in reading, English and mathematics (Grades 6, 7 and 8). Additionally, school grades in English and mathematics were examined for four semesters of high school (Grades 9 and
10 or second year of high school). Furthermore, the two variables of attendance (as measured by number of absences) and student conduct (as measured by discipline referrals) were examined in Grades 6, 7, 8, 9 and 10. These three variables—academic achievement, attendance and student conduct—were used to contrast three groups of students: the treatment group (Pride students), the control group (matched students) and the comparison group (selected for Pride but opted out). The fourth and final variable of this study, total self-esteem, was examined at five points in time over a three-year period (summers prior to Grade 7 and Grade 8 and at the end of Grade 9). The total self-esteem variable applied only to the students who comprised the treatment group.

The qualitative data will be presented first—Part I—so that the reader will have a clear description of the treatment and the subjects involved. This information should be helpful in synthesizing the results of the quantitative analyses presented in Part II. The results summary will follow providing a synopsis of both sections.

Part I

Evaluation Results for Pride '91 (Year One)

In its first year, Pride was a four week, residential, summer-school program for rising seventh graders from Huntington Middle School. Its prime objective was to increase self-esteem, and in so doing positively impact upon attendance and school achievement. Other objectives included the favorable influencing of appropriate social skills, cooperation, trust and goal setting behaviors.

Staff included personnel from the Newport News Public Schools (4 teachers and 1 director) and Newport News Shipbuilding (91 mentors). Facility and food service was provided by the State of Virginia at the Virginia School for the Deaf and Blind in Hampton, Virginia.
Eighty-seven sixth-grade students were recommended by teachers because they exhibited one or more of the following characteristics: low self-esteem, low achievement, lack of social competence, poor attendance, or excessive age for grade placement. Forty-seven "at risk" students (27 black males, 5 white males, 12 black females and 3 white females) constituted the original list of pupils who returned permission slips. Forty-four students (26 black males, 5 white males, 11 black females and 2 white females) started the program on July 7, 1991, and 38 students (21 black males, 5 white males, 10 black females and 2 white females) completed it on August 1, 1991.

Teachers, shipyard personnel and the director acted as mentors for these children. A variety of hands-on activities; academic classes in language arts, math and science; community program presentations (Girl Scouts and Junior Achievement, etc.); and field trips comprised the core of the curriculum.

This evaluation attempted to answer five questions:

1. Did the program impact on self-esteem, cooperation, trust, social behaviors, academic skill levels and goal setting?
2. Was the environment drug free?
3. Were activities implemented as planned?
4. What did Pride cost?
5. What were the perceptions of the program participants (students, mentors, teachers, parents) with regard to the Pride Program's effectiveness and worth?

These questions were answered using a variety of instruments: self-esteem inventories, questionnaires, scales, program evaluation surveys and field observations. The evaluator, with the assistance of the program managers and the on-site program director, administered the instruments and collected data.
Evaluation question 1 sought to determine program impact on self-esteem, cooperation, trust, social behaviors, goal setting and academic skill levels of the students. In the area of self-esteem, one of the four subscales, Home-Parents, of the Coopersmith Self-Esteem Inventory (SEI) indicated a significant, positive, statistical, pre-post difference ($t = 2.03$, $df = 35$, $p < .05$) when one-tailed paired $t$ tests were used to analyze the data (see tables in Appendix E – 1991 Coopersmith Self-Esteem Inventory [SEI] Directions for Administration and Results). Students' perceptions of themselves in relationship to their parents' attitudes to themselves (students) had been affected positively. At this time (1991), the composite score of Total Self on the Coopersmith showed no statistically significant differences in total self-esteem.

One-tailed paired $t$ tests also were used to analyze the semantic differential data. This data indicated a negative, statistically significant difference ($t = -1.98$, $df = 31$, $p < .05$) in self-esteem and no significant difference in trust (see Appendix G – Semantic Differential) for a sample of the instrument.

Although statistically, no significant positive differences were measured in cooperation/social behavior, individual observers (teachers, shipyard mentors and parents) told the evaluator or wrote in the program evaluation comment section (see Appendix H --1991/1992 Observation Forms -- Directions and Sample Forms) that students had made improvements in attitudes and other observable behaviors (see Appendix I -- 1991 Cooperation/Social Behavior Results).

Furthermore, the student's perceptions of the Pride Program, as noted previously, and its effect on goal setting or changing ideas was positive. In a mentor administered questionnaire (see Appendix J -- 1991 Goal Setting -- Sample Mentors' Information Sheet for Connections Questionnaire and Sample Connections Questionnaire), 74 percent of the students indicated that Pride had helped them change their ideas or their goals in what
they (the students) perceived to be a positive manner (see Appendix K — 1991 Goal Setting – Summary of Results from Connections Questionnaire).

For a variety of logistical and time related reasons, no data was collected on academic achievement for the 1991 Pride Program (summer prior to Grade 7). However, a statistical analysis of school grades in reading, English and mathematics at the end of the seventh grade showed a decrease in mean grades for the Pride ’91 students.

Relative to evaluation question 2, which addressed the maintenance of a drug-free environment, the majority of participants (98 percent) stated that they saw no actual drug usage or evidence of drug usage during the program time. Some participants went so far as to state that they did not hear any students talking about drugs. Two students indicated that they had seen drug usage, but because the questionnaires were unsigned, no further inquiry could be made into the specifics of what they had seen to determine if it actually was usage of illegal drugs on campus during the Pride Program.

Overall, program activities were implemented as planned (evaluation question 3). However, as with all new programs, activities and time schedules needed revision when the program was actually in progress. At times planned activities and field trips ran overtime, and adjustments had to made to the activities which followed. Other times, expected meals were not prepared, so pizza “parties” were initiated. From the evaluator’s observations and field notes, it was estimated that most program changes were implemented in a creative and constructive manner to the best advantage of all involved.

In reference to evaluation question 4, the cost of Pride, the evaluator’s principal task in this study was to focus on self-esteem issues specifically, and cost items incidentally. Therefore, the cost information is an estimated per pupil amount arrived at by utilizing information which was provided the evaluator by the Newport News Public Schools and Newport News Shipbuilding. See Table 4.1 for the approximate cost breakouts (full Pride ’92 evaluation section to follow on page 96). The approximate per-
pupil cost for the Pride '91 was $2,100. It was calculated by dividing the total program cost by 44, which was the number of pupils who started the first summer program.

Table 4.1

**Pride 1991 and 1992 Budget**

<table>
<thead>
<tr>
<th></th>
<th>Summer 1991</th>
<th>Summer 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>$20,440</td>
<td>$34,201</td>
</tr>
<tr>
<td>Mentors &amp; Counselors</td>
<td>$43,500</td>
<td>$26,336</td>
</tr>
<tr>
<td>Lodging</td>
<td>$3,050</td>
<td>$6,050</td>
</tr>
<tr>
<td>Food</td>
<td>$7,320</td>
<td>$14,520</td>
</tr>
<tr>
<td>Transportation</td>
<td>$820</td>
<td>$1,480</td>
</tr>
<tr>
<td>Restaurant outings</td>
<td>$1,525</td>
<td>$2,875</td>
</tr>
<tr>
<td><strong>Materials (e.g., T-shirts, Park Bench Project, Scout Project, Video Project, etc.)</strong></td>
<td>$14,945</td>
<td>$12,255</td>
</tr>
<tr>
<td><strong>ROPES Instructors</strong></td>
<td>$900</td>
<td>$900</td>
</tr>
<tr>
<td><strong>TOTAL BUDGET</strong></td>
<td>$92,500</td>
<td>$98,617</td>
</tr>
</tbody>
</table>

In answer to evaluation question 5, the participants' perceptions of the program were positive. Most respondents, including students, perceived Pride as a beneficial and rewarding experience. The program was viewed as an effort that should be continued and
enhanced. Comments by shipyard personnel (mentors) stated that they were proud of the Shipyard's involvement in this program and that it was a positive contribution to the community (see Appendix N — 1991 Questionnaire Response Summary for Students, Teachers, Mentors, and Parents).

It must be remembered that this was the first year for this program and that this evaluation was meant to be formative in nature. The strengths of this program were found in the positive perceptions of the program participants and the students' parents. Because this was a formative evaluation, however, areas for program improvement were cited and recommendations were made by the evaluator. These recommendations are included in Chapter 5 of this study.

Many helpful suggestions were offered by program participants, parents and the evaluator as to how Pride could be improved and strengthened. These suggestions can be found on the program evaluation surveys submitted by the participants. Some of these suggestions for program improvement for Pride '92 included the incorporation of other businesses as partners so that Newport News School Division (NNS) and Newport News Shipbuilding would not have to bear such a large portion of the financial burden; an increase in the teacher/pupil ratio to alleviate some teacher stress; the implementation of a provision for feedback to participants; and the consideration of a longitudinal study of the program with possibly some individual case studies of students.

Evaluation Results for Pride '92 (Year Two)

The second year of the Pride Program (Pride '92), was a three week, residential, summer-school program for rising seventh and eighth graders (all but three eighth graders were returning Pride '91 participants). All participants were Huntington Middle School students, who were selected from a target population of approximately 300 rising seventh and eighth graders identified as disadvantaged and in need of improving self-esteem,
social and problem solving skills, work study habits and teamwork in order to perform in accordance with their anticipated potential. Again, this second year's prime objective was to increase self-esteem, and in so doing positively impact upon attendance and school achievement. Other objectives included the favorable influencing of appropriate social skills, of cooperation and goal setting behaviors, and of remaining alcohol and drug free.

Unlike the Pride '91 program, Pride '92 did not allow students to go home for the weekends. Parent-contact activities, such as frequent social functions on campus (i.e., barbecues and picnics), letter writing and, in some cases, phone calls, enabled students to keep in touch with their parents.

Staff included personnel from the Newport News Public Schools (10 teachers and 1 director) and Newport News Shipbuilding (94 mentors). Facility and food were provided (on a fee basis) by the Virginia School for the Deaf and Blind in Hampton, Virginia.

Teachers, shipyard personnel and the director acted as mentors for these children. Students were divided into eight teams which were identified by a color. The team consisted of a teacher, 8 to 10 students and one to four mentors per team. This team stayed intact for all activities throughout the three week program. A variety of hands-on activities such as: projects designed to improve basic skills in communication, mathematics, problem solving and research; trade demonstrations; rocket building; field trips; "Olympic Games"; and social functions were incorporated into the curriculum.

Seventy-nine students (Grades 7 and 8) were scheduled to enter the program. Twenty-nine of these students had attended the Pride Program during the summer of 1991, and 46 of the students were selected to attend for the summer of 1992. Students were recommended for inclusion by teachers using the following criteria: low self-esteem, low achievement, lack of social competence, lack of motivation to succeed, poor attendance and/or excessive age for grade placement. Seventy-five students (45 males and
30 females) began the program on July 26, 1992, and 71 students completed the program on August 13, 1992. Three students were sent home for discipline reasons, and one student went home because she was homesick. The three students who were sent home for discipline reasons were all males who had attend Pride in the summer of 1991. The student who was homesick was a female from the Pride '92 cohort.

As with Pride '91, the Pride '92 evaluation attempted to answer five questions:

1. Did the program impact on self-esteem, cooperation, social behaviors, academic skill levels and goal setting?
2. Was the environment drug free?
3. Were activities implemented as planned?
4. What did Pride '92 cost?
5. What were the perceptions of the program participants (students, mentors, teachers, parents) with regard to the Pride '92 program's effectiveness and worth?

These questions were answered using a variety of instruments: a self-esteem inventory, questionnaires, program evaluation surveys and field observations. The evaluator, with the assistance of the on-site program director, teachers and mentors, administered the instruments and collected data. Evaluation results are as follows:

At the end of Pride '92, the Pride '91 cohort exhibited significant positive differences in self-esteem as measured by a one-tailed paired t test. Two subscales of the Coopersmith SEI, General Self (t = 2.41, df = 23, p < .05) and Social Self-Peers (t = 2.55, df = 23, p < .05), plus Total Self (t = 2.48, df = 23, p < .05) indicated significant positive differences when comparing post 1991 and post 1992 scores. Examination of the '91 cohort scores using a one-tailed paired t test also showed significant, positive pre-post summer of '92 differences on the Home-Parents subscale (t = 3.80, df = 23, p < .05).
This same difference was noted in the 1991 evaluation of the '91 cohort. These results might indicate a trend, a cumulative program effect or student maturation. Pre-post 1992 for the '92 cohort found no significant differences in any of the subscales (see Appendix F—1992 Coopersmith Self-Esteem Inventory (SEI) Results).

A small percentage gain was made in the area of positive cooperative and social behaviors. Individual observers, however, noted that some students had made notable improvements in attitudes and other observable behaviors. Based on a behavior checklist completed by teachers for each student for each activity, a summary of observations sheet was completed by the teachers at the end of the summer session (see Appendix P—1992 Sample Summary of Observations Form for Cooperation and Social Behavior Observations). The results of the summary sheet indicated that teachers perceived positive change in 33 students (54 percent), no change in 23 students (38 percent), a negative change in 4 students (6.5 percent) and 1 no response (1.5 percent).

A pre-post self-report data sheet (see Appendix Q—1992 Academic Skills Results and K-W-L Strategy Form) on the academic component suggested that stated objectives were mostly achieved (67 percent). Other additional knowledge was also acquired as noted on the on the Know-Want to know-Learned strategy (K-W-L) Report Sheet.

Goal setting was measured by using a slightly altered form of the 1991 Connections Questionnaire. A sample of the 1992 form of the Connections Questionnaire and the Mentor's Information Sheet for the Connection's Questionnaire can be seen in Appendix L—1992 Goal Setting-Sample Mentors' Information Sheet for Connections Questionnaire and Sample Connections Questionnaire.

The 1992 results for goal setting indicated that the majority of respondents felt that Pride had not changed their ideas about education or career occupations. A more
detailed explanation of the results and the method of tabulation can be seen in Appendix M—1992 Goal Setting - Summary of Results from Connections Questionnaire.

In answer to evaluation question number 2, the majority of participants (91.2 percent) stated that they saw no actual drug usage or evidence of drug usage. Two students indicated that they had seen drug usage, but because the questionnaires were unsigned, no further inquiry could be made into the specifics of what they had seen. Nine did not respond to that question, which was one of the items on the final program evaluation questionnaire.

With regard to evaluation question 3, many program activities were implemented as planned. The physical education and classroom activities were more organized than in Pride’91. However, a noticeable number of activities were not implemented as planned for a variety of reasons (i.e. time overruns, late starts, cancellations of activities due to inclement weather or insufficient time, materials for activities not arriving on time, confusion about previous arrangements for activities). This was an area of weakness in the ’92 program.

In answer to evaluation question 4, cost information was an estimated per pupil amount arrived at by utilizing information that was provided to the evaluator by the Newport News Public Schools. The approximate per pupil cost for the Pride ’92 was $1,391.00. See Table 4.1 for specific cost breakouts and comparison.

The fifth and last evaluation question related to the perceptions of the program participants (students, teachers, mentors and parents) during Pride ’92. The perceptions of the program participants were found to be positive in most cases. Respondents, including students, perceived Pride ’92 as a beneficial and rewarding experience. There were some concerns on the part of the mentors about the rigor of the academic component of the program. However, the program was viewed as an effort that definitely should be
continued and enhanced (see Appendix O -- 1992 Questionnaire Response Summary for Students, Teachers, Mentors, and Parents).

Because this was a formative evaluation, areas for program improvement were cited in the evaluation. Those suggestions for program improvement are delineated in Chapter 5 of this study.

Part II

The first of four null hypothesis investigated in this study stated that there would be no significant differences on measures of academic achievement between the treatment group, the control group and the comparison group. The second and third null hypotheses stated respectively that there would be no significant differences in attendance (as measured by number of absences) and student conduct (as measured by number of discipline referrals) between groups. The analyses measured academic achievement, attendance and student conduct, over a five-year period, for the three groups (treatment, control and comparison). The fourth hypothesis contended that for subjects of the treatment group only, there would be no significant differences on a measure of total self-esteem, over a three-year period.

Definition of Variables and Statistical Procedures

Although the variables and the statistical measures for this study have been explained in depth in Chapter 3, a brief explanation is presented here in order to clarify and expedite the presentation of information in Chapter 4. The main independent variable was student participation in the Pride Program for two summers. Eight control variables were also examined to determine initial group comparability. These eight variables were sex, ethnicity/race, socio-economic status (free and reduced lunch status in Grade 6), parent constellation (number of parents in the home at beginning of Grade 6), student age.
(Grade 6), achievement (Grades 5 & 6), attendance as measured by number of absences (Grade 6) and student conduct as measured by discipline referrals (Grade 6). The dependent variables analyzed were academic achievement (Grades 6 thru 10), attendance (Grades 6 thru 10), student conduct (Grades 6 thru 10) and total self-esteem (summer prior to Grades 7 & 8 and end of Grade 9).

Academic achievement was defined as the scores obtained on the Iowa Test of Basic Skills (ITBS) and school letter-grades converted to numeric equivalents (i.e., A=4, B=3, etc.). Three subtests of the ITBS were used for the analyses: Reading Comprehension, Total Language and Total Mathematics. School grades in three subject areas (reading, English and mathematics) were examined for Grades 6, 7 and 8. Two subject areas (English and mathematics) were examined for Grades 9 and 10.

Attendance was defined as the number of absences per school year. The number of student absences were obtained from school-district records. Additionally, student conduct was measured by obtaining the number of discipline referrals per school year for each subject from school-district computer records. These data were compared between groups.

The type of statistical analyses used are as follows: Fisher's Exact Tests (two-tailed) for initial group comparability; Kendall's tau statistic to determine comparability of student distribution within each group for levels of high-school English and mathematics; general linear models procedure for analysis of variance (GLM ANOVA); general linear models procedure for repeated measures analysis of variance (GLM repeated measures ANOVA); general linear models procedure for analysis of co-variance (GLM ANCOVA); general linear models procedure for multivariate analysis of variance (GLM MANOVA); Wilks' lambda statistic criterion for MANOVAs; and Student-Newman-Keuls post hoc test. For the purposes of brevity, all general linear models
(GLM) procedures will be referred to simply as ANOVAs, repeated measures ANOVAs, ANCOVAs, and MANOVAs.

Data Reduction Procedures

Treatment group and comparison group students who were no longer on school district records at the end of Grade 10 (or second year of high school) or treatment group students who had not completed two summers in the Pride Program were eliminated from the sample for comparisons of academic achievement, attendance and student conduct. Treatment group students who were no longer on school district records at the end of Grade 9 (6 students), who had not completed two summers of the Pride Program or who did not have complete data sets for the Coopersmith (1 student) were eliminated from the sample for total self-esteem analysis. Students (2 treatment group students) for whom baseline data were missing were eliminated. Also, those students who had attended a formal summer school session any time after Grade 7 were eliminated (1 treatment group student).

Results of Procedures to Ascertain Group Comparability

Prior to the main analysis of scores, grades, attendance data, and discipline-referral data, a nonparametric test, the Fisher's Exact Test (two-tailed), was utilized to ascertain initial group comparability. Because cell frequencies were often less than five, there were validity concerns about the use of the chi-square ($x^2$) for this analysis. The Fisher's Exact is the recommended test "if the smallest expected frequency is less than 5" (Tuckman, 1972, p. 248).

Both the initial sample (before data reduction—$N = 61$: treatment group, $n = 20$; control group, $n = 15$; and comparison group, $n = 26$) and the final reduced sample (after data reduction—$N = 52$: treatment group, $n = 15$; control group, $n = 15$; and comparison
group, n = 22) were analyzed using the Fisher's Exact Test. These statistical analyses determined if the three groups had significantly different distributions of obtained frequencies relative to expected frequencies on eight factors: sex, ethnicity/race, socioeconomic status (Grade 6), parent constellation (Grade 6), student age (Grade 6), achievement (end of Grade 5 and Grade 6), attendance (Grade 6) and student conduct (Grade 6). Although special education inclusion (Grade 6) was considered as a factor, it was dropped when baseline data (fifth-grade ITBS scores) were not available for the special education students. All students without fifth-grade ITBS baseline data were systematically dropped from the treatment and comparison groups for the analyses of achievement, attendance and student conduct. This resulted in the loss of two subjects in the treatment group and zero subjects in the comparison group. Accordingly, the two special education students who were initially members of the treatment group were dropped from the study for all variables except self-esteem, in which case, they were retained in the sample analyses because they served as their own controls.

The occurrence of a statistically significant probability on the Fisher's Exact Test signified that the frequencies obtained in the cells of the contingency table were different from the frequencies one might expect based on chance variation alone. A statistically significant probability (p < .05) for a factor would indicate that the samples had been drawn from populations which differed systematically on that factor.

The results of the Fisher's Exact Test on the final reduced sample, with an alpha level of .05, were that the groups varied significantly in observed vs. expected frequencies on only one of the eight factors. That factor was sixth-grade English letter-grades. The treatment group had significantly better sixth-grade English letter-grades than the control or the comparison groups. This initial difference was controlled by using the sixth-grade English letter-grades as a covariate in the analyses of English letter-grades over time.
To confirm that all possible precautions were taken to insure initial group comparability, Fisher's Exact Tests also were performed on the initial sample (N = 61) and compared to the final reduced sample (N = 52) results. The results were the same on all factors except one—attendance at the sixth-grade level. The Fisher's Exact Test result for the initial sample indicated a significant difference in attendance (number of absences). The treatment group and the control group in the initial sample were found to have significantly better attendance (fewer absences) than the comparison group in the initial sample. However, the final reduced-sample Fisher's analysis did not find this significant difference.

Although the attendance difference was not found on the Fisher's Exact Test for the final reduced sample, an individual ANOVA of sixth-grade attendance and a subsequent post hoc comparison on the final reduced sample did identify a significant difference in the number of absences at the sixth-grade level. This discrepancy between the Fisher's Exact Test results and the ANOVA results was probably due to the collapsing of the data on number of absences for the Fisher's Exact Test analysis as opposed to the use of individual numbers of absences on the ANOVA analysis. Therefore, sixth-grade absences also were covaried in the repeated measures analyses.

In summary, the Fisher’s Exact Test analysis found that within the final reduced sample, the treatment group had significantly higher English letter-grades at the sixth-grade level than the control and the comparison groups. Furthermore, an ANOVA analysis of absences found that the treatment group and control group had significantly better sixth-grade attendance than the comparison group (i.e., significantly fewer absences). Subsequently, these two factors (sixth-grade English letter-grades and sixth-grade attendance) were covaried in the analyses. Table 4.2 presents the Fisher's Exact Test probability levels for the eight factors analyzed.
Table 4.2

Results of Fisher's Exact Test (2 tail) for the reduced sample (RS) and the complete sample (CS).

<table>
<thead>
<tr>
<th>Factor</th>
<th>df</th>
<th>RS p value *</th>
<th>CS p value b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>2</td>
<td>1.000</td>
<td>0.889</td>
</tr>
<tr>
<td>Ethnicity/race</td>
<td>2</td>
<td>0.197</td>
<td>0.295</td>
</tr>
<tr>
<td>SES c</td>
<td>2</td>
<td>0.392</td>
<td>0.196</td>
</tr>
<tr>
<td>Parent Constellation</td>
<td>2</td>
<td>0.208</td>
<td>0.318</td>
</tr>
<tr>
<td>Age/Grade</td>
<td>2</td>
<td>0.831</td>
<td>0.762</td>
</tr>
<tr>
<td>Achievement – ITBS d (5th)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>4</td>
<td>0.180</td>
<td>0.125</td>
</tr>
<tr>
<td>Total Language</td>
<td>4</td>
<td>0.508</td>
<td>0.284</td>
</tr>
<tr>
<td>Total Mathematics</td>
<td>4</td>
<td>0.904</td>
<td>0.770</td>
</tr>
<tr>
<td>Achievement – Letter grades (6th)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>8</td>
<td>0.116</td>
<td>0.059</td>
</tr>
<tr>
<td>English</td>
<td>8</td>
<td>0.028*</td>
<td>0.046*</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8</td>
<td>0.416</td>
<td>0.311</td>
</tr>
<tr>
<td>Attendance (6th)</td>
<td>2</td>
<td>0.237</td>
<td>.039*</td>
</tr>
<tr>
<td>Discipline Referrals (6th)</td>
<td>0</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Reduced sample probability values. b Complete sample probability values.
 c Socio-economic status. d Iowa Tests of Basic Skills (ITBS).
* _p < .05.

**Academic Achievement**

Two types of measures were used to determine academic achievement: (a) the Iowa Tests of Basic Skills (ITBS) scores in Reading Comprehension, Total Language and
Total Mathematics at the ends of Grades 5, 7, and 8; and (b) the letter-grades in reading-Grades 6 through 8, letter-grades in English—Grades 6 through 10 and letter-grades in mathematics—Grades 6 through 10. Because of the differences in reporting letter-grades in middle school, the lack of high-school ITBS scores and the absence of reading as a high-school subject, analyses were divided into two 'snapshots' of academic achievement—one for middle school and one for high school. Fifth-grade ITBS scores and sixth-grade letter-grades were used as baseline data for subjects in all three groups.

**ITBS Reading Comprehension.** Univariate analyses indicated that group-mean standard scores for the Reading Comprehension subtest did not differ significantly from each other at the fifth-, seventh- or eighth-grade levels. Furthermore, the relationships between the groups' mean scores stayed statistically constant over time. See Table 4.3 for results of ANOVA's for the ITBS Reading Comprehension subtest. For the repeated measures analyses, standard scores were converted to z-scores because ITBS standard scores are measured on a continuous scale with a 10 point expected increase per school year. The three groups did not differ significantly when the scores for all three years were compared between groups; however, time was a significant factor when examining differences from one measurement point to another. There was a significant difference between the mean-of-group-means z-scores from the end of fifth grade to the end of eighth grade. This mean-of-group means declined significantly from fifth grade to eighth grade due to the fact that the z-score for each of the three groups declined during this three year period. No significant interaction effects of time-by-group were found. See Table 4.4 for summaries of the repeated measures analyses of z-scores for ITBS Reading Comprehension.
Table 4.3

GLM ANOVA Summaries for ITBS Reading Comprehension Standard Scores - Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>200.14</td>
<td>100.07</td>
<td>0.55</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>8854.83</td>
<td>180.71</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1195.73</td>
<td>597.86</td>
<td>2.56</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>11430.78</td>
<td>233.28</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1015.84</td>
<td>507.92</td>
<td>1.40</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>17448.66</td>
<td>363.51</td>
<td></td>
</tr>
</tbody>
</table>

Upon closer examination, it was found that the treatment group mean z-scores dropped considerably between fifth and seventh grades, and then dropped slightly between seventh and eighth grades. The comparison group mean z-scores dropped from fifth to seventh grade, and then dropped again (but not as much) from seventh to eighth grade. The control group mean z-scores dropped slightly from fifth to seventh grade, and then dropped slightly from seventh to eighth grade. Individual group means did not differ significantly between groups over time.

In summary, performance on the Reading Comprehension subtest of the ITBS declined for all three groups between fifth and eighth grades. The largest decline was made by the treatment group, followed closely by the comparison group. The most minimal decline was made by the control group. There were no significant between-group differences at the eighth-grade level or over time when all three measurements...
were considered. See Figure 1 for comparisons of individual group mean z-scores (over time) in ITBS Reading Comprehension.

Table 4.4

GLM Repeated Measures ANOVA Summaries for ITBS Reading Comprehension z-scores – Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>18.29</td>
<td>9.14</td>
<td>1.93</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>227.02</td>
<td>4.72</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>2</td>
<td>7.23</td>
<td>3.61</td>
<td>3.11*</td>
</tr>
<tr>
<td>T x G</td>
<td>4</td>
<td>1.89</td>
<td>0.47</td>
<td>0.41</td>
</tr>
<tr>
<td>Error</td>
<td>96</td>
<td>111.78</td>
<td>1.16</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>366.21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05.

ITBS Total Language. Univariate analyses of ITBS Total Language standard scores showed that group mean standard scores did not differ significantly between groups at the fifth- or seventh-grade levels, but did differ significantly between groups at the eighth-grade level. A post hoc analysis of eighth-grade results indicated that the control group had significantly higher scores than either the treatment or the comparison group, but the treatment and comparison groups' scores did not differ from each other significantly. See Table 4.5 for ANOVA summaries of the ITBS Total Language subtest.
Figure 1. Comparison of ITBS Reading Comprehension Group Mean z-scores

![Graph showing group mean z-scores for ITBS Reading Comprehension over a three year period.]

Figure 1. Group mean z-scores for ITBS Reading Comprehension over a three year period.
Table 4.5

GLM ANOVA Summaries for ITBS Total Language Scores – Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>524.38</td>
<td>271.19</td>
<td>1.40</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>9487.92</td>
<td>193.63</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>611.26</td>
<td>305.63</td>
<td>1.29</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>11650.78</td>
<td>237.77</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1623.46</td>
<td>811.73</td>
<td>3.47*</td>
</tr>
<tr>
<td>Error</td>
<td>46</td>
<td>10749.59</td>
<td>233.68</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05.

As summarized in Table 4.6, repeated measures analyses indicated that groups did not differ significantly when scores for all three measurements were considered. Time, however, was a significant factor meaning that the relationship between groups did not remain constant over the three times of measurement. Also, there was a time-by-group interaction. Between fifth and seventh grades, there was a significant difference between the mean-of-group-means z-scores. All group mean z-scores declined during this two-year period producing a significant difference in the combined average means of the three groups between fifth grade and seventh grade. The treatment group scores declined the most with the comparison group's scores falling less than the treatment group's mean z-scores, and the control group's scores falling least of all.
Table 4.6

GLM Repeated Measures ANOVA Summaries for ITBS Total Language z-scores — Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>18.10</td>
<td>9.05</td>
<td>1.79</td>
</tr>
<tr>
<td>Error</td>
<td>46</td>
<td>232.67</td>
<td>5.05</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>2</td>
<td>5.20</td>
<td>2.60</td>
<td>4.72 *</td>
</tr>
<tr>
<td>T x G</td>
<td>4</td>
<td>5.58</td>
<td>1.39</td>
<td>2.53 *</td>
</tr>
<tr>
<td>Error</td>
<td>92</td>
<td>50.71</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>312.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

Between fifth and eighth grades, there was no significant difference between the mean-of-group-mean z-scores, but there was a significant difference between the relationship of individual group-mean z-scores when comparing fifth-grade group scores to eighth-grade group scores. The control group had significantly higher group-mean z-scores than the treatment or comparison groups, but there was no significant difference between the treatment and comparison groups' mean z-scores. The control group's mean z-scores in Total Language at the end of eighth grade had risen slightly above the fifth-grade baseline, after a decline at the seventh-grade level. However, the treatment and comparison groups' mean z-scores were lower at the end of eighth grade than at the end of fifth grade.
The time-by-group interaction indicated that the time variable, when combined with the group variable, had a significant effect on group-mean z-scores. For example, the control group’s Total Language mean z-scores became significantly better than the treatment and comparison groups’ scores between fifth and eighth grades. Also, the treatment group scores fell below the comparison group’s scores between fifth grade and seventh grade. The scores remained inverted at the eighth-grade level. All group scores declined at the end of seventh grade, but the treatment and comparison groups’ scores declined considerably and remained depressed, while the control group’s scores declined slightly and then increased to above the fifth-grade baseline by the end of eighth grade. In contrast, the treatment and comparison groups’ scores at the eighth-grade level remained at almost the same low level as their seventh-grade mean z-scores. See Figure 2 for a graphic depiction of ITBS Total Language mean z-scores.

In summary, performance on the Total Language subtest of the ITBS declined for all three groups between fifth and seventh grades, causing time to be a significant factor. However, performance increased between seventh and eighth grades for all three groups. Although there was an increased performance for all three groups between seventh and eighth grades, the control group’s performance declined the least between fifth and seventh grades and rose the most between seventh and eighth grades, to the point of surpassing its fifth-grade scores. In contrast, the treatment and comparison groups’ performances declined the most from fifth to seventh grade and rose only slightly from seventh to eighth grade, thus leaving the treatment and comparison groups with significantly lower mean z-scores in Total Language than the control group. The treatment group scores also fell below the comparison group’s scores for both the seventh- and eighth-grade years; thus, a level of significant interaction of time-by-group was achieved by the three groups between fifth grade and eighth grade.
Figure 2. Comparison of ITBS Total Language Group Mean z-scores

Figure 2. Group mean z-scores for ITBS Total Language over a three year period.
ITBS Total Mathematics. Univariate analyses, summarized in Table 4.7, indicated that fifth-grade ITBS standard scores for Total Mathematics were not significantly different between groups; however, seventh- and eighth-grade scores were. A post hoc comparison of seventh-grade mean standard scores revealed that the control group had a significantly better mean score than the treatment and comparison groups. There was no significant difference between the treatment and comparison group scores. At the eighth-grade level, the ANOVA indicated significance; however, the subsequent post hoc test was unable to define the source of variability. This post hoc result probably was due to a combination of factors: a relatively small effect and a small sample size. The control group had higher mean z-scores than the treatment and comparison groups.

Table 4.7

GLM ANOVA Summaries for ITBS Total Mathematics Standard Scores -- Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>44.04</td>
<td>22.02</td>
<td>0.30</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>3592.78</td>
<td>73.32</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1108.94</td>
<td>554.47</td>
<td>5.30**</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>5022.03</td>
<td>104.62</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1164.40</td>
<td>582.20</td>
<td>3.43*</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>7986.01</td>
<td>169.91</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05.  ** p < .01.
but the post hoc did not indicate that the control group scores were significantly higher than either, or both, of the other two groups. Mean z-scores for the treatment and comparison groups were much closer together. See Figure 3 for a graphic representation of mean z-scores.

Repeated measures analyses found a significant time-by-group interaction as summarized in Table 4.8, but time alone was not shown to be a significant factor. A contrast analysis did indicate significant differences in the relationship of one group to another between fifth grade and seventh grade and also between fifth grade and eighth grade. There were no significant findings, over time, relative to mean-of-group-means z-scores.

Over time, the mean z-score for each of the three groups was affected differently, dependent on the group in which students were included. The source of these differences was the control group's higher scores at the seventh-grade and eighth-grade testings. The treatment group's and the control group's z-scores were comparable at the fifth-grade testing, and the comparison group's score was lower; but at the seventh grade testing, the control group's scores rose considerably, while the treatment group's and comparison group's scores declined. The scores continued to decline for the treatment and comparison groups at the eighth-grade testing. In contrast, the control group's score declined slightly from the seventh-grade testing to the eighth-grade testing, but still remained above the fifth-grade baseline and markedly higher than the treatment group's and the comparison group's scores.

In summary, the control group mean standard scores on the ITBS Total Mathematics subtest were found to be significantly higher than the treatment group scores and the comparison group scores at the seventh-grade level. There was a significant finding at the eighth-grade level also; however, the post hoc analysis was not able to ascertain the source of the variability at the eighth-grade level. There was a significant
Figure 3. Comparison of ITBS Total Mathematics Group Mean z-scores

Figure 3. Group mean z-scores for ITBS Total Mathematics over a three year period.
Table 4.8

GLM Repeated Measures ANOVA Summaries for ITBS Total Mathematics z-scores — Grades 5, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>15.32</td>
<td>7.66</td>
<td>3.13</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>115.02</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>2</td>
<td>1.87</td>
<td>0.93</td>
<td>2.72</td>
</tr>
<tr>
<td>T x G</td>
<td>4</td>
<td>4.29</td>
<td>1.07</td>
<td>3.10 *</td>
</tr>
<tr>
<td>Error</td>
<td>94</td>
<td>32.48</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>168.98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

time-by-group interaction. Over time (fifth grade to eighth grade), the control group's mean z-scores rose above the fifth-grade baseline score while the treatment group's mean z-scores and the comparison group's mean z-scores fell below the fifth-grade baseline score.

School letter-grades—reading (Grades 6, 7 & 8). Using sixth-grade letter-grades (converted to numeric values) as a baseline, it was found that there were no significant differences between group mean at the sixth-, seventh-, or eighth-grade levels relative to reading grades (see Table 4.9). A repeated measures analysis found no significant differences over time or any significant interaction of time-by-group when school reading grades were analyzed (see Table 4.10). Figure 4 is a graphic depiction of mean reading letter-grades for all three student groups over a three year period.
Table 4.9

GLM ANOVA Summaries for School Letter-Grades in Reading – Grades 6, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6th Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>4.72</td>
<td>2.36</td>
<td>2.55</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>45.33</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td><strong>7th Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1.62</td>
<td>0.81</td>
<td>1.11</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>35.68</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td><strong>8th Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>2.51</td>
<td>1.25</td>
<td>0.92</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>67.17</td>
<td>1.37</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.10

GLM Repeated Measures ANOVA Summaries for School Letter-Grades in Reading – Grades 6, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>6.48</td>
<td>3.24</td>
<td>1.97</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>80.66</td>
<td>1.64</td>
<td></td>
</tr>
<tr>
<td><strong>Within</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>2</td>
<td>1.22</td>
<td>0.61</td>
<td>0.89</td>
</tr>
<tr>
<td>T x G</td>
<td>4</td>
<td>2.38</td>
<td>0.59</td>
<td>0.86</td>
</tr>
<tr>
<td>Error</td>
<td>98</td>
<td>67.52</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>155</td>
<td>158.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Figure 4. Comparison of Mean Reading Grades — Grades 6, 7, and 8

Figure 4. Mean reading letter-grades as converted to numeric equivalent for grades 6, 7, and 8.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
School letter-grades—English (grades 6, 7 & 8). Univariate analyses of sixth, seventh- and eighth-grade mean English grades indicated a significant difference between groups at the sixth-grade level only. No significant differences were found among the groups at the seventh-grade level or the eighth-grade level. A post hoc examination of the sixth-grade results was conducted to determine the source of the difference. The results of this examination were unable to determine the source of the variation and this examination was unable to provide a definitive source for the difference. In part, this may have been due to the small sample size or the size of the effect. However, it should be noted that the mean grades for the treatment group were .7 of a point higher than either the comparison group mean grades or the control group mean grades. Due to the initial significant ANOVA finding ($F = 0.03$, df = 2/49, $p < .05$) in baseline English grades, an analysis of covariance was used to control for this difference. Sixth-grade English letter-grades were used as the covariate. Table 4.11 summarizes the ANCOVA findings for English letter-grades in Grades 7 and 8.

When sixth-grade English letter-grades were covaried, repeated measures analysis revealed that there were no significant differences or interactions over the three-year time period among the three groups. Table 4.12 summarizes the repeated measures ANCOVA results, and Figure 5 is a graphic depiction of mean grades for English across three school years.

School letter-grades—mathematics (Grades 6, 7 & 8). Univariate analyses found no significant differences of mean letter-grade scores at the sixth-grade level. However, significant differences were indicated in the analyses of seventh-grade mean grades and eighth-grade mean grades.

At the seventh-grade level, the post hoc analysis indicated that the control group had significantly higher mean grades than the comparison group; however, there was no significant difference between the control group and the treatment group mean grades or
the comparison group and the treatment group mean grades. In essence, the treatment group mean grade was between the control group's higher grade and the comparison group's lower grade. However, the treatment group mean grade did not meet the critical range requirements to reach a level of significant difference either from the control group or the comparison group.

Table 4.11

GLM ANCOVA* Summaries for School Letter-Grades in English — Grades 7 and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1.77</td>
<td>0.88</td>
<td>1.25</td>
</tr>
<tr>
<td>SGE 6b</td>
<td>1</td>
<td>5.80</td>
<td>5.80</td>
<td>8.20 **</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>33.99</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1.39</td>
<td>0.69</td>
<td>0.92</td>
</tr>
<tr>
<td>SGE 6b</td>
<td>1</td>
<td>9.84</td>
<td>9.84</td>
<td>13.03 ***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>36.27</td>
<td>0.75</td>
<td></td>
</tr>
</tbody>
</table>

*a Sixth-grade English grades were used as a covariate.  
b School letter-grades for English in grade 6.  

At the eighth-grade level, the post hoc analysis found that the treatment group had significantly higher mean grades in mathematics than the control group and the comparison group. The control group and the comparison group did not differ significantly from each other. Table 4.13 summarizes data of ANOVAs for mean letter-grade in mathematics for Grades 6, 7 and 8.
Table 4.12

GLM Repeated Measures ANCOVA Summaries for School Letter-Grades in English – Grades 6, 7, and 8

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>3.15</td>
<td>1.57</td>
<td>1.47</td>
</tr>
<tr>
<td>SGE6&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1</td>
<td>15.38</td>
<td>15.38</td>
<td>14.33***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>51.52</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>1</td>
<td>1.38</td>
<td>1.38</td>
<td>3.53</td>
</tr>
<tr>
<td>T x G</td>
<td>2</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>T x SGE6</td>
<td>1</td>
<td>0.26</td>
<td>0.26</td>
<td>0.68</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>18.74</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>90.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>School letter-grades for English in grade 6.

***<sub>p < .001</sub>.

Repeated measures analyses indicated that there was no significant between group effect, but there was a significant time effect within and a significant time-by-group interaction. The mean-of-group-means for mathematics letter-grades did differ significantly from sixth grade to seventh grade, but not from sixth grade to eighth grade. Time did affect mathematics grades significantly. The interaction indicated that both the amount of time and the group to which the subjects belonged significantly affected the mean grades in mathematics. For example, the treatment group initially had the highest (but not significantly higher) mean grade in mathematics out of the three groups. The control group's mean grades were slightly lower, and the comparison group's mean grades
Figure 5. Comparison of Mean English Grades — Grades 6, 7, and 8

Figure 5. Mean English letter-grades as converted to numeric equivalent for grades 6, 7, and 8.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table 4.13

**GLM ANOVA Summaries for School Letter-Grades in Mathematics — Grades 6, 7, and 8**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1.96</td>
<td>0.98</td>
<td>1.28</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>36.66</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>10.50</td>
<td>5.25</td>
<td>3.79*</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>67.80</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>8.48</td>
<td>4.24</td>
<td>4.09*</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>50.82</td>
<td>1.03</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

were the lowest. Over the three-year period, the treatment group's mean grades declined and then increased to bring the eighth-grade mean grade to a point above the baseline. In contrast, the control group's mean mathematics grade remained the same between sixth grade and seventh grade, but declined at the eighth-grade level. The pattern of the comparison group was more comparable to that of the treatment group in the way it declined at the seventh-grade year and then rose at the eighth-grade year. However, the comparison group's mathematics mean grade did not rise above the baseline mean at the end of the eighth-grade year as did the treatment group's mean grade. See Table 4.14 for results of the repeated measures ANOVA analysis for sixth-, seventh- and eighth-grade mathematics grades and Figure 6 for a graphic depiction of those grade means over a three-year period.
Table 4.14

**GLM Repeated Measures ANOVA for School Letter-Grades in Mathematics -- Grades 6, 7, and 8**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>7.12</td>
<td>3.56</td>
<td>2.12</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>80.53</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>2</td>
<td>8.63</td>
<td>4.31</td>
<td>5.98**</td>
</tr>
<tr>
<td>T x G</td>
<td>4</td>
<td>12.07</td>
<td>3.01</td>
<td>4.18**</td>
</tr>
<tr>
<td>Error</td>
<td>96</td>
<td>69.28</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>177.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01.

In summary, during the middle school years (Grades 6, 7 and 8), there were no significant differences between groups, or over time, in the area of reading letter-grades. After covarying the English letter-grades, there were no significant differences found either between groups, or over time, in English letter-grades. The covariate accounted for any differences found in English grades. In mathematics, significant differences were found between groups for seventh-grade letter-grades and for eighth-grade letter-grades. At the seventh-grade level, the control group had a significantly higher mean grade than the comparison group, but there was no significance found between the treatment group and the control group. At the eighth-grade level, the treatment group was found to have significantly higher mean mathematics grades than the control group and the comparison group. Relative to mathematics mean grades, time was a significant factor. Time also interacted with group to create a situation where the relationship of the group means to each other changed over time, enough to create a significant difference between the group means relative to mathematics grades.
Figure 6. Comparison of Mean Mathematics Grades — Grades 6, 7, and 8

Figure 6. Mean Mathematics letter-grades as converted to numeric equivalent for grades 6, 7, and 8.
School letter-grades—English (Grades 9 & 10). Before using a parametric analysis of grades, a Kendall's tau statistic was used to ascertain if students within each group were distributed randomly throughout the four levels of English classes. The Kendall's tau values ranged from -0.57 to -0.06 for the four semesters measured. During all four semesters of Grade 9 and Grade 10 (or second year in high school), no significant differences at the .05 level were found in actual versus expected numbers of students in each group who were included in the various levels of English. In other words, there were no significantly greater numbers of average-level students, remedial-level students, etc., found in the treatment group than were found in the comparison or the control groups, other than that which could be expected by random chance.

ANOVA analysis of high-school English letter-grades, converted to numeric equivalents (A=4, B=3, etc.), indicated that there were no significant differences between groups during any of the four semesters of English measured. Repeated measures analysis found no significant differences over time and no time-by-group interactions which were significant at the .05 level. Results summaries of Kendall's tau, ANOVAs for high school English letter-grades, repeated measures ANOVAs and a graphic depiction of mean letter-grade means can be seen in Tables 4.15, 4.16, 4.17 and Figure 7, respectively.
Table 4.15

Results of Kendall's tau-b for High-School English Levels.

<table>
<thead>
<tr>
<th>Factor</th>
<th>df</th>
<th>Value</th>
<th>ASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-1</td>
<td>6</td>
<td>-0.060</td>
<td>0.124</td>
</tr>
<tr>
<td>9-2</td>
<td>6</td>
<td>-0.098</td>
<td>0.123</td>
</tr>
<tr>
<td>10-1</td>
<td>6</td>
<td>-0.087</td>
<td>0.116</td>
</tr>
<tr>
<td>10-2</td>
<td>6</td>
<td>-0.057</td>
<td>0.126</td>
</tr>
</tbody>
</table>

Note.
9-1 = 9th grade, 1st semester
9-2 = 9th grade, 2nd semester
10-1 = 10th grade, 1st semester
10-2 = 10th grade, 2nd semester

*ASE ≥ 0.733.
Table 4.16

GLM ANOVA Summaries for School Letter-Grades in English -- Grades 9 and 10.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>4.24</td>
<td>2.12</td>
<td>2.50</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>39.93</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>9-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>5.36</td>
<td>2.68</td>
<td>2.48</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>50.81</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>10-1 a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>1.20</td>
<td>0.60</td>
<td>0.56</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>50.80</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>10-2 a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>3.23</td>
<td>1.61</td>
<td>1.40</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>54.28</td>
<td>1.15</td>
<td></td>
</tr>
</tbody>
</table>

a Some students were not designated as 10th graders, but were designated as second-year 9th graders.
Table 4.17

GLM Repeated Measures ANOVA of Summaries for School Letter-Grades in English — Grades 9 and 10.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>9.95</td>
<td>4.97</td>
<td>2.11</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>110.86</td>
<td>2.35</td>
<td></td>
</tr>
<tr>
<td>Within Subject</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>3</td>
<td>1.59</td>
<td>0.53</td>
<td>0.88</td>
</tr>
<tr>
<td>T x G</td>
<td>6</td>
<td>4.09</td>
<td>0.68</td>
<td>1.13</td>
</tr>
<tr>
<td>Error</td>
<td>141</td>
<td>84.96</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td>211.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

School letter-grades—mathematics (Grades 9 and 10). Similarly, a Kendall's tau statistic was generated for analysis of mathematics grouping to ascertain if students within each group were randomly distributed throughout the five to eight levels of mathematics classes. Kendall's tau values ranged between -0.04 and +0.001 for the four semesters measured. None of these values met the criterion for significance. There were no significantly greater numbers of average-level students, remedial-level students, etc., found in the treatment group than were found in the comparison or the control groups, other than that which could be expected by random chance (see Table 4.18).
Figure 7. Comparison of Mean English Grades — Grades 9 and 10

Figure 7. Mean English letter-grades as converted to numeric equivalent for grades 9 and 10 (or 2nd year high school). Each grade year was divided into two semesters, thus 9-1, 9-2, etc. Also, some students were not designated tenth graders, but second year ninth graders. Their grades are included in 10-1 and 10-2.
### Table 4.18

**Results of Kendall's tau-b for High-School Mathematics Levels.**

<table>
<thead>
<tr>
<th>Factor</th>
<th>df</th>
<th>Value</th>
<th>ASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-1</td>
<td>8</td>
<td>-0.047</td>
<td>0.136</td>
</tr>
<tr>
<td>9-2</td>
<td>8</td>
<td>-0.045</td>
<td>0.134</td>
</tr>
<tr>
<td>10-1</td>
<td>8</td>
<td>0.001</td>
<td>0.116</td>
</tr>
<tr>
<td>10-2</td>
<td>8</td>
<td>-0.079</td>
<td>0.121</td>
</tr>
</tbody>
</table>

**Note.**

9-1 = 9th grade, 1st semester  
9-2 = 9th grade, 2nd semester  
10-1 = 10th grade, 1st semester  
10-2 = 10th grade, 2nd semester  
*ASE > 0.571.

Univariate analysis of high-school mathematics grades indicated that there were significant differences in mean mathematics grades between groups for the two semesters of Grade 9, but no significant differences for the two semesters of Grade 10 (or second year). The source of the ninth-grade difference was the fact that the control group's mean high-school grades were significantly higher than either the treatment group's or the comparison group's mean mathematics grades during those two semesters. Although there was no significant difference found between the treatment group's and the comparison group's mean mathematics grades during their ninth-grade year, the treatment group's mean grade was higher than the comparison group's mean grade when examining the post hoc comparisons (see Table 4.19).
Table 4.19

GLM ANOVA Summaries for School Letter-Grades in Mathematics – Grades 9 and 10

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>17.79</td>
<td>8.89</td>
<td>6.86 **</td>
</tr>
<tr>
<td>Error</td>
<td>44</td>
<td>57.05</td>
<td>1.29</td>
<td></td>
</tr>
<tr>
<td>9-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>15.13</td>
<td>7.56</td>
<td>5.92 **</td>
</tr>
<tr>
<td>Error</td>
<td>44</td>
<td>56.26</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>10-1 a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>2.92</td>
<td>1.46</td>
<td>1.11</td>
</tr>
<tr>
<td>Error</td>
<td>44</td>
<td>57.71</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>10-2 a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>0.98</td>
<td>0.49</td>
<td>0.57</td>
</tr>
<tr>
<td>Error</td>
<td>44</td>
<td>37.82</td>
<td>0.85</td>
<td></td>
</tr>
</tbody>
</table>

*Some students were not designated as 10th graders, but were designated as second-year 9th graders.

**p < .01.

A repeated measures ANOVA revealed a significant group effect, time effect and a time-by-group interaction for the four semesters of mathematics. There were significant differences between groups during the four measurements of high-school mathematics in that the three groups did differ significantly from each other when the scores for all three years were compared. Thus it can be said that across time the groups did differ significantly from each other. Also, the relationship of groups to each other varied significantly from the beginning of 9th grade to the end of 10th grade. From the first
semester to the second semester of 9th grade, the group relationship did not show significant change; however, there was a significant difference in the mean-of-group-means between these first two high-school semesters. The mean-of-means went down: two group means (treatment and control) declined and one went up (comparison) between the first and second semesters of 9th grade. In contrast, between the first semester of the 9th-grade year and the first semester of the 10th-grade year (or second year of high school), there was a significant difference in the relationship of the groups to each other and in the mean-of-group-means. The mean-of-means went up significantly due to the sudden rise of the control group’s mean score. From the first semester of 9th grade to the last semester of 10th grade (or second year of high school), there was a significant difference in the relationship (ordering and distance) of groups to each other and in the mean-of-means. By the end of the second year in high school, the treatment group’s score was the highest, with the control group's score second and the comparison group's score lowest. In contrast, at the end of the first semester of 9th grade, the control group's mean score was highest with the treatment group's score next and the comparison group's score lowest. At the last measurement (10th grade or second year of high school), there was no significant difference in the mean grades of the groups, and all three groups’ mathematics mean grades had gone down. See Table 4.20 for summaries of the repeated measures ANOVA and Figure 8 for a graphic depiction of high-school mathematics mean letter-grade scores.

At the end of two years of high school, cumulative grade point averages (GPA) for students in the three groups were compared via an ANOVA. The first comparison was made of the final reduced sample in which nine students had been dropped from the sample due to lack of baseline data, special education inclusion or summer school. This first analysis of GPAs found no significant differences ($F = 2.47, df = 2/49, p < .05$)
Table 4.20


<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>18.18</td>
<td>9.09</td>
<td>3.84  *</td>
</tr>
<tr>
<td>Error</td>
<td>44</td>
<td>104.06</td>
<td>2.36</td>
<td></td>
</tr>
<tr>
<td>Within Subject</td>
<td>141</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>3</td>
<td>13.77</td>
<td>4.59</td>
<td>5.78  **</td>
</tr>
<tr>
<td>T x G</td>
<td>6</td>
<td>18.66</td>
<td>3.11</td>
<td>3.92  **</td>
</tr>
<tr>
<td>Error</td>
<td>132</td>
<td>104.79</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>259.46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.  **p < .01.
Figure 8. Mean Mathematics Grades as converted to numeric equivalent for grades 9 and 10 (or 2nd year high school). Each grade year was divided into two semesters, thus 9-1, 9-2, etc. Also, some students were not designated tenth graders, but second year ninth graders. Their grades are included in 10-1 and 10-2.
between the groups after two years of high school. However, when the data for the complete sample (nine eliminated students added back in) was analyzed, significance ($F = 3.51, df = 2/56, p < .05$) was found. A post hoc revealed that the control group had a significantly higher GPA than the comparison group. However, the control group's GPA was not significantly higher than the treatment group's GPA. Furthermore, the treatment group's GPA was higher than the comparison group's GPA, but not significantly so. See Figure 9 for a depiction of the GPA means at the end of the second year of high school.

**Academic achievement summary.** On a standardized measure of achievement, (ITBS), the three groups did not differ significantly from each other on the Reading Comprehension subtest between fifth grade and eighth grade. However, time was found to be a significant factor, in that, time had an effect on the composite group-mean z-score for Reading Comprehension. That score declined significantly between fifth grade and eighth grade. No time-by-group interactions were significant.

For ITBS Total Language, there was no significant difference between groups at the fifth-grade level and at the seventh-grade level; however, group scores did differ significantly at the eighth-grade level. The control group had significantly higher mean scores than the treatment group and the comparison group, which did not differ significantly from each other. Also, time was found to be a significant factor, in that, between fifth grade and seventh grade, the composite mean-Total-Language z-score declined significantly. Between fifth and eighth grade, there was no significant difference between the mean-of-group-means z-scores. The treatment group's mean z-score declined the most, and the control group's score fell the least. There was a significant time-by-group interaction between fifth grade and eighth grade. The control group's Total-Language-mean z-score was significantly higher than the treatment group's and the comparison group's mean z-scores.
Figure 9. Comparison of Cumulative High-School GPA Means

<table>
<thead>
<tr>
<th>Groups</th>
<th>Reduced Sample</th>
<th>Complete Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Group</td>
<td>1.51</td>
<td>1.47</td>
</tr>
<tr>
<td>Comparison Group</td>
<td>1.23</td>
<td>1.14</td>
</tr>
<tr>
<td>Control Group</td>
<td>1.78</td>
<td>1.78</td>
</tr>
</tbody>
</table>

Figure 9. Cumulative Grade Point Average (GPA) means for the three subject groups - reduced sample and complete sample. This cumulative average is reflective of two years of high school.
In ITBS Total Mathematics, between-group differences were found at the seventh and eighth-grade levels. At the seventh-grade level, the control group obtained a significantly higher mean standard score than the treatment and comparison groups. Although there was also a significant difference at the eighth-grade level, a post hoc failed to reveal the source of the variance. However, the control group’s mean score was higher than the treatment and control groups’ scores. Between fifth and eighth grade, time coupled with group was found to be a significant factor, in that, there was a significant time-by-group interaction and significant group differences between Grade 5 and Grade 7 and between Grade 5 and Grade 8. Over time, the control group's mean z-scores rose above the baseline while the treatment group’s and the comparison group's mean z-scores fell below the baseline.

Relative to school letter-grades, no significant differences were found between groups for reading letter-grades at the sixth-, seventh- or eighth-grade levels. No significant time, or time-by-group interactions were noted. After covarying the English grades, no significant differences or interactions were obtained between sixth and eighth grades. Mathematics grades did not vary significantly at the sixth-grade level; however, significance was found at the seventh- and eighth-grade levels. At the seventh-grade level, the control group was found to have significantly higher mean grades than the comparison group, but not the treatment group. However, the treatment and comparison groups did not differ significantly from each other. At the eighth-grade level, the treatment group was found to have significantly higher mathematics grades than the comparison and the control groups, whose scores did not differ significantly from each other. A significant time effect and a significant time-by-group interaction were indicated by the repeated measures analysis. Over the three-year period, the treatment group's grades declined and then increased to bring the their eighth-grade mean grade above the baseline; the control and comparison groups' grades ended below the baseline.
At the high-school level, no significant differences were found between groups, or over time, for four semesters of high-school English. During the first two semesters of high-school mathematics, the control group obtained significantly higher grades than the treatment and comparison groups. For the two semesters of mathematics in the second year of high school, no significant differences were found between groups. Significant time and time-by-group effects were found in mathematics grades for the two-year high-school period. Mathematics grades for all groups went down during those two years.

Additionally, no significant differences were found in cumulative grade point average (GPA) between groups at the end of the second year of high school. GPA would be reflective of grades for all classes, not just English and mathematics. This information about GPA has been included in this study as an insight into academic achievement in general when comparing the three groups involved in this study.

The results of the analysis of achievement were mixed. At the end of the middle-school years (eighth grade), the treatment group had significantly lower scores than the control group on the ITBS Total Language. Post hoc analysis of scores at the end of Grade 8 showed no definitive source of variance on the ITBS Total Mathematics subtests, although there was a significant result indicated. However, the treatment group did have significantly higher mathematics grades in school. There were no significant differences found between groups on ITBS Reading Comprehension scores, reading grades or English grades. At the end of the second high-school year, there were no significant differences between groups found in English or mathematics grades or in cumulative grade point average (GPA).

Null Hypothesis 1 was not rejected when comparing student achievement at the end of the second year of high school. These results suggested that participation in the Pride Program had had no significant effect on the achievement of the students as measured at the end of the second year of high-school education. However, secondary
findings indicated that when eighth-grade standardized test scores (ITBS) and grades were considered, there were significant differences between groups in ITBS Total Language (control group higher) and Total Mathematics (undefined) and school mathematics grades (treatment group higher).

Attendance

ANOVA analyses, and subsequent post hoc comparisons of the mean number of absences for each group for each school year between the beginning of sixth grade and the end of the second year of high school, indicated that sixth-grade attendance for the comparison group was significantly different from that of the two other groups (F = 5.14, df = 2/49, p < .01). Because of this initial significant difference in the number of baseline-year absences, ANCOVAs were performed on the attendance data, and sixth-grade attendance was used as a covariate. No significant differences between groups were found for 7th-, 8th-, 9th- or 10th- (second year of high school) grade years, other than that which could be attributed to the initial 6th-grade difference (see Table 4.21).

Results of the repeated measures ANCOVAs indicated a significant time effect within, but no time-by-group interaction and no time-by-covariate interaction. It was found that the covariate accounted for any between-group differences found over the five-year period; however, the comparison group continued to have more absences than the treatment and control groups; and the mean number of absences increased significantly for all groups between sixth grade and the end of the second year of high school (see Table 4.22 and Figure 10).

Repeated measures contrasts, with 6th-grade attendance being held constant, indicated there were no significant differences found between 7th and 8th grade or 7th and 9th grade; however, a significant difference was found between 7th and 10th grade. This difference was in a negative direction (i.e., the number of absences increased
significantly between 7th and 10th grade) even when Grade 6 attendance was held constant.

Table 4.21

GLM ANCOVA* Summaries for Attendance (Number of Absences), Grades 7-10

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>0.30</td>
<td>0.15</td>
<td>0.00</td>
</tr>
<tr>
<td>AGR 6b</td>
<td>1</td>
<td>3984.32</td>
<td>3984.32</td>
<td>50.26 ***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>3804.96</td>
<td>79.27</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>152.66</td>
<td>76.33</td>
<td>0.51</td>
</tr>
<tr>
<td>AGR 6b</td>
<td>1</td>
<td>3470.86</td>
<td>3470.86</td>
<td>23.12 ***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>7206.09</td>
<td>150.12</td>
<td></td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>221.94</td>
<td>110.97</td>
<td>0.39</td>
</tr>
<tr>
<td>AGR 6b</td>
<td>1</td>
<td>5471.69</td>
<td>5471.69</td>
<td>19.21 ***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>13673.74</td>
<td>284.86</td>
<td></td>
</tr>
<tr>
<td>10th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>510.81</td>
<td>255.40</td>
<td>1.04</td>
</tr>
<tr>
<td>AGR 6b</td>
<td>1</td>
<td>1588.46</td>
<td>1588.46</td>
<td>6.49 *</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>11752.66</td>
<td>244.84</td>
<td></td>
</tr>
</tbody>
</table>

Note. 10th grade refers to all students designated as 10th graders and students who were 2nd year 9th graders.

*Sixth-grade number of absences is the covariate factor. aAttendance—grade 6.

*p < .05. ***p < .001.
Table 4.22

GLM Repeated Measures ANCOVA Summaries for Attendance (Number of Absences), Grades 7 - 10.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>468.42</td>
<td>234.21</td>
<td>0.47</td>
</tr>
<tr>
<td>AT6</td>
<td>1</td>
<td>13907.72</td>
<td>13907.72</td>
<td>28.11 ***</td>
</tr>
<tr>
<td>Error</td>
<td>48</td>
<td>23750.57</td>
<td>494.80</td>
<td></td>
</tr>
<tr>
<td>Within Subject</td>
<td>156</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>3</td>
<td>1542.77</td>
<td>514.25</td>
<td>5.84 ***</td>
</tr>
<tr>
<td>T x G</td>
<td>6</td>
<td>417.30</td>
<td>69.55</td>
<td>0.79</td>
</tr>
<tr>
<td>T x AT6</td>
<td>3</td>
<td>607.62</td>
<td>202.54</td>
<td>2.30</td>
</tr>
<tr>
<td>Error</td>
<td>144</td>
<td>12686.88</td>
<td>88.10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>207</td>
<td>53381.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The covariate (AT6) = number of absences in grade 6. ***p < .001.

Null Hypothesis 2 was not rejected in that there were no significant differences found in the number of absences between groups in Grade 10. However, as noted previously, there was a significant difference in number of absences for all groups combined from the baseline to the second year in high school. Figure 11 illustrates the total number of absences per year when absences for all three groups were combined.
Figure 10. Comparison of Number of Absences

Figure 10. Mean number of absences per grade for grades 6-10 (or 2nd year of high school).
Figure 11. Number of Absences Per Year

Per year number of absences for the three groups combined.
Discipline Referrals

The results of the ANOVA analysis of discipline referrals revealed no significant differences in the number of discipline referrals between groups for any of the five years studied (see Table 4.23). The repeated measures analysis found a significant time effect,

Table 4.23

GLM ANOVA Summaries for Discipline Referrals, Grades 6-10.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>0.02</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>6.73</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>5.04</td>
<td>2.52</td>
<td>0.96</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>128.65</td>
<td>2.62</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>5.72</td>
<td>2.86</td>
<td>2.29</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>61.25</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>26.99</td>
<td>13.49</td>
<td>1.95</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>339.69</td>
<td>6.93</td>
<td></td>
</tr>
<tr>
<td>10th Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2</td>
<td>0.87</td>
<td>0.43</td>
<td>0.05</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>404.35</td>
<td>8.25</td>
<td></td>
</tr>
</tbody>
</table>

Note. 10th grade refers to all students designated as 10th graders and students who were 2nd year 9th graders.
but no time-by-group interaction (see Table 4.24). Over time, all groups varied significantly from the end of 6th grade to the end of their second year in high school. The number of discipline referrals increased significantly for all groups between 6th grade and 10th grade (2nd year of high school). Figure 12 is a graphic illustration of the discipline referral results and Figure 13 illustrates the total number of discipline referrals per year for all groups. Null Hypothesis 3 was not rejected.

Table 4.24

**GLM Repeated Measures ANOVA Summaries for Discipline Referrals, Grades 6-10.**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (G)</td>
<td>2</td>
<td>14.04</td>
<td>7.02</td>
<td>0.89</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>385.32</td>
<td>7.86</td>
<td></td>
</tr>
<tr>
<td>Within Subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (T)</td>
<td>4</td>
<td>139.53</td>
<td>34.88</td>
<td>12.31 ***</td>
</tr>
<tr>
<td>T x G</td>
<td>8</td>
<td>24.62</td>
<td>3.07</td>
<td>1.09</td>
</tr>
<tr>
<td>Error</td>
<td>196</td>
<td>555.37</td>
<td>2.83</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>1118.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001.
Figure 12. Comparison of Discipline Referrals

Figure 12. Mean number of discipline referrals for grades 6-10 (or 2nd year of high school).
Figure 13. Per year number of discipline referrals for the three groups combined. Tenth grade column is reflective of both official tenth graders and second year ninth graders.
Self esteem

This portion of the analysis was conducted only on the subjects of the treatment group who had complete data sets (N=19). MANOVAs were performed on the composite score, Total Self; each of the four subscales; and the Lie Scale of the Coopersmith Self-Esteem Inventory (SEI). The MANOVA (19 sets of scores and five measurements over a three-year period) for the composite Total Self was not significant (F = 2.80, df=4/15, p<.05). However, when data was partitioned into the four subscales the following results were discovered. The MANOVA for the first Coopersmith SEI subscale of General Self was found to be significant (F = 3.31, df = 4/15, p < .05) by the Wilks’ lambda criterion. The MANOVA for the Social Self-Peers subscale was found to be significant (F = 3.24, df = 4/15, p<.05). A significant MANOVA also was obtained on the third subscale, Home-Parents, (F = 5.55, df = 4/15, p<.01). MANOVA analysis of School-Academic, the fourth subscale, found no significance (F = 0.51, df = 4/15, p<.05). The Lie Scale scores, when analyzed by a MANOVA, did not prove to be significant (F = 0.14, df = 4/15, p<.05). This last result would indicate that the same level of defensiveness was operating during all five measurements.

Repeated measures ANOVAs confirmed that time was a significant factor for General Self, Social Self-Peers and Home-Parents (see Tables 4.25, 4.26 and 4.27). These subscales comprised three of the four subscales of the overall inventory, School-Academic being the fourth subscale. Three of the four subscale scores (General, Social and Home) did show a significant difference on the univariate analysis between measurement one (summer after sixth grade—pre treatment) and measurement five (end of ninth grade). Scores rose indicating an increase of self-esteem in the subscale measures. The only subscale which did not indicate significance between time one and time five was the School-Academic subscale (see Table 4.28).
### Table 4.25

**GLM Repeated Measures ANOVA for the Coopersmith SET Subtest, General Self**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>190.56</td>
<td>47.64</td>
<td>7.34***</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>467.03</td>
<td>6.48</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>657.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < .001.

### Table 4.26

**GLM Repeated Measures ANOVA for the Coopersmith SET Subtest, Social Self/Peers**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>22.48</td>
<td>5.62</td>
<td>4.25 **</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>95.11</td>
<td>1.32</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>117.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01.
Table 4.27

**GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, Home/Parents**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>22.46</td>
<td>5.61</td>
<td>3.14 *</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>128.73</td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>151.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05.

Table 4.28

**GLM Repeated Measures ANOVA for the Coopersmith SEI Subtest, School/Academic**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>3.68</td>
<td>0.92</td>
<td>0.49</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>135.51</td>
<td>1.88</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>139.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was also a Total Self score generated which was a composite score for all four subscales, minus the Lie Scale Score (amount of defensiveness). Although a MANOVA analysis of Total Self scores approached significance (p = .06), it was not significant (F = 2.80, df = 4/15, p < .05). A univariate repeated measures analysis...
indicated that there was a significant difference in scores between the initial measurement before treatment (time one) and the final measurement at the end of the ninth-grade year (time five), but no significant differences at any other points in time or when scores were analyzed as a whole over the five year period (see Table 4.29).

Results of the self-esteem analysis should be regarded with caution due to the lack of either a control or comparison group. Significant results could be a function of history or of natural maturation of the students, although the technical manual for the Coopersmith SEI states that "Scores on the SEI have been shown to increase slightly and monotonically with grade level" (Coopersmith, 1987, p. 8).

Table 4.29
GLM Repeated Measures ANOVA for the Coopersmith SEI

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>1478.48</td>
<td>369.62</td>
<td>4.38**</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>6073.51</td>
<td>84.35</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>7551.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01.

Null Hypothesis 4 was not rejected based on the non-significant MANOVA for the composite scores of Total Self (total self-esteem). However, when data was partitioned, significant MANOVAs for General Self, Social Self-Peers and Home-Parents were obtained. Also, a repeated measures ANOVA contrast finding for Total Self (increased scores between measurement 1 and measurement 5) was significant. No significant differences were found on the School-Academic subscale and the Lie Scale.
(see Table 4.30). The non-significant Lie Scale was an indication that there was a consistent response approach by the subjects across all five measurements.

Figures 14 through 17 graphically depict the comparisons of mean scores over five observations for each of the four subtests of the Coopersmith SEI. The composite Total Self scores and the Lie Scale scores are shown on Figures 18 and 19.

Table 4.30

GLM Repeated Measures ANOVA for Lie Scale Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>0.84</td>
<td>0.21</td>
<td>0.10</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>144.75</td>
<td>2.01</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>145.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 14. Coopersmith SEI Comparison for General Self

The Coopersmith SEI was administered pre/post to the treatment group during summers of 1991 and 1992. The last observation was made at the end of the ninth grade school year (May/June 1994). All observations were of the treatment group subjects only. Higher scores indicate higher self-esteem. The maximum score for General Self is 26.
Figure 15. Coopersmith SEI Comparison for Social Self-Peers

The Coopersmith SEI was administered pre/post to the treatment group during summers of 1991 and 1992. The last observation was made at the end of the ninth grade school year (May/June 1994). All observations were of the treatment group subjects only. Higher scores indicate higher self-esteem. The maximum score for Social Self-Peers is 8.
Figure 16. The Coopersmith SEI was administered pre/post to the treatment group during summers of 1991 and 1992. The last observation was made at the end of the ninth grade school year (May/June 1994). All observations were of the treatment group subjects only. Higher scores indicate higher self-esteem. The maximum score for Home-Parents is 8.
Figure 17. The Coopersmith SEI was administered pre/post to the treatment group during summers of 1991 and 1992. The last observation was made at the end of the ninth grade school year (May/June 1994). All observations were of the treatment group subjects only. Higher scores indicate higher self-esteem. The maximum score for School-Academic is 8.
Figure 18. The Coopersmith SEI was administered pre/post to the treatment group during summers of 1991 and 1992. The last observation was made at the end of the ninth grade school year (May/June 1994). All observations were of the treatment group subjects only. Higher scores indicate higher self-esteem. The maximum score for Total Self is 100. Average scores are within the 70 to 80 range with a standard deviation of 11 to 13.
Figure 19. Coopersmith SEI Comparison for the Lie Scale

Figure 19. A high score on the Lie Scale may indicate that the subjects respond defensively or thought they understood the "intention" of the inventory and were attempting to respond positively to all items. The maximum score on the Lie Scale is 8.
Results Summary

The qualitative evaluation of the Pride Program indicated that all participants (students, teachers, mentors and parents) were generally satisfied with the program. It was perceived as a beneficial program which needed some corrections, but one that with time could make a difference in student self-esteem, conduct, academic achievement and, more importantly, in the futures of these at-risk students.

The quantitative, longitudinal analysis indicated that after three years in middle school (Grades 6, 7 and 8), standardized test scores for reading comprehension on the ITBS went down for all three groups, but there were no significant differences between groups at the end of Grade 8. Overall, time made a significant difference. The mean-of-group-means z-score was significantly different between Grade 5 and Grade 8 (lower). The control group's scores declining the least and the treatment group's scores declining the most. During the period mentioned above, ITBS Total Language test scores rose slightly for the control group and declined significantly for the treatment and comparison groups. A time-by-group interaction was also significant. Relative to ITBS Total Mathematics, the control group’s scores rose slightly and the treatment and comparison groups’ scores declined considerably causing a significant time-by-group effect. The control group’s mathematics scores were significantly higher at the end of Grade 7. Although there was a significant difference found at Grade 8 between groups, the post hoc comparison was unable to define the source of the variance.

No significant effects were noted for reading or English grades between Grades 6 and 8. A significant time effect and time-by-group interaction were found for mathematics grades between Grades 6 and 8. The treatment and comparison groups' grades rose from Grade 6 to Grade 8, and the control group's grades declined. The treatment group's mathematics grades were significantly higher than either the control or comparison groups' grades at the eighth-grade level.
For the four semesters of high school English, there were no significant between-group effects, time effects, or time-by-group interactions. This covered the time period between the first semester of Grade 9 and the end of the second semester of Grade 10 (or second year of high school).

Analyses of four semesters of high school mathematics grades indicated significant between-group effects for the two semesters of Grade 9, and a highly significant time effect between the beginning of Grade 9 and the end of the second year of high school. A highly significant time-by-group interaction was also noted.

Mathematics grades declined for all groups between the first semester and the fourth semester of high school. The control group's grades were extremely erratic during this time period. They showed a considerable decline between the first measurement and the last measurement. The treatment and comparison groups' grades were more constant, with the treatment group obtaining the highest grades (although not significantly higher) of the three groups by the end of the second year of high school. No significant differences were found in cumulative grade point average between groups at the end of the second year of high school.

There were no significant differences found in the number of absences between groups at the end of Grade 10 (or second year of high school). All differences were accounted for by the covariate. However, it should be noted that there was a significant difference in number of combined absences for all three groups from the end of Grade 6 to the end of Grade 10 indicating a strong, negative time effect for all three groups.

An analysis of discipline referrals over a five year period (Grades 6 through 10) revealed no significant differences in the number of discipline referrals between groups during any of the five years. Over time, however, all groups varied significantly from the end of Grade 6 to the end of their second year of high school. The number of discipline referrals increased significantly for all groups during those years.
Results for the Coopersmith SEI should be regarded with caution due to the small number of subjects and the lack of a control group. Although it was found that the Total Self (composite of the four subscale scores minus the Lie Scale) MANOVA approached significance across the three-year period, no significant differences were found in the area of total self-esteem. However, when data was more closely scrutinized, a one-time, significant positive time effect was noted between the first observation (June 1991) prior to any treatment and observation five at the end of Grade 9 (May 1994) on the Total Self. Furthermore, when data was partitioned to highlight the individual subscales, significant findings were recorded on MANOVAs for the subscales of General Self, Social Self-Peers, and Home-Parents. Lie Scale analysis indicated no significant differences over time indicating that the same level of defensiveness was in operation throughout the five observations.
CHAPTER 5
DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The Pride Program was, and still is, a program for at-risk middle-school students. Newport News Public Schools and Newport News Shipbuilding have joined together to provide positive influences on the academic and personal lives of at-risk students. For its first two years, Pride was residential in nature, but currently, it is not. This study provides a longitudinal analysis of the performance of the first cohort of Pride students who attended both years of the residential program. It contains a qualitative narrative about the program execution for those first two years of its existence. Also, the analysis examines both the academic and personal aspects of these students with respect to their educational performance, their conduct in school and their self-esteem.

The results of the formative (qualitative) analysis, Part I of Chapter 4, have provided information to determine program improvements for the two years following the initial year and have been summarized to provide information on the conduct of the program during the two residential, summer periods. The quantitative portion of the study (Part II of Chapter 4) has amassed empirical evidence over a three- to five-year period which can be utilized to evaluate the long-term effectiveness of Pride on the first cohort of students.

Purpose of the Study

The purpose of this study was to collect empirical and anecdotal evidence regarding the effectiveness of the treatment (Pride Program) on the first cohort of
students in the areas of academic achievement, attendance (as reflected by number of absences), student conduct (as reflected by the number of discipline referrals) and total self-esteem. Through this analysis, the researcher sought to answer the following questions:

1. How was the Pride Program implemented and conducted during the first two summers?

2. Over a five-year period, did the Pride Program have a significant effect on the academic achievement of those students who participated in the program for two summers?

3. Over a five-year period, did the Pride Program have a significant effect on the attendance of those students who participated in the program for two summers?

4. Over a five-year period, did the Pride Program have a significant effect on the student conduct of those students who participated in the program for two summers?

5. Over a three-year period, did the Pride Program have a significant effect on the total self-esteem of those students who participated in the program for two summers?

Evaluation Questions

Although there were no hypotheses proposed for the qualitative section of this study, there were five evaluation questions which were answered by this component of the investigation. These questions are as follows:

1. Did the program impact on self-esteem, cooperation, trust (Pride'91 only), social behaviors, academic skill levels and goal setting?

2. Was the environment drug free?

3. Were activities implemented as planned?
4. What did Pride cost?

5. What were the perceptions of the program participants (students, mentors, teachers, parents) with regard to the Pride Program’s effectiveness and worth?

Hypotheses of the Study

To provide answers to the questions regarding the academic achievement, attendance, student conduct and total self-esteem of the Pride students, the following four hypotheses were tested.

1. There are no significant differences on measures of academic achievement between the treatment group, the control group and the comparison group, at the end of a five-year period (end of Grade 5 thru Grade 10, or second year of high school).

2. There are no significant differences on a measure of attendance between the treatment group, the control group and the comparison group, at the end of a five-year period (Grade 6 thru Grade 10, or second year of high school).

3. There are no significant differences on a measure of student conduct between the treatment group, the control group and comparison group, at the end of a five-year period (Grade 6 thru Grade 10, or second year of high school).

4. There are no significant differences on a measure of total self-esteem for subjects of the treatment group, over a three-year period (end of Grade 6 to end of Grade 9).

Discussion of Findings

Qualitative Component

As stated earlier, there were no hypotheses stated for this portion of the study; however, there were five questions which the evaluation sought to answer. The first
question addressed the effects of the Pride Program on self-esteem, cooperation, trust (for Pride '91), social behaviors, academic skills and goal setting. From the data gathered through observations, surveys, scales and questionnaires, the general finding was that self-esteem, cooperation, trust, social behaviors and goal setting were influenced to a degree. However, how great was the influence or how deep was the level of commitment reached by the students could not be ascertained. Effects of the Pride Program may not be in evidence until these students become adults, and those effects might be known only to the individual students.

Question 2 addressed the presence of drugs in the summer school environment. On both occasions (summer 1991 and summer 1992), the majority of participants (91 to 98 percent) stated that they had seen no drug usage during the program. One of the priorities of the Pride Program was to extract these students from their usual environment where drug usage was prevalent. It was hoped that by providing a drug-free environment and drug-free role models, students would get a sense of a more hopeful and healthful lifestyle.

Question 3 addressed the implementation of the Pride Program. Activities were not always implemented as planned, particularly the first year. However, when changes were necessary, the Pride staff were quite creative in solving the problems. In general, the activities implemented had the best interests of the students in mind, and were implemented with the least amount of disruption to the basic program.

During the second summer, the researcher noted what appeared to be frequent disruptions of activities due to time over-runs of the previous activity, and more disorganization in general relative to carrying out what was stated on the daily schedule. The causes of these problems might have been less thorough pre-planning, a larger number of students in the program, or possibly the fact that the new program manager
(Newport News Public Schools) for the second summer was unable to spend as much time on site fielding problems as they arose.

Question 4 was simply a reporting of the average per-student cost of the program based on the information provided by the Newport News School District. On an average, the cost ranged from $2,100 the first summer to $1,391 the second summer.

It appeared to this researcher that resources were scarce the second summer of this program. A series of converging events may have been the cause of this. Newport News Ship Building was going through a period of “down-sizing” at the time of Pride '92 and was unable, or unwilling, to contribute their time and money as generously as they had the first summer. Also, mentors were not permitted as much work-time off for the purpose of mentoring at the Pride Program site. Unfortunately, some mentors were laid off their jobs during the time frame of this program. To their credit, these mentors continued to work with the Pride students. Furthermore, the school district was under some fiscal constraints, but was expected to increase the funding for the Pride Program to cover the increased number of students and teachers.

Question 5, the final evaluation question, was devised to ascertain the perceptions of the program participants about the Pride Program's effectiveness and worth. Overall, the participants felt that the program was effective and worthwhile. Many of the teachers and mentors noted, observed, or "sensed," improved behaviors or other nonquantifiable changes in attitudes or relationships with adults, peers, or both. There was some question by the mentors about the rigor of the academic program the second year, but in general the perceptions of most participants was that Pride was a beneficial intervention and that any problems encountered in the program could be resolved satisfactorily.

Evaluation findings for both Pride '91 and Pride '92 should be regarded with caution for the following reasons: The measurement of the qualitative aspects of a program dealing with people is always subject to many uncontrollable variables. Pride
was a program which incorporated many individuals and numerous treatments which were non-standard (teaching methods and counseling/mentorship techniques). Missing or non-existent data in some areas and student defensiveness on self-report instruments were uncontrollable variables due to the nature of the population. Time constraints limited the possibilities of field testing instruments prior to implementation, and the program structure necessitated the use of a variety of administrators for some instruments.

Limitations which will be ameliorated with time and future program data include lack of long term effects data and lack of information on a comparison group. Every reasonable effort afforded by time and situation was made by the evaluator to control variables or standardize administration for the purpose of producing a valid and useful evaluation of the Pride Program.

In Heyns's (1986) study of summer programs and disadvantaged youth, she states that, "The single most striking fact about summer programs in the United States is how little is known about them" (p. 6). Although, the evaluation of the Pride Program has its limitations, it adds pertinent information to an area of study which apparently has a paucity of data.

Hypothesis 1

There are no significant differences on measures of academic achievement between the treatment group (Pride students), the control group and the comparison group, at the end of a five-year period (end of Grade 5 thru Grade 10, or second year of high school). In order to test Hypothesis 1, several "snapshots" of academic achievement were taken. The first "snapshot" was taken at the end of the middle-school years (Grade 8), and the second was taken at the end of Grade 10, or for some students, the second year of high school since they did not accrue enough credits to be considered in Grade 10. The researcher's decision to investigate academic achievement in this way was based on the
assumptions that the type of classes, the availability of standardized test scores and the reporting of grades in middle school and in high school differed enough to warrant this division. For instance, reading was offered as a subject at the middle-school level, but not at the high-school level. Furthermore, standardized test data was only available for Grades 5, 7, 8 and 11 in the Newport News School System at that time.

As analyzed by ANOVAs, the results of the first "snapshot" at the end of Grade 8 revealed that there were no significant differences found between groups relative to reading grades. ANCOVAs found no significant differences between groups on English grades at Grade 8, other than those which could be accounted for in initial grade differences. However, ANOVA analysis did find a significant difference between groups at Grade 8 in mathematics grades. At Grade 8, the treatment group was found to have significantly higher mean mathematics grades than the control group and the comparison group.

It could be speculated that treatment group students had teachers with a more liberal grading system in mathematics than comparison group students or control group students, which could account for the higher grades. However, it is unlikely that all of the treatment students had math teachers that were different from the comparison group's teachers since both groups attended the same school and were usually computer assigned to teachers. Also, the treatment group's math teachers would have to be more liberal graders than the math teachers at the control group's school.

It is possible that there was more emphasis placed on mathematics at the treatment group school. However, since the treatment and comparison groups did differ significantly, but they attended the same school; and the comparison and the control groups grades did not differ significantly, and they attended different schools, the factors of school and teacher would not appear to be the reason for the difference.
Student attendance could have been a mitigating factor. Since it was known that the comparison group had significantly worse attendance than the treatment group, the comparison group might not have been in school as frequently, so they learned less. Their grades reflected this. However, it was known that the control group did not have significantly worse attendance than the treatment group, and their grades were still significantly lower.

Another possibility is that one school had a stronger supplemental math program for those students who needed to pass the Literacy Passport test at Grade 8. Since the population from which the treatment group students were drawn would be the likely population for the additional Literacy Passport classes, the Passport classes could have made the difference. However, this difference was mitigated in the case of the comparison group by their significantly worse attendance.

Furthermore, it can be speculated that a combination of factors, including the Pride Program intervention, could be the cause of the significantly higher mathematics grades of the treatment group at Grade 8. The findings do not point conclusively to one specific cause.

This study used an additional measure of academic achievement, the Iowa Test of Basic Skills (ITBS) standardized test scores. ANOVA analysis of these test scores indicated the following: there were no significant differences in ITBS Reading Comprehension mean standard scores at Grade 8, but the mean-of-mean z-scores declined significantly between fifth grade and eighth grade; there was a significant difference in ITBS Total Language mean standard scores at Grade 8 (i.e., the control group’s scores were significantly higher than the treatment group’s scores and the comparison group’s scores), time was a significant factor and there was a time-by-group interaction; there was a significant difference found in the ITBS Total Mathematics mean standard scores at
Grade 8, but the source of variability was undefined by the post hoc analysis. This might have been due to the small sample size, the small effect size, or both.

Although not totally consistent, the findings for school grades and for standardized test scores at Grade 8 were similar. Analyses indicated that the treatment group did not differ significantly from the other two groups in the area of reading at Grade 8. When comparing school grades in English and ITBS Total Language (which is a combination of reading, writing and English language usage) at Grade 8, there was a discrepancy between school grades (treatment group higher, but not significantly higher) and standardized test scores (control group significantly higher). When ITBS Total Mathematics was considered at Grade 8, the treatment group differed significantly in school grades (higher). However, although there was a significant difference obtained on the ANOVA for ITBS Total Mathematics, the main effect was relatively weak and did not meet the critical range value (11.02) of the Student-Newman-Kuels post hoc examination. The researcher was able to ascertain that the control group’s mean score was the source of the variance because it was 9.73 points higher than the treatment groups mean score and 11.01 points higher than the comparison group’s mean score. But it cannot be stated that the control group’s score was significantly higher than the treatment group’s score. The significant ANOVA finding might have had its source in the difference between the control group and the comparison group scores.

It is possible to speculate that the school grades were more reflective of what the teachers were teaching currently, and the ITBS scores reflected more general, long-term recall of academic information absorbed in the past. Based on this speculation, anything which interfered with learning prior to Grade 6 could have an effect on standardized test scores. Discrepancies between school grades and standardized test scores could be reflecting deficiencies prior to the treatment which were not yet alleviated by the treatment.
Also, some schools were very rigorous in their preparation of students for taking the standardized tests. This researcher has no irrevocable evidence of this, but it is possible that the control group school was one of those schools. This fact, in part, could account for the significantly higher Total Language and Total Mathematics mean ITBS scores of the control group, without the accompanying higher school grades.

The second academic "snapshot" was taken at the end of four semesters (two or four semesters at Grade 9 or two semesters at Grade 9 and two semesters at Grade 10) of high-school enrollment. When English and mathematics grades were compared between groups, via ANOVAs, at the end of four semesters of high school, no significant differences were found between groups in either English or mathematics at that point in time. However, repeated measures analyses did find between group differences when the four semester grades were considered as a whole for each group. Time was a significant factor when the mean scores were compared across time, and group was a significant factor between the first semester and the third semester, as well as between the first semester and the fourth semester, thus creating a time-by-group interaction. Additionally, when the cumulative grade point average was compared after four semesters of high school, no significant differences were found between groups either.

Although results were mixed when considering academic achievement at two points in time (end of Grade 8 and end of Grade 10 or second year of high school), results were conclusive at the end of the fifth year of the study—Hypothesis 1 was not rejected. However, when looking across time with repeated measures ANOVAs or ANCOVAs, one saw a more "active" set of results, not only for the treatment group, but for all three groups.

First, one sees that, the treatment, the control and the comparison groups could be highly erratic in the patterns of their grades and standardized test scores over time. In the case of ITBS reading and ITBS language scores (which were converted to z-scores due to
the nature of ITBS scoring process), time was found to be a significant factor when mean-of-the-mean scores were compared from year to year. In ITBS Reading Comprehension, the combined mean z-score (all three groups) declined significantly between Grade 5 and Grade 8, thus indicating that time was a negative factor when examining ITBS Reading Comprehension scores. The largest decline was seen in the treatment group scores, with the comparison group following closely, and the control group showing a minimal decline.

With regard to ITBS Total Language z-scores, time of itself, was a significant factor for all three groups, and there was also a time-by-group interaction indicating that the time factor affected different groups differently. The treatment and comparison groups' scores declined and remained depressed while the control group's score declined and then rose above the baseline score at the end of Grade 8.

ITBS Total Mathematics z-scores appears to be the most varied scores. Time again was a factor, but not by itself. Neither group nor time alone were found to be significant factors, but there was a time-by-group interaction in which groups varied significantly in their relationship to each other between fifth grade and seventh grade, and again, between fifth grade and eighth grade. The control group mean z-score rose between Grade 5 and Grade 7, but then declined. This decline, however, did not bring the control group's score below the baseline z-score. The treatment and comparison group scores made a steady decline between Grade 5 and Grade 8.

When examining school grades between Grades 6 and 8, no significant time effects or interactions were found in reading or English. Although grades fluctuated for all groups, they usually ended at, or below, the baseline grades. The control group was the exception with regard to reading grades: this group's grades were found to be slightly above the baseline at the end of Grade 8. For all groups, the mathematics grades were found to be somewhat erratic during the middle-school period. Both a significant time
effect and a significant time-by-group interaction were found. All three groups' mathematics grades vacillated to varying degrees or declined during this middle-school period. The treatment group's grades rose considerably between the end of Grade 7 and the end of Grade 8. From these results, although speculation when applied to the general middle-school, at-risk population, it might be inferred that scores and grades might be erratic with a general pattern of decline in evidence over the middle school years.

Although studying a rural population, Barrington and Hendrick's (1989) stated that at the middle-school level "serious problems in academic work clearly begin to appear" (p. 317). NELS:88 also concluded that "school failure does not happen in a single day or year, but is a culmination of a gradual process of disengagement over time" (p. 37). Pallas (1991) adds further evidence to the existence of this pattern of declining academic achievement by stating that "histories of school failure are cumulative, and with each passing year, it becomes more and more difficult to escape the weight of a growing mass of failure" (p.18). Although these studies do not refer directly to reading comprehension, English or mathematics, it is logical to conclude that all three subjects are vital parts of academic achievement, thus a decline in these three areas could be reflective of a pattern of general decline in academics overall. Determining which factors influence standardized scores and grades to the greatest degree during the middle-school years probably could be the subject of multiple future analyses.

It is speculated that academic achievement results were mixed at Grade 8, because the middle-school years are such a time of change and growth (Beane & Lipka, 1984), and the sample for this study so extremely skewed. The treatment and comparison groups’ scores followed the general pattern of decline (cited previously) in five out of six cases, while the control group scores were more erratic—going up in three cases, down in two and staying the same in one. Possibly, the Pride intervention needed to be a more concentrated and sustained effort with more emphasis on academic rigor. This
intervention necessitated consistent application throughout the middle-school years (not only in the summer) to make a significant impact on Grade 8 academics in general and Grade 8 reading comprehension in particular. Although Murnane (1975) suggested that enriching and stimulating the summer environment of at-risk students could help avert the stagnation of academic skills, and Vacha and McLaughlin (1982) stated that schools can compensate for the lack of academic and cultural experiences with low-cost summer programs, the current study does not bear this out. In contrast, Heyns (1986) and Ascher (1988) suggested that performance is not enhanced significantly by summer school attendance. This appears to be the case with the results of the current study. Additionally, Ascher (1988) suggested that the short duration of summer school programs inhibits their effectiveness, and that programs that exist can be strengthened by emphasizing high achievement and high expectations. Pallas (1991) contended that at-risk youth need on-going interventions (not only early interventions) throughout their education careers because of their continuous exposure to family and community environments which usually are not conducive to normal educational progress.

When examining high-school grades in English and mathematics, using a repeated measures ANOVA analysis, no significant differences in English grades were found over time or at the end of the second semester of high school; however, significant group, time and time-by-group interactions were noted relative to high-school mathematics grades. Although the pattern of mean grades for both English and mathematics was even more erratic than in middle-school, a general decline in mean grades in both subject areas was seen for all three groups. It should be noted, however, that the treatment-group grades were beginning to rise by the end of the fourth semester of high school, while the control and comparison groups’ grades were on a downward path. It would be interesting to ascertain if this recovery trend in English and mathematics grades continued for the treatment group students until they completed high school, or departed from it, and if the
11th-grade ITBS scores (Test of Achievement and Proficiency—TAP) were significantly different between groups. It can be speculated that possibly the Pride Program treatment had some long term effect on student attitudes about academic achievement which was finally coming to fruition as students matured and continued their high-school careers. NELS:88 (National Center for Education Statistics, 1992) reported that school failure was cumulative in nature and did not happen in a single day. The obverse of that situation would be that school success is cumulative and doesn't happen in one day either. Unfortunately, at the end of this study, Hypothesis 1 was not rejected.

Hypothesis 2

The number of absences, which was the measure of attendance used for this analysis, was not found to be significantly different between groups at Grade 10. No significant differences were found at Grades 7, 8, or 9 either. Initially at Grade 6, the comparison group had significantly more absences than the treatment and control groups. When the Grade 6 absences were used as a covariate, no significant differences were found at any of the grade levels examined, other than that which could be attributed to the covariate. Thus, Hypothesis 2 was not rejected.

However, repeated measures ANCOVAs indicated a significant time effect for attendance. Over time, the number of absences of all groups increased significantly, or in other words, attendance declined for all groups. This finding is consistent with Barrington and Hendricks (1989) findings in their longitudinal study, in that, their analyses revealed a pattern of increasing absences with significant differences from Grade 5 through high school. But, when one notes the pattern over the five-year period in the present study, one can see that by the end of the second year in high school, the number of comparison-group and control-group absences were increasing, while the treatment group absences had started decreasing. This researcher does not know if this trend continued, but if it
did, possibly the Pride Program treatment had a positive long-term effect on those students relative to their school attendance patterns. Also, it can be speculated that the improving attendance pattern of the treatment group might have fostered what seemed to be the beginnings of an improving academic-achievement pattern in high-school grades at the end of the second year of high school.

**Hypothesis 3**

There were no significant differences in the number of discipline referrals between groups at Grade 10 (or second year of high school) or at any other grade level which was examined. Thus, Hypothesis 3 was not rejected. However, repeated measures ANOVAs indicated time was a significant factor for all groups relative to discipline referrals. Overall, the number of referrals increased significantly between the end of Grade 6 and the end of Grade 10 (or second year in high school). After a decline for all groups at Grade 8, the referrals increased considerably for all groups. This finding is consistent with Vacha and McLaughlin's (1992) report that children of single mothers were more likely to experience more problems with adolescent defiance and school discipline. The population from which the current study was drawn is predominantly in the single-mother/parent category. It should be noted, however, that the comparison group’s number of referrals appeared to be starting a decline while the treatment and control groups’ number of referrals appeared to be on a steeply increasing path.

It can be posited that although, or possibly because, the treatment group students were attending more days, they were also able to get into trouble more frequently; and conversely, since the comparison group students were attending less frequently, they were getting in trouble less. However, this assumption does not tend to support the fact that the treatment group’s grades appeared to be improving somewhat, even though they were getting in trouble more. Yet, it does support the steady decline in the comparison
group grades. Another more plausible scenario is that only a few students in the
treatment group were causing the bulk of the discipline referrals, while the other students
were continuing to focus on academic matters.

**Hypothesis 4**

Hypothesis 4 was not rejected based on the non-significant MANOVA for the
composite scores of Total Self (total self-esteem) at the end of ninth grade. However,
when data was partitioned, significant MANOVAs for the subscales of General Self,
Social SelfPeers and HomeParents were obtained. Also, a repeated measures ANOVA
contrast finding for Total Self (measurement 1—pretest to measurement 5—post, post
test) was significant. SchoolAcademic subscale scores were not significant. The
indication is that self-esteem in the areas of general self, peers and parents were positively
influenced for the first Pride cohort. A total of the subscale scores, minus the Lie Scale
score, comprised the Total Self score. On the univariate analysis for Total Self, there was
a significant difference between the pre-treatment observation at the end of Grade 6 and
the final observation at the end of Grade 9. Although three subscales achieved
significance, the total self-esteem score did not. Overall, time was not a significant factor
in Total Self, although there was a significant finding between time 1 and time 5 (pre-
treatment and at the end of ninth grade—post-post treatment). These findings should be
regarded with caution, however, since there was no control group used for comparison. It
is possible that self-esteem increases significantly for all students as they mature,
although Coopersmith (1987) indicates that there is only a slight, monotonic increase of
scores with the increase of grade level. Another possibility is that the Pride treatment, in
fact, did have a positive effect on the cohort of students examined because it increased
parental involvement. Friedland (1992) maintained that more parent involvement helps
to raise self-esteem. Since this was a small, and very skewed sample, it would be
inappropriate to generalize to the greater population of at-risk students, but it is conceivable that the Pride sample is representative of many other students in the overall, at-risk population.

Conclusions

Program Evaluation

Generally, the Pride Program was viewed as beneficial, not only to the students, but to the mentors. The program evaluation questionnaires indicated that the participants perceived the program as a very worthwhile endeavor. That is not to say that there was no criticism of Pride, but that criticism took a constructive form. The suggestions given appeared to be given in the spirit of helping the program improve. Overall, the comments were constructive and positive. However, one sobering conclusion drawn by Holly (1987) about program perception, which needs to be included at this point in the current study, is that “enthusiasm for a program is not a reliable measure of a program’s effectiveness” (p. 11).

Many positive changes were made in the Pride Program in 1992, but it should be remembered that the program was still in its infancy. The strengths of this program have been in the positive perceptions of the program participants and the students’ parents. Mentor, teacher and parent willingness to put forth time and effort in Pride activities signified a commitment to help these students. The value and the possibilities that these people have seen for the students because of their involvement in Pride have overshadowed and outweighed any of the current program weaknesses. Furthermore, the collaborative effort of a private and public organization in attacking the social problem of unmotivated, under achieving or problematic youth is to be commended and nurtured. All these factors have combined to make a program which could have significant impact on these students. Ascher (1988) spoke very clearly to this point. She stated that
although the evidence is discouraging thus far about the impact of summer school programs, it should not prevent educators and researchers from seeking ways in which to improve them for disadvantaged children.

Academic Achievement

The results of this study indicate that the Pride Program intervention had no significant effects on the academic achievement of those at-risk students who participated for two summers. At the end of the second year of high school (either second-year 9th grade or 10th grade), there were no significant differences between the treatment group, the comparison group and the control group in grades earned in English or mathematics. The cumulative grade-point averages between these three groups was not significantly different either.

Academically speaking, one can speculate that possibly the Pride Program treatment was not strong enough or not long enough to sustain major, significant academic results in the areas of reading, language arts, English and mathematics. At-risk students as stated by Ascher (1988) need long, sustained interventions. Even if the intervention is begun at the middle-school level—prime impressionable years when patterns of poor attendance and underachievement become established (Barrington & Hendricks, 1989; Wells, 1989)—the treatment must be sustained and maintained throughout both the middle-school and high-school years to be significantly effective. Brief, one-shot interventions for at-risk students are not sufficient (Heyns, 1986). Students with risk characteristics tend to revert back to old, comfortable, self-defeating habits when the "scaffolding" is removed. Pride's relatively brief intervention time might have made some differences, but not enough to sustain a life-long change of habits and attitudes.
One question which surfaces about the academic findings of this study is that if there had been a stronger emphasis during the summer programs in reading, writing and mathematics as suggested by Ascher (1988), would the statistical results have been different? Or, can it be said that there truly was not an impact on academic success, if the impact was not in increased grades, but simply in keeping these students in school so that they did not become dropout statistics. As an aside, it was noted that the number of official dropouts was fewer in the treatment group (0 of 20) than in the comparison group (3 of 26). Was this a factor of the initial difference in number of absences between the treatment group (significantly less absences) and the comparison group, or was this somehow an impact of the treatment?

Attendance

Based on the findings of this study, the number of absences—which was the method used to determine attendance—between the treatment group, the comparison group and the control group was not significantly different when initial differences were controlled. Thus, it would appear that the Pride Program treatment had no significant, statistical impact on attendance which is consistent with Barrington and Hendricks (1989) findings about the general attendance patterns of students between Grade 5 and high school. However, as noted in the academic achievement portion prior to the attendance conclusions, school district records do not indicate any dropouts in the treatment group, but do record dropouts in the comparison group. This difference might be significant, and if it is, it is possible that the treatment made the difference.

Furthermore, another significant result which was evident across all three groups was that attendance declined (number of absences rose) from Grade 6 to the end of the second year of high school. This finding was consistent with Barrington and Hendricks' (1989) study of graduates, dropouts and nongraduates. Although the Barrington and
Hendricks study was conducted using subjects from a small city and its surrounding rural area, the same pattern was seen in the Pride Program study which was conducted with subjects living in a relatively large, urban area. Barrington and Hendricks (1989) attributed this decline in attendance from middle school onward to student dissatisfaction and failure when academic demands were not met. They further noted that the parents of these students may not have been able to provide effective support and assistance to help the students succeed in an academic environment.

One of the hopes of the initial program planners of the Pride Program was that this program would provide support and assistance for both the students and the parents. Although not statistically verifiable, maybe Pride did because there were no dropouts in evidence at the point where the current study ended. It would be interesting to investigate the current situation of the treatment group students who have come to the end of their fourth year in high school this June (1997).

**Discipline Referrals**

No significant differences between groups was found in the number of discipline referrals at the end of the second year of high school. The Pride intervention did not appear to make a statistical difference in reducing discipline referrals as students proceeded into high school. As with absences, time was a significant factor in the increases of discipline referrals for all groups. It can be speculated that dissatisfaction with school and the academic demands at school could cause friction between students and teachers or between students and peers. This set of circumstances appears to be related to Beane and Lipka's (1984) findings about patterns of student behavior. Possibly other circumstances outside of the school, and within the home environment, were instrumental in precipitating inappropriate behavior at school (Bempechat and Ginsberg, 1989). The support provided by the Pride Program was no longer in place after Grade 8.
If that support had been continued, the results of the study might have been different. This point speaks to sustaining an intervention for at-risk students as opposed to offering it for limited periods of time only.

Self-Esteem

In this portion of the analyses, results reflected only how the treatment group students compared with themselves in four areas of self-esteem (General Self, Social Self-Peers, Home-Parents and School-Academic). No control or comparison group was used. The Coopersmith Self-Esteem Inventory (SEI) was the measurement tool used. Although there were no significant results for total self-esteem, there were significant positive results found in three (General Self, Social Self-Peers and Home-Parents) of the four areas (subscales) measured by the Coopersmith. No significant difference was found in the fourth area, School-Academic. This finding is consistent with Holly’s (1987) findings which stated that “the best way to acquire a justified sense of confidence is to actually develop competencies” (p. 9). The comparisons were made over a three year period, beginning with an initial measurement prior to the initiation of the Pride Program treatment and a final measurement at the end of Grade 9. A comparison of the Total-Self score (combined total score of the four subscales) approached significance on the multivariate analysis, but was not significant. Although time was not a significant factor overall in Total self-esteem, there was a positive effect on Total self-esteem when comparing one set of scores—the pretest scores (summer before entering Grade 7) and the post-posttest scores (end of Grade 9). The pretest scores were used to provide a baseline measure. The baseline Total Self score was below the band of average scores calculated by previous large studies which used the Coopersmith SEI as a measurement instrument. By the final measurement at the end of Grade 9, the mean scores of the Pride group were midway within the band of average scores. The technical information on the Coopersmith
SEI stated that "scores on the SEI have been shown to increase slightly and monotonically with grade level" (p. 8). The Pride students' scores increased significantly and monotonically between Grade 6 and Grade 9.

Although results and conclusions of the self-esteem analyses should be regarded with caution, the impact of the Pride Program on the first cohort of at-risk students appeared to be significantly positive in three areas of self-esteem—general self-esteem, social-peer self-esteem and home-parents self-esteem. Furthermore, the composite Total Self score was found to be positively, and significantly affected between the initial 1991 measure and the final 1994 measure. From this data, it can be inferred that Pride contributed to more positive self-esteem in the treatment group students.

Although a quasi-experimental, naturalistic investigation of a difficult variable such as self-esteem can not control all intervening or confounding variables, it can provide a critical piece of insight into the self assessments of a group of at-risk students. However, alternative hypotheses should be considered. Although maturation might be considered as an alternative, the technical data about the instrument does not support that hypothesis (Coopersmith, 1987), but a combination of the treatment and maturation might account for the significant findings. Also, subject mortality might have eliminated those students whose scores could have made the findings non-significant. Again, this hypothesis does not appear to be substantiated because there was a significant finding on Total Self at the end of Pride '92 when subject mortality was not an issue.

Examining the results of the self-esteem analysis, the question might be raised as to why there were significant findings in the areas of General Self, Social-Peers Self, and Parents-Home Self and no significant finding in the School-Academic Self. In fact, these results relative to School-Academic Self would substantiate the lack of significance found on the academic achievement portion of this study and coincide with Holly's (1987) findings. The initial program thrust for Pride was to affect self-esteem positively.
and thus affect academic achievement, attendance and conduct. The academic component was strengthened as the program continued. Possibly, the first two years were not strong enough in the academic area to make a significant difference, but were strong enough in certain parts of the self-esteem area. This might account for the type of findings in evidence. Furthermore, the first evidence of an impact on self-esteem was found in the Parents-Home subscale. Because the students and parents would have to get more involved with each other due to the Pride Program, the feeling of increased, or more obvious, caring may have surfaced for both parties. This could have been translated into a more positive feeling about one's self relative to parents and the home environment.

The fact that the Pride students were singled out during the school year as well as during the summer, might have encouraged more positive attitudes about themselves in relationship to their peers, and thus a more positive picture of themselves in general. Simply stated, the special treatment might have made them feel special in the eyes of their parents, in the eyes of their peers and in their own eyes.

Summary

Information has been provided on the conduct of the Pride Program, the impact on the student participants and on the perceptions of all participants in the program. Although the program was at times organizationally weak, it should be remembered that it was still in its formative stages, but improvements were being implemented each summer. Impact upon student participants was hard to judge due to the fact that long-term impacts may have not surfaced yet. Perceptions of the Pride Program by the participants was generally positive. The program was considered valuable and effective by the participants. Although some criticism was voiced, the intentions of that criticism appeared to be constructive.
The statistical data provided a comparative, as well as a longitudinal, view of the treatment, the comparison and the control groups in the areas of academic achievement, attendance and student conduct. Additionally, the treatment group was examined over a three-year period with regard to the issue of self-esteem.

If one examines the results of Grade 10 (or second year of high school), no significant differences were evident in academic achievement, attendance or discipline referrals. The indication would be that the Pride Program probably did not significantly affect these three areas. In fact, all three groups followed the typical pattern of declining grades, increasing absenteeism and increasing discipline referrals as they progressed from middle school into high school. Although not significant, it was noted that the treatment group’s grades in English and mathematics were either starting to go up or leveling, but not going down between the first and second year of high school. The comparison and control groups’ grades in English and mathematics appeared to be declining consistently. Absences for the treatment group were declining, although not significantly, while comparison and control group absences continued to rise. The only area in which the treatment group appeared to be continuously increasing was in discipline referrals. The control group's number of discipline referrals also continued to increase. The comparison group's number of discipline referrals appeared to be on the decline, possibly because the worst discipline problems had started to drop out. This conclusion would be consistent with what Bempechat and Ginsberg (1989) reported about discipline problems and dropouts.

The only area that showed significant, positive results for the treatment group was the area of self-esteem. Although analysis of Total Self (total self-esteem) did not provide significant, positive findings, three subscale areas did: General Self, Social-Peers, and Parents Home. School-Academic self-esteem did not show significant improvement. Since one of the main thrusts of the Pride Program was the enhancement of student self-
esteem, the treatment might have been effective in some, but not all, of the self-esteem areas measured.

**Recommendations**

**Recommendations for Program Improvement**

Critical to this program is the need for highly visible, coordinated support from school district and shipyard administrators. A unity of purpose, clearly articulated to all administrators, teachers and mentors, is needed. Planning needs to be completed early in the school year and accomplished collaboratively, utilizing representatives from as many "stake holders" as possible, including parents and possibly students. This recommendation is made in light of Heyns's (1986) and Ascher's (1987) findings and recommendations for improvements in summer-school/at-risk programs.

Although self-esteem issues were this program's primary concern, it is recommended that the academic component be bolstered substantially (Ascher, 1987), as well as, provisions made for the progressive, on-site evaluation of the academic component (Heyns, 1986). It is suggested that the parent program component, which was in its formative stage, continue to be addressed. More parent involvement is crucial to sustained long-term program effects (Vacha & McLaughlin, 1992 and Friedland, 1992).

More structured guidance needs to be provided to the very willing, but sometimes uncertain, mentors who find themselves thrust into circumstances very different than those to which they are accustomed. Flaxman, Ascher & Harrington (1988) suggested that lack of clarity about the mentoring role and unbounded activities result in ambiguous, weak interventions. Additionally, teachers and the director need to be compensated adequately and relieved of their duties on occasion so that they can "recharge their batteries."
If the second year students are truly to be "peer mentors," a definite program should be developed for them. It is recommended that a counselor(s) staff position(s) be added to the personnel involved in Pride. This counselor(s) could do some pre-program, as well as in-program, work with these "peer mentors" so that these students could become effective "peer mentors."

A critical element which must be emphasized is the need for a definite and organized follow-up plan for these students when they reenter school in the fall. Positive effects can not be sustained over the long term if these students are not nurtured throughout their school years.

To conclude these recommendations for program improvement, the researcher suggests that Newport News Public Schools and Newport News Shipbuilding incorporate other businesses as partners so neither partner would have to shoulder as much of the financial burden. Furthermore, the number of teachers per pupil should be increased to alleviate some teacher stress; a provision for feedback to participants should be implemented; and a longitudinal study of the program with possibly some individual case studies of students should be considered. Heyns (1986) definitely stresses the fact that more well-structured research is needed on summer-school programs.

The findings of this study raise a number of questions that suggest the need for additional research particularly with regard to middle-school interventions for at-risk students. First, if the interventions were sustained for longer periods of time, would they be more effective? Next, would more emphasis on academics make more of a difference on grades at the high-school level? Also, would sustaining some type of "scaffolding" for these at-risk students through their high-school years help academics, attendance and conduct?

As with the national Head Start Study, will findings be significant as these students proceed through life? In other words, do the lessons of the intervention need to
incubate before they show any positive results? Will the treatment have effects when these students become adults? Will the counseling and caring that they received during Pride have some effect on their future career choices and life styles? These are all long term effects that would be interesting to examine in future research.

Although limited in its generalizability, a case study of individual Pride students might be beneficial in seeing how the intervention affected specific students over a period of time. Since the current study looked at aggregate scores, a more individualized approach could reveal overlooked, but helpful, information for the future treatment of at-risk youth.
Pride Study -- 177

REFERENCES


Supplemental Sources Consulted


APPENDIXES
Appendix A

1991 EXECUTIVE SUMMARY OF THE PRIDE PROGRAM
1991 EXECUTIVE SUMMARY

PRIDE is a four week, residential, summer school program for rising seventh graders from Huntington Middle School. Its prime objective is to increase self-esteem, and in so doing positively impact upon attendance and school achievement. Other objectives include the favorable influencing of appropriate social skills, cooperation and goal setting behaviors.

Staff included personnel from the Newport News Public Schools (4 teachers and 1 director) and Newport News Shipbuilding (91 mentors). Facility and food service was provided by the State of Virginia at the Virginia School for the Deaf and Blind in Hampton, Virginia.

Eighty-seven 6th grade students were recommended by teachers because they exhibited one or more of the following characteristics: low self-esteem, low achievement, lack of social competence, poor attendance and excessive age for grade placement. Forty-seven (27 black males, 5 white males, 12 black females and 3 white females) "at risk" students constituted the original list of pupils who returned permission slips. Forty-four (26 black males, 5 white males, 11 black females and 2 white females) started the program on July 7, 1991, and thirty-eight students (21 black males, 5 white males, 10 black females and 2 white females) completed it on August 1, 1991.

Teachers, shipyard personnel and the director acted as mentors for these children. A variety of hands-on activities; academic classes in language arts, math and science; community program presentations (Girl Scouts and Junior Achievement, etc.); and field trips comprised the core of the curriculum.

This evaluation attempts to answer five questions:

1. Did the program impact on self-esteem, cooperation, social behaviors, academic skill levels and goal setting?
2. Was the environment drug free?
3. Were activities implemented as planned?
4. What did PRIDE cost?
5. What were the perceptions of the program participants (students, mentors, teachers, parents) with regard to the PRIDE program's effectiveness and worth?
These questions were answered using a variety of instruments: self-esteem inventories, questionnaires, program evaluation surveys and field observations. The evaluator, with the assistance of the program managers and the on-site program director, administered the instruments and collected data. More detailed, technical information is provided in the body of this report.

Evaluation results are as follows: The perceptions of the program participants were extremely positive. Most respondents, including students, perceived PRIDE as an exceptionally beneficial and rewarding experience. The program was viewed as an effort that definitely should be continued and enhanced. Comments by shipyard personnel (mentors) stated that they were proud of the Shipyard's involvement in this program and that it was a positive contribution to the community.

Although statistically, no significant positive differences were measured in cooperation/social behavior, individual observers (teachers, shipyard mentors and parents) noted that students had made improvements in attitudes and other observable behaviors.

In the area of self-esteem, one of the four subscales, Home-Parent, of the Coopersmith Self-Esteem Inventory (SEI) indicated a significant, positive, statistical, pre-post difference. Students' perceptions of themselves in relationship to their parents' attitudes to themselves (students) had been positively affected. Furthermore, the student's perceptions of the PRIDE Program and its effect on goal setting or changing ideas was positive. Seventy-four percent indicated in the mentor administered questionnaire that PRIDE had helped them change their ideas or their goals in what they perceived to be a positive manner.

Because of the relatively short span between pre and post testing, the overall scores on the Coopersmith showed no statistically significant differences in self-esteem as a whole. The semantic differential indicated a negative, statistically significant difference towards self. Results should be interpreted with caution because the scales indicated that students were exhibiting substantial defensiveness in their responses, the population sample was negatively skewed and the treatment time was brief. Evaluation of the returning students in the 1992, and subsequent programs, will provide more data and data points from which to draw conclusions.

The majority of participants (98%) stated that they saw no actual drug usage or evidence of drug usage. Some participants went so far as to state that they did not hear any students talking about drugs. Two students indicated that they had seen drug usage, but
because the questionnaires were unsigned, no further inquiry could be made into the specifics of what they had seen to determine if it actually was usage of illegal drugs on campus during the PRIDE Program.

Overall, program activities were implemented as planned. However, as with all new programs, activities and time schedules needed revision when the program was actually in progress. From the evaluator's observations, it was estimated that most program changes were implemented in a creative and constructive manner to the best advantage of all involved.

For a variety of logistical and time related reasons, no data was collected on academic achievement for the four week period. However, academic achievement data will be collected during the 3rd or 4th quarter of the 1991-92 school year on the student participants to see if any gains have been made in this area. The evaluator's principal task in this study was to focus on self-esteem issues specifically and cost items incidentally. Therefore, the cost information is an estimated per pupil amount arrived at by utilizing information that was provided the evaluator by the Newport News Public Schools and Newport News Shipbuilding. The approximate per pupil cost for the 1991 PRIDE Program was $2,100.

It must be remembered that this was the first year for this program and that this evaluation is meant to be formative in nature. The superior strengths of this program lie in the extremely positive perceptions of the program participants and the students' parents. The value and the possibilities that these people see for the students because of their involvement in PRIDE overshadow and outweigh any of the current program weaknesses. Furthermore, the collaborative effort of a private and public organization in attacking the social problem of unmotivated, underachieving or problematic youth is to be commended and nurtured. Another positive aspect of PRIDE is the cooperation that was in evidence among the teachers, mentors and at risk students. All these factors combine to make a program which could have significant impact on these students.

Because this is a formative evaluation, areas for program improvement must also be cited. Although self-esteem issues are this program's primary concern, the academic area needs to be bolstered, as well as, provisions made for the progressive, on-site evaluation of the academic component. The parent program component, which is in its formative stage, should continue to be addressed. More parent involvement is crucial to sustained, long-term program effects. More structured guidance needs to be provided to the very willing, but sometimes uncertain, mentors who find themselves thrust into circumstances very different than those to which they are accustomed. Teachers and the director need to be
compensated adequately and relieved of their duties on occasion so that they can "recharge their batteries." The last critical element which this evaluator would like to emphasize is the need for a definite and organized follow-up plan for these students when they reenter school in the fall. Positive effects cannot be sustained over the long term if these students are not nurtured throughout their school years.

Many helpful suggestions were offered by program participants, parents and the evaluator as to how PRIDE can be improved and strengthened. These suggestions can be found on the program evaluation surveys submitted by the participants, and a partial listing can be found in the Methods of Analysis and Results section for evaluation question five beginning on page 18 of this report. Some of these suggestions for program improvement include the incorporation of other businesses as partners so that NNS does not have to bear such a large portion of the financial burden; an increase in the teacher/pupil ratio to alleviate some teacher stress; the implementation of a provision for feedback to participants; and the consideration of a longitudinal study of the program with possibly some individual case studies of students.

Evaluation findings should be regarded with caution for the following reasons: The measurement of the qualitative aspects of a program dealing with people is always subject to many uncontrollable variables. PRIDE is a program which incorporated many individuals and numerous treatments which were non-standard (teaching methods and counseling/mentorship techniques). Missing or non-existent data in some areas and student defensiveness on self-report instruments were uncontrollable variables due to the nature of the population. Time constraints limited the possibilities of field testing instruments prior to implementation and the program structure necessitated the used of a variety of administrators for some instruments. Limitations which will be ameliorated with time and future program data include lack of long term effects data and lack of information on a comparison group. Every reasonable effort afforded by time and situation was made by the evaluator to control variables or standardize administration for the purpose of producing a valid and useful evaluation of the PRIDE Program.
Appendix B

1992 EXECUTIVE SUMMARY OF THE PRIDE PROGRAM
1992 EXECUTIVE SUMMARY

**PRIDE '92** was a three week, residential, summer school program for rising seventh and eighth graders (most were **PRIDE '91** participants). All participants were Huntington Middle School students, who were selected from a target population of approximately 300 rising seventh and eighth graders identified as disadvantaged and in need of improving self-esteem, social and problem solving skills, work study habits and teamwork in order to perform in accordance with their potential. **PRIDE**'s prime objective is to increase self-esteem, and in so doing positively impact upon attendance and school achievement. Other objectives include the favorable influencing of appropriate social skills, of cooperation and goal setting behaviors, and of remaining alcohol and drug free.

Unlike the **PRIDE '91** program, **PRIDE '92** did **not** allow students to go home for the weekends. Frequent social functions on campus such as barbecues, letter writing and, in some cases, phone calls enabled students to keep in touch with their parents.

Staff included personnel from the Newport News Public Schools (10 teachers and 1 director) and Newport News Shipbuilding (94 mentors). Facility and food were provided (on a fee basis) by the Virginia School for the Deaf and Blind in Hampton, Virginia.

Seventy-nine students (7th & 8th graders) were scheduled to enter the program. Twenty-nine of these students had attended the **PRIDE** Program during the summer of 1991, and 46 of the students were selected to attend for the summer of 1992. Students were recommended for inclusion by teachers using the following criteria: low self-esteem, low achievement, lack of social competence, lack of motivation to succeed, poor attendance and/or excessive age for grade placement. Seventy-five students (45 males and 30 females) began the program on July 26, 1992, and seventy-one students completed the program on August 13, 1992. Three students were sent home for discipline reasons, and one student went home because she was homesick. The three students who were sent home for discipline reasons were all males who had attend **PRIDE** in the summer of 1991. The student who was homesick was a female from the '92 **PRIDE** cohort.

Teachers, shipyard personnel and the director acted as mentors for these children. Students were divided into eight teams which were identified by a color. The team consisted of a teacher, eight to ten students and one to four mentors per team. This team stayed intact for all activities throughout the three week program. A variety of hands-on
activities such as: projects designed to improve basic skills in communication, mathematics, problem solving and research; trade demonstrations; rocket building; field trips; "Olympic Games"; and social functions were incorporated into the curriculum.

This evaluation attempts to answer five questions:

1. Did the program impact on self-esteem, cooperation, social behaviors, academic skill levels and goal setting?
2. Was the environment drug free?
3. Were activities implemented as planned?
4. What did PRIDE '92 cost?
5. What were the perceptions of the program participants (students, mentors, teachers, parents) with regard to the PRIDE '92 program's effectiveness and worth?

These questions were answered using a variety of instruments: a self-esteem inventory, questionnaires, program evaluation surveys and field observations. The evaluator, with the assistance of the on-site program director, teachers and mentors, administered the instruments and collected data.

Evaluation results are as follows: The perceptions of the program participants were generally positive. Most respondents, including students, perceived PRIDE '92 as a beneficial and rewarding experience. The program was viewed as an effort that definitely should be continued and enhanced.

A small percentage gain was made in the area of positive cooperative and social behaviors. Individual observers, however, noted that some students had made notable improvements in attitudes and other observable behaviors.

In the area of self-esteem, one of the four subscales, Home-Parent, of the Coopersmith Self-Esteem Inventory (SEI) indicated a significant, positive pre-post difference for the '91 cohort. This same difference was noted in the 1991 evaluation. Additional significant, positive differences were found for the '91 cohort on two subscales, Social Self - Peers and General Self when scores of the '91 posttest and the '92 posttest were analyzed. Total Self (an averaging of all subscales) was also significantly higher for the '91 cohort group ('91 post/'92 post). These results might indicate a trend, a cumulative program effect or student maturation. Pre/post 1992 for the '92 cohort found no significant differences in any of the subscales.
The majority of participants (91.2%) stated that they saw no actual drug usage or evidence of drug usage. Two students indicated that they had seen drug usage, but because the questionnaires were unsigned, no further inquiry could be made into the specifics of what they had seen. Nine did not respond to that question.

Many program activities were implemented as planned, however, a large number were not for a variety of reasons. This was an area of weakness in the '92 program.

Data collected on the academic component suggested that stated objectives were mostly achieved (67%). Other additional knowledge was also acquired.

Cost information is an estimated per pupil amount arrived at by utilizing information that was provided the evaluator by the Newport News Public Schools. The approximate per pupil cost for the PRIDE '92 was $1,391.00.

Many positive changes were made in the PRIDE Program this year, but it should be remembered that the program is still in its infancy. The superior strengths of this program lie in the positive perceptions of the program participants and the students' parents. Mentor, teacher and parent willingness to put forth time and effort in PRIDE activities signifies a commitment to help these students. The value and the possibilities that these people see for the students because of their involvement in PRIDE overshadow and outweigh any of the current program weaknesses. Furthermore, the collaborative effort of a private and public organization in attacking the social problem of unmotivated, under achieving or problematic youth is to be commended and nurtured. All these factors combine to make a program which could have significant impact on these students.

Because this is a formative evaluation, areas for program improvement must also be cited. Critical to this program is the need for highly visible, coordinated support from school district and shipyard administrators. A unity of purpose, clearly articulated to all administrators, teachers and mentors, is needed. Planning should be done early and collaboratively, utilizing representatives from as many "stake holders" as possible, including parents and possibly students.

Although self-esteem issues are this program's primary concern, the academic area needs to be scrutinized again, and a strong integrated academic agenda which fits the student and the program needs should be sought.

Provisions should be made for the progressive, on-site evaluation of all program components.

The parent program component, which is in its formative stage, should continue to be addressed. More parent involvement is crucial for sustained, long-term program effects.
More structured guidance needs to be provided to the very willing, but sometimes uncertain, mentors who find themselves thrust into circumstances very different than those to which they are accustomed.

Teachers and the director need to be compensated adequately and relieved of their duties on occasion so that they can "recharge their batteries."

If the second year students are truly to be "peer mentors," a definite program should be developed for them. It is recommended that a counselor(s) staff position(s) be added to the personnel involved in PRIDE. This counselor(s) could do some pre-program, as well as in-program, work with these "peer mentors" so that these students could become effective "peer mentors."

The last critical element which this evaluator would like to emphasize is the continuation of a definite and organized follow-up plan for these students when they reenter school in the fall. Positive effects cannot be sustained over the long term if these students are not nurtured throughout their school years.

Many helpful suggestions were offered by program participants, parents and the evaluator as to how PRIDE can be improved and strengthened. These suggestions can be found on the program evaluation surveys submitted by the participants, and a partial listing can be found in the Methods of Analysis and Results section for evaluation question five beginning on page 18 of this report. Some of these suggestions for program improvement include those listed on the previous page and the following: the incorporation of other businesses as partners so that NNS does not have to bear such a large portion of the financial burden; an increase in the teacher/pupil ratio to alleviate some teacher stress; the implementation of a provision for feedback to participants; and the consideration of a longitudinal study of the program with possibly some individual case studies of students.

Evaluation findings should be regarded with caution for the following reasons: The measurement of the qualitative aspects of a program dealing with people is always subject to many uncontrollable variables. PRIDE is a program which incorporates many individuals and numerous treatments which are non-standard (teaching methods and counseling/mentorship techniques). Missing or non-existent data in some areas and student defensiveness on self-report instruments have been uncontrollable variables due to the nature of the population. Time constraints have limited the possibilities of field testing instruments prior to implementation and the program structure has necessitated the use of a variety of administrators for some instruments. Limitations which will be ameliorated with time and future program data include lack of long term effects data and
lack of information on a comparison group. Every reasonable effort afforded by time and situation has been made by the evaluator to control variables or standardize administration for the purpose of producing a valid and useful evaluation of the PRIDE Program.
Appendix C

1991 PRIDE PROGRAM – EVALUATION FORMS FOR MENTORS, PARENTS, STUDENTS, AND TEACHERS
1991 PRIDE PROGRAM – MENTOR'S EVALUATION

Circle the appropriate answer or write in your answer, which ever is needed.

1. The time I spent at the Pride Program was:
   productive
   somewhat productive
   not very productive
   non-productive

2. My talents were:
   well utilized
   usually well utilized
   not well utilized

3. What did you like about the program?

4. What didn’t you like?

5. Would you do it again? YES NO Why or why not?

6. Did you observe, or were you aware of, any usage of drugs (alcohol, grass, crack, etc.)
on the campus? YES NO
7. If you could change one thing about Pride, what would you change?


8. What administrative changes (if any) would you suggest for next year?


9. Do you feel that, generally, the students benefited from the program?

   Academically    YES  NO
   Socially        YES  NO
   Psychologically YES  NO
   Emotionally    YES  NO

   Why or why not?


10. For you, what was the most memorable event you experienced during this program?


Other comments:
1991 PRIDE PROGRAM -- PARENTS' EVALUATION

1. What do you think is the most important thing your child learned during this program?_______________________________________________

2. What did you like about the program?______________________________

3. What didn't you like about the program?______________________________

4. Did you feel that your child was safe at the Pride Program?
   YES   NO

5. Would you let your child be in it again?   YES   NO
   Why or why not?______________________________________________

6. If you could change one thing about Pride, it would be__________

All who were involved with Pride would like to thank you for your support and cooperation in making this a successful program for the students.
## 1991 PRIDE PROGRAM – STUDENT EVALUATION

Please check under the word that tells your feelings the best.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>LIKED A LOT</th>
<th>LIKED</th>
<th>DIDN'T LIKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mentor meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Physical activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Communication class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Math class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ropes course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Junior Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Scouts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Pizza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Skating party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Shipyard tour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Pilot's baseball game</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Lunch at Red Baron</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Concert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Pool party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Dismal Swamp Cruise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Dinner at restaurant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Chrysler Museum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Wellness and Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Video</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Career Day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Recycling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Building project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Science class</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. Cookout
26. Picnic in park
27. Group meetings
28. Morning exercises
29. Movies
30. Bowling

CIRCLE YOUR ANSWERS TO TELL YOUR FEELINGS ABOUT THE FOLLOWING:

1. **Free time**
   - too much
   - just right
   - too little

2. **Freedom**
   - too much
   - just right
   - too little

3. **Rules**
   - too much
   - just right
   - too little

4. **Food**
   - good
   - OK
   - not very good

5. **Bedtime**
   - too early
   - OK
   - too late

6. **I felt safe:**
   - never
   - sometimes
   - most of the time
   - always

   Why or why not?

7. I saw, or knew of people, taking drugs (alcohol, grass, crack, etc.), here on campus.
   - YES
   - NO

8. I think my time spent at **Pride** was:
   - terrific
   - great
   - OK
   - usually boring
   - bummer

9. I would do **Pride** again.
   - YES
   - NO

   Why or why not?

Finish the sentence.

1. What I liked about **Pride** was __________________________
2. What I didn't like about *Pride* was ________________

________________________________________________________.

3. If I could change one thing about *Pride*, it would be __________

________________________________________________________.
1. What did you like about the program?

2. What didn't you like about it?

3. Would you do it again? **YES**  **NO**
   Why or why not?

4. Did you observe, or were you aware of, any usage of drugs (alcohol, grass, crack, etc.) on the campus during the program?  
   **YES**  **NO**

5. If you could change one thing about the program, what would you change?

6. What administrative changes (if any) would you suggest for next year?

7. Do you feel that, generally, the students benefited from the program? 
   Academically  **YES**  **NO**  Why or why not?

   Socially  **YES**  **NO**  Why or why not?

   Psychologically  **YES**  **NO**  Why or why not?

   Emotionally  **YES**  **NO**  Why or why not?
8. Did you feel that you were able to teach what needed to be taught? **YES NO** Why or why not?

9. Was the academic content planned for:
   - too much  sufficient  not enough

10. How well were you able to meet the cognitive goals?
    - well  fairly well  satisfactorily  not well  not at all

11. How well were you able to meet the affective goals?
    - well  fairly well  satisfactorily  not well  not at all

12. Were the supplies provided adequate? **YES NO**

13. Was the facility adequate? **YES NO**

14. For you, what was the most memorable event you experienced during this program?

**Other comments or suggestions for follow-up and for next summer's program:**
Appendix D

1992 PRIDE PROGRAM – EVALUATION FORMS FOR MENTORS, PARENTS, STUDENTS, AND TEACHERS
1992 PRIDE PROGRAM – MENTOR’S EVALUATION

Circle the appropriate answer or write in your answer, whichever is needed.

1. The time I spent at the PRIDE Program was:
   productive
   somewhat productive
   not very productive
   non-productive

2. My talents were:
   well utilized
   usually well utilized
   not well utilized

3. What did you like about the program?

   ________________________________________________________________
   ________________________________________________________________

4. What didn’t you like?

   ________________________________________________________________
   ________________________________________________________________

5. Would you do it again?  YES     NO  Why or why not?

   ________________________________________________________________
   ________________________________________________________________

6. Did you observe, or were you aware of, any usage of drugs (alcohol, grass, crack, etc.) on the campus?  YES     NO
7. If you could change one thing about Pride, what would you change?

___________________________________________________________________

___________________________________________________________________

8. What administrative changes (if any) would you suggest for next year?
___________________________________________________________________

___________________________________________________________________

9. Do you feel that, generally, the students benefited from the program?
   
   Academically
   YES NO

   Socially
   YES NO

   Psychologically
   YES NO

   Emotionally
   YES NO

Why or why not?
___________________________________________________________________

___________________________________________________________________

10. For you, what was the most memorable event you experienced during this program?

___________________________________________________________________

___________________________________________________________________

11. Second year mentors only. Did you see program differences?
   
   YES NO Improved Same Worse

Describe:

Other comments:
1992 PRIDE PROGRAM – PARENTS' EVALUATION

1. What do you think is the most important thing your child learned during this program?_____________________________________________

2. What did you like about the program?_____________________________________________

3. What didn't you like about the program?_____________________________________________

4. Did you feel that your child was safe at the Pride Program? YES  NO

5. Would you let your child be in it again? YES  NO
   Why or why not?_____________________________________________

6. If you could change one thing about Pride, it would be________

   ______________________________________________

All who were involved with Pride would like to thank you for your support and cooperation in making this a successful program for the students.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>LIKED A LOT</th>
<th>LIKED</th>
<th>DIDN'T LIKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 24 Games</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Physical activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Guided silent reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Minds Unlimited</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ropes course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Shipyard activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Black top activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Pizza party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Skating party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Shipyard tour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Journal writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Daily Press tour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. VA Air/Space Museum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Summer Institute (CNU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Pool party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Busch Gardens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Dinner at restaurant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Chrysler Museum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Olympics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Video</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Free quiet time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Laundromat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Water Country</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Aerobics</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. Cookout
26. Picnic in park
27. Group meetings
28. Morning exercises
29. Movies
30. Bowling
31. First aid training
32. NN Harbor cruise
33. Organized activities
34. Self defense

CIRCLE YOUR ANSWERS TO TELL YOUR FEELINGS ABOUT THE FOLLOWING:

1. **Free time**
   - too much
   - just right
   - too little

2. **Freedom**
   - too much
   - just right
   - too little

3. **Rules**
   - too much
   - just right
   - too little

4. **Food**
   - good
   - OK
   - not very good

5. **Bedtime**
   - too early
   - OK
   - too late

6. **I felt safe**
   - never
   - sometimes
   - most of the time
   - always

   Why or why not? ____________________________________________

7. I saw, or knew of people, taking illegal drugs (alcohol, grass, crack, etc.), here on campus at the Pride Program. **YES**  **NO**

8. I think my time spent at Pride was:
   - terrific
   - great
   - OK
   - usually boring
   - bummer

9. I would do Pride again. **YES**  **NO**

   Why or why not? ____________________________________________
Finish the sentence.

1. What I liked about **Pride** was ____________________________
   ____________________________ ____________________________

2. What I *didn't* like about **Pride** was ____________________________
   ____________________________ ____________________________

3. If I could change one thing about **Pride**, it would be __________
   ____________________________ ____________________________

**SECOND YEAR STUDENTS ONLY**

How was this year's **Pride** Program different from last years?
1992 PRIDE PROGRAM – TEACHERS' EVALUATION

Circle one: First year with Pride Second year with Pride

1. What did you like about the program?

2. What didn't you like about it?

3. Would you do it again? YES NO

   Why or why not?

4. Did you observe, or were you aware of, any usage of illegal drugs (alcohol, grass, crack, etc.) on the campus during the program? YES NO

5. If you could change one thing about the program, what would you change?

6. What administrative changes (if any) would you suggest for next year?

7. Do you feel that, generally, the students benefited from the program?
   Academically YES NO Why or why not?
   Socially YES NO Why or why not?
   Psychologically YES NO Why or why not?
   Emotionally YES NO Why or why not?

8. Did you feel that you were able to teach what needed to be taught? YES NO Why or why not?
9. Was the academic content planned for:
   too much    sufficient    not enough

10. How well were you able to meet the cognitive goals?
   well  fairly well  satisfactorily  not well  not at all.

11. How well were you able to meet the affective goals?
   well  fairly well  satisfactorily  not well  not at all

12. Were the supplies provided adequate? YES  NO

13. Was the facility adequate? YES  NO

14. For you, what was the most memorable event you experienced during this program?

Other comments or suggestions for follow-up and for next summer's program:
Appendix E

1991 COOPERSMITH SELF-ESTEEM INVENTORY (SEI) DIRECTIONS FOR ADMINISTRATION AND RESULTS

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Coopersmith Self-Esteem Inventory

Directions for Administration

1. Have students sitting as far away for each other as possible.
2. **BEFORE PASSING OUT THE FORMS,** tell them that this is **NOT** a test. There are no right or wrong answers. What we need to know are their opinions and/or their ideas.
3. Tell them that they need to **MARK EVERY ITEM.**
4. If they don’t understanding an item, tell them to put a mark of some sort in front of the set of boxes used for responses. You will talk with them about it after you have collected the other forms.
5. **THEY ARE NOT TO DISCUSS THEIR ANSWERS WITH OTHER STUDENTS. THIS IS PRIVATE INFORMATION.**
6. Pass out the forms.
7. Have them print the information requested on the front clearly. Fill in all the blanks. For “school”, they can fill in their “group color”.
8. Read the directions on the front of the form to them as they follow along.
9. Have them open the form, and orally read each question to them as they follow along. Have them mark their answers immediately after having read the question to them.
10. Collect completed forms.
11. Answer individual questions. Do not prompt any answers. Try to say as little as possible when clarifying an item.
12. Check to see that **ALL** students have answered **ALL** questions.
### 1991 COOPERSMITH RESULTS

<table>
<thead>
<tr>
<th>Paired t-Test</th>
<th>X: TOT-POST</th>
<th>Y: TOT-PRE</th>
<th>Paired t-Test</th>
<th>X: GEN-POST</th>
<th>Y: GEN-PRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>Mean X-Y</td>
<td>Value</td>
<td>Prob. (1 tail)</td>
<td>Mean X-Y</td>
<td>Value</td>
</tr>
<tr>
<td>35</td>
<td>0.222</td>
<td>0.347</td>
<td>0.3652</td>
<td>0.222</td>
<td>0.347</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paired t-Test</th>
<th>X: LIE-POST</th>
<th>Y: LIE-PRE</th>
<th>Paired t-Test</th>
<th>X: SOC-POST</th>
<th>Y: SOC-PRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>Mean X-Y</td>
<td>Value</td>
<td>Prob. (1 tail)</td>
<td>Mean X-Y</td>
<td>Value</td>
</tr>
<tr>
<td>35</td>
<td>-0.083</td>
<td>-0.295</td>
<td>0.385</td>
<td>-0.25</td>
<td>-0.828</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paired t-Test</th>
<th>X: HOME-POST</th>
<th>Y: HOME-PRE</th>
<th>Paired t-Test</th>
<th>X: SCH-POST</th>
<th>Y: SCH-PRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>Mean X-Y</td>
<td>Value</td>
<td>Prob. (1 tail)</td>
<td>Mean X-Y</td>
<td>Value</td>
</tr>
<tr>
<td>35</td>
<td>0.639</td>
<td>2.034</td>
<td>0.0248</td>
<td>-0.167</td>
<td>-0.601</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paired t-Test</th>
<th>X: SELF-POST</th>
<th>Y: SELF-PRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>Mean X-Y</td>
<td>Value</td>
</tr>
<tr>
<td>35</td>
<td>0.889</td>
<td>0.401</td>
</tr>
</tbody>
</table>

### X: DIFF - TOTAL SELF

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std Dev</th>
<th>Std Error</th>
<th>Variance</th>
<th>Coef Var</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.889</td>
<td>13.288</td>
<td>2.215</td>
<td>176.559</td>
<td>149.848</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Sum</th>
<th>Sum of Sq</th>
<th># Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>-38</td>
<td>22</td>
<td>60</td>
<td>32</td>
<td>6208</td>
<td>0</td>
</tr>
</tbody>
</table>
Appendix F

1992 COOPERSMITH SELF-ESTEEM INVENTORY (SEI) RESULTS
<table>
<thead>
<tr>
<th>Paired t-test</th>
<th>Hypothesized Difference = 0</th>
<th>Mean Diff.</th>
<th>DF</th>
<th>t-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-PST-II, SOC-PST-I</td>
<td>0.875</td>
<td>23</td>
<td>2.557</td>
<td>0.0176</td>
<td></td>
</tr>
<tr>
<td>GEN-PST-II, GEN-PST-I</td>
<td>1.250</td>
<td>23</td>
<td>2.410</td>
<td>0.0244</td>
<td></td>
</tr>
<tr>
<td>HOME-PST-II, HOME-PST-I</td>
<td>0.625</td>
<td>23</td>
<td>1.518</td>
<td>0.1427</td>
<td></td>
</tr>
<tr>
<td>SCH-PST-II, SCH-PST-I</td>
<td>0.000</td>
<td>23</td>
<td>0.000</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>SELF-PST-II, SELF-PST-I</td>
<td>5.500</td>
<td>23</td>
<td>2.484</td>
<td>0.0207</td>
<td></td>
</tr>
<tr>
<td>LIE-PST-II, LIE-PST-I</td>
<td>-0.125</td>
<td>23</td>
<td>-0.377</td>
<td>0.7095</td>
<td></td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>Paired t-test Hypothesized Difference = 0</th>
<th>Mean Diff.</th>
<th>DF</th>
<th>t-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-PST-II, SOC-PST-I</td>
<td>0.208</td>
<td>23</td>
<td>0.361</td>
<td>0.7215</td>
</tr>
<tr>
<td>GEN-PST-II, GEN-PST-I</td>
<td>0.333</td>
<td>23</td>
<td>1.249</td>
<td>0.2243</td>
</tr>
<tr>
<td>HOME-PST-II, HOME-PST-I</td>
<td>0.792</td>
<td>23</td>
<td>3.800</td>
<td>0.0009</td>
</tr>
<tr>
<td>SCH-PST-II, SCH-PST-I</td>
<td>0.125</td>
<td>23</td>
<td>0.331</td>
<td>0.7435</td>
</tr>
<tr>
<td>SELF-PST-II, SELF-PST-I</td>
<td>2.917</td>
<td>23</td>
<td>1.591</td>
<td>0.1253</td>
</tr>
<tr>
<td>LIE-PST-II, LIE-PST-I</td>
<td>-0.333</td>
<td>23</td>
<td>-0.954</td>
<td>0.3498</td>
</tr>
</tbody>
</table>
### 1992 Coopersmith - Pre-Post (for 1992 cohort)

<table>
<thead>
<tr>
<th>Paired t-test</th>
<th>Hypothesized Difference = 0</th>
<th>Mean Diff.</th>
<th>DF</th>
<th>t-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-PST-II, SOC-PST-I</td>
<td>-0.081</td>
<td>36</td>
<td>-0.415</td>
<td>0.6803</td>
<td></td>
</tr>
<tr>
<td>GEN-PST-II, GEN-PST-I</td>
<td>-0.919</td>
<td>36</td>
<td>-1.143</td>
<td>0.2605</td>
<td></td>
</tr>
<tr>
<td>HOME-PST-II, HOME-PST-I</td>
<td>0.324</td>
<td>36</td>
<td>0.908</td>
<td>0.3702</td>
<td></td>
</tr>
<tr>
<td>SCH-PST-II, SCH-PST-I</td>
<td>0.000</td>
<td>36</td>
<td>0.000</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>SELF-PST-II, SELF-PST-I</td>
<td>-1.351</td>
<td>36</td>
<td>-0.464</td>
<td>0.6453</td>
<td></td>
</tr>
<tr>
<td>LIE-PST-II, LIE-PST-I</td>
<td>-0.459</td>
<td>36</td>
<td>-1.884</td>
<td>0.0676</td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

SEMANTIC DIFFERENTIAL
Semantic Differential

NAME____________________ DATE________________

I trust people

<table>
<thead>
<tr>
<th>sour</th>
<th>sweet</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td>last</td>
</tr>
<tr>
<td>old</td>
<td>new</td>
</tr>
<tr>
<td>bad</td>
<td>good</td>
</tr>
<tr>
<td>open</td>
<td>closed</td>
</tr>
<tr>
<td>wrong</td>
<td>right</td>
</tr>
<tr>
<td>pretty</td>
<td>ugly</td>
</tr>
<tr>
<td>not brave</td>
<td>brave</td>
</tr>
<tr>
<td>happy</td>
<td>unhappy</td>
</tr>
<tr>
<td>sad</td>
<td>funny</td>
</tr>
</tbody>
</table>

Me as I am

<table>
<thead>
<tr>
<th>sour</th>
<th>sweet</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td>last</td>
</tr>
<tr>
<td>old</td>
<td>new</td>
</tr>
<tr>
<td>bad</td>
<td>good</td>
</tr>
<tr>
<td>open</td>
<td>closed</td>
</tr>
<tr>
<td>wrong</td>
<td>right</td>
</tr>
<tr>
<td>pretty</td>
<td>ugly</td>
</tr>
<tr>
<td>not brave</td>
<td>brave</td>
</tr>
<tr>
<td>happy</td>
<td>unhappy</td>
</tr>
<tr>
<td>sad</td>
<td>funny</td>
</tr>
</tbody>
</table>
Appendix H

DIRECTIONS FOR OBSERVATION FORMS

Points to remember:

BEHAVIOR

Appropriate dress -- not excessive, offensive, suggestive or inappropriate for the activity. In other words, relatively normal for the age of the child and in synch. with the activity in which they are engaging.

Appropriate language -- no cursing or name calling. Language which is generally acceptable in public conversation.

Appropriate loudness -- no yelling where activity doesn't require, or encourage, yelling. Normal level of voice when conversing or calling out to others.

Appropriate actions -- respectful of others feelings. Does not interrupt or disturb speaker(s). Listens and follows directions. Exhibits "good" manners to include table manners.

COOPERATION

With adults -- willing to communicate and work with adults. Not actively or passively resistant to reasonable suggestions, demands or corrections.

With peers -- willing to communicate and engage in cooperative activities with peers.
Appendix I

1991 COOPERATION/SOCIAL BEHAVIOR RESULTS
1991 Cooperation/Social Behavior

A sampling of the observations on the Observation Checklist was made using one event (Shipyard tour, July 8) near the beginning of the program and one similar event near the end of the program (Chrysler Museum tour, July 30). A tally of the number of students receiving all "yes" checks for appropriate behavior and cooperation was made for each observer for each event. The July 8 fractional totals were compared with the July 30th fractional totals. The fractions were generated by placing the number of all "yes" checkmarks over the total number of students which the observer was able to evaluate. The following data was generated:

<table>
<thead>
<tr>
<th>Observer</th>
<th>Shipyard Tour (7-8)</th>
<th>Museum Tour (7-30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4/7</td>
<td>7/7</td>
</tr>
<tr>
<td>2</td>
<td>7/7</td>
<td>7/7</td>
</tr>
<tr>
<td>3</td>
<td>7/9</td>
<td>No data available</td>
</tr>
<tr>
<td>4</td>
<td>9/10</td>
<td>4/5</td>
</tr>
<tr>
<td>5</td>
<td>7/7</td>
<td>7/7</td>
</tr>
</tbody>
</table>

Over all, there seemed to be no significant differences in cooperation/social behavior; however, in individual cases, observers noted in the comments section that the student had made a significant improvement in the areas observed.
Appendix J

1991 GOAL SETTING – SAMPLE MENTORS’ INFORMATION SHEET FOR CONNECTIONS QUESTIONNAIRE AND SAMPLE CONNECTIONS QUESTIONNAIRE
1991 Mentors' information sheet for Connections Questionnaire

1. If the student says, "I don't know." just write it down. Then prompt by saying, "Do you have any ideas or thoughts about it at all?"

**DO NOT PROMPT IN ANY OTHER MANNER.**

2. If you have comments about the student or the interview, just write them on the back of the form. Any and all comments are welcomed.

3. Place completed forms in the envelope in the "Completed Observations" box which is located in the office at the dorm.

**PLEASE MAKE SURE THAT THE STUDENT'S NAME AND YOUR NAME ARE ON THE QUESTIONNAIRE.**

Thanks for your help.

Terry Grimm

P.S. On Wednesday, July 31, I would like to request your help in administering this same questionnaire to the same students. The idea is to see if the students have changed their thinking on the topics indicated.
1991 CONNECTIONS QUESTIONNAIRE

Student's Name ________________________________

Mentor's Name ________________________________

Date ________________________________

1. Do you plan to finish high school?
   Why or why not?

2. What would you like to do, or be, after you leave high school?

3. Do you think that going to school is important?
   Why or why not?

4. Do you think going to school will help you in your future after high school?
   Why or why not?
   If it will help you, how will it help?

5. What do you think is the best way for you to make money?
   Now:
   In the future as an adult:
1991 CONNECTIONS QUESTIONNAIRE

Student's Name ____________________________________
Mentor's Name ____________________________________
Date __________________________

1. Do you plan to finish high school?
   Why or why not?

2. What would you like to do, or be, after you leave high school?

3. Do you think that going to school is important?
   Why or why not?

4. Do you think going to school will help you in your future after high school?
   Why or why not?
   If it will help you, how will it help?

5. What do you think is the best way for you to make money?
   Now:
   In the future as an adult:

6. Has being in Pride changed any of your ideas? Yes  No
   If it has, which ideas has it changed and how?
Appendix K

1991 GOAL SETTING – SUMMARY OF RESULTS FROM CONNECTIONS QUESTIONNAIRE
1991 Goal Setting Results

A tally system was used to count the number of "yes" and "no" responses to the following question: "Has being in PRIDE changed any of your ideas (about finishing school, careers plans or self in general)?" Responses to other questions were noted if they were recurrent in other interviews or were forcefully expressed.

Twenty-three out of 31 students (pre-post paired responses) responded with "yes," PRIDE had changed their ideas, and eight students said "no." Additionally, 3 unpaired responses were "yes," 2 unpaired responses were "no" and 2 were blank. Thus out of 31 paired responses, 74% felt that the program had changed their ideas and 26% felt that it had not.

The following are some of the student comments which were recorded on this questionnaire.

"The program has given me more self pride."
"The thought of dropping out of high school has changed."
"Work harder in school and try hard."
"You learn to trust people."
"I wanted to be a welder, like my dad, but now I want to be an electrician because of one of my PRIDE classes."
"PRIDE Program has given me a good attitude."
"It's taught me to be responsible."
"My idea of how job pay is related to level of education."
"Voice changed due to air conditioning."
Appendix L

1992 GOAL SETTING – SAMPLE MENTORS' INFORMATION SHEET FOR CONNECTIONS QUESTIONNAIRE AND SAMPLE CONNECTIONS QUESTIONNAIRE
1992 Mentors' information sheet for Connections Questionnaire

1. If the student says, "I don't know." just write it down. Then prompt by saying, "Do you have any ideas or thoughts about it at all?"

DO NOT PROMPT IN ANY OTHER MANNER.

2. If you have comments about the student or the interview, just write them on the back of the form. Any and all comments are welcomed.

3. Place completed forms in the envelope in the "Completed Observations" box which is located in the "office" room next to Steve Hart's quarters.

PLEASE MAKE SURE THAT THE STUDENT'S NAME AND YOUR NAME ARE ON THE QUESTIONNAIRE.

Thanks for your help.

Terry Grimm

P.S. On Tuesday, August 11, I would like to request your help in administering this same questionnaire to the same students. The idea is to see if the students have changed their thinking on the topics indicated.
1992 CONNECTIONS QUESTIONNAIRE

Student's Name ___________________________________________
Mentor's Name ___________________________________________
Date ______________________________________

1. Do you plan to finish high school?
   Why or why not?

2. What would you like to do, or be, after you leave high school?

3. Do you think that going to school is important?
   Why or why not?

4. Do you think going to school will help you in your future after high school?
   Why or why not?
   If it will help you, how will it help?

5. What do you think is the best way for you to make money?
   Now:
   In the future as an adult:
1992 CONNECTIONS QUESTIONNAIRE

Student's Name ______________________________________
Mentor's Name ______________________________________
Date ____________________

1. Do you plan to finish high school?
   Why or why not?

2. What would you like to do, or be, after you leave high school?

3. Do you think that going to school is important?
   Why or why not?

4. Do you think going to school will help you in your future after high school?
   Why or why not?
   If it will help you, how will it help?

5. What do you think is the best way for you to make money?
   Now:
   In the future as an adult:

6. Has being in Pride changed any of your ideas about education and/or career occupation (field of work)? Yes  No
   If it has, which ideas has it changed and how?
Appendix M

1992 GOAL SETTING – SUMMARY OF RESULTS FROM CONNECTIONS QUESTIONNAIRE
1992 Goal Setting Results

A tally system was used to count the number of "yes" and "no" responses to the following question: "Has being in PRIDE changed any of your ideas about education and/or career occupation (field of work)?" Responses to other questions were noted if they were recurrent in other interviews or were forcefully expressed.

Results

Twenty-eight out of 59 students (post only responses) responded with "yes," PRIDE had changed their ideas, and 30 students said "no." One student responded with "yes" and "no." The total number of pre-post paired respondents was 48. Thus out of 59 respondents, 48% felt that the program had changed their ideas, 51% felt that it had not and 1% was ambivalent (yes and no).
Appendix N

1991 QUESTIONNAIRE RESPONSE SUMMARY FOR STUDENTS, TEACHERS, MENTORS, AND PARENTS
1991 Evaluation Question 5: What are the perceptions of the program participants (students, mentors, teachers, administrators and parents) with regard to the program's effectiveness and worth?

Data was gathered via a program evaluation survey. Information was tallied manually by the evaluator. Recurring or particularly strong opinions are included in narrative form. Each response group's information will be presented separately.

Students' responses (38)

1. Thirty-five out of 38 students would like to participate in the PRIDE Program again, one would not and two had no comment.
2. Time spent in PRIDE was: terrific (18); great (10); OK (5); usually boring (1); bummer (0)
3. Most students said they like the program because it was fun, they liked the field trips or they liked the mentors.
4. The greatest number of complaints came in about the cafeteria food (31 - not very good) and the lights out time (33 - too early).
5. Other opinions are as follows:
   Free time -- too little (18); just right (16); too much (3)
   Freedom -- too little (19); just right (14); too much (3)
   Rules -- too much (26); just right (7); too little (3)
   I felt safe -- always (18); most of the time (9); sometimes (5); never (4)

The top 3 favorite activities were: skating party (34); pool party (34); bowling (33). Number indicates students who marked the activity in "Liked A lot" category.

The least liked activities were: (morning exercises (18); science class (17); group meetings (12). Number indicates students who marked the activity in the "Didn't Like" category.

Summary of comments
Things students liked about PRIDE: trips, classes, activities, skating, ropes course, teachers, free time, less class time than in regular school, making the video, dinner at
restaurant, help to master reading and math, staying the night, pizza and snacks at night, shipyard tour and gym.

Things students did not like: food in the cafeteria, classwork, going to bed early, concert, interviews, not being able to visit girlfriends upstairs, too many mentors at night, the rules, Pilot's baseball game and some people.

Things students would change: amount of freedom, cafeteria food, classwork and amount of class time, bed time, nothing, amount of free time, not being able to visit the girls upstairs, having to go to the Virginia Marine Science Museum and the amount of time they could stay at PRIDE (wanted to stay longer).

**Teachers' responses (4)**

1. All stated that they would be willing to work in this program again.
2. Teachers felt that the program allowed them to grow personally. They also felt a great sense of satisfaction in the student growth which took place during this month. It was time well spent.
3. Although teachers felt that students benefited academically, they said that students did not spend enough time on academics.
4. In the areas of social, psychological and emotional benefits, all teachers felt that students gained and that all students showed growth in these areas. It was also felt that students began demonstrating their appreciation for group cooperation.
5. Other opinions are as follows:
   - Able to teach what needed to be taught: yes (2); no (2) Reason: time restrictions and too many outside influences.
   - Academic content planned for: too much (3); sufficient (1)
   - Cognitive goals met: well (1); satisfactorily (2); not well (1)
   - Affective goals met: well (1); fairly well (3)
   - Supplies provided adequate: yes (4); no (0)
   - Facility adequate: yes (4); no (0)

   Follow-up should include: all students grouped in one team at Huntington for the coming school year, and mentors stay involved throughout the school year.
Summary of comments

Things teachers liked about PRIDE: hands-on and practical, the involvement of the shipyard mentors, kids responses to positive role models, planning and organization of the program and the fact that action has been taken to help this type of student.

Things teachers did not like: the cafeteria food, mentor sessions (need more one-on-one), salary (not enough) and time for academics (need more).

Things teachers would change: amount of mentor session time (more), more one-on-one interaction, program format (3 week program - all staying through 2 weekends), increase number of teachers from 4 (5 including director) to 8 on a rotational schedule, the food and the pay structure.

Mentors' responses (69)

1. All stated that they would be willing to be mentors in this program again.

2. Some of the feelings expressed by mentors about PRIDE are as follows: feeling good because they had made a positive difference in the lives of the students; it was personally rewarding; they liked working closely with the kids; they found self-satisfaction in being a part of the students' learning; they felt good about letting kids know that there are lots of people who care for them; they enjoyed seeing improvement from the time the students arrived to the time they left; they felt it was a much needed program; they were proud that their employer was a part of this project; hearing the kids say thank you when it was over; the teachers did a great job; teamwork; overall program was very good, well organized and worthwhile; and "... not only did the kids learn from this experience, but so did I."

3. Other opinions are as follows:
   "I can't think of a better investment for Newport News Shipbuilding to make!"
   "This is an excellent program. I look forward to becoming more involved next year!"
   "A young man telling me he enjoyed the motivation and encouragement I gave him. He smiled and said he is giving his mother respect now and she is reciprocating it."
"This is a two year program. To change 13 years of accumulated experience, it will take more than 4 weeks. This is a great start but there's still a long journey ahead (for) these kids in this program."

"The program is excellent for these students. There needs to be an analysis of them compared to some that did not attend the session."

"It was a pleasure working with them. I made friends with them all and hated to depart from them."

"The last week of the program, I notice(d) the children were using word(s) like 'please' and 'thank you'."

"I can't wait till next year. It should be even more interesting."

"I observed many examples of students benefiting from the program such as better behavior, interest in activities, working together, supporting each other, determination to succeed, and PRIDE in their work."

"I feel the Pride Program is an effective, productive endeavor."

"Saw some behavior changes for the better."

"There should be more programs like this."

"I felt it was valuable to me and to the children."

"The positively of this program is just too powerful not to benefit the student."

"The program was so powerful that everyone got something out of it."

"It (the program) needs to be an on going effort."

"To see an overall positive change in the students as the program progressed."

"They had improved so much from the first week."

"It's a very good program and should be expanded to reach more kids and to provide follow-up for the kids that have gone through the program."

"I feel that this project will make a difference."

"Overall I think the program is an excellent concept with tremendous potential."

"...I could see a difference in the students' attitudes from the 1st wk. to the last. The efforts of the instructors, mentors, and others seemed to have made a difference."

"I think the shipyard did a great thing."

The time I spent at the PRIDE Program was: Productive (55); Somewhat productive (12); not very productive (0); non-productive (0). Two inserted "very highly productive" which was not a response choice.
My talents were: well utilized (29); usually well utilized (34); not well utilized (3). No response (3).

Summary of comments:
Things mentors liked about PRIDE: working with the students, seeing students change positively, feeling they (the mentors) had made a difference in the lives of the students, program organization, program activities, the ropes course, the caring atmosphere, the opportunity for involvement, the good job that the teachers did, meeting and interacting with different people, the relaxed atmosphere and the special and satisfying feelings that evolved from working in PRIDE.

Things mentors did not like: the cafeteria food, fire alarm bells going off at night, not having more time to interact with the students, working the 10pm to 6am shift (because of the lack of interaction with the students), the students being able to purchase snacks and candy in the dorm in the evenings, disjointed activities, the inability to spend more time with the program, lack of one-on-one time, lack of sex education, some activities that bored the students, lack of sleep, lack of pre-assigned specific tasks and responsibilities, some kids constantly picking on others, the fact that all the kids were from the same school and environment, the short amount of time geared towards math and communication skills, the lack of support of some NNS supervisors about their employee's participation, mentors who did not show true support and commitment, what appeared to be lack of control over students, discipline of students and respect shown by students, not enforcing the mandatory use of safety glasses, some racially slanted speakers and not enough academics. In the positive vein, having to leave and saying goodbye.

Things mentors would change or other suggestions:
1. Earlier and more detailed information meetings for mentors -- similar to Savings Bond or United Way campaign kick-offs.
2. Lead-in meeting which spends more time enumerating the expectations and less time selling the program.
4. More black, male role models (mentors and teachers).
5. Schedule volunteer time one week at a time instead of spreading it out over the four weeks, or have nine hour shifts for two days instead of half day shifts for four days.

6. Provide training sessions (3 hours or whatever is necessary) describing the way mentors can be most helpful and effective, and also delineating their responsibilities and the amount of authority they have in relationship to disciplining the students.

7. Have mentor meetings before each shift led by a teacher or group leader.

8. Encourage participation by especially talented, non-salaried NNS personnel, and get more volunteers from other businesses to act as mentors.

9. Have more teachers, possibly on a rotational basis, to prevent teacher "out."

10. Limit number of students in mentor groups to no more than five. The fewer the better.

11. Provide more one-on-one time.

12. Make the program three weeks long.

13. Make the program longer than four weeks.

14. Include weekends in the program and have parents visit students. Possibly use a weekend to take students to Busch Gardens or Water Country.

15. Offer a parallel program for parents.

16. House boys and girls in separate buildings and have more mentors at night.

17. Don't give kids the flashlights or allow them to have radios or alarm clocks.

18. Properly adjust the air conditioning.

19. Address sexual, health, nutritional and economic issues in an instructional manner, and give guidance in these areas.

20. Have more mind games and fewer physical games.

21. Have more "participation" activities.

22. Add something spiritual to the program.

23. More mentor involvement in the academic area.

24. Have more recitals.

25. Delete unpopular activities this coming year.

26. Have evening "rap" sessions so students can say what's on their minds.

27. Incorporate activities that help kids deal with social and academic problems.

28. Have more organized evening activities and/or have more control of students during free time. Strongly enforce disciplinary actions.
29. Assign "bad actors" housekeeping chores in bathrooms and halls before other students get up in the morning so that those areas will be in good condition by the time the majority of students get up.

30. Have fewer classes in a row so that students would not get restless and rowdy.

31. Assign students to groups and mentors. Don't let them choose. They need to learn to get along and would benefit by communicating with others outside their chosen group of friends.

32. Have a PRIDE experience for "regular" kids and have more diversity of students.

33. Start the program with younger children.

34. Follow-up activities could include: meetings for teachers and mentors to discuss accomplishments and shortfalls; feedback about how the kids progress from year to year; mentor testimonial night where mentors could express what they had learned from their experiences; mentors could send postcards to the kids on a monthly basis throughout the school year just to say "Hi" to the students; and make certain that there is continued involvement by these students in this type of program.
Parents' responses (11)

1. All parents who responded stated that they would want their children to participate in PRIDE again.

2. All parents who responded felt that their child was safe while in the program.

Summary of comments

Things parents liked about PRIDE: students learned to get along with other people, control their behavior, be independent, accept responsibility, have pride in themselves and respect for others, have confidence in themselves, be more courteous, listen and follow directions and cooperate to achieve a common goal; it was a learning experience; positive role models were provided for the children; interest was shown in their children; there were a variety of activities provided; the importance of education was emphasized; children were given the opportunity to visit places and do things which the parents could not afford to provide them; it kept the children's minds somewhat on school work and they got excited about learning on their own; it provided a vacation for the children; it provided a good experience for a child to live independently of his parents; the children were safe and someone was looking after them; and there was no cost to the parents for the program. In general, it was a wonderful learning experience for the students to learn about themselves and what the world around them and education can offer.

Things parents disliked: students not spending the weekend also; the inability to talk to their children by phone more frequently; and the fact that the program didn't teach about Jesus.

Things parents would change: the period of time (2 months instead of 1); teach about Jesus; offer the opportunity to other (more) children to participate; be an annual affair; the cafeteria food; allow parents to do more for the program; schedule the parents' program earlier in the day and provide transportation for them; and tell others.
Appendix O

1992 QUESTIONNAIRE RESPONSE SUMMARY FOR STUDENTS, TEACHERS, MENTORS, AND PARENTS
1992 Evaluation Question 5: What are the perceptions of the program participants (students, mentors, teachers, administrators and parents) with regard to the program's effectiveness and worth?

Data was gathered via a program evaluation survey. Information was tallied manually by the evaluator. Recurring or particularly strong opinions are included in narrative form. Each response group's information will be presented separately.

Student Surveys -- (71 respondents) 100% return rate compared to 100% return rate in 1991.


1. Free time: too little (37), just right (31), too much (1), no response (2)
2. Freedom: too little (45), just right (23), too much (1), no response (2)
3. Rules: too much (38), just right (24), too little (6), no response (4)
4. Food: OK (43), not very good (15), good (11), no response (2)
5. Bedtime: too early (50), OK (16), too late (1), no response (4)
6. Feeling safe: always (28), most of the time (21), sometimes (20), never (1), no response (1)
7. Observed or had knowledge of drug use on campus: No (60), Yes (2), no response (9)
8. Quality of time spent at PRIDE '92: great (26), terrific (20), OK (17), usually boring (5), bummer (1), no response (1)

9. Would attend PRIDE again: Yes (57), No (8), maybe (1), don't know (1), no response (1), two circled (2)

Positive aspects: enjoyable field trips, fun activities, the way teachers and mentors made students feel, got closer to friends, showed some things that one needs to know, learning and physical activities.
Negative aspects: early bedtime, too little freedom, not getting to know all the teachers, not long enough, classes, some kids attitudes and actions.

Suggestions: fewer or shorter classes, field trips that go outside of Virginia, go to King's Dominion.

Teacher Surveys — (9 respondents) 82% return rate compared to an 80% return rate in 1991.

1. Would participate again: Yes (4), Maybe (3), No (2)
2. Awareness or observation of drug use: No (9), Yes (0)
3. Students benefited: Yes (8-9), No (0), no response (1), Yes and No (1)
4. Taught what needed to be taught: Yes (6), No (0), sometimes (1), no response (2)
5. Academic content planned for: sufficient (7), not enough (1), no response (1)
6. Met cognitive goals: fairly well (5), well (2), satisfactorily (1), no response (1)
7. Met affective goals: fairly well (5), well (2), satisfactorily (1), no response (1)
8. Adequate supplies: Yes (9), No (0)
9. Adequate facility: Yes (7), No (1), no response (1)

Positive aspects: visible student progress, making a difference, the opportunity to give kids some positive experiences, final student/parent program, interacting with students, positive role model experience for students, students learning to deal with interpersonal problems, and positive relationship among students, teachers and mentors.

Negative aspects: need for more and earlier pre-planning involving teachers and mentors, need for administrative help, inconsistencies in handling discipline situations, lack of "apparent" support from upper level administrators, size of the student body, negative comments about the program, method of feeding kids during activities away from campus, communication of expectations about program goals between NNPS and the shipyard, dormitory situation, "on-site" director frequently had to go "off-site" to do administrative chores and communication problems between the shipyard people, the NNPS administration and the teachers.
Suggestions: Clarification and agreement by NNPS and shipyard on program goals and objectives prior to program planning and implementation, earlier and more cooperative planning, make the pay match the work, administrator from central office to take an "active" role in the program, students be allowed to attend only one year, include students from other middle schools, start planning and student screening process earlier, work with shipyard in designing any changes in the program, provide a classroom for every teacher, provide a computer room, require certification of all teachers on ropes course, do not allow mentors to go through ropes course with students, equal pay for equal work, NNPS and shipyard support the teaching staff, set up discipline guidelines regarding dismissal from the program, make a secretary and a copying machine available on-site, make an Impact counselor available 24 hours a day, have an administrative assistant in charge when the director has to be away from campus, better and more clearly defined goals and objectives for the returning students, more frequent follow-up activities during the school year, additional corporate sponsorship and give the on-site director the authority to make critical decisions.

Mentor Surveys -- (45 respondents) 48% return rate compared to 76% return rate in 1991

1. Time spent: productive (24), somewhat productive (18), not very productive (2), no answer (1)
2. Talent utilization: usually well utilized (20), well utilized (12), not well utilized (12), no answer (1)
3. Would you do it again? Yes (44), No (1)
4. Observed drug use: No (45), Yes (0)
5. Benefit to students: Yes (31-41), No (1-2)
6. Second year mentors only -- program differences: Worse (14), Improved (9), Same (2)

Positive aspects: opportunity to help kids, principle of the program, interaction with the students, range of activities, dedication of some teachers, beneficial change in students, "Olympics," and final student program/presentation.

Negative aspects: disorganization, lack of rigor in academics, lack of communication at all levels and among all participants, some teacher attitudes towards students and
mentors, lack of cooperative planning and organization. First year mentors tended to view the program in a more favorable light than second year mentors.

Suggestions: earlier and more thorough planning, involvement of mentors in that planning (joint program planning team), make sure program activity schedule is followed, provide a more rigorous academic program, provide optional time and/or transportation for students to attend religious activities on Sundays of the program, ensure more consistency among mentors and teachers about enforcement of rules, allow for more joint discussion, organization and planning time among mentors and teachers to facilitate communication during the program, have sessions on basic hygiene, behavior and speaking, more structure to the program, and plan for ongoing mentor contact with students throughout the rest of the year.

**Parent Surveys** — (33 respondents) 46% return rate compared to 29% return rate in 1991.

1. Child safe: Yes (31), No (2)
2. Let child attend again: Yes (32), No (1)

Positive aspects: child learned pride and responsibility, developed self-esteem and independence, program provided a variety of positive experiences.

Negative aspects: little contact with child during program, need for stricter rules, selection of students who deserve to attend, need for program to encompass more grade levels, need for more parent involvement.
Appendix P

1992 SAMPLE SUMMARY OF OBSERVATIONS FORM FOR COOPERATION AND SOCIAL BEHAVIOR OBSERVATIONS
1992 SUMMARY OF OBSERVATIONS FORM

Teacher's Name ________________________________________

Date ______________________

Student's Name ________________________________________


1. + 0 -
   Explanation of change, if one was noted.

2. + 0 -
   Explanation of change, if one was noted.

3. + 0 -
   Explanation of change, if one was noted.

4. + 0 -
   Explanation of change, if one was noted.
Appendix Q

1992 ACADEMIC SKILLS RESULTS AND K-W-L STRATEGY FORM
1992 Academic Skills

A K-W-L Strategy sheet, provided by one of the teachers, was completed by each teacher and in the case of one group, by each student. The number of objectives achieved was placed over the number of objectives stated with a plus for additional knowledge which was indicated. Data for six groups out of a total of eight groups was received by the evaluator. For example, one group achieved three out of three stated objectives with six items of additional knowledge indicated. This was tabulated in the following manner:

Group 1 3/3 + 6

Results

Six groups, 56 students

<table>
<thead>
<tr>
<th>Group</th>
<th>Objectives achieved</th>
<th>Objectives not achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>3/3 + 6</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>5/8 + 1</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>3/4 + 1</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>5/6 + 2</td>
<td></td>
</tr>
<tr>
<td>Group 5</td>
<td>1/1 + 6</td>
<td></td>
</tr>
<tr>
<td>Group 6</td>
<td>1/5 + 4</td>
<td></td>
</tr>
</tbody>
</table>

Objectives achieved - 67%
Objectives not achieved - 33%
K-W-L STRATEGY FORM

<table>
<thead>
<tr>
<th>K — What we know</th>
<th>W — What we want to find out</th>
<th>L — What we learned or still need to learn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Categories of information we expect to use:

A. 
B. 
C. 
D. 
E. 
F. 
G. 

From *The Reading Teacher*, February 1986, p. 565
VITA

Maria Teresa Amillategui Grimm was born in Guernica, Spain, November 15, 1948. At the age of three, she emigrated from Spain to the United States with her parents. Subsequently, she lived in Riverton, Wyoming, and in Boise, Idaho. She spent her school years in Boise, Idaho, where she attended Boise State College, graduating in 1970 with a Bachelor of Arts degree in elementary education. She attended Boise State University and completed her Master of Arts in Reading Education in 1978.

During her 26-year career in education, Dr. Grimm has taught at the seventh through ninth grade levels (10 years); the elementary level (5 years); and has been a psychometrist/academic diagnostician—evaluating special education students and regular education students at the middle and high school levels (11 years). Currently, she is a Reading Acceleration and Enrichment teacher at B.C. Charles Elementary School in Newport News, Virginia.

She served as President of the Newport News Reading Council in 1988-89, Vice-President elect in 1987-88, Secretary in 1986-87, and Historian in 1985-86. She is a member of the Newport News Reading Council, Virginia State Reading Association, International Reading Association and Phi Delta Kappa.