One new approach to the needs of at-risk African American male students that is being implemented in several urban school districts throughout the nation is the immersion school approach. This is the establishment of schools that provide a curriculum and related experiences for African American male students that are distinct from the curriculum and experiences provided for other students. This paper examines the Milwaukee (Wisconsin) Public Schools African American Immersion Academy, a program specifically designed to increase the academic performance and overall success of African American male students. There are seven programs designed by the immersion school to address the concerns of this population. Responses of participants on measures of intellectual achievement responsibility, attitudes toward school, and self-esteem were compared using a nonrandomized pretest-posttest control group design with 90 students from the immersion program and 63 students from a traditional school. There was little evidence from student responses to indicate that students in grades 3, 4, and 5 in the immersion school differed significantly from their counterparts in the traditional school, although students in grade 5 did demonstrate some change in the desired direction in terms of responsibility for their own achievement. The study did generate baseline data that can be used in future investigations, although no conclusions are appropriate at this time. (Contains 1 table and 67 references.)
BLACK INNER-CITY MALES AND THE MILWAUKEE PUBLIC SCHOOLS IMMERSION PROGRAM: A PROGRESS REPORT

Eugene T. W. Sanders, Ph.D.
Department of Educational Administration and Supervision
Bowling Green State University
Bowling Green, Ohio 43403

Paper Presented at the Annual Convention of the University Council for Educational Administration
Minneapolis, Minnesota
October 30-November 1, 1992
ABSTRACT

The enrollments in urban metropolitan schools across the nation have become increasingly characterized by African-American male students who are at risk. The need to address problems specifically related to students has become more widely acknowledged by educational leaders and policy makers. With this acknowledgement comes proposals for unique approaches that are designed to meet the needs of African-American males. One new approach being implemented in several urban school districts throughout the nation is the "immersion school" approach; that is, the establishment of schools that provide a curriculum and related experiences for African-American male students that is distinct from the curriculum and experiences provided for other students. This paper examines the Milwaukee Public Schools African-American Immersion Academy that is specifically designed to increase the academic and overall academic performance of African-American male students. There are seven programs designed by the "immersion" school to address the concerns of this particular population.

Because of the importance of educating all students, more successful approaches for educating African-American male students are needed. This study has been designed to investigate one approach currently being implemented in several school districts across the nation. Responses of African-American male elementary students on measures of intellectual achievement responsibility, attitude toward school, and self-esteem were compared using a non-randomized pretest/posttest control group design.
Introduction

According to Gibbs (1988), "black youth today are the ultimate victims of this legacy of nearly 250 years of slavery, 100 years of legally enforced segregation, and decades of racial discrimination and prejudice in every facet of American life" (p. 4). Generations of African-Americans have endured inferior schools, substandard housing, menial jobs, and the indignities of poverty (Bell, 1988; Bridges, 1986; Kelly, 1992; McAdoo & McAdoo, 1985; Miller, 1991; Moss, 1991). Moreover,

of all demographic subgroups of American males 20-64 years old, young adult African-American men 20-39 have suffered the largest absolute and relative decline in their real annual earnings since 1973. Within this group, young African-American men have fared the most poorly and will continue to suffer disproportionately. (Sum & Fogg, 1989, p. 3)

Given this legacy, it would appear that efforts to provide appropriate educational programming for African-American males must take into consideration relationships between sociocultural factors and school achievement.

Research Questions

Three hypotheses guided the collection and analysis of data for this study:

1. African-American male students in grades 3, 4, and 5 enrolled in the Milwaukee African-American Immersion Academy will have higher adjusted mean posttest scores on the Intellectual Achievement Responsibility Questionnaire ($p < .05$) than will African-American male students enrolled in grades 3, 4, and 5 in a traditional inner-city Milwaukee elementary school with a comparable student population.
2. African-American male students in grades 3, 4, and 5 enrolled in the Milwaukee African-American Immersion Academy will have higher adjusted mean posttest scores on the Attitude Toward School Scale ($p < .05$) than will African-American male students enrolled in grades 3, 4, and 5 in a traditional inner-city Milwaukee elementary school with a comparable student population.

3. African-American male students in grades 3, 4, and 5 enrolled in the Milwaukee African-American Immersion Academy will have higher adjusted mean posttest scores on the Self-Esteem Inventory ($p < .05$) than will African-American male students enrolled in grades 3, 4, and 5 in a traditional inner-city Milwaukee elementary school with a comparable student population.

Subjects which comprised the sample for this study were African-American male third, fourth, and fifth grade students enrolled in two inner-city elementary schools in the Milwaukee School District. One of these schools was the site of the newly established African-American immersion program (nontraditional school) while the other continued to offer the traditional program (traditional school). The two schools were comparable in terms of total enrollment as well as in terms of African-American male enrollment.

Both of the schools involved in this study are located in Area Three of the Milwaukee Public Schools. Area Three has been characterized as 99% African-American and predominately poor with over 93% of the students receiving free or reduced lunches (F. Johnson, personal conversation, November 15, 1991). Area Three students tend to be academically similar, with a significant percentage termed at risk (F. Johnson, personal
conversation, January 6, 1992). Subjects were identified from the official enrollment records for each of the two schools.

Profile of Contemporary African-American Male Students

Hare and Castenell (1985) have referred to African-American males as the "endangered species" because compared to other gender-race groups, they have the highest dropout rate, the highest suspension and expulsion rate, the highest rate of infant mortality, and the shortest life expectancy, and they are more likely to be unemployed, underemployed, or incarcerated. The researchers concluded, "put simply, African-American males are probably the most feared, least likely to be identified with, and least likely to be effectively taught" (p. 211).

For example, a study of the New Orleans Public Schools revealed that, during the 1987 school year, African-American males represented 43% of the school population. However, they accounted for 58% of the nonpromotions, 65% of the suspensions, 80% of the expulsions, 45% of the dropouts, and only 9% of the gifted and talented (Geribaldi, 1988). Geribaldi (1988) described the educational performance of African-American males as "a crisis in epidemic proportions" (p. 2).

Not only in New Orleans, but throughout the nation the low educational achievement level of African-American males is evident. According to Richard Gray, program director of the National Coalition of Advocates for Students (a national, Boston-based group that studies public school issues involving poor, black, hispanic, and handicapped students), African-American male students feel degraded, de-humanized, and
socialized to the extent that conditions of inferiority and passive acceptance of a system they know is wrong goes unquestioned (Holzer, 1988).

In comparison to their white counterparts, African-American males in educational settings are:

1. More likely to interact with other black males and least likely to interact with teachers;
2. More likely to have nonacademic interaction with peers;
3. Less likely to use a cooperative learning style;
4. More likely to receive controlling statements and qualified praise;
5. More likely to be labeled deviant and described more negatively than white males;
6. Less likely to receive positive feedback; and

During the upper elementary and junior high years, African-American males are also:

1. More likely to be in the lowest academic rank;
2. More likely to be isolated socially and academically from white students;
3. More likely to be sent to the principal's office for challenging the teacher; and

And, African-American males have been shown to have even lower standardized achievement scores as well as lower school self-esteem and less achievement orientation than their female counterparts (Irvine, 1990).
Sociocultural Factors and Academic Achievement

Genetic vs. Environmental Explanations of Low Achievement

Much of the research relating to the academic achievement of African-Americans has involved cross-race comparative studies which have been characterized by Pollard (1989) as a "search for the explanation of the minority student's failure" (p. 298). From these studies, two general theories have emerged as explanations for the low academic achievement of African-American students in comparison to white students: namely, a genetic theory and an environmental theory (Ornstein & Levine, 1990; Pollard, 1989).

The genetic theory has been reflected in the research of Arthur Jensen who concluded that about 80% of the variance in Intelligence Quotient (IQ) is due to genetic differences and only 20% is due to causes from the environment. Jensen framed his argument as follows:

A hypothesis that I believe comprehends more of the facts and is consistent with more of the converging lines of evidence than any other I know of, in its simplest terms, is the hypothesis that (a) the heritability of Intelligence Quotient (IQ) is the same within the white and black populations as between the populations, and (b) the genetic variance involved in IQ is about one-fifth less in black than the white population (p. 10 of testimony before the U.S Senate Select Committee on Equal Educational Opportunity). (Jensen, 1969, p. 20).

Jensen (1969) drew a further distinction between black and white populations by proposing there are two levels of intelligence. Level one intelligence involves being able to think in concrete rather than abstract terms. Level two intelligence involves being able to think in abstract terms, conceptualize, and solve problems. Jensen argued that level one intelligence is distributed in the lower class and the middle and upper class alike, whereas
level two intelligence is found mainly in the middle and upper classes only. Jensen further contended that level two children do well in school because "the traditional methods of classroom instruction emphasize cognitive and conceptual skills" (p. 14). Jensen suggested that level one children perform less well in school because the classroom methods of instruction do not utilize their inherited abilities or skills.

In contrast to this genetic explanation for low achievement, Williams (1972) summarized the environmentalist explanation as follows:

There are critical periods, or stages, in the development of animals, including man, during which the individual is most receptive to learning from particular kinds of experiences. These periods are very limited in duration. If an experience is to become a regular part of an individual's later behavior, it has to be acquired during the critical period when the individual is most ready for that kind of experience. Earlier or later exposure to such experience will produce little or no effect on the individual's later action. (p. 116)

Disproportionately lower IQ scores for African-Americans are thus better explained by children not receiving adequate stimulation from parents during the early years of development than by genetic differences. Ogbu (1974, 1985) also argued that special programs designed to assist African-American parents in providing adequate stimulation have been unsuccessful in increasing the IQ of African-Americans not because the genetic theory is correct but because the environmentalist view has been ethnocentric in nature. Ogbu (1978) stated:

The lower test scores of black children on intelligence tests, especially with respect to level 2 intelligence, appear to be due partly to three related factors: (1) the caste-like system's long denial of blacks of adequate access to desirable jobs and other societal positions and activities that require and promote white middle class type of cognitive skills; (2) black disillusionment because of the job ceiling and related factors, which has not encouraged
them to develop a cultural norm of maximizing their test scores; and (3) the symbolic meaning of intelligence tests, which may have a negative influence of black’s approach to these tests. (p. 16)

Notably, however, despite their opposing views as to whether genetic or environmental factors are the "root causes" of African-Americans having disproportionately lower achievement than whites, researchers in both "camps" have acknowledged that sociocultural factors bear a strong relationship to school achievement. And, in comparison to whites, African-Americans are more likely to be lower in sociocultural status (Fenn & Iwanicki, 1986; Hare & Castenell, 1985; Irvine, 1990).

**Sociocultural Status and Achievement**

The low socioeconomic status of a disproportionate number of African-Americans has been documented by Dr. Dorothy Hight, president of the National Council of Negro Women, in a speech before the Committee on Banking, Housing and Urban Affairs of the United States Senate (1991). Dr. Hight noted that "although African-American male unemployment was still nearly twice as high as white male unemployment in the sixties, African-American male unemployment hovered around 8 percent" (p. 37). However, in the 70s and early 80s, African-American male unemployment rates were nearly always double digit numbers: for example, in 1981 a rate between 14% and 15.9%, and in 1983 an astonishing 21% (Committee on Banking, Housing and Urban Affairs, 1991). Subsequently, during this period, the African-American population observed an accelerated increase in female-headed households (Gibbs, 1988; Irvine, 1990). Dr. Hight concluded that "in 1989, 11.8 percent of African-American married families were poor, and 46.5 percent of African-
American female-headed households were poor, the figure for whites were 5 percent and 25.4 percent respectively" (Committee on Banking, Housing and Urban Affairs, 1991, p. 37).

Numerous studies have indicated that there is a positive correlation between sociocultural status and performance on achievement tests (Gilmore, 1985; Hale & Benson, 1989; Jensen, 1969; Myers, 1991; Ogbu, 1985; Walker & Madhere, 1987; Williams & Leonard, 1989). Ornstein and Levine (1990) have attempted to explain this relationship by noting that there are distinctions between parental and school rules that make it difficult for lower class students to follow procedures in the school. Due to academically oriented standards for students, there is negative peer pressure upon students from lower sociocultural backgrounds and "as terminology, and concepts become increasingly abstract, many lower class and working class students fall further behind" (p. 13). Students considered to be slow learners are frequently set apart and instruction is given at a slower pace, thus contributing to a wider gap in achievement. Moreover, differences in teacher and student backgrounds and dialects make it difficult for middle class teachers to understand and motivate lower class students. Middle class teachers tend to reject lower class students' lifestyles and culture, and because students are influenced by their teachers' perceptions and behaviors, low teacher expectations generate further declines in students' motivation and performance. By the time low achieving students reach upper elementary grades or junior high school, they are required to accomplish very little and low performance becomes acceptable to their teachers. Frequently, teachers give up trying to teach low achievers or seek less frustrating work. (p. 11-12)

A major contributor to the lack of academic success for many African-Americans may thus be low teacher expectations (Dent, 1989; Hare & Castenall, 1985; Irvine, 1991).
Numerous studies have shown that student performance often parallels teacher expectations (Dent, 1989; Hale, 1982; Jackson, 1988; Neisser, 1985; Pollard, 1989) and that children achieve at higher levels in classrooms where teachers nurture and encourage them (Ford, 1985; Jones, 1986; Sowell, 1976; Smith & Chunn, 1989; Waxman, 1989).

Low teacher expectations also have been shown to lead to placement in special education classes (Irvine, 1990). African-American children are more than twice as likely as white children to be placed in special education classes, but less than half as likely as white children to be placed in classes for gifted and talented children (Ogbu, 1974, 1985). Also, Alston concluded that many teachers judge a student’s abilities to perform in school by superficial characteristics (Committee on Banking, Housing and Urban Affairs, 1991). She further noted “they [teachers] sometimes make judgements based on the way a child is dressed in class or on what they can surmise about a child’s family. Because of racism in our culture, they often make the judgement based on skin” (p. 55).

Given the perceived relationship between socioeconomic conditions and school achievement, it would seem appropriate to suggest that school districts address these differences to allow for maximizing the educational opportunities for all children.

Design of the Immersion Program

The Immersion Academy program is housed in what was the Victor Burger Elementary School but is now called the Dr. Martin Luther King African-American Elementary Academy and is located in Milwaukee, Wisconsin. For the purposes of this study, this school has been referred to as the nontraditional school. A description of key
elements of the organizational structure of this school and the nature of its operation and

curriculum that distinguish it from the Ben Franklin School, i.e., the traditional school in
this study, follows. These key elements include the Male Mentoring Program, the Rites of
Passage, the Tutorial Assistance Program, the Afro-Centric Curriculum, the "Families"
concept, the Student Management and Family Intervention Emphasis, and the obligation
and requirement for teachers within the African-American Immersion Academy.

Information regarding each of these elements was obtained through personal on-site
observation and personal communication with Dr. Florence Johnson, Assistant
Superintendent of Milwaukee Public Schools, and Ms. Anita Sparks, Curriculum
Coordinator for the Dr. Martin Luther King African-American Immersion Academy as well

as from recently published literature. Additional information concerning certain aspects of
the Immersion Academy program was also provided by Dr. Jay Peterson, Director of the
Research Department for the Milwaukee Public Schools. It should be noted, however, that
both the nontraditional and traditional schools adhered to the district- and state-approved
curriculum guidelines.

The Male Mentoring Program

The Male Mentoring Program was implemented in January, 1992. In this program,

successful and positive African-American role models in the Milwaukee community serve as

mentors for African-American male students in grades 3, 4, and 5. The program is designed
to provide one-on-one mentoring and instruction by these adult African-American male role
models. The majority of the African-American male role models involved in this program
since January, 1992, were recruited from either black-owned businesses or the University of Wisconsin at Milwaukee. In some instances, African-American owned businesses adopted entire grade levels and shared responsibility for mentoring the young African-American male students. In the mentoring program, the primary areas of focus are self-respect, intellectual achievement, attitude toward school, drug awareness, sex education, self-concept, and self-awareness. From January to the close of the school year, mentoring activities occurred for one hour after school during the week and for two hours every other Saturday.

**The Rites of Passage**

The Rites of Passage is a fraternal-type program which emphasizes African traditions and customs as well as the proud role of the male in traditional African history. The program is highly ceremonial and involves closed meetings. The program at the nontraditional school was coordinated by the Milwaukee Urban League and met 16 times during the second semester of the 1991-92 school year for three hours each Saturday from 9:00 a.m. to 12:00 noon. The purpose of the Rites of Passage is to familiarize African-American male students with the rich heritage of Africa and provide a “bonding” for male students who otherwise would not have a significant amount of interaction with adult African-American males. Since all before- and after-school programs operated on a volunteer basis, it may be relevant to note that the Rites of Passage program experienced the most attendance by African-American male students.
The Tutorial Assistance Program

The Tutorial Assistance program was an extended day program. Tutorial hours were from 2:45 p.m. to 4:45 p.m. each school day. Tutorial assistance was provided by teachers, high school students, University of Wisconsin at Milwaukee students, parents who were certified teachers or classroom aides, and administrators. Males as well as females were encouraged to participate, and day care services were provided by the Milwaukee Public Schools at no cost. Although evaluative data are still forthcoming for this program, Ms. Anita Sparks, Curriculum Coordinator for the Immersion Academy, indicated that the third grade reading scores had improved from 56% to 70% which is attributable in part to the tutorial services being made available to all students (personal communication, June 5, 1992).

The Afro-Centric Curriculum

A major focus in the nontraditional school was the Afro-Centric curriculum implemented in the fall of 1991. As noted previously, this school continued to have a legal responsibility for teaching the prescribed curriculum, but it was also charged with infusing an Afro-Centric focus of learning. According to Ms. Anita Sparks, "the Afro-Centric curriculum aspect of the school has resulted in an add on as opposed to an entire change in the curriculum" (personal communication, June 5, 1992). The purpose of the Afro-Centric curriculum was to identify significant contributions that African-American people have made in all academic areas and include this information in the curriculum. The overall objective is to motivate and encourage young African-American students and introduce
them to the scope of their role in the development of this country. Afro-Centric literature was purchased by the Milwaukee Public Schools through Afro-American Literature Series from Chicago, Illinois. Also, a speaker's forum was established to provide students with actual individual experiences regarding recent aspects of social history. Ms. Sparks indicated that the curriculum was implemented in conjunction with the standard curriculum.

The Immersion School "Families" Concept

Organizationally, the Immersion school is based upon a "Families" concept with each grade level defined as a "Family." Beginning in the spring of 1992, each of these families met twice a week for a total of four hours. During "family" time, students were taught African art, music, African-American contributions to science and math, reading and comprehension skills, and study skills techniques, and library time was provided. Classroom teachers, counselors, and administrators supervised these activities, and while students were in "family" groups, teachers not involved in these activities used this time to network, or make home visitations, study student files, call parents for information regarding students, or identify students with particular academic needs and then use this time for small group tutoring. Discipline techniques and strategies were also addressed during this time by teachers experiencing difficulty with classroom management.

Student Management and Family Intervention Emphasis

A sixth element of the nontraditional school program focused on discipline and parental intervention. A discipline policy was adopted which called for the parent to attend school with the child for several days to correct behavioral concerns. Beginning in January,
1992, all students were required to wear uniforms every day. The uniform consisted of blue slacks and white shirts for boys and blue skirts and white blouses for girls. Students were not permitted to wear hats or jackets during the school day. The Milwaukee Public Schools provided uniforms for those students who could not afford them.

The Immersion School Teacher

All teachers at the Dr. Martin Luther King African-American Immersion Academy are required to enroll in and successfully complete 18 semester hours in African-American studies at the University of Wisconsin at Milwaukee or any accredited university in the country. The Milwaukee Public Schools provided complete financial assistance for teachers teaching at the nontraditional school prior to the Immersion format. Teachers new to the Immersion school were individually responsible for meeting the 18 semester hours. These 18 semester hours of graduate courses are to be selected to address particular areas of concern such as African-American social history, learning styles, and contemporary issues facing African-Americans (i.e., poverty, socioeconomic status, political considerations, and family roles). Other coursework considered appropriate include African-American sociology, counseling minority groups, and Afro-Centric curriculum areas.

The school also made a special effort to employ African-American male teachers and African-American male educational aides. Although there were only three African-American male teachers in the building for the 1991-92 school year, there were 10 African-American male educational aides who were classroom aides, library aides, hall monitors, playground attendants, and office workers.
As Leake and Leake (1992) also noted, teachers in the Immersion Academy will maintain their classes for two years in addition to coordinating academic and recreational programs after school and on Saturdays. Leake and Leake stated that "a parent outreach center provides a variety of support services, including family counseling, coordination of babysitting services during parent/teacher conferences, information regarding drug abuse and adult education classes in the school" (p. 785). Additionally, gender socialization classes (GSC), in which students examined and established a "gender identity" in a safe environment, were established, and the building was decorated with murals and other art and artifacts reflecting African-American experiences and African history (Leake & Leake, 1992).

Method

A nonrandomized control-group pretest-posttest design as described by Van Dalen and Meyer (1966) was employed to determine if African-American male students in the Milwaukee Immersion Academy demonstrated higher levels of Intellectual Achievement Responsibility, Attitude Toward School, and Self-Esteem than did their counterparts in a comparable traditional inner-city elementary school.

Subjects

Subjects for this study were identified on the basis of official enrollment at the Dr. Martin Luther King African-American Immersion Academy (the nontraditional school) and the Ben Franklin Elementary School (the traditional school). All subjects were African-American males enrolled in either grades 3, 4, or 5 in these schools. The final sample
consisted of 153 African-American male students, 90 of whom were enrolled in the nontraditional and 63 of whom were enrolled in the traditional school. The 90 African-American male students who participated in the study from the nontraditional school represented 76% of all the African-American male students enrolled in grades 3, 4, and 5 in that school. The 63 African-American male students who participated in the study from the traditional school represented 86% of all the African-American male students in grades 3, 4, and 5 in that school. The total number of students and actual number of subjects at each of the three grade levels is depicted in Table 1.

Table 1

Sample Response Rate by Traditional and Nontraditional African-American Male Students

<table>
<thead>
<tr>
<th>Grade</th>
<th>Traditional (N=115)</th>
<th>Nontraditional (N=81)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>( % )</td>
</tr>
<tr>
<td>Third Grade</td>
<td>42</td>
<td>76.4</td>
</tr>
<tr>
<td>Fourth Grade</td>
<td>29</td>
<td>82.9</td>
</tr>
<tr>
<td>Fifth Grade</td>
<td>19</td>
<td>76.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>78.4</td>
</tr>
</tbody>
</table>

Instrumentation

The three principal instruments utilized in this research study were the Intellectual Achievement Responsibility Questionnaire developed by Crandall, Katkovsky, and Crandall (1965); the Attitude Toward School Index developed by the Instructional Objective Exchange (1972); and the Coopersmith Self-Esteem Inventory developed by Stanley...
Coopersmith (1967). For this study, whenever available, the shorter forms of the instruments were selected for use, in part because of time constraints involved in administering the three instruments during the school day but also in consideration of the fact that the subjects involved in this study could be expected to have limited attention spans. A description of each of the three instruments in this study follows.

**Intellectual Achievement Responsibility Questionnaire**

The Intellectual Achievement Responsibility Questionnaire (IARQ) is a measure which provides assessment of children's beliefs that they, rather than others, are responsible for their intellectual and academic success and failure (Crandall, 1978). It was designed for use with school-age children to access their perception of causality for events that occur in the academic and intellectual situations (Crandall, 1978). The IARQ attaches the agent of internal control to the child rather than posing the question in terms of children or people in general because "it is the child's behavior that we want to predict" (Crandall, 1978, p. 1).

The IARQ has been used extensively for basic research in developmental, educational, social, and clinical psychology (Crandall, 1978). The instrument has been shown to be helpful in predicting locus of control for emotionally disturbed students (Barnhoum-Musa, 1986); social skills training and reading gain (Wooster, 1986); computer culture and child development (Bisaillon, 1989); locus of control for short-term recall and retention (Nishikawa, 1989); and academic achievement (Borden, Brown, Jenkins, & Clingerman, 1987; Carcosta & Michael, 1986; Chiu, 1986; Fenn & Iwanicki, 1986; Halpin, Halpin, & Whidden, 1985; Jackson, 1988; Kagen, 1988; Kammer, 1986). The validity and
reliability coefficients of the Intellectual Achievement Responsibility Questionnaire are
generally acceptable (Antion & Michael, 1983; Bain, Boersma, & Chapman, 1983; Crandall,
1978).

Crandall (1978) noted that the IARQ has experienced positive face validity since
1967 since the purpose and intent of the test is obvious. Borg and Gall (1989) stated that
"most people react more favorably to tests having high face validity" (p. 256), and Nevo
(1985) suggested that face validity brings higher levels of cooperation and motivation while
subjects are taking the test and reduces feelings of dissatisfaction or injustice among low
scores. Nevo (1985) also noted that face validity improves public relations, as lay people can
more easily see the relationship between the test and the performance or characteristics it
purportedly measures.

Regarding convergent validity, Robinson and Shaver (1985) reported that the IARQ
scores were significantly related to report card grades in all academic subjects as well as "in
all grades combined" (p. 194). Robinson and Shaver supported strong convergent validity
for the IARQ, and they noted that those with higher IARQ scores had higher report card
averages and there were no significant gender-related differences.

With respect to test-retest reliability, Crandall (1978) indicated that there were
numerous correlates between .64 and .77. Other split-half reliability data provided by
Patsula (1969) indicated correlates between .56 and .67 while Arlin (1984) found test-retest
reliability correlates between .60 and .66. Robinson and Shaver (1985) also reported test-
retest reliability for first through fifth grades at .69 and for ninth grade at .65. Robinson
and Shaver also reported test-retest correlations ranging from .23 to .69 with an urban population.

The IARQ consists of 14 self-response items. Besides being simple, direct, and easy to score, the items on the instrument have universal application; that is, they are appropriate for students at all levels (Crandall, 1978).

Attitude Toward School Index

The Attitude Toward School Index or School Sentiment Index is designed for use with school-age children, grades kindergarten through 12. It has been used extensively with students from all regions of the country as well as various socioeconomic groups (Instructional Objective Exchange, 1972). The Index addresses six dimensions of attitude toward school. These six dimensions are:

1. Teachers (one's subjective feelings about teacher behavior rather than an objective report on behavior with respect to some mode of instruction, authority and control, and the interpersonal relationship of teacher to pupil);

2. School Subject (one's differential attitude toward various commonly-taught school subjects);

3. Learning (one's attitude toward the learning experience, independent of attitude toward school, teachers and subjects, as reflected in intellectual curiosity, willingness to study, voluntarism, and interest in problem solving);

4. Social Structure and Climate (one's attitude toward his or her school as a social center, rule-making and rule enforcing entity, and an extra-curricular opportunity system);

5. Peer (one's feelings regarding the structure of, and climate of relationship within the peer group, rather than toward particular individuals within that group); and

6. General (one's general orientation toward schooling, independent of a particular school).
Different levels of this self-report measure are available for use with primary students (K-5), intermediate students (5-7), and secondary students (7-12). For the purposes of this research, only the general subscale of the K-5 measure consisting of 12 statements was administered.

According to Hannah (1985), a reviewer for the *Ninth Mental Measurement Yearbook*, the test-retest reliability of the various subscales of the Index ranged from .35 to .85 and the total index has an overall reliability of .87. However, no reliability data relating specifically to the general subscale of the K-5 measure was reported or could be obtained through the Instructional Objective Exchange. As a result, the Kudar-Richardson 21 was employed to test reliability and yielded a correlate of .86 for the third grade, .88 for the fourth grade, and .83 for the fifth grade. Table 2 depicts the Kudar-Richardson reliability coefficients for all grades.

Table 2

Kudar-Richardson 21 Reliability Coefficients for Attitude Toward School Based on Posttest Scores

<table>
<thead>
<tr>
<th>Grade</th>
<th>Source</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>Nontraditional</td>
<td>27</td>
<td>.86</td>
</tr>
<tr>
<td>3rd</td>
<td>Traditional</td>
<td>42</td>
<td>.86</td>
</tr>
<tr>
<td>3rd</td>
<td>Combined</td>
<td>69</td>
<td>.86</td>
</tr>
<tr>
<td>4th</td>
<td>Nontraditional</td>
<td>20</td>
<td>.82</td>
</tr>
<tr>
<td>4th</td>
<td>Traditional</td>
<td>29</td>
<td>.86</td>
</tr>
<tr>
<td>4th</td>
<td>Combined</td>
<td>49</td>
<td>.83</td>
</tr>
<tr>
<td>5th</td>
<td>Nontraditional</td>
<td>16</td>
<td>.90</td>
</tr>
<tr>
<td>5th</td>
<td>Traditional</td>
<td>19</td>
<td>.74</td>
</tr>
<tr>
<td>5th</td>
<td>Combined</td>
<td>35</td>
<td>.83</td>
</tr>
</tbody>
</table>
In completing this inventory, students respond by marking "true" or "untrue" to a series of statements regarding school. The statement involves student perceptions of, or attitude toward, various aspects of school, rather than a mere objective reporting of these aspects (Instructional Objective Exchange, 1972).

Coopersmith Self-Esteem Inventory

The Coopersmith Self-Esteem Inventory (SEI) was designed by Stanley Coopersmith (1967) for use with students in grades kindergarten through 12. According to Johnson, Redfield, Miller, and Simpson (1983), the Coopersmith Self-Esteem Inventory is among the best known and widely used of the various self-esteem measures.

Coopersmith (1967) defined self-esteem as:

the evaluation which the individual makes and customarily maintains with regard to himself; an attitude of approval or disapproval, and the inventory indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. In essence, self esteem is a personal judgement of worthiness that is expressed in the attitude the individual holds toward himself. (p. 5)

The original form contained 50 items which were subdivided into four subscales regarding different self-esteem domains. These domains were peers, parents, school, and personal interests. The long version is accompanied by an eight-item lie scale to assess defensiveness. The Coopersmith Self-Esteem Inventory used in this study consists of 25 self-report items for which students indicate that the statement in the sentence is "like me" or "unlike me."

In their review in the Ninth Mental Measurement Yearbook, Peterson and Austin (1985) noted that the Coopersmith Self-Esteem Inventory (short form) is brief and easily
scored and that the test is reliable and stable and there exists an impressive amount of
information bearing on its construct validity. Regarding convergent validity, Robinson and
Shaver (1985) found a correlation of .59 to .60 for the short form administered in this study.
They noted that the Coopersmith Self-Esteem Inventory has a "considerable flexibility in
measuring the family, social, self-acceptance, and anxiety-assertiveness areas of the self
concept for various ages" (p. 85).

According to Peterson and Austin (1985), test-retest reliability data has ranged from
.87 to .92 for grades 3 to 8. Taylor and Reitz (1968) reported a reliability of .90. Further,
Coopersmith (1967) reported test-retest reliability for the original item scale as .88 over five
weeks and .70 over three years.

Findings

Hypothesis 1

Hypothesis 1 was tested using ANCOVA to determine if there were significant
adjusted posttest mean differences ($p < .05$) between African-American male students
enrolled in grades 3, 4, and 5 on the measure of students' beliefs regarding their intellectual
achievement responsibility (IAR) in the traditional school as compared to the nontraditional
school. For all grade levels, pretest scores on the IAR were used as covariates. For all
grades, Iowa vocabulary and math scores were also used as covariates since they were
determined to correlate highly with scores on the measure of the dependent variable. $F$-
levels for school effect for both third and fourth grades were not significant at the
established level; thus, Hypothesis 1 as it relates to students at this level was not supported.
However, the $F$-level for school effect for the fifth grade was significant ($p = .027$), and Hypothesis 1 as it relates to students at that grade level is supported in that the adjusted posttest mean for students in the nontraditional school was determined to be significantly higher.

**Hypothesis 2**

Hypothesis 2 was also tested using ANCOVA to determine if there were significant adjusted posttest mean differences ($p < .05$) between African-American male pupils enrolled in grades 3, 4, and 5 on the measure of attitude toward school (ATS) at the traditional school as compared to the nontraditional school. For all grade levels, pretest scores on the ATS were used as covariates. No additional covariates were used in that none of the additional measures were determined to correlate highly with scores on the measure of the dependent variable. $F$-levels for school effect for both fourth and fifth grades were not significant at the established level; thus, Hypothesis 2 was not supported as it related to students at these levels. However, the $F$-level for school effect for the third grade was significant ($p = .033$), but as in the case, the adjusted posttest mean for students in the traditional school was significantly higher. Thus, with respect to this grade level. Hypothesis 2 was not supported.

**Hypothesis 3**

Hypothesis 3 was also tested using ANCOVA to determine if there were significant adjusted posttest mean differences ($p < .05$) between African-American male pupils enrolled in grades 3, 4, and 5 on the measure of self-esteem (SEI) in the traditional school as
compared to the nontraditional school. For all grade levels, pretest scores on the SEI were used as covariates. Scores on the Iowa math test were determined to correlate highly with the measure of the dependent variable and were thus used as an additional covariate at all grade levels. $F$-levels for school effect for both fourth and fifth grades were not significant at the established level; thus, Hypothesis 3 as it relates to students at these grade levels was not supported. The $F$-level for the third grade was significant ($p = .001$), but as in the case of Hypothesis 2, the posttest adjusted mean for the traditional school was again significantly higher. Thus, with respect to this grade level, Hypothesis 3 was not supported.

Conclusions and Implications

With respect to the three variables of concern in this study (i.e., beliefs regarding intellectual achievement responsibility, attitude toward school, and self-esteem), there is little evidence to indicate that, at the time of the final data collection, African-American male students in grades 3, 4, and 5 enrolled in the African-American Immersion Academy differed significantly from their counterparts enrolled in a traditional inner-city school in the same city.

There is some evidence to indicate that at the third and fifth grade levels the two groups of African-American male students did differ with respect to one or more of the dependent variables. However, only at the fifth grade level were these differences in the direction predicted. Specifically, fifth grade students in the nontraditional school evidenced a significantly higher degree of responsibility for their own intellectual and academic achievement (as measured by the IARQ) than did their counterparts in the traditional
school. However, at the third grade level, African-American male students in the traditional school evidenced higher self-esteem (as measured by the SEI) and a more positive attitude toward school (as measured by the ATS) than did their counterparts in the nontraditional school. Overall, therefore, the results of this study must be regarded as inconclusive with respect to any differential effects which might be attributable to the special immersion program.

Clearly, a major limitation of the study was the short time span between the collection of pretest and posttest data, which could have considerably decreased the probability of detecting any measurable program effects. Additionally, the design of the study permitted no controls for teacher or school leadership effects which could at least, in part, account for the differences that were found between the students in the two schools.

This study has, however, generated baseline data which can be used for comparison purposes in future investigations and, in that sense, provided a basis for continuing and long-term investigation of possible differential effects of the immersion program. With respect to the larger problem to which this study is related (i.e., the effectiveness of the immersion program in promoting the education of African-American males), no conclusions are appropriate at this time.
REFERENCES


Barnhoum-Musa, I. M. (1986). A comparative study of tendencies to ascribe locus of control responsibility for intellectual achievement between two groups of middle school students (locus of control, emotionally disturbed). *Dissertation Abstracts International, 47*, 4321. (University Microfilms No. ADG87-00441)


