

**BOURDIEU'S HABITUS AND THE EDUCATIONAL ACHIEVEMENT OF NORTH  
CAROLINA'S AMERICAN INDIAN STUDENTS: AN EMPIRICAL  
INVESTIGATION**

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## **ABSTRACT**

**PRISCILLA JACOBS MAYNOR: Bourdieu's Habitus and the Educational Achievement of North Carolina's American Indian Students: An Empirical Investigation**

(Under the direction of Fenwick English)

The purpose of this quantitative study was to investigate Bourdieu's theoretical concept of habitus to determine whether it was predictive of the educational achievement patterns for American Indian students in North Carolina. If affirmative, then it would suggest the entire system of changes, interventions, and other reforms schools employed in the past decades have not changed the pattern of low achievement or the likelihood of a better quality of life for the American Indian population. If affirmative, it would also suggest, as Bourdieu would argue, that the role of the school in reproducing the exiting social order will not change until and unless it is confronted in the context of the larger socio-political system. More specifically, the study focused on the academic proficiency for a cohort of 1,495 American Indian students entering third grade in 1998 and examined their progression through the state's public schools through 2007, including the college retention for those students entering a higher-education institution in the UNC system following their graduation from high school. The researcher applied the theoretical concept of habitus as the lens addressing the major research question for the study: "Do schools make a positive, significant difference in the educational achievement patterns for American Indian students, more specifically those from economically disadvantaged backgrounds who attend public schools in North Carolina?"

Based on the results, patterns of proficiency shown provide evidence that over time, schools in North Carolina did not make a significant difference in the educational achievement for the cohort of American Indian students in this study. Higher socioeconomic status (SES) American Indian students showed higher rates of academic proficiency on standardized math, reading, and high school assessments than students from lower SES backgrounds. However, the proficiency of the higher SES students lagged behind the proficiency of White students. In terms of school density, there were no significant differences found in the percentages of proficiency for both higher and lower SES American Indian students on state assessments in math, reading, and high-school assessments. Results also showed that American Indian students entering college are less likely to be retained after their freshman year in comparison to their non-Native peers. SES was the only strong predictor of freshman retention for American Indian students in the UNC System. The students' proficiency had some effect but not to the degree of the students' SES. Density of the American Indian student population in the school district from which students' completed high school reveals no significant effect on freshman retention.

Using paired-sample t-tests, chi-square tests and cross-tabulations and a logistic-regression analysis, findings support existing literature about the academic achievement of American Indian students and Bourdieu's theoretical concept of habitus.

To my beloved mother, Julia, this accomplishment is dedicated, for her love, prayers, and faith in me. While on Earth and now from Heaven, you are truly my inspiration and unquestionably the wind beneath my wings.

This work is also dedicated to my incredible husband, Billy, and my awesome son, Ryne, for unconditional love, encouragement, and support. The two of you sacrificed much, so this truly belongs to us all.

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# **Bourdieu's Habitus and the Educational Achievement of North Carolina's American Indian Students: An Empirical Investigation**

(Under the direction of Dr. Fenwick English)

## **CHAPTER ONE**

### **INTRODUCTION**

The contemporary world system did not emerge naturally, and it was not the inevitable result of technical innovations. It was an intentionally designed framework of social institutions and cultural symbols and beliefs constructed by particular individuals to maximize their social power in all its forms; ideological, economic, military, and political. Throughout world history, opportunistic individuals have successfully designed and used cultural meanings, social institutions, governments, and business organizations for their own purposes. Elites took political power, but people also gave them power. Understanding how this came about, who the designers were, and what their objectives were is crucial if we, as citizens, are to regain control and assume an active role in creating better, more humane societies and a better world (Bodley, 2003, p. 79).

The broader society must address the social injustices of allowing only certain people to succeed educationally. The formal educational institutions in the United States are supposed to provide all citizens their free, democratic right to a sound basic education and opportunity to fully achieve their potential. Yet, in reality, as reflected in the research literature, a long history and tendency exists of schools to connect best with, and work best for, students of middle-class, Anglo, male backgrounds (Mills & Gale, 2007). The literature also documents a long history of minority students not fairing as well in the American institutions that pledge equal opportunity for all (Coleman, 1966; Tyack, 1974; Spring, 1976; Tyack & Cuban, 1995; Jencks & Phillips, 1998; Hale, 2001; Price, 2002; Harvard Civil Rights Project, 2005; Harris & Herrington, 2006; Ladson-Billings, 2006). "Despite frequent good intentions and abundant rhetoric about "equal educational opportunity,"

Tyack (1974) states, schools have rarely taught children of the poor effectively—and this failure has been systematic, not idiosyncratic” (p. 11).

The equalizing factor against poverty and social inequality often cited is education attainment (Allen & Hood, 2000; Lee & Bowen, 2006; Mills & Gale, 2007; Harrington, 2010). Yet, for American Indians, the nation’s system of public education throughout history and in present time continues to poorly educate them, which further diminishes their way of life and the economic position of their communities (Fuchs & Havighurst, 1973; Butterfield & Pepper, 1991; Jeffries, 2003; Deyhle & Swisher, 1997; Yazzi, 2000; Tharp 2006). Senator Robert Kennedy (1969) summed it up by stating, the “First Americans had become the last Americans with the opportunity for employment, education, a decent income, and a chance for a fulfilling and rewarding life” and stated further that, “effective education lies at the heart of any lasting solution” (*The Kennedy Report*, p. 3). This continues to be a reality. Despite recommendations from numerous investigative reports and studies the federal government commissioned since the early nineteenth century examining the failure of the education system to work for American Indians (e.g., *The Meriam Report*, 1928); *The Kennedy Report*, 1969; *Indian Nations at Risk*, 1991), poor performance persists. The perpetual educational and economic inequalities American Indians experience continue to be profound and appear to mirror the past. But why? To address the dismal state of Indian education, the deeply embedded historic, cultural-perceptions biases need to be directly addressed. Schools have served to promote mainstream cultural values and expectations. They have disregarded the experiences, languages, and cultural understandings of American Indians and other underrepresented groups (Noley, 1992; Noll, 1998). Instead, throughout much of history, the cultures of

American Indians have been perceived more as an obstruction to the educational process (Coggins, Williams, & Radin, 1997). Yazzi (2000) argued that identifying the power structures that determine the purpose of education is essential to overcoming the unequal positioning and marginalization of American Indians and their culture. Colonization, Lomawaima (1999) purported, explains the stereotypical beliefs about the culture and capabilities of Native Americans. The creation of new communities, through colonization, aimed to impose military, political, economic, and social power. Therefore, according to Lomawaima, the rhetoric of civilization against savagery contained the extension of power and domination over Native nations. Bourdieu, a French social scientist, contends that those power structures can be identified when exploring how cultural resources, processes, and institutions hold individuals and groups in competitive and self-perpetuating hierarchies of domination (Swartz, 1997, p. 6). According to Lomawaima (1999), Native people participate unknowingly in maintaining their life circumstances within such hierarchies by accepting certain dominant ideas and worldviews as natural conditions and the way things naturally are. Much worse, our schools are key agents in ensuring this social order.

### Purpose of the Study

Throughout the history of American Indian education, Native students have persistently performed significantly lower than their White peers and have dropped out of school in record numbers. Improving educational achievement and increasing graduation rates is critical for American Indians because higher levels of educational attainment are directly linked to better incomes and quality of life. Yet, it appears that numerous educational reforms have done little to improve American Indian students' outcomes. The purpose of this quantitative study was to investigate Bourdieu's theoretical concept of

habitus to determine whether it was predictive of the educational achievement patterns for American Indian students in North Carolina. If affirmative, it would suggest the entire system of changes, interventions, and other reforms schools employed in the past decades have not changed the pattern of low achievement or the likelihood of a better quality of life for the American Indian people. If affirmative, it would also suggest, as Bourdieu would argue, that the role of the school in reproducing the existing social order will not change until and unless it is confronted in the context of the larger socio-political system. This study focused on the academic proficiency of a cohort of American Indian students entering third grade in 1998 and examined their progression through the state's public schools through 2007, including the college retention for those entering a higher-education institution in the UNC System following their graduation from high school. The analysis serves to broaden and deepen the understanding of both the experiences of economically disadvantaged American Indian students and Bourdieu's theoretical concept of habitus and to motivate researchers to conduct more quantitative and qualitative studies that reveal the deep-rooted dynamics involved in American Indian education.

### Significance of the Problem

#### *Lagging Educational Achievement*

Some American Indian students perform well academically, graduate from school, attend college, and successfully enter the workforce (Faircloth & Tippeconnic, 2010). However, in general, American Indians underachieve and drop out of school in high numbers. . For example, only 46 percent of American Indian/Alaska Natives taking the 8<sup>th</sup> eighth grade National Assessment of Educational Progress (NAEP) reading test in 2009 scored at or above the basic level, and only 16% scored at or above the proficient reading

level. In comparison, 81% of White students scored at or above the basic level, and 39% scored at or above proficiency. North Carolina's American Indian students also lag behind significantly on national educational achievement reading measures. On the same eighth grade NAEP reading test, 46% scored at or above the basic level and only 16% scored at or above the proficient reading level. In comparison, 81% of White students scored at or above the basic level and 39 percent scored at or above proficiency (National Center for Education Statistics, 2009). In 2006, American Indian/Alaska Native young adults nationally had a higher dropout rate (15%) than any other ethnic group with the exception of Hispanics (National Center for Education Statistics, 2008).

Similar to these trends, American Indian students in North Carolina, in disproportionate numbers, are choosing to leave school without graduating. In 2003-04, the dropout rate for American Indian students was 9%. Although slight improvements have occurred, in 2007-08, American Indian students, both male and female, dropped out of school at a higher rate than the state average and left school 1.4 times more often than other students (State Advisory Council on Indian Education, 2009, p. 27). American Indian males, with a rate of 7.89%, have the highest dropout rate of any ethnic or gender group (NCDPI, Annual Dropout Report 2007-08). Since 2005, the four-year cohort graduation rate for American Indians has consistently remained significantly lower than that of White students, as well as the rate for the state. In 2008-09, the 4-year cohort graduation rate for American Indians was 60% compared to 78% for White students and the state rate of 72%.

Academic indicators from North Carolina's state assessments have revealed mixed results for American Indian students. An analysis of trends in achievement between 1993 and 2000, which the North Carolina Commission on Raising Standards and Closing Gaps

conducted, revealed that the gap in reading achievement between American Indian students and White students decreased more than any other racial/ethnic group. For math, the gap closed at a greater rate following the 1996-97 implementation of the state's ABCs of Public Education accountability program (N.C. Department of Public Instruction, Division of Accountability, 2001). However, in 2005-06, the overall percentage of all students in the state deemed proficient significantly decreased when the state standard was raised, but the drop in proficiency was much greater for American Indian students (State Advisory Council on Indian Education, 2008, p. 7). Recent data from the 2008-09 school year reveal that only 49% of American Indian students scored proficient in math and reading compared to 76.7% of White students.

#### *Little Impact of Educational Reforms and Initiatives*

There is little evidence that federal-, state-, and district-level education reform initiatives advocating goals of eliminating disparities and improving the academic achievement of minority students are making a difference for American Indian students. The most notable federal initiative is the No Child Left Behind Act (NCLB), which has been lauded for its noble intent of making sure all students regardless of race, ethnicity, or income achieve at high standards. However, it has received significant criticism from opponents who argue it has negatively impacted Native American children and educators. Further, NCLB has not made much difference in the instructional practices and education achievement for these students since its implementation (McCarty, 2008; Beaulieu, 2008; Wantanbe, 2008; Winstead, et al., 2008). In 2005 and 2007, the National Center for Education Statistics (NCES) in its National Indian Education Study (NIES) provided insights regarding NCLB's impact on American Indian student achievement. The NIES is

the only nationally representative assessment of American Indian student performance and consists of two parts. Part I of the study analyzed the performance of Native students on the National Assessment of Education Progress (NAEP), a national assessment of reading and mathematics for grades 4 and 8. In 2007, the national sample included 10,000 students from 11 states, including North Carolina, with significant numbers of Native students. Findings revealed that reading mean scores in both grades between 2005 and 2007 did not change significantly, and in some cases, scores declined while the performance for non-Natives increased. For mathematics, the findings were the same (NIES, 2007); the achievement of American Indian students had not been narrowed since the implementation of NCLB. Part II of the study was a survey regarding curriculum, standards, and assessment. Part II was administered to students, teachers and principals in schools serving Indian students and provided information related to the extent to which American Indian culture and language was incorporated into classroom instruction. A growing body of research studies provides evidence of the importance of Native languages and culture in school success for Indian students (Lipka & McCarty, 1994; Smith, Leake, & Kamekona, 1998; Demmert, 2001). The total number surveyed in North Carolina was 963, representing students from 110 public and charter schools. The survey data suggested that NCLB and other accountability programs linked to state standards and assessments presented barriers and/or eliminated Native language and culture instructional practices.

State-level statistics lead to similar conclusions in relation to the effectiveness of education reforms. For example, Garcia (2008) conducted a study using state-level achievement data from 2000-2006 and examined the academic progress of American Indian students, Whites, and other minority groups in Arizona before and since the implementation

of NCLB. His initial findings showed that American Indian students made significantly greater gains in their reading and mathematics proficiency when compared to all other groups except for White students. However, in a more in-depth analysis, Garcia found that the greatest gains occurred in 2005 when state policymakers lowered the standard for proficiency in Arizona. In fact, when the scores for that year were omitted, Garcia concluded that the achievement rates for American Indians dropped dramatically. Garcia concluded that the guise of reporting was misleading, and he cautioned, “The adjustment of passing scores may work as a short-term strategy so that more schools make adequate yearly progress (AYP), but . . . [i]f the underlying purpose of accountability systems is to provide assistance to students who are not meeting standards, then manipulation of passing scores could deny American Indian/Alaska Native students the very academic assistance that NCLB was intended to provide” (p. 150).

Likewise, the state interventions in North Carolina have had little impact on improving the achievement of American Indian students. Approximately 10 years ago, state-education officials initiated a plan to narrow the racial achievement gap by the year 2010. A state commission formed and a Closing the Achievement Gap section was created in the Department of Public Instruction to support the state’s initiative. In addition, school districts in the state formed similar committees at the local level to direct strategies aimed in closing achievement gaps of minority students. Despite the targeted emphasis at both the state and local district levels, an analysis conducted by the North Carolina Justice Center (2010) concluded the state had been successful in increasing performance levels for all students, but in closing the academic achievement gap for its minority students little progress was made. The American Indian students, in particular, consistently achieved

lower on standardized test scores on state assessments. These students also experienced higher dropout rates, overrepresentation in suspensions and expulsions, and underrepresentation in gifted programs. The average SAT score for American Indian students increased slightly from 2001. However, performance gaps in comparison to White students have remained the same.

### *Minimal Empirical Studies*

Most educational research about American Indian education and student achievement is qualitative, ethnographic descriptions, making quantitative analysis, in particular, minimal. First, the representation of American Indians in the general population is often an explanation for the marginalized attention (Tippeconnic, 2000; Demmert, et al., 2006). The small population of Natives in comparison to other racial and ethnic groups, geographic isolation, and limited resources complicates matters and often hinders collections of quality data and empirical studies (Demmert, et al. 2006; Faircloth & Tippeconnic, 2010). Existing research about the achievement of Native Americans is often smaller scale, rarely involves sample sizes larger than 500 individuals, is confined to specific tribes or subgroups of Native Americans, and prohibits comparative analysis with other minority groups or even within different tribes (Demmert, et al.).

In North Carolina, 17 school districts received federal funding to support Indian education programs designed to meet the unique, cultural needs of Indian students. The funding is intended to support American Indian/Alaska Native students in meeting the state's performance standards and the unique cultural aspects of the population. One district in the state is the largest single grantee of federal funding for Indian education in the nation. However, no current empirical studies and/or evaluations of these programs are available to

determine whether specific instructional practices and/or programs have affected the educational outcomes for the state's American Indian students.

Another point is that American Indians are not differentiated often as a separate cohort in data collections and reporting (Deyhle & Swisher, 1997), therefore limiting in-depth analyses. However, North Carolina began its accountability program, the ABCs of Public Education, in 1996. Fortunately, this program has afforded the state the capability to maintain a longitudinal database of student records, including test scores and demographic variables, since the program's implementation. Using unique student identifying numbers assigned randomly to individual students, students' records can be matched over time. It also permits the comparison of trends in student achievement using a fixed cohort of students. This study examined the educational achievement of a cohort of American Indian students acquired from the State's longitudinal database and will add to an area of educational research that is underdeveloped in North Carolina.

### Theoretical Framework

How does a stratified social system of hierarchy and domination persist and reproduce intergenerationally without powerful resistance and without the conscious recognition of its members? (Swartz, 1997, p. 103). Bourdieu's contention is that the educational inequality existing in public schools can only be explained by examining both economic and cultural relations. His concept of capital refers to the amount of economic, cultural, social, and symbolic resources an individual has. In contrast, the concept of habitus explains how individuals internalize their objective chances of succeeding based on their economic and cultural background, as well as what is common for their social class. The education field, as in schools, "reinforces rather than redistributes the unequal distribution of cultural

capital” (Schwartz, 1997, p. 191) and “deflects attention from and contributes to the misrecognition of its social reproduction function” (p. 191). In other words, schools are central to this production and reproduction process including the social stratification and the sustaining of dominant power. Bourdieu’s theoretical framework claims interactions between habitus, capital, and the field explain the differentiated social relations in society. These relations are culturally arbitrary, meaning that the differential power relations in society are arbitrarily constructed to reflect the interest of the dominant group (Webb, 2002).

By habitus, one internalizes dispositions to the degree that he or she becomes part of the way one perceives and thinks about the social world and his or her place in it. These dispositions form through early social training and past experiences including experiences that occur within the family, social peer groups, and in school (Lee & Bowen, 2006; Mills, 2006). As a result, students from lower-income homes, often marginalized, tend to view their situation in the world as natural and fitting to them. Unfortunately, this view confines their perception of possibilities and future aspirations to those they see to be suitable to the social group of which they belong (Mills 2006). According to Bourdieu (2000), it is because of their habitus that children from families with parents who have occupied relatively privileged positions within the social class hierarchy have tended to move to similar positions, while children from families with parents who do not possess a privileged position in the social-class hierarchy have tended to remain in a relatively dominated position (p. 31). Indirectly by accepting this symbolic violence or pedagogic action as “truth,” or doxa, people play a role in reproducing their own subordination through the gradual internalization and acceptance of those ideas and structures that tend to subordinate them (Connolly & Healy, 2004, p. 15, cited in Mills, 2006). Further, Mills (2008), in citing

Webb, Schiratio, and Danaher, suggests such complicity with “dominant vision[s] of the world [occurs] not because we necessarily agree with [them] or because [they are] in our interest but because there does not seem to be any alternative” (p. 83). For Bourdieu, schools by nature reproduce existing social-class hierarchies and social inequalities rather than promoting change (Swartz, 1997; Webb, et al., 2002; Mills & Gale, 2007; Grenfell, 2007, 2008). This brings to question the effectiveness of current education reforms in making significant changes in the outcomes students experience in schools.

### Research Questions and Hypotheses

To examine this issue, the major research question for this study was, “Do schools make a positive, significant difference in the educational achievement patterns for American Indian students, more specifically those from economically disadvantaged backgrounds, who attend public schools in North Carolina?” This study investigated the patterns of achievement for American Indian students by examining their performance on North Carolina’s state assessments. Within the major research question, five guiding questions emerged to serve as integral components of the study:

#### *Guiding Questions*

1. To what extent do patterns of American Indian students scoring proficient and nonproficient in reading and math on North Carolina’s state assessments from 1997–98 to 2002–03 (grades 3–8) and 2003–04 to 2006–07 in high school reflect a positive change in position that is sustainable over time?
2. In a comparison of proficiency, do statistically significant differences exist in student achievement across time between low SES American Indian students and higher SES American Indian students?

3. Do the relationships found between SES and students' proficiency differ by district density?
4. How does the freshman retention of American Indian students who graduated from North Carolina's public high schools and enrolled in the UNC System in the fall of 2007 compare to the retention of the population of non-American Indian students enrolled in the system during the same period of time?
5. How do students' SES, school density, and student proficiency affect freshman retention for American Indian students?

### *Hypotheses*

The major research hypothesis for this study, Hypothesis 1, was that over time, schools would not make a significant difference in the educational achievement patterns for the American Indian student population attending public schools in North Carolina. Following Bourdieu's line of argument, it was further hypothesized that American Indian students with higher SES would consistently and over time maintain greater academic proficiency on standardized math, reading, and high school assessments than American Indian students with lower SES (Hypothesis 2), and the density of the American Indian student population in a school district (Hypothesis 3) would make little difference in the proficiency of students with lower SES. An examination of freshman retention for those American Indians who chose to pursue a higher-education degree would reveal similar patterns to those found at the elementary and secondary education levels. It was hypothesized (Hypothesis 4) that American Indian students who graduated from North Carolina's public high schools and entered the UNC System as freshman in the fall of 2007 would be retained at a lower rate when compared to the retention of non-American Indian

students who entered the system during the same period of time. Further, it was hypothesized (Hypothesis 5) that the students' SES backgrounds would affect their retention in higher-education institutions more than their past levels of proficiency and the density of the American Indian student population in the school district from which they graduated from high school.

### Methodological Overview

Because proficiency of students is a categorical variable, an analysis was performed at an alpha level of 0.05. To test the hypotheses, pair-sample t-tests, cross-tabulations and cross-tabulations for each year, and a logistic-regression analysis were conducted. The data for the study were acquired from the administrative records of the North Carolina Department of Public Instruction (NCDPI) and the UNC General Administration (UNC-GA). The State Board of Education requires all students to take standardized-achievement tests, the End-of-Grade (EOG) Tests for grades 3-8 in reading and math, and the End-of-Course (EOC) Tests in high school. For this study, achievement data, including the individual scale scores and proficiency levels, for a cohort of students identified as American Indian in grades 3 through 8 and high school spanning the school years 1998–99 to 2008–09 were obtained. This dataset also included the socioeconomic status (SES) for each student as determined by eligibility in the National School Lunch Program. The NCDPI student-level files included matched student data on freshman retention from the administrative records of the UNC General Administration. Additional data on the percentage of American Indian students enrolled in each school and district generated from student enrollment records (1998-2009) was accessed from the website of the North Carolina Department of Public Instruction. The Freshman Retention Report used to provide

information to North Carolina's principals and superintendents on the academic performance of their students during their freshman year at a UNC institution was an additional source of information examined. This information was available for all schools on the public website of UNC-GA.

### Assumptions

The study included the following assumptions:

1. It was assumed that student achievement data, i.e. end-of-grade, end-of-course, and free and reduced lunch information, acquired from the North Carolina Department of Accountability Services were accurate for all districts and American Indian students included in the study.
2. It was assumed that measures of school achievement are not neutral measures, which are applicable in the same way to all students. Rather, such measures are culturally skewed toward closer alignment to those individuals in the more powerful and wealthier social classes.
3. It was assumed that differences in school attainment are not because of inborn, genetic qualities, but are rather because of factors of social-class differences that operate internally and externally to inhibit the achievement of lower-class or culturally different learners.

### Limitations

The study included the following limitations:

1. The study was limited to cohorts of American Indian students in grades 3–8 and high school who attended public schools in North Carolina during the time period of 1998–99 through 2008–09.
2. The study was limited to school districts with sufficient data regarding American Indians.
3. The study was a cluster of students from state-recognized tribes and students from federally recognized tribes together.
4. The researcher is an American Indian from North Carolina and diligently worked to maintain objectivity. Given that the study was quantitative, any potential for bias in the interpretation of the results and findings was limited.

#### Definition of Terms

An American Indian, as defined by the United States Census, is a person having origins in any of the original peoples of North and South America and who maintain tribal affiliation or community attachment. The terms *American Indian*, *Native American*, *Indian* and *Native* are used interchangeably in this study to avoid repetition. In North Carolina, affirmed by the N.C. Commission of Indian Affairs to honor the preference of the state's tribes, *American Indian* is used when referencing the state's indigenous population. Also, the inclusion of and reference to *American Indian/Alaska Native* is based upon the unique legal relationship with Indian tribes and a special relationship with Alaska Native entities as provided in the Constitution of the United States, treaties, and federal statute. Other terminologies referenced in the study include the following:

- *No Child Left Behind Act (NCLB)* – was reauthorized in 2001, a number of federal programs developed to improve K-12 schools by increasing the accountability

standards for states, school districts, and schools (U.S. Department of Education, 2001).

- *ABCs of Public Education Accountability Program* – is North Carolina’s school-based management and accountability program enacted by the state’s General Assembly in 1996. In 2002–03, the ABCs program was expanded to incorporate the new statutory accountability requirements of NCLB. The ABCs accountability program sets growth and performance standards for each elementary, middle, and high school in the state. End-of-Grade (EOG) and End-of-Course (EOC) test results and other selected components are used to measure a school’s growth and performance (NCDPI, 2009).
- *End-of-Grade Tests (EOG)* – are standardized exams administered to all students in grades 3–8 in the areas of math and reading in North Carolina. Achievement is measured on a scale of I–IV, with III and above considered to be proficient (NCDPI, 2009).
- *End-of-Course Test (EOC)* – are standardized exams administered to high-school students to assess the student’s knowledge and mastery of subject-related concepts as specified in the North Carolina Standard Course of Study. Currently, students enrolled in the following courses are required to take the North Carolina EOC tests: Algebra I, Algebra II, Biology, Chemistry, English I, Geometry, Physical Science, and Physics (NCDPI, 2009).
- *Freshman Performance Report (FPR)* – include summary reports for each NC public high school, each NC public high-school district, and all NC public high schools combined, and all high schools (public, private, and out-of-state) combined. The report includes the count of fall freshmen at each UNC institution who graduated in a

specific year from a given high school and the percentage of students who returned the following fall. (UNC-GA, 2007).

- *Four-year cohort rate* – reflects the percentage of ninth graders as a cohort who graduated from high school four years later (NCDPI, 2009).
- *Student proficiency* – is measured on a scale of I–IV, with III and above considered to be proficient on North Carolina’s state assessments (NCDPI, 2009).
- *Economically disadvantaged* – is used for the purpose of this study to describe the socioeconomic status of American Indian students. The indicator, included in NCDPI reports, used for socioeconomic status is an individual student’s free and reduced lunch eligibility (NCDPI, 2009).
- *Cultural arbitrary* – a term Bourdieu uses to suggest that the differential power relations pertaining to our culture have no necessary basis but are rather arbitrarily constructed to reflect interests of dominant groups (Webb, 2002).
- *Cultural capital* – is the knowledge, experience, and connections individuals have through the course of their lives that enables them to succeed more so than those from a less experienced background. In the field of education, an academic degree would be cultural capital (Webb, 2002).
- *Doxa* – a set of core values and discourse that a field articulates as its fundamental principles that tend to be seen as true and necessary (Webb, 2002).
- *Field* – any structure of social relations; the social space where interactions, transactions, and events occur (Webb, 2002).
- *Misrecognition* – the process whereby power relations are perceived not for what they objectively are but in a form that renders them legitimate in the eyes of the beholder

(Webb, 2002).

- *Pedagogic action (PA)* – (education in the broadest sense, encompassing more than the process of formal education) the imposition of a cultural arbitrary (an arbitrary cultural scheme that is actually, though not in appearance, based upon power) by an arbitrary power. All pedagogic action is, objectively, symbolic violence insofar as it is the imposition of a cultural arbitrary by an arbitrary power (Webb, 2002).
- *Symbolic violence* – is the imposition of categories of thought and perception upon dominated social agents who then take the social order to be just. The incorporation of unconscious structures that tend to perpetuate the structures of action of the dominant. The dominated then take their position to be “right.” It includes soft violence, such actions that have discriminatory meaning or implications, i.e. gender discrimination, racism (Webb, 2002)

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This literature review explores the theoretical framework of habitus by Pierre Bourdieu in relation to the persistent problem of lower-academic achievement and educational attainment of American Indian students attending public schools. The review also presents a brief overview of American Indian education. Following the introduction, the first section presents the educational achievement and socioeconomic conditions of contemporary American Indians and their communities. The next section provides a review of Bourdieu's theoretical framework of habitus, including a brief discussion of schools as reproducers of the social stratification in American society. For context, the subsequent sections address the history of American Indians and their educational experiences and struggles within the social, political, and cultural practices that surround them.

#### **Introduction**

Despite the intent of the No Child Left Behind Act (NCLB) of 2001 and other accountability measures and reforming interventions to improve the nation's schools, the debate concerning the effectiveness of public schools in educating all students remains controversial. English (2002) asserted that the "achievement gap" between African American and Latino students and the gaps between these ethnic groups and their White counterparts continues to evoke national cries of consternation and condemnation of public schools. Some have argued that the broader society must address the social injustices of

allowing certain people to succeed based on their cultural experiences, social ties, and the economic resources they are able to access (Wacquant, 1998, p. 216, cited in Mills & Gale, 2007). Less visible, and somewhat dismissed, have been the cries from the perspective of American Indians concerning the education of their children and advocacy for a critical inspection of the current system of public education (Lomawaima, 1995; Deyhle & Swisher, 1997; Yazzie, 2000; Tharp, 2006). Schools are the primary institutions relied upon by the general public to offer every student a free, democratic right to a sound basic education, as well as an opportunity to fully achieve his or her individual potential. The reality, as reflected in the literature, is a long history and tendency of schools to connect best with, and work best for, students of middle-class, Anglo, male backgrounds and a long history of minority students not fairing as well in the American institution that pledges equal opportunity for all (Coleman, 1966; Tyack, 1974; Spring, 1976; Tyack & Cuban, 1995; Jencks & Phillips, 1998; Hale, 2001; Price, 2002; Harvard Civil Right Project, 2005; Harris & Herrington, 2006; Ladson-Billings, 2006; Mills & Gale, 2007).

A review of the research literature clearly demonstrates that Indian education has been guided by deep-rooted ideology that has little regard for other cultures outside that of Euro-Americans. An insensitivity to Native culture and dismissal of their existence in America was prevalent in schools. Mission societies charged with educating Natives enforced use of English and discouraged the use of Native language and traditional cultures (Perdue and Green, 2010, p. 81). Several studies (Phillips, 1983; Deyhle, 1992) detail the present-day failure of most schools to provide culturally appropriate and relevant curriculum

for American Indian students. So generally speaking, schools have served to promote mainstream cultural values and expectations and have disregarded the experiences, languages, and cultural understandings of American Indians and other underrepresented groups (Noley, 1992; Noll, 1998). Despite the fact that supporting ethnic and economically diverse populations is a fundamental aspect of today's education policy discourse, past and current educational reform models seem to have done little to improve student outcomes and educational attainment, particularly for American Indian youth. Improving student performance and educational attainment rates, including access to college for American Indians, is one solution to reversing the cycle. It is also key to advancing this population from the lowest levels of poverty to the realization of self-sufficiency (Harrington, 2010).

In the research literature, educational attainment is often cited as an equalizing factor against social inequalities and poverty (Allen & Hood, 2000; Lee & Bowen, 2006; Mills & Gale, 2007; Harrington, 2010). For the most part, those who attain higher levels educationally make more money and achieve a better quality of life. For example, in 2002, the average earnings by highest level of education, which the United States Census Bureau released, were: for those with advanced degrees, \$72,824; for bachelor's degree holders, \$51,194; for high-school graduates \$27,280; and for non-graduates, \$18,826. Without question, these data reflect a positive correlation between educational attainment and income.

Socioeconomic status (SES) and social class are used in research interchangeably to describe the social and economic characteristics of students (Sirin, 2005). SES refers to a

person's rank of hierarchy in terms of social status. SES, according to Sirin (2005), positively impacts academic achievement. Siren explained that racial and cultural background is a critical factor linked to both socioeconomic status and academic achievement. A couple of studies validating this link between SES and academic achievement for American Indians involved the Ganado (Arizona) Unified School District No. 2 and the Seminole tribe. The Ganado (Arizona) Unified School District No. 2 analyzed available information from six academic subtests for a representative sample of its American Indian student population from the reservation in grades 3, 6, 8, and 12 and found that socioeconomic status was the most consistent variable, showing a strong relation to academic achievement in all tested areas (Bolož & Varrati, 1983). In their case study, Greene and Kersey (1975), cited in Demmert (2001), also found that social and economic status of the Seminoles Indian tribe influenced academic performance. In general, minority students, including American Indians, who consistently perform below their White peers are more likely to be reared in lower income homes. More often than not, minority students are also reared in single-parent families and homes in which the parents are less educated. "Society may be failing in one of the greatest commitments of every modern society," contended Siren (2005)—that is, "the responsibility to provide educational opportunities for each student regardless of social and economic background" (p. 45).

In the research literature, it is also argued that schools, from kindergarten to college, have been designed to "sort" students by socioeconomic status (Spring, 1976; Bowles & Gintis, 1976; Giroux, 1981; Aronowitz & Giroux, 1993). For example, Bowles and Gintis

(1976) argued a direct relationship exists between schools and the demands of the economy. Therefore, schools sort individuals in relation to their socioeconomic status. According to the authors, schools offer lower-income students the possibility to advance their socioeconomic status through educational attainment, while they simultaneously, by their design, perpetuate inequality. This is done through the facilitation of students into occupational positions aligned with their class backgrounds. Based on this assertion, the American system of public education, i.e. schools, serves as a key agent in reproducing the existing inequalities. If this is the case, their argument would support that schools do little to impact the transition of minority students from poverty and lower economic statuses by the time they reach adulthood. Pierre Bourdieu, a French sociologist, also argued that schools sustain the social stratifications that exist in society (Swartz, 1997). His focus was on schools as fostering reproduction. He contended that lower-income students fail to achieve in schools in comparison to middle- and upper-class White students because schools reward those who possess the dominant cultural capital. Thus schools by design allocate privileges to those students who initially come to school with the right social and cultural capital as a result of their middle- and upper-class family status. Lower income students, particularly those from minority groups, then fall short in achieving in school because they lack the cultural capital the school rewards. Further, he states that individuals and/or groups of people participate in their own subjugation unknowingly as a result of habitus. In this context, and coupled with the historical context of Indian education in America, it is conceivable that there is little to debate in terms of whether public schools have produced

positive changes in the educational achievement patterns for Native students over time. Whether American Indians contribute to sustaining their current status and quality of life requires further investigation.

#### Educational Achievement and Social Status of American Indians

The poor quality- of-life conditions of American Indian families and communities and the appalling history of their children's educational experiences in American schools are well documented. One conclusion is consistent: The nation's system of public education throughout history and in present time continues to poorly educate many American Indian students and further erodes the way of life and the economic position of Indian people (Fuchs & Havighurst, 1973; Butterfield & Pepper, 1991; Jeffries & Singer, 2003; Deyhle & Swisher, 1997; Lomawaima, 2000; Yazzi, 2000; Tharp 2006). A body of research suggests Indian education is centered within a framework where larger deep-seated practices, assimilative ideas, and political forces are engaged with local Indigenous forces in a "battle for power" (Lomawaima, 1999; Brayboy, 2005; Lomawaima & McCarty, 2002; Brayboy & Castigno, 2009). American Indians throughout history have frequently struggled with local, state, and federal governments to preserve their cultural identity. They have consistently advocated for meaningful learning environments for their youth. To be meaningful, it is important that learning environments are respectful of the cultural heritage and languages of the American Indian people. Native communities, Native educators, and some non-Native educators firmly believe that this cultural context is absolutely essential if Native youth are

to succeed academically, improve their quality of life, and contribute to society (Cleary & Peacock, 1998; Demmert & Towner, 2003; Tharp, 2006).

Although the experiences of American Indians are somewhat similar to other minority groups who fair poorly in American schools, Demmert, Towner, and Grissmer (2006) note that significant differences exist, as well. One significant difference is that educational achievement gaps and other inequities confronting American Indians are generally not at the forefront of the education-policy discourse of mainstream society. “There has been a lot of interest and talk about how important Indian education is,” asserted Tippeconic (2000) but, “it has received little attention at all levels—including local, state, national, and even tribal levels.” For a variety of reasons, explaining the achievement and social challenges American Indians face has been difficult. The availability of quality educational research and data focused on measuring and explaining the education performance of American Indians is less extensive (Demmert, Grissmer & Tower, 2006). Second, according to Ross (1999), American Indians do not fit into the accepted racial categories. Therefore, they are more difficult to study than Blacks and Whites and are more apt to be ignored by the larger society (p. 229). Last, the representation of American Indians in the total population is frequently cited in the literature (Tippeconic, 2000; Demmert, et al. 2006,). American Indians, as counted in the 2000 United States Census, represented approximately 0.8% of the nation’s population, whereas, minority groups, such as African Americans (12.3%) and, more recently, Hispanics or Latinos (12.5%), made up a larger percent of the total population. Yet educationally, the percentage of 16- through 24-year-

olds who dropped out, are not enrolled in school, and have not earned a high-school diploma is higher for American Indian/Alaska Natives than any other ethnic group (American Community Survey, 2007).

In 2007, results for the National Assessment of Educational Progress (NAEP) for students in grades 4 and 8 showed in both reading and mathematics, the overall scores for American Indian/Alaska Native students were significantly lower than the scores for non-Native students. Economically, according to the National Center for Education Statistics (2005), a larger percentage of American Indian individuals and families in comparison to White individuals and families lived in poverty. The unemployment rates for the American Indian/Alaska Native population was three times the rate of unemployment for the White population, with the median income for Native households lower than that of the total population. For the most part, state-level performance results reflect similar results to the national statistics on American Indian students. While examining the achievement gap based on students' performance on state assessments, the Center for Education Policy (2009) in its analysis of gaps in the percentages of students scoring proficient or above on state tests at three grade levels—elementary, middle school and high school for all subgroups, i.e. African American, Latino, and Native American students and White students—and between students from low-income and non-low income families, found that since the implementation of NCLB in 2002, achievement gaps across all subgroups have narrowed in most states at all three grade levels. However, the trajectory lines for 23% of the subgroups' trends showed gaps widening. In all subjects and grade levels analyzed in

the Center's analysis, gaps narrowed more often for African American and Latino subgroups than for Native Americans or low-income subgroups (p. 2).

In North Carolina, the educational and economic statistics for American Indians are no different from the trends previously stated. In 2008–09, 20,777 American Indian students were educated in the state's public schools (State Advisory Council on Indian Education, 2009, p. 123). The performance results for fourth and eighth graders on the National Assessment of Education Progress (NAEP) reflected significant gaps in comparison to other groups. The reading scores for American Indian students in grades 4 and 8 had an average score lower than White students' scores. There was a difference of 26 points for fourth graders and 34 points for eighth graders (NCES, 2007). In 2009, the NAEP mathematics results showed that fourth graders had an average score that was 22 points lower than that of White students. For eighth graders, the average score was 41 points lower. American Indian students have consistently, for the past decade, achieved lower on standardized-test scores on state assessments. These students also experienced higher dropout rates, overrepresentation in suspensions and expulsions, and underrepresentation in gifted programs (North Carolina Justice Center, 2010). For a number of years, American Indian students, particularly males, have had a higher dropout rate than any other racial group in the state (State Advisory Council on Indian Education, 2009, p. 27).

On measures of income and educational attainment, the state's indigenous population, which makes up about 1.2% of the total population, did not fair any better. Statistics tended to be at the lower end of the scale. The poverty rate in 2000 for American

Indians, according to the N.C. Rural Economic Development Center, was 22% compared to 8.4% for Whites and 12.3% of the total population. The poverty rate for American Indians residing in rural areas was 22.3% and 15.4% for Indians residing in urban areas. For Whites, the rural poverty rate was 9.8% and 7% for those residing in urban areas. Robeson County, one of 37 largest rural counties in the state, had the highest poverty rate at 30.8% of all. The state's largest population of American Indians resides in Robeson County. Overall, the educational attainment of American Indians lags significantly behind, as well.

According to the 2006–08 United States Census American Community Survey results, 68% of American Indians 25 and older had at least a high-school education compared to 86% for Whites and 83% for the total population. Twelve percent of American Indians had at least bachelor's degree compared to 29% for Whites and 26% of the total population.

#### *Higher-education Enrollment and Retention*

Significant disparities exist between rates of initial enrollment and rates of graduation for student populations in postsecondary institutions in the nation, as reported by the National Center for Education Statistics (2002). However, the disparity is greater for minority students. Recent reports indicate that the enrollment of minority students in postsecondary institutions has significantly increased. Data reported in *Status and Trends in the Education of Racial and Ethnic Minorities* (2010) reveals that between 1976 and 2008, the total undergraduate fall enrollment in a degree-granting institution increased for each racial/ethnic group. American Indian/Alaska Native enrollment more than doubled, increasing from 70,000 to 176,000 during this period of time. These statistics appear

promising for the future of Native communities. However, data regarding first-year retention of American Indians presents a different picture. Harrington (2010) reports that underrepresented minority students have lower first-year retention rates than their non-minority peers. Using data about the retention and graduation rates for entering baccalaureate degree-seeking freshman cohorts, 1999 through 2005, from 438 colleges and universities, he further concluded that American Indians had the lowest rate (68.8%) of first-year retention rates than any other ethnic group. It was estimated that the attrition rates for American Indian students in higher education range from 75% to 93% (Larimore & McClellan, 2005).

From 2003–2008, American Indian students in North Carolina enrolled in the UNC System at a rate of 34%, a higher rate than the state average of 30%. However, similar to national trends, too many American Indian students who enrolled are not retained and do not graduate. Graduation rates for American Indian students in the UNC System lag behind those in the general student population. The four-year graduation rate for freshman entering the UNC System in the fall of 2001 was 18% compared to 35% for all students in the UNC System (State Advisory Council on Indian Education, 2009). As stated by Larimore and McCellan (2005), for Native American students, “leaving college prior to completion of a degree signals delayed or foregone personal aspirations and often diminished or deferred opportunities” (p. 17).

### Bourdieu's Theoretical Framework of Habitus

If members of the lower middle and working classes take reality as being equivalent to their wishes, it is because, in this area as elsewhere, aspirations and demands are defined in both form and content by objective conditions which exclude the possibility of hoping for the unobtainable. (Bourdieu cited in Swartz, 1997, p. 111)

The principal theoretical proposition of Bourdieu is that “every power which manages to impose meanings and to impose them as legitimate by concealing the power relations which are the basis of its force, adds its own specifically symbolic force to those power relations (Bourdieu & Passeron, 2000, p. 4). In other words, the dominant patterns of thought are the ideologies of the dominant class, and the actual dominant patterns of thought reinforce the hegemony of the dominant class. The dominant class is the group that controls the economic, social, and political resources. By virtue of its greater power, the dominant class imposes its cultural values as the blueprint of society for others to fit into. It is successful in doing so by establishing these patterns of thought as legitimate. The acceptance of this legitimacy by others is essential because this is how the dominant class's power to rule is perpetuated and sustained. The legitimacy is misrecognized and, in turn, is accepted as the way things naturally are. Bourdieu describes *misrecognition* as being when an individual or group is subjected to forms of symbolic violence such as racism, being treated inferior, being denied resources, or being limited in social mobility and aspirations, but they do not perceive it that way. Instead, their situation seems to be the natural order of things as it applies to them.

From this principal proposition, Bourdieu and Passeron (2000) formulated additional propositions applicable to social formations that they contend are securely positioned to reproduce culture and society. *Habitus* is a central concept of these propositions. It is fundamental to Bourdieu's explanation of how stratified social systems of hierarchy and domination persist and reproduce intergenerationally without powerful resistance and without the conscious recognition of their members? (Swartz, 1997, p. 103).

*What is Habitus?*

According to Bourdieu, social structures are produced and reproduced through habitus. More specifically, habitus defined is defined as:

a system of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them (Bourdieu, as cited in Swartz, 1997, p. 100).

A person or group's dispositions are developed through early socialization experiences in their homes with their family. These early experiences are internalized and develop the broad parameters and boundaries of what is possible or unlikely for them. Therefore, habitus sets structural limits for action, but on the other hand, it generates perceptions, aspirations, and practices that correspond to the structuring properties of early socialization. Specifically put, habitus is a person's worldview, which shapes their actions, perceptions, and attitudes. Stated another way, habitus shapes the opportunity structure of a person's life and what he or she views as common sense for him or her or the way things are done. This

suggests that given a certain social class, people can be subconsciously driven to behave in certain ways that align to their perception of what they can aspire to based on their level of resources and/or their social class. Behaviors are, as referenced in Grenfell (2008), relations between one's habitus and one's current circumstances and therefore, outlines the central concept to Bourdieu's theory of practice" (p. 52).

For Bourdieu, simply stated,

Habitus focuses on our ways of acting, feeling, thinking and being. It captures how we carry within us our history, how we bring this history into our present circumstances, and how we then make choices to act in certain ways and not others. This is an ongoing and active process—We are engaged in a continuous process of making history, but not under conditions of our own making. Where we are in life at any one moment is the result of numberless events in the past that have shaped our path. We are faced at any moment with a variety of possible forks in that path, or choices or action and beliefs. This range of choices depends on our current context (the position we occupy in a particular field), but at the same time which of these choices are visible to us and which we do not see as possible are the result of our past journey, for our experiences have helped shape our vision. Which choices we choose to make, therefore, depends on the range of options available at that moment (thanks to our current context), the range of options visible to us, and on our dispositions (habitus), the embodied experiences of our journey. Our choices will then in turn shape our future possibilities, for any choice involves foregoing alternatives and sets us on a particular path that further shapes our understanding of ourselves and of the world. (Grenfell, 2008, p. 52)

Different classes of people have different habituses. Aspiration and practices of a person or a group of people tend to correspond to the conditions of their respective habituses.

Therefore, economic and social inequality is legitimized through a "taken for granted" acceptance of the fundamental conditions of existence. Bourdieu describes fundamental

conditions of existence as those that determine materially, socially, and culturally what is probable, possible, or impossible for a given individual or group (Swartz, 1997). Bourdieu's line for argument is supported by Lomawaima (1999), who purports that the pervasive influence originally crafted by Euro-Americans still perpetuates "certain invented and stereotypic ideas about American Indians that have been accepted, by both Indians and non-Indians, as self-evident natural truths" (p. 4). She explains further, "As human beings, we take for granted much of what we think, experience and remember....certain ideas and perceptions are taken as natural—in other words, not as artificial or man-made but as unexceptional components of the natural order of things."

The unconscious acceptance is *doxa*, which Bourdieu describes as the natural beliefs that are taken for granted, including beliefs pertaining to one's social positioning. Experiences of one's habitus are a condition of *doxa*. *Doxa*, as referenced in Grenfell (2008), involves the natural order of traditional societies where "what is essential goes without saying because it comes without saying" and therefore lies outside the scope of questioning (p. 120) but instead is accepted as the natural order of things by all.

Habitus does not act in isolation. Bourdieu's approach to examining the social workings of society is by looking at the interlocking nature and relation of habitus with field and capital. The following sections explain both field and capital in relation to one's habitus.

### *Habitus and Field*

A field defines the structure of the social setting where habitus operates, more specifically, the arenas of struggle for control over valued resources such as cultural or economic capitals. In other words, how successful a person is in a particular field depends on how appropriate his or her habitus and capital is for the game played in that field. Fields are arenas of struggle for legitimacy or the right to monopolize the exercise of *symbolic violence*. Symbolic violence, as defined by Webb (2002), is not a physical form of violence but instead a symbolic form imposed on an individual or group. It can be in the form of people being denied resources, being treated as inferior, or being limited in terms of opportunity. Interactions between habitus, social relations, and fields involve power relationships. The interactions between field and habitus are measured by power possessed by those in the field in a way that those with lower capital (status) will have less power in relation to those with higher capital (status). Power differences cause behaviors or ways of acting that align to the existing social statuses. Subsequently, those in the lower status with less power do not gain access to the same resources, information, or opportunities as those with higher status, more power and capital.

Bourdieu (1984) asserted that subordinate classes are forced by their lack of power to adjust their expectations because their lack of cultural, social, and economic capital confines their ability to see opportunities for advancement. It is easier to accept their subordinate positions. Therefore, the subjugated contribute to their subjugation through unconscious submission to conditions that Bourdieu asserts are arbitrary. A person or group

accepts dominant norms and attitudes (symbolic violence), then they internalize them as the unquestionable “truth” (doxa). In the subsequent section, capital, another essential part of Bourdieu’s framework of habitus, is discussed.

### *Habitus and Capital*

Bourdieu refers to capital as economic (money), cultural (knowledge of the fine arts), social (connections), and symbolic (expressions of what is valued at a given time). All types of capital work to create and distinguish different groups. Swartz (1997) stressed that economic capital is the most important type of capital. However, Bourdieu perceives capital beyond a simple economic asset, but also as a social commodity that can be exchanged in many different forms. For him, cultural capital is equally important. Cultural capital is a power source that consists of different forms: embodied, objectified, and institutionalized. In its embodied form cultural capital is the acquisition of dispositions gained through socialization, primarily through the family and home, and constitutes appreciation and ways of thinking about and understanding life. Early socialization creates a stratifying dimension. According to Swartz (1997), a sense of a person’s place leads them to exclude themselves from the goods, persons, place, and so forth from which the person is excluded.

Cultural capital also exists in an objectified form referring to objects, such as books, works of art, and instruments that require a specialized cultural ability to use. Next, cultural capital exists in an institutionalized form. For example, the credential system in education is capital in an institutionalized form. Educational credentials increasingly have become necessary for gaining access to desirable positions in the job market. For this reason,

parents who are able to invest in a good education for their children do so in order to position them future profit both educationally and economically. This process of investment involves the conversion of economic capital into cultural capital, which is a strategy more accessible to the affluent. Cultural capital, according to Bourdieu, is becoming more and more the new basis of social stratification. The unequal distribution of cultural capital across social classes is, for Bourdieu, one of the key dimensions of social inequality in modern societies perpetuated by schools.

#### *Schools as Social Reproducers*

Bourdieu challenges the liberal perception that schools are instruments of social reform and equality (Nash, 1990). Despite ideologies of equal opportunity and meritocracy in modern society, Mills and Gales (2007) contend that the dominant class calls upon few schools “to do anything other than reproduce the legitimate culture as it stands and produce agents capable of manipulating it legitimately” (p. 435). The education system controls the allocation of status and privilege and contributes to the maintenance of an unequal social system by allowing cultural differences to shape academic achievement and occupational attainment (Swartz, 1997, p. 190).

According to Bourdieu, the education system performs three central functions (Swartz, 1997). First, schools perform a cultural-reproduction function. They are directly involved in the transmission of technical knowledge and skills, as well as socialization into a particular cultural tradition. Second, schools perform a social-reproduction function. They reinforce social-class relations and the unequal distribution of cultural capital rather than

redistribute it. Last, a function of schools is to provide legitimacy. In general, the educational system maintains the preexisting order of things. Further, by misrecognition, those who are engaged with the schools, such as teachers, students, parents and the communities, are involved in perpetuating this social order unknowingly.

Bourdieu and Passeron (2000) contend that schools accept only the cultural orientations of the dominant class; generally, this is the middle class. With this said, schools legitimize the worldview of the middle class by establishing acceptance of their norms, hence, the pathway to educational attainment, economic success, and social mobility. The wealthier inherit and/or acquire the appropriate cultural capital (high status), social capital (connections), and habitus (predisposed ways of acting) that permits them to easily fit in, particularly in schools (field) that are designed to reward the dominant class values and perpetuate inequitable power relations. Contrary, the cultural capital of minorities and other marginalized groups is devalued. Lareau (2003) provides an example to demonstrate the interactions of those from differing social class and how it plays out in schools. Lareau refers to interactions of the middle class habitus as *concerted cultivation* and that of lower class habitus as “accomplishments of natural growth” (p. 1). Middle class habitus expects equality that results in a sense of entitlement. In terms of concerted cultivation, middle class parents encourage their children to advocate for themselves and to question and articulate their concerns. Teachers are not viewed as authority figures but instead as partners in the education process. Children from middle class backgrounds also participate in a number of activities that are carefully chosen to ensure well-rounded development. The socialization

of middle class children tends to match the expected interactional style of the dominant class, including language patterns, mannerisms, and attitudes that are expected in schools and institutions of power. For lower class families, the interaction pattern differs significantly in that children are taught to respect adults as authority figures, and questioning authority is considered disrespectful. Parents of lower class children tend to accept and defer to the expertise and authority of schools and other powerful institutions. Children with lower class backgrounds seldom participate in extracurricular activities aimed at advancing their development, but instead are allowed to grow through the “accomplishment of natural growth.” Because the interactional pattern of the dominant class is institutionalized in schools, lower class children are placed at a disadvantage in not knowing the dominant class values and expectations schools require (p. 1).

Grenfell (2008) concluded, “Education was a double-edge sword: it highlighted one’s idiosyncrasies; at the same time, it offered the means to escape one’s immediate surroundings” (p. 17). It is ruled by capital values that are legitimized by governmental intentions to shape policies that align with economic drivers. Students who are not from the capitalist class have differing habitus and must discard their ideologies in favor of capital values to move up in class status. If not, the consequence is permanent positioning in their traditional class of society. This result is why Bourdieu (1977) argues that educational institutions legitimize the dominant class’s definition of what is good over all others, and that schools, “ensure the transmission of cultural capital across generations and stamp

preexisting differences in inherited cultural capital with a meritocratic seal of academic consecration by virtue of the special symbolic potency of the title (pp. 9–10).

### *Critical Perspectives*

Critics of Bourdieu's habitus portray his work as pessimistic and deterministic because of his characterization of the social world in terms of competitive power relations, dominance, and subjugation, and the unconscious willingness of the subjugated to concede power to the dominant class (Nash, 1990; Moon, 2003; Mills, 2006). Jenkins (2002) argues that despite his attempt to “transcend the dualistic divide between objectivism and subjectivism . . . [he] remains caught in an unresolved contradiction between determinism and voluntarism with the balance of his argument favoring the former” (p. 21). Bourdieu's perception of the social world confronts criticism because it does not give credit to an individual's potential to advance in status by his or her own desire but intently focuses on reproduction. His social world “ultimately remains one in which things happen to people, rather than a world in which they can intervene in their individual and collective destinies” (p. 91). However, Mills (2008) contends that Bourdieu's work has been consistently misinterpreted. According to Mills, habitus lends itself to reproduction rather than transformation. However, transformation is not excluded. Mills also refutes this criticism by pointing out the appropriateness of “some teachers to attempt transformation of students, projecting onto them identities without regards to the communities they embody” (p. 109).

Nash (1990) noted another criticism of Bourdieu's habitus, pointing to the fact that in some cases the educational and occupational destinations of family members are often

different despite their familial capital. This challenges the strength of familial capital, which is critical to Bourdieu's argument pertaining to habitus. For example, if the performance of siblings in school and their eventual pursuit of careers lead to differing income levels that is similar to others outside their home environment, then given the fact they have acquired the same familial cultural capital, Bourdieu's argument that familial capital is a determinant of educational success can be questioned. Bourdieu addresses this criticism by contending that a certain fraction of individuals possessing a certain economic and cultural capital have a certain probability to not succeed. In other words, according to Nash, it is always possible within Bourdieu's framework to argue that within the culture of subordinate classes, a distinctive subculture with a cultural trajectory similar to the dominant class exists. To critics, his explanation appears arbitrary, yet it is an argument consistent with Bourdieu's theoretical assumptions to begin with (p. 441).

Kingston (2001) contended that schools reward hard work and any student can achieve success regardless of socioeconomic backgrounds, further concluding that cultural capital was limited in its ability to explain why students from privileged backgrounds performed better than those from disadvantaged backgrounds. Kingston argued that other variables such as personality, parent's interests, teacher characteristics, race, and class influence school success but did acknowledge, however, that more affluent homes prepared children better academically because of their exposure to privileged opportunities. Nevertheless, Kingston strongly supported that school success should not be linked entirely

to conformity to the norms of the dominant class and argued that some cultural practices help students succeed whether rich or poor.

In summary, Bourdieu asserted that students from lower status backgrounds are forced to concede to the dominant class rules in order to succeed or permanently accept their traditional social positions unknowingly. Through habitus and its relational interacting with capital and field, a natural acceptance of the way things are is produced and perpetuated in power institutions such as schools (Swartz, 1997). In the next section, the research literature pertaining to the history of American Indian education reveals that persistent lower achievement and other educational and economic inequalities have prevailed in many Native communities over time. Also, the section reveals that American Indians continue to struggle to maintain their cultural identity and to overcome the power and dominance just as they did in the past.

#### American Indian Education: Past and Present

Deyhle and Swisher (1997) stated, “The structure of school and society that harbors institutional racism and an assimilationist model limits both educational and economic opportunities and must be analyzed as a critical problem to be addressed in the education of American Indian youth” (p. 139). *Acculturation* is defined as a process of assuming the values, language, and cultural practices of a new culture. The end point of this process, defined as *assimilation*, is when the dominated group adopts customs and attitudes of the dominant culture. Through forced assimilation practices of *deculturalization*, interventions by the federal government decimated Native communities (Spring, 2001). According to

Butterfield and Pepper (1991), the federal government's education of Native people eroded the way of life and the economic position of tribes. Education was an intentional act of intellectual and community genocide used to estrange Indian children from their culture, their parents, and community (Butterfield & Pepper, 1991; Deyhle & Swisher, 1997; Lomawaima, 2000; Yazzi, 2000).

It was the belief of European Americans that education was the key to civilization, social control, and improvement of society. Therefore, Indian tribes were targeted for deculturalization through schooling. The Office of Indian Affairs advocated for legislation to create tribal school systems and claimed this would culturally transform Native Americans. By 1819, Congress passed the Civilization Fund Act to provide support for schools among tribes adjoining the frontier settlements of the United States (primarily Choctaw and Cherokee tribes). The act subsidized White missionary educators to teach Native Americans children and authorized the instruction of reading, writing, and arithmetic (Spring, 2001, p. 19). Some tribes operated their own schools. By 1830, the Indian Removal Act further enforced deculturalization because of the government's desire to acquire Native lands. The focus of education policy shifted to the removal of children from reservations and their families to boarding schools. In 1868, as a result of a report from the Indian Peace Commission, major education policies involving American Indians consisted of replacing use of native languages with English, destroying Indian customs, and teaching allegiance to the United States government (Spring, 2001, p. 28). Boarding schools became the tool for accomplishing this, and through boarding schools experiences, generations of

American Indian children separated from their parents, extended families, and tribal communities lost exposure to traditional Native cultures, languages, and values (Butterfield & Pepper, 1991; Deyhle & Swisher, 1997; Lomawaima, 1999; Demmert, 2001).

The educational philosophy of Lt. Richard Henry Pratt—"Kill the Indian, save the man"—dominated the approach to educating American Indians during this time (Perdue & Green, 2010, p. 82). By the nineteenth century, federal policies of assimilation were prominent and deeply infiltrated American thought and practices. In an alternative perspective, Lomawaima (1999) contended that colonization motivated the coercive federal policies. Colonial education, as described by Lomawaima, was an unnatural history involving the reculturing and reeducation of American Indians by the secular and religious institutions of colonizing nations. Colonial education consisted of four tenets: (1) that Native Americans were savages and had to be civilized; (2) that civilization required Christian conversion; (3) that civilization required subordination of Native communities, primarily achieved through resettlement efforts; and (4) that Native people had mental, moral, physical, or cultural deficiencies that made certain pedagogical methods necessary for their education. Lomawaima posited that tenets of colonial education were not based on natural truths but were culturally constructed and served specific agendas of the colonizing nations. Lomawaima further stated that deep-seated ideas and practices were accepted as natural by past colonizers and continue to undergird contemporary stereotypes about American Indians.

Brayboy (2005) argued the same point by stating, "colonization is endemic to society."

He contended that European American thought, knowledge, and power structures dominate present-day society. Both scholars concluded that colonizing agendas have evolved into a naturalized racism that warrants critical inspection.

### *America's First Tragedy*

There are numerous studies and investigative reports documenting the tragedy of Indian education. In the literature, two notable comprehensive reports on American Indians, the *Problem on Indian Administration*, referred to as the *Meriam Report* of 1928, and *Indian Education: A National Tragedy—National Challenge*, referred to as the *Kennedy Report* (1969), documented the failed schooling of American Indians and the little improvement in their economic conditions. The *Meriam Report* of 1928 was instrumental in focusing attention on the social, educational, and economic conditions of American Indians in the United States. The report questioned many governmental policies pertaining to tribes and outlined significant deficiencies in American Indian education that were negatively impacting tribal communities (Brayboy and Castagno, 2009). Two key points outlined in the report were: (1) Indians were excluded from management of their own affairs; and (2) Indians were receiving a poor quality of services, especially in health and education from public officials. According to the report, “the most fundamental need is a shift in point of view” (p. 346). It called for an acknowledgement that the American Indian family and social structure required strengthening instead of destruction. The report recommended a major reformation of American Indian education, including the engagement of tribal family and community members at all levels of the education process. It stressed the significance

of education being tied to the Indian communities, the need to reform boarding schools, and the need to incorporate Indian language and culture in the development of curriculum. The *Meriam Report* is one of the most cited reports in the research literature, including present-day studies, and is viewed as a catalyst for what was expected to be a major shift in American Indian policy in the United States.

Another seminal report, *The Indian Education: A National Tragedy—National Challenge*, referred to as the *Kennedy Report* (1969) and released 40 years after the *Meriam Report*, continued to affirm that government and schools were not doing a good job in educating Indian students. Problems included poor facilities, irrelevant curricula, and indifferent or hostile teachers. Indian involvement and participation in education decision making in schools was cited as generally “not permissible.” In referencing the facts and statistics pertaining to Indian Affairs, Senator Robert Kennedy stated:

These facts and cold statistics illuminate a national tragedy and a national disgrace. They demonstrate the “First Americans” had become the last Americans with the opportunity for employment, education, a decent income, and a chance for a fulfilling and rewarding life— --but clearly effective education lies at the heart of any lasting solution. And it must be an education that no longer presumes cultural differences mean cultural inferiority (The Kennedy Report, 1969, p. 3).

More than 20 years later, reports including *Indian Nations at Risk: An Educational Strategy for Action* (Indian Nations at Risk Task Force, 1991) leading to *The Final Report of the White House Conference on Indian Education* (1992) exposed again that many Indian education reforms were producing little significant change. According to the Indian Nations

at Risk Task Force (1991), Indian children needed to overcome a number of barriers if they were to succeed in school. Some barriers mentioned included:

- limited opportunities to enrich their language and developmental skills during preschool years;
- an unfriendly climate that fails to promote appropriate academic, social, cultural, and spiritual development among many Native students;
- curriculum presented from a purely Western perspective, ignoring the historical perspectives American Indians have to contribute;
- low expectations and relegation to low ability tracks that result in poor academic achievement;
- a loss of Native language ability and wisdom of the older generations;
- high dropout rates;
- economic and social problems in families and communities—poverty, single-parent homes, family violence, suicide, and substance abuse; and
- limited access to colleges and universities because of insufficient funding.

To improve the educational outcomes and success of American Indian students, the Indian Nations at Risk Task Force report (1991) offered an educational strategy for action with recommendations for parents, school officials, educators, tribal governments and communities, local governments and schools, state and federal governments, and colleges and universities. In addressing school reforms, the task force stated:

Improvement cannot occur with fragmented reforms. The transformation of our schools must be comprehensive if we are to create a school system that addresses all aspects of children's learning and development, from birth. If change is implemented piecemeal, we end up with pockets of excellence that serve the few and a flawed education system that does not work for the many. (Indian Nations at Risk: An Educational Strategy for Action, 1991, p. 21)

Numerous reports and findings since the *Meriam Report*, including recommendations that followed, all remain relevant today (Barnhart, 2001). Current national statistics and trends provide evidence that the educational progress of American Indian students and the economic challenges faced in adulthood remain somewhat the same as those documented historically. Tribal leaders and communities continue to argue that the American education system in the past and in the present continues to fail at educating American Indian youth. This is validated by existing conditions in Native communities, as well. American Indians drop out of school at higher rates than other ethnic groups. Persistent social problems, including suicide, drug and alcohol addiction, poverty, teen pregnancy, unemployment and violence reflect the ills that permeate tribal communities. Tribal leaders have repeatedly challenged the government about the dismal state of American Indian education and its educational reforms that have continually dismissed or threatened the Native identity, language, and cultural survival. Unfortunately, the Native voice and attempts to engage in the education of their children are often marginalized or met with resistance as the repetitive cycle of poor educational, social, and economic conditions of tribal communities persist.

American Indians have been studied more than any other ethnic group by the United States in search for an answer to the persistent failure of its system to educate (or assimilate) the Indian population (Deyhle & Swisher, 1997). The general response of the federal government to its ineffective Indian education policies when challenged was to commission more investigative reports and proposals calling for Indian education reform. As Vine Deloria, an American Indian scholar in his 1991 book, *Indian Education in America*, asserted that government tended to “talk about education than to educate” further reiterating this tendency, he stated, “ the ink will hardly be dry on [this] report before another organization, or another federal agency has the urge to investigate and the cycle will begin again” (p. 62).

### *Reforming Indian Education*

European-Americans have attempted to change and assimilate American Indian peoples through various forms of education. Attempts by well-meaning groups to reform Indian education have generally ignored the cultural validation necessary for American Indian children to succeed in American schools. As a result, Indian children frequently are at risk of school failure. (Grayson Noley, 1992)

Government initiated reforms are not new to American Indians or Indian education. In 1934, major pieces of legislation, the Indian Reorganization Act (IRA) and the Johnson-O'Malley Act (JOM) were enacted. This initiated programs focused on providing Indian self-determination in economic development, social services, and education. IRA was significant in enacting political self-governance and economic self-determination provisions that allowed tribes to organize and incorporate in an attempt to counter economic destruction resulting from previous years of treaty negotiations and land allotment policies. JOM initiated a new

approach to American Indian education and authorized the Secretary of Interior for the Bureau of Indian Affairs (BIA) to negotiate contracts with state, territorial, or local agencies to provide federal funds to help defray the cost for educating American Indians (Barnhart, 2001; Delong, 1993; Fuchs & Havighurst, 1972). The act “reaffirmed the continuing legal responsibility of both the federal government and the states to provide education for Indians—while the federal responsibility was based on treaty and statute, the state’s responsibility lay in their obligation to educate all residents” (DeLong, 1993, p. 178).

In the 1960s and 1970s, concerns regarding the increasing economic and academic disparity between different groups on the basis of race, ethnicity, gender, religion, and social class triggered the United States’ education-reform efforts. The Civil Rights Movement led to new legislation and court decisions that directly or indirectly benefited all ethnic and cultural minority groups. For American Indians, according to Barnhart (2001), it presented another opportunity to address the ineffectiveness of both federal and state education policies pertaining to the education of Native youth. Tribal communities organized and applied pressure to government agencies and Congress to regain some control and responsibility for Indian education. In response, a United States Senate subcommittee investigation was launched to examine Indian education. The final U.S. Senate Report of 1969, the *Kennedy Report*, discussed in the previous section, also commented on family, community, and schools relations and concluded:

At the heart of the matter, educationally at least, is the relationship between the Indian community and the public school and the general powerlessness the Indian feels in regard to the education of his children. This relationship frequently demeans Indians,

destroys their self-respect and self-confidence, develops or encourages apathy and a sense of alienation from the educational process, and deprives them of an opportunity to develop the ability and experience to control their own affairs through participation in effective local government. (Kennedy Report, 1969, p. 24)

In the context of the political climate that had been set with the passage of the Civil Rights Act of 1968, Congress responded to the *Kennedy Report* and passed the 1972 Indian Education Act, which provided grants to Indian tribes, institutions, and organizations or states to 1.) develop and implement programs to improve educational opportunities for Indian children and address their unique education and culturally related needs; and 2.) establish adult education programs. The act strongly emphasized and required parental and community participation in education programming. However, in critique of the legislation, Barnhart (2001) stated that the act did little other than to shift the focus of Indian involvement from nonparticipation to nominal involvement when implemented in the Euro-American schools. In 1975, the Indian Self-Determination and Education Assistance Acts were passed, and all subsequent Native efforts to improve the quality of education since this time, according to Demmert (2001), have focused on improving the traditional knowledge (heritage, language, and cultures) and academic performance of American Indian youth.

Goals 2000, a national effort to reform failing schools, was initiated in the early 1990s.. Goals 2000 required states to set standards. This led to similar goals in addressing the poor performance of American Indian students and schools that served them. Goals 2000 for American Indians mirrored the national goals and reiterated those outlined by the United States Department of Education's efforts. The only difference was the inclusion for

a focus on enriching tribal language and culture. By 1998, with President Bill Clinton's signing of a Presidential Executive Order and the growing political influence of the National Indian Education Association (NIEA), some positive direction in federal Indian education policy came about. The order affirmed the federal government's historic responsibility for the education of American Indian/Alaska Native students and commitment to improving their educational achievement. Beaulieu (2008) stated that the Order transformed Indian education at the federal level. Funding for programs, teacher training, and research increased. The national research agenda was established. It became a catalyst in defining the central focus for federal Indian education policy. The central policy focus, Beaulieu reported, was to identify the role and impact of native languages and cultures in the academic achievement of Native American students (p. 24). The order also included requirements to 1.) establish baseline data on academic achievement and retention of American Indian and Alaska Native students in order to monitor progress; 2.) evaluate promising practices used with those students; and 3.) evaluate the role Native languages and cultures have in the development of educational strategies.

In 2004, President George W. Bush signed a second Presidential Executive Order that added a provision to "assist American Indian/Alaska Native students in meeting the challenging student academic standards of the No Child Left Behind Act in a manner consistent with tribal traditions, languages, and cultures" (Executive Order 13336, 2004). In a critical analysis of the 2004 order and its implementation, Beaulieu (2008) argued that the language of the order was aligned with language in the previous order President Clinton

signed and the Indian Education Act (Title VII of NCLB). Both placed an emphasis on the importance of Native language and culture in schools serving Native students.

Consequently, Beaulieu noted that the administration moved away from the central policy and instead shifted to policies that endorsed the removal of Native language and culture from schools serving Native students. According to Brayboy and Castagno (2008), this change was significant and directly demonstrated the concern in many indigenous communities. This concern was that the government and schools were moving further away from providing an effective, high-quality, and culturally responsive education to Native students despite what is written in legislative language and education policy concerning Indian education. In a less covert manner, dominant power forces continue to exist in Indian education policy and reforms.

By 2005, the National Indian Education Study (NIES), a two-part study conducted by the National Center for Education Statistics (NCES), was in place to establish a baseline for monitoring the academic achievement and retention of Native students. Results of the study are divided into two parts. Part I presents the performance results of American Indian/Alaska Native (AI/AN) students at grades 4 and 8 on the National Assessment of Educational Progress (NAEP) in reading and mathematics. Part II provides the results of a special survey of American Indian/Alaska Native students, their teachers, and their school administrators, focusing on native language and culture related to the education of AI/AN students. This is the only nationally representative assessment of American Indian student performance as of this date and has thus far provided additional evidence that American

schooling continues to fail Native youth.

### *Little Impact of Educational Reforms*

Little evidence exists that federal-, state-, and district-level education reform initiatives with goals of eliminating disparities and improving the academic achievement of minority students are making a difference for American Indian students. The most notable federal initiative is the No Child Left Behind Act (NCLB), which has been lauded for its noble intent of making sure all students regardless of race, ethnicity, or income achieve at high standards. However, it has received significant criticism from opponents who argue it has negatively impacted Native American children and educators and has not made much of a difference in the instructional practices and education achievement for Native students since its implementation (McCarty, 2008; Beaulieu, 2008; Wantanbe, 2008; Winstead, et al., 2008). Beaulieu (2008) stated that NCLB was implemented “in a manner to diminish almost entirely the role of Native languages and cultures in schools with Native students and to revert federal Indian education policy to a time prior to the 1928 Meriam Report” (p. 32). According to Patrick (2008), NCLB became a façade for assimilation. Teachers’ (at Warrior Elementary) comments showed that Western Eurocentric pedagogy continued to dominate curriculum, promote hegemony, and alienate the surrounding community (p. 78). The National Indian Education Study (NIES) results in 2007 revealed insights on NCLB’s influence on student achievement. The national sample included 10,000 students from 11 states with significant numbers of Native students. This sample included North Carolina. The data were analyzed by grade level and by schools including high density (with 25% or

more American Indian/Alaska Native [AI/AN] student enrollment) and low density (with less than 25% AI/AN student enrollment). In comparing results in 2005 and 2007, findings revealed that reading mean scores in both grades between 2005 and 2007 did not change significantly and, in some cases, scores declined while the performance for non-Natives increased. For mathematics, the findings were the same (NIES, 2007) and concluded that the achievement of American Indian students had not been narrowed since the implementation of NCLB.

Garcia (2008) conducted a study using state-level achievement data from 2000–2006 and examined the academic progress of Whites, American Indian students, and other minority groups in Arizona before and since the implementation of NCLB. His initial findings showed American Indian students made significantly greater gains in their reading and mathematics proficiency when compared to all other groups except for White students. However, in a more in-depth analysis, Garcia found the greatest gains occurred in 2005 when state policymakers lowered the standard for proficiency in Arizona. In fact, when the scores for that year were omitted, Garcia concluded that the achievement rates for American Indians dropped dramatically. He concluded that the guise of reporting was misleading and cautioned, “The adjustment of passing scores may work as a short-term strategy so that more schools make adequate yearly progress (AYP), but . . . [i]f the underlying purpose of accountability systems is to provide assistance to students who are not meeting standards, then manipulation of passing scores could deny American Indian/Alaska Native students the very academic assistance that NCLB was intended to provide” (p. 150).

A growing body of research studies provides evidence of the importance of Native languages and culture in school success for Indian students (Lipka & McCarty, 1994; Smith, Leake, & Kamekona, 1998; Demmert, 2001). Part II of the National Indian Education Study (2007) addressed curriculum, standards, and assessment. Students, teachers, and principals in schools serving Indian students were surveyed, and they provided information related to the extent to which American Indian culture and language were incorporated into classroom instruction and school environments. The total number surveyed in North Carolina was 963, representing students from 110 public and charter schools. Overall, the survey data suggest NCLB and other accountability programs linked to state standards and assessments presented barriers and/or eliminated Native language and culture instructional practices.

In 2001, North Carolina initiated a plan to narrow the racial achievement gap by the year 2010. A state commission was formed. A Closing the Achievement Gap section became a part of the organizational structure of the State Department of Public Instruction, and an annual report including recommendations to the State Board of Education were presented. Likewise, most school districts in the state formed similar committees at the local level to focus efforts on closing achievement gaps of minority students. Despite the targeted emphasis at the state- and local-district levels, an analysis the North Carolina Justice Center (2010) conducted concluded that the state had experienced success in increasing performance levels for all students but that little progress had been made in closing the academic achievement gap for the state's minority students. More specifically,

American Indian students continued to consistently achieve lower standardized-test scores on state assessments. These students also experienced higher dropout rates, overrepresentation in suspensions and expulsions, and underrepresentation in gifted programs. The average SAT score for American Indian students increased slightly from 2001. However, performance gaps in comparison to White students remained the same.

### Resiliency in a Biracial Social System

In North Carolina, despite pressure to assimilate and exposure to numerous discriminatory practices, American Indians have maintained their identity as the descendants of the state's indigenous population (Oakley, 2005, p. 13). In addition to federal policies, the tribes in North Carolina have also struggled with state and local policies of a biracial social system inherent in the South. The history of eastern North Carolina Indians, made up primarily of state-recognized tribes, reflects an ongoing struggle to survive and maintain their separate identity. It also reflects their determination and resiliency in creating educational opportunities that allow Indian people to improve their quality of life and contribute in their communities.

Unlike the authority for Indian education previously mentioned, the federal government did not take full ownership for educating Indians of North Carolina. The provision for formal education for them was left to the discretion of the state, which had the responsibility and obligation to educate all its residents. A state constitutional amendment in 1835 had deprived Indians in the state, including the Eastern Band of Cherokee Indians, the only federally recognized tribe, of a right to citizenship. Thirty years later, North

Carolina established public schools for its citizenry. In 1875, an amendment of the state constitution provided a segregated system of schools, but the system was established for only Whites and Blacks (referred to as “coloreds”) residents. A provision was omitted for educating American Indians. To obtain an education, Indians refused to be labeled “coloreds” and chose instead to forge a third racial category in the state’s system. (Oakley, 2005, p. 22). The Indians feared losing their separate identity by enrolling their children in “colored” schools. As a result, American Indian parents in Robeson County convinced a local historian and state representative in the North Carolina General Assembly to advocate for separate schools for Indians. In 1885, the General Assembly enacted legislation stating that Robeson Indians “shall have separate schools for their children, school committees of their own race and color, and shall be allowed to select teachers of their own race (Oakley, 2005, p. 22). With this provision, Indians were provided control of their schools through Indian-only school committees but received little monetary support from the state. However, this action secured the tribal identity for Robeson Indians and a new way for gaining social influence and political power. Maynor (2010), in summarizing the period, states that adopting segregation to preserve distinctiveness proved to be a double-edged sword for the state’s Native people. The exclusion of Blacks and Whites from their community assured Indians control over their affairs, but it also conceded to the Whites’ power to govern race relations. To a certain extent, Indians had to function within the restrictions of Whites’ attitudes about the racial hierarchy and their defined social, political, and legal boundaries (p. 27).

### *From Uneducated to Educated*

North Carolina Indians have seldom attracted scholarly attention, especially in comparison to other tribes across the nation (Oakley, 2005, p. 10). The available research literature describes the courage and determination of the state's Native people. The state's American Indians led the way in resolving inequities resulting from restrictive or lack of public education opportunities for their youth. Resources for support and maintenance of the schools came primarily from the American Indian community. The initial state appropriation was \$503 to operate 7 Indian schools with a total enrollment of 1,006 children between the ages of 6 and 21 (Thompson, 1973). As enrollment numbers grew, a shortage of qualified Indian teachers presented a new challenge for the community. Illiteracy rates among Indians were extremely high, and the supply of educated, qualified teachers to teach in the Indian schools was insufficient in meeting the demand. The Robeson County Indians, again through political intervention, established a centralized institution offering a curriculum from the elementary-school level and teacher training. In 1887, the Croatan Indian Normal School was created by the North Carolina General Assembly to serve as a teacher training school, which eventually expanded and is now the University of North Carolina at Pembroke. In the early 1900s other state tribes took similar actions to petition the General Assembly to enact legislation authorizing the establishment of Indian schools in their communities.

The Indian schools in the Indian communities were poorly equipped and funded but, despite the adversity the Indians, were proud of their accomplishments. The state

appropriations for school operations remained insufficient. In Robeson County, per pupil expenditure was well below that of schools for White students but was higher than schools for Black students. By 1930, 53% of Indian children in the state attended school compared to 55% of White children and 53% of Blacks. The median grade level completed for adults over the age of 25 was 8.1 for Whites, 5.1 for Blacks, and 4.9 for Indians. These educational-attainment levels demonstrated that American Indians continued to be undereducated when compared to Whites and Blacks, but the difference given the significant constraints the tribe had to overcome to access educational opportunities for their people was insignificant (Oakley, 2005, p. 55).

#### *Identity and Social Mobility*

Education enabled the North Carolina Indian tribes to maintain their identity as an ethnic group, as well as improve their economic standing. The schools became the center of an ethnic and geographic community (Thompson, 1973, p. 78). Educators became community leaders and contributed to the advancement of the Indian people and the tribal communities. Community unity was nurtured in schools and often served as gathering places for various social events and celebrations (Oakley, 2005, p. 27). Prominent local citizens, often landowners, composed the school committees and controlled admissions, curriculum, and hiring practices. Because school positions were among the few white-collar opportunities available for Indians, these committees assumed a great deal of prestige and power (Oakley, 2005, p. 25). This was significant, given that, during the Jim Crow era, discriminatory policies prohibited other economic opportunities for Indians. By 1970, the

Indian school system in Robeson County had become one of the largest and most important businesses to the Indian community, providing 60–70% of the White-collar employment for Indian people (Thompson, 1973, p. 89). Some Indian families became economically prosperous through farming.

### *Perspectives on Integration*

North Carolina's American Indians' views pertaining to the impact of school desegregation were mixed. For those who had invested much in establishing and maintaining Indian schools, integration threatened the Indian identity, responsibility, and control of their children's education, as well as the tribal community's economic growth. Ross (1999), in interviews with Indians throughout North Carolina about integration, especially the tribal communities that had established separate schools reserved for Indian children, stated that many people expressed the belief that integration and the subsequent demise of "Indian schools" played an important role in tribal identity, albeit a negative one. They complained that, although the all-Indian schools kept tribes unified, when Indian children were placed in a larger integrated school, they became a small minority population whose culture and heritage were given little respect by Whites and Blacks. This resulted in many Indian children choosing to drop out of school during those early years of integration. On the other hand, integration of the Indian schools was lauded. Some Indians believed integration would provide opportunities for much more upward mobility in terms of education and economics. For example, integration would provide Indians access to better

equipped schools and all public colleges and universities, which prior to integration were limited.

### Unnatural Education

The Coleman report, *Equality of Educational Opportunity*, presented as one of its major findings that student background had a far greater impact on student achievement than did school characteristics (Coleman, et al., 1966), suggesting that efforts within the school could have limited influence on student learning. To account for lower achievement, three contrasting positions emerged in the literature on Native American achievement and that of other minorities:

- 1.) low-achieving students, both minority and majority groups, share a common set of characteristics such as poverty, low parental education, high levels of teen pregnancy and single-parent families, poor health status, and lower quality schools, factors that underlie their achievement cultural differences between the minority group and majority group and are a source of explanation for low achievement;
- 2.) past and present unequal treatment of the minority by the majority group partially accounts for low achievement; and
- 3.) cultural differences between minority group and majority group are a source of explanation for low achievement (Demmert, Grissmer & Tower, 2006).

The positions are not mutually exclusive but are interrelated, so it would be difficult to discuss them separately. In an earlier sections of this chapter, the status of American Indians' educational achievement and socioeconomics characterized the poverty, low

parental education levels, and living conditions of Native youth. With high levels of poverty in Indian communities, it is not uncommon to find other characteristics such as poor health and high levels of teen pregnancy. Such characteristics can be expected and, as Coleman stated, are common across all minority and nonminority groups living in high-poverty conditions. Yet, one study concluded that American Indian communities are more sensitive to difference in income and sustained poverty.

In a deeper examination of family characteristics in relation to American Indian achievement, Demmert, Grissmer, and Tower (2006) used data from the ECLS-K, a longitudinal study of a nationally representative sample of kindergarten students, which included approximately 300 American Indians. They found American Indian students start kindergarten with lower reading and math skills than White, Black, and Hispanic children. The study included a number of family, parent, home, and child characteristics, such as family human capital, that were statistically linked to the level of reading and math skills upon entering kindergarten. Native American children did not show consistent differences from other children in their dependence on most of the factors. However, Native American students did appear more sensitive to difference in income and sustained poverty. Further, an analysis of the extent to which these differences accounted for the gaps in achievement between Natives and Whites revealed that, when comparing achievement with and without family characteristics, differences accounted for less than one half of the gap between White and Native students. In contrast, differences in family characteristics accounted for between 80% and 100% of the reading and math skills gap between White and Black students and

75% of the gap between White and Hispanic students. The research suggests a unique factor outside family characteristics affected achievement. It also suggests social capital was a missing factor given the social capital variables did not further reduce the gaps for other ethnic groups as it did for Native Americans. An explanation the authors provided for Natives' higher dependence on social capital was that in comparison to other ethnic groups, a higher proportion of Natives lived in poor, rural communities. Also, these communities are isolated and have little social capital. Another finding from this study was that a substantial achievement gap between Natives who live in rural areas compared to urban areas existed. The score gap between Whites and Natives was much smaller in these areas, as well.

In a further exploration of the past and present history of unequal treatment, as presented earlier in this chapter, the subsequent section of this chapter addresses the uniqueness of tribes in relation to other minorities and presents research literature on the cultural differences and misconceptions in relation to the population's low achievement.

### *The Uniqueness of Native Populations*

“One must know first who we are and understand our past history before understanding our present and our future” (Grayson Noley, personal conversation, April 2008).

The history of Indian education, for some based on tribal sovereignty and trust responsibilities, is unique and often misunderstood (Deyhle & Swisher, 1997, p. 114). The

impact of the South's biracial social system and the impact on Southeastern tribes are also complex. In *To Live on This Earth*, Fuchs and Havighurst (1973) reminded, "though there is broad diversity among the various Indian tribes and communities, there is an erroneous tendency for Native Americans to be thought of as one group and as little different from other disadvantaged minority groups" (p. 31). They derived this assertion from their comprehensive research in 1967–71 regarding American Indian populations and their education. The study consisted of 26 American Indian communities and 40 schools including communities in North Carolina. Formal education evolved differently for Indian populations than it did for other minority groups. First, the federal government retained responsibility for educating Native tribes although, for others, the states and local communities were responsible for educating Natives along with other minority groups within their jurisdictions. Education experiences for American Indians varied and included mission schools, boarding schools the Bureau of Indian Affairs operated, tribal schools, and public schools. In North Carolina, with the exception of the only federal tribally controlled school, American Indians have been educated in the state's education system. Unlike tribes whose education was the responsibility of the federal government and other minorities in North Carolina, American Indians were the last population of people to be afforded access to a formal education. Unrecognized by the state as a population, American Indians were forced to make major sacrifices for the sake of their tribal identity and survival. Whether federally or state controlled, American Indian education, comprised of both federal and state government relations and political influences, is characterized by struggles against Euro-

American power and dominance. Native people have experienced histories of subjugation and attempts by the dominant class to eliminate their diverse culture and identity (Fuchs & Havighurst, 1973; Lomawaima, 1999; Yazzi, 2000; Spring 2001). Presently, American Indians are the only minority population in the nation required to verify their identity as Natives through tribal enrollment and carding for documentation. A review of the literature reflects that American Indians differ greatly from other minority groups by their refusal to fully assimilate and give up their cultural identity and distinctive Native characteristics.

Wilkins (2002) posits,

For much of this nation's history, the general thrust of most racial and ethnic groups and their members has been to seek inclusion (to become constitutionally incorporated) into the American social contract; by contrast, the general thrust of most indigenous nations and their citizens (notwithstanding their American citizenship) has been to retain political and cultural exclusion from absorption or incorporation in the American polity. (p. 201)

### *Natives Teaching and Learning*

Significant educational and cultural differences related to child-rearing practices, property accumulation, work ethic, family structure, religion, and teaching and learning are evident in tribal communities (Spring, 2001). American Indian communities tend to be kinship oriented, united by a place of residence, person-to-person interactions, and a common understanding of their uniqueness as separate peoples (Fuchs & Havighurst, 1973, p. 2). The communities differ in their economic, religious, and social life. However, most Indian people share a binding orientation of kinship and culture. Much priority is placed on communal and family considerations over individual considerations. Native people possess a belief in sharing versus

accumulating and a respect for spirituality and interconnectedness with the natural world (Barnhart, 2001). The transfer of knowledge from elders to younger generations centers on survival and includes history, culture, and religion in a manner that is integrated in daily community life and traditions. Parents, extended families, and members of the tribal community have the responsibility of working collaboratively so all Native children experience success. Through the Native approach of teaching and learning, American Indian youth fully develop their cultural identity, sense of belonging, and acquire skills necessary for them to give back to the community. For the most part, Native Americans' beliefs and practices contradict Western beliefs and ways (Barnhart, 2001). As a result, cultural, social, and political interventions brought dramatic changes to the Indian traditional system of education, and not all change was voluntary (Demmert, 2006).

Westerners viewed Indian traditional learning as unacceptable. Tharp (2006) disputed that the Euro-American notion that pedagogical methods and Native ways of teaching and learning were ineffective. To support his contention, he cited the Cherokee Syllabary, a complete oral language orthography invented by Sequoia, a Cherokee Indian in the nineteenth century, as one example. Despite the adversity, Cherokee families continued teaching and learning together in the traditional manner, according to Tharp, and accomplished high reading proficiency for Native students—an intellectual accomplishment American schools cannot claim (p. 8). Contrary to the perceptions and seeming disregard for Native people, American Indians do value education. Although educational values of language, history, and cultural traditions for tribal communities are a priority for Native tribes, parents, elders, and community leaders do

realize an education of Western context is equally essential in enabling their children to successfully participate in both the tribal and global societies.

### *Cultural Misconceptions*

Universally defined, according to Germaine (2000), education is the means by which societies transmit culture to their youth. However, as reflected in the research literature regarding Indian education, American Indian families and communities were not permitted to teach their values, heritage, and customs to their youth. In some cases, such as in North Carolina, where Indians were directly engaged in their children's schooling, Indian communities operated within the constraints of the dominant class. American Indians were granted authority to engage more in the education process by the late twentieth century with the passage of the Indian Education Act. However, in a less coercive way, the power and control of Anglo-American thought continued to frame the structure and parameters for interactions between American Indian students, families, and schools. Deyhle and Swisher (1997) assert that a deficit-thought notion has guided the educational experiences for Native youth and have played a role in distorting the reality of Native children and families, their identity, and culture. The authors, in citing Berry (1968) claim, "The problems of Indian education are not entirely situated in the individual or her or his home, community, and culture but must be shared by schools and society " (p. 118). By conceptualizing American Indian education in the context of "blame the victim," Deyhle and Swisher purport that the problem of low achievement will continue to be attributed to factors solely outside the realm of the school.

Collectively, the literature about the history of American Indian education illustrates how both past and current education policies grounded in the thought and practice of the dominant class continue to negatively impact American Indian children, families, and communities and their Native culture, language, and values (Butterfield & Pepper, 1991; Beaulieu, 2008). Deyhle and Swisher (1997) posit that educational research until recently has contributed little to improve the academic achievement of American Indian students because it has tended to “buttress the assimilatory model by locating deficiencies in Indian students and families” (p. 116). They claimed this has perpetuated the ideology of American Indians as intellectually inferior and, therefore, less likely to be academically successful. Negative stereotypes of Indians’ shaped the learning context for Native students. The Euro-American belief was that Indian students lived in culturally deprived home environments and required the enriching of Eurocentric experiences from the school. The cultural-deprivation frame perceived Indians as poor or impoverished children with limited backgrounds upon which schools could expand. M. Wax, et al. (1989) referred to the positions that home environments and the minds of Indian children were empty or meager and therefore required enriching of Eurocentric experiences from the school as the “vacuum ideology.” As mentioned, this mindset clearly fails to acknowledge and value the existence of cultural differences and places the problem on the Indian student and family and not the school.

### *Differences of Home and School*

Discipline, attitudes toward authority, disinterest in school, and poor achievement are all problems that can be attributed to differences between the values, beliefs, and attitudes in the home culture and school culture (Deyhle & Swisher, 1997). Fuchs and Havighurst (1972) confirmed in their findings that many Indian children lived in homes and communities where the cultural expectations were different and discontinuous from the expectations held by classroom teachers and school authorities (p. 299). With this said, the disposition of the classroom teacher toward American Indian students is a significant consideration.

Research suggests the classroom teacher has more influence on student learning and achievement than any other school-based factor. In her ethnographic study of cultural conflict, Susan Phillips (1983) concluded that, for Indian students to have more academic success, non-Indian teachers needed to be much more aware of the differing communication patterns of different cultures. Cleary and Peacock (1998) affirmed Phillips's position but also concluded, following extensive interviews with both Native and non-Native teachers, that teachers in schools serving Indian children should see themselves as learners who are open to understanding the reasons children and communities are the way they are, who are willing to discover and consider the differences between school and home cultures, and who are willing to change their ways of teaching to give children a better chance in school and life.

Fuchs & Havighurst (1972) found teachers tended to take the “man in two cultures” position, maintaining that Indians should acquire skills required for success in society, but they should also maintain their culture. They found the teachers’ positions on assimilation were moderate and cautious but not Anglo-oriented, and they were not inclined to view the teaching of Native culture as an objective for them in school. Interestingly, the position of Indian teachers (11% sampled) on assimilation was similar to that of the non-Indian group, and the only difference indicated that they were slightly more inclined toward an Anglo orientation. Fuchs and Havighurst noted Indian teachers were often characterized as a group with close contact to the Indian communities but had a firm Anglo orientation for themselves and their view on the role of the school (p. 197). In other words, they were Indian, but aspects of Native culture did not play an important role in their orientation in terms of curriculum and instruction. It would be logical to reason that American Indian teachers, especially those from the same community as the Indian students, would already possess an understanding and would approach working with Native students differently. Therefore, it would be expected that American Indian students would be more successful academically in classrooms taught by Indians familiar with the community.

Peshkin (1997) investigated why American Indian students in Indian-controlled schools with high proportions of well-educated Indian teachers, adequate funding, and parents who valued education still performed below national academic achievement averages. The findings of his ethnographic study of a boarding school serving New Mexico’s Pueblo Indians presented a significant conclusion. Native students did not embrace education.

According to Peshkin, the cultural discontinuity (two worlds) theory of academic failure explained the “student malaise” he observed. Peshkin said the finding originated from the ambivalent attitude of the Pueblo community toward schooling. Explaining further, Peshkin pointed out that the Pueblo community described schools, including Indian-controlled ones with Indian administrators and teachers, as alien, “White” institutions. The findings suggest Native people and communities continued to harbor a lack of trust as it relates to schools and teachers regardless of their Native ties.

A growing body of research about American Indian education consistently reflects the importance of cultural aspects in the schooling of Indian students (Demmert, 2001). In other words, students with a strong sense of cultural and personal identity were more likely to have academic success. Coggins, Williams, & Radin (1997) examined the relationship between parental identification with traditional Ojibwa cultural values and the school performance of their children. The findings supported the argument that the maintenance of American Indian cultural identity was critical to the success of Native students. The authors concluded that adults who are secure in their identities as American Indians and with traditional tribal values provided a solid cultural identity core for their children. They further stated a strong cultural sense of self allowed the Indian children to explore other cultures without threatening their basic American Indian identity. Culture was not an obstacle but a tool to be used to enhance the school performance of Indian students.

### *Cultural Identity*

Newman (2005) describes ethnic identity as a person's sense of belonging to an ethnic group and part of his/her thinking, perceptions, feelings, and behavior because of their membership in the group. As a result of mixed messages about the meaning and value, American Indian youth, in comparison to other minority groups, confront unique and complex challenges as they acquire social and cultural information about their ethnicity (Trimble, 2000; Newman, 2005). First, in the broader society, American Indian people are both idealized and devalued. Most in society demonstrate little evidence of actual knowledge about who they are. Newman stated,

American Indian students in mainstream U.S. public schools are formally taught social and political history that omits the Native point of view. Official public messages using racial stereotypes persist and present a confusing message about the role of American Indians in contemporary U.S. society. It is within this cultural backdrop that the normative process of psychosocial maturation and ethnic identity formation can be understood for the current generation of American Indian youth. (p. 736)

Second, American Indians are expected to navigate conflict resulting from a school culture that differs from their home environment. Cleary and Peacock (1998) interviewed 60 teachers to gain a deeper understanding of factors impacting the success of Native students. Referencing the significant differences between school and home cultures, they argued, "Perhaps the strongest method by which the dominant culture has maintained power has been to construct schools the replicate the value system and language system used in the culture of the middle class home" (p. 193).

Cleary and Peacock summarized the views of teachers and concluded, “The key to producing successful American Indian students in our modern educational system . . . is to first ground these students in their American Indian belief and value systems” (p. 101).

The perspective of cultural difference is among the most commonly used explanations for the differences between American Indians and the White orientation in schools. Differences in the way most Indian parents socialize their children and methods used differ from child-rearing practices of Anglo-American families. The child-rearing methods Indian parents use are manifested in the child’s communication patterns, interactional styles, and social values. Indian children enter school with learning and interactional styles that are inherently different. As a result, American Indians are faced with learning new concepts in a new cultural context and new social organization that is not congruent with their cultural and community norms (Tharp & Yamauchi, 1994; Deyhle & Swisher, 1997). As noted in the discussion of ethnic identity, the conflict American Indian youth experience in schools extends through their adolescent years, as well, hence impacting their success over time.

Demmert, Grissmer, and Towner (2006) referred to the cultural compatibility theory, which is based on the extent of congruence between Native homes and the school. As a way of addressing the lower achievement of American Indian students in schools, this theory claims that the more closely the human interactions in the school and in the classroom are aligned with those of the community, the more likely goals of the school, including improved student achievement, can be reached. The assumption is that culturally based

differences in the interactional styles of the minority students' homes and the Anglo culture of the school lead to conflicts, misunderstandings, and lower student performance. Focused on the process, rather than the structure of education, the authors concluded that a more culturally appropriate classroom and school environment respectful of Native culture would mean a higher rate of achievement and educational attainment for American Indian students.

### *Assessing Achievement*

Germaine (2000) pointed out that schools, through standards and accountability, testing, and certifications such as diplomas provide society's stamp of approval by determining who shall succeed and be awarded status and who shall remain in poverty. The educational system utilizes a system of widely used cognitive classifications that reinforce social distinctions. Bourdieu and Passeron (2000) argued they "consecrate social distinctions by constituting them as academic distinctions." These classifications and symbols, including the violence they represent, are often misrecognized to be academic and are accepted as legitimate. Yet, as methods for academic judgments, they are also social judgments that affirm and reproduce social-class distinctions (Swartz, 1997). According to English (2002):

The low success rate of minority students in our schools has too often been portrayed as individual failures of the students instead of instructional failures of the system based on false notions of objectivity shrouded in the mantle of impartial tests of "ability." The shroud of impartiality, rationality, and static mental attributes that are embedded in nearly all testing programs protects them from being examined as tools of class conflict and hegemony (p. 306).

Based on the performance of American Indians on biased psychological tests created

by the middle-class Anglo population, which showed that Indian students consistently performed lower than White students in school. An earlier assumption was that Indians did not have the ability or intelligence to succeed in school. Contrary to this assumption, evidence available from a nonverbal, visual test, such as the Goodenough Draw-A-Man Test, revealed exceedingly higher test scores for American Indian children. This finding refuted the earlier assumption and concluded that American Indian students were not inferior or uneducable but had the same innate ability as Whites (Deyhle & Swisher, 1997, p. 118). In general, most studies regarding Indian achievement presented in the literature, such as Coombs (1954) cited in Fuchs and Havighurst (1972) and Coleman (1965), regardless of the instrument or criteria used, concluded that Indian students performed poorly.

In the current context of high stakes accountability measures and the use of tests to sort students by their academic performance, McCarty (2008) contended that current practices of using high-stakes accountability measures and testing to sort students based on performance remains blind to racial discrimination and continues to use English standardized tests as the sole measure of proficiency.

Locklear (1996) conducted an examination of test bias to determine whether ethnicity or gender significantly influenced the test-item responses of students on the North Carolina End-of-Course (EOC) English I Tests. Locklear's study examined 2,843 responses from ninth grade male and female students in a school district with a higher enrollment of American Indian students. Locklear's findings concluded that wide disparities between

scores of the Black and American Indian groups existed. His results clearly showed that some ethnic groups had more difficulty selecting correct responses, indicating that test-item bias existed, as well. Results further suggested that EOC tests stigmatize the perceptions held about certain ethnicities. In terms of gender, Locklear also suggested inherent biases of the test items have a negative impact on the academic abilities and self-confidence among Blacks and American Indians, in particular, male students.

### Chapter Summary

The purpose of this chapter was to present the theoretical framework of habitus by Pierre Bourdieu in relation to the persistent problem of lower academic achievement and educational attainment of American Indian students attending public schools. Bourdieu attempts to explain the social, political, and cultural practices so people understand the meaning of their actions and the social world around them. In gaining this understanding, actions must be examined against the background of social and historical events. The context of this study is American Indian education. From the start, formal schooling of American Indians, as reflected in research literature, has been characterized by power and dominance. Lomawaima and McCarty (2002), in their characterization of Indian education, stated, “The goal has been civilization of American Indian people . . . replace heritage languages with English, replace ‘paganism’ with Christianity, replace economic, political, social, legal, and aesthetic institutions” (p. 282). Evidence clearly illustrates the manner in which both past and current policies grounded in an assimilative thought, or symbolic violence as purported by Bourdieu, continue to negatively impact the educational and

economic status of American Indian children, families, and communities. In essence, the dominant class's attitudes and conceptualizations regarding Indians have defined Indians' social space in a manner perceived legitimate and natural to the broader society, including American Indians.

The review of literature on American Indian education also demonstrates that, despite shifts in Indian education policy beginning in the twentieth century that empowered Natives to engage more in the education of their youth, the dominant class's ideology persists. With critical inspection, the dominant ideology surfaces under the guise of well-meaning legislation such as the Indian Education Act and other federal and state statutes, executive orders, and education policies and practices, including recent reform initiatives such as NCLB. As Bourdieu would purport, the literature on American Indian education shows that schools are key agents in perpetuating existing social stratifications. This practice ensures the reproduction and maintenance of a certain social hierarchy, as well as that the dominant class's rule can be strongly supported in relation to many aspects of American Indian education. Thus far, various reform initiatives have not been effective in creating a sustainable, positive trend in the educational achievement of American Indians. As evidenced by presented national statistics, American Indians persistently fair poorly on many measures of achievement and educational attainment.

In conclusion, this study explored whether evidence existed to support Bourdieu's theoretical framework of habitus in the past and present patterns of academic achievement and attainment of American Indians, therefore contributing to the construction of their social

and economic conditions. The ideas of Bourdieu provide a framework for arguing that schools make little difference in the educational achievement of American Indians in North Carolina, particularly those from economically disadvantaged backgrounds. The next chapter presents the methodology for examining Bourdieu's theoretical concept of habitus in this context.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter reviews the purpose and rationale for the study and summarizes the theoretical framework of Bourdieu's habitus, as well as the research questions, and hypotheses. Next, the site selection and participants, the data set, and specific measurements utilized to explore the hypotheses are discussed. The analytical techniques required to test the hypotheses are then provided in detail.

#### **Purpose and Rationale**

The purpose of this quantitative study was to investigate Bourdieu's theoretical concept of habitus to determine whether it is predictive of the educational achievement patterns for American Indian students in North Carolina. In this context, *habitus* means "a particular type of existence, based on shared cultural trajectories . . ." (Webb, Schirato, & Danaher, 2002, p. 40) or "an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted" (Bourdieu, 1977, p. 95). Specifically, this study focused on the academic proficiency for a cohort of American Indian students entering third grade in 1998 and examined their progression through public schools in North Carolina through 2007. Freshman retention was also examined for those American Indian students entering a higher education institution of the UNC System as freshmen in fall 2007. It is hypothesized that if habitus is affirmed as a predictor of the achievement patterns for these students then the entire system of changes, interventions, and other reforms employed

by schools in the past decades has not changed the pattern of low achievement or the likelihood of a better quality of life for the American Indian population.

If affirmative, it could also suggest, as Bourdieu would argue, that the role of the school will not change until and unless it is confronted in the larger sociopolitical system. What is well documented in the historical literature is that, since the beginning of the federal government's educational policies and intervention, American Indian students have performed poorly in American schools (Lomawaima, 1995; Deyhle & Swisher, 1997; Spring, 2001). More recent literature examining federal and state governmental education reforms in the twentieth century reveals little evidence to support that reform efforts to eliminate disparities, improve academic achievement, and enhance equity are making a significant difference for American Indian students. The 2001 reauthorization of the Elementary and Secondary Education Act, known as No Child Left Behind (NCLB) and its implementation have negatively impacted the education of American Indian children (McCarty, 2008; Beaulieu, 2008; Wantanbe, 2008; Winstead, et al., 2008). More specifically, as noted by the National Indian Education Association in its *Preliminary Report on No Child Left Behind in Indian Country*, the statute has diminished the use of culturally appropriate pedagogy and curriculum that reflects the cultural heritage and languages of Native children; has created learning environments that are disconnected from students' lives and their sense of future connected to attending school; has caused students to internalize system failures as personal failures by blaming the student for low test scores; has increased risks of students' dropping out; and has threatened tribal sovereignty and educational choice. With the exception of a

few state reports, information was limited on the specific impacts and educational progress American Indian students made in North Carolina whose formal education, for the most part, began in segregated Indian schools supported by the tribal community.

In North Carolina, in an effort to reform its public schools, education officials in 2000 initiated a plan to narrow the racial achievement gap of its minority students by the year 2010. However, despite the increased emphasis, the North Carolina Justice Center (2010) concluded little progress had been made in closing the academic achievement gap for the state's minority students. More specifically, American Indian students had consistently achieved lower on state assessments when compared to the White student population. Currently, the annual reports to the State Board of Education by the State Advisory Council on Indian Education are primary sources of information about the academic performance and issues facing American Indian students attending the state's public schools. However, the information consists solely of descriptive statistics and static reporting of student performance. This study was designed to further the mission of the council and add to the literature available about the academic achievement of American Indian students. An additional rationale was to add to the current body of literature for school leaders working with the state's Native students and tribal communities.

#### Overview of Theoretical Framework

Bourdieu's theoretical framework would argue that habitus provides an explanation for the consistent pattern of lower achievement for American Indian students, particularly those from lower income home environments. By habitus, an individual internalizes dispositions to the degree that he or she becomes part of the way the individual perceives and thinks about the social world and his or her place in it. In other words, "the place

becomes second nature” (Grenfell, 2008, p. 64). Dispositions form through social training and past experiences including experiences that occur within the family, social peer groups, and in school (Lee & Bowen, 2006; Mills, 2006). As a result, students from lower income homes, often marginalized, tend to view their situation in the world as natural and fitting to them. Unfortunately, this view confines their perception of possibilities and future aspirations to those they see to be suitable to the social group of which they are a part (Mills, 2006). According to Bourdieu (2000), it is because of their habitus that children from families with parents who have occupied relatively privileged positions within the social-class hierarchy have tended to move to similar positions, and children from families with parents who do not possess a privileged position in the social class hierarchy have tended to remain in a relatively dominated position (p. 31). Further, Mills (2008), in citing Webb, Schiratio, and Danaher, suggested that such complicity with “dominant vision[s] of the world [occurs] not because we necessarily agree with [them] or because [they are] in our interest but because there does not seem to be any alternative” (p. 83). In other words, participants possessing a specific habitus are complicit in their own status and role. They participate in their own subjugation. Another key premise for Bourdieu is that schools, by nature, reproduce existing social-class hierarchies and social inequalities rather than promote change (Swartz, 1997; Webb, et al., 2002; Mills & Gale, 2007; Grenfell, 2007, 2008). The subsequent chapter explored the concepts of Bourdieu by analyzing data related to American Indian achievement patterns, their socioeconomic status, the density of American Indians within a school district, and the freshman retention rates for those students entering higher education institutions. In doing so, it sought to explore whether education patterns can be explained by habitus, as well as whether American Indian students

participated in their own subjugation, which in turn is perpetuated by their experiences in schools.

### Research Questions and Hypotheses

To examine this issue, the major research question was “Do schools make a positive, significant difference in the educational achievement patterns for American Indian students, more specifically those from economically disadvantaged backgrounds who attend public schools in North Carolina?” This study investigated the patterns of achievement for American Indian students by examining their performance on North Carolina’s state assessments. Within the major research question, five guiding sub-questions emerged to serve as integral components of the study:

#### *Guiding Questions*

1. To what extent did patterns of American Indian students scoring proficient and nonproficient in reading and math on North Carolina’s state assessments from 1997–98 to 2002–03 (grades 3–8) and 2003–04 to 2006–07 in high school reflect a positive change in position that was sustainable over time?
2. In a comparison of proficiency, did statistically significant differences exist in student achievement across time between low SES American Indian students and higher SES American Indian students?
3. Did the relationships between SES and students’ proficiency differ by district density?

4. How did the freshman retention of American Indian students who graduated from North Carolina's public high schools and enrolled in the UNC System in the fall of 2007 compare to the retention of the population of non-American Indian students enrolled in the system during the same period of time?
5. How do students' SES, school density, and student proficiency affect freshman retention for American Indian students?

### *Hypotheses*

The major research hypothesis for this study, Hypothesis 1, was that over time schools do not make a significant difference in the educational achievement patterns for the American Indian student population attending public schools in North Carolina, more specifically those students from economically disadvantaged backgrounds. Following Bourdieu's line of argument, it was further hypothesized that American Indian students with higher SES will consistently, and over time, maintain greater academic proficiency on standardized math, reading and high-school assessments than American Indian students with a lower SES (Hypothesis 2), and the density of the American Indian student population in a school district (Hypothesis 3) would make little difference in the proficiency of students with a lower SES. An examination of freshman retention for those American Indians who chose to pursue a higher education degree would reveal similar patterns to those at the elementary and secondary education level. It was hypothesized (Hypothesis 4) that American Indian students who graduated from North Carolina's public high schools and entered the UNC System as freshmen in fall 2007 would be retained at a lower rate when compared to the retention of non-American Indian students who entered the system during the same period of time. Further, it was hypothesized (Hypothesis 5) that students' SES

backgrounds will affect their retention in higher education institutions more than their level of proficiency and the density of the American Indian student population in the school district at which they attend.

## Site Selection and Participants

### *The State's Native Population*

American Indian, as defined by the United States Census, is a person having origins in any of the original peoples of North and South America and who maintain tribal affiliation or community attachment. There are approximately 562 federally recognized tribes in the United States, not including the number of indigenous communities recognized as tribes or other tribal entities by individual states. The representation in North Carolina is the largest population of American Indians east of the Mississippi and the seventh largest in the nation. According to the United States Census 2000, the total population of American Indian residents was approximately 100,000, all residing in each of the state's 100 counties. There are eight American Indian tribes officially identified by the North Carolina Commission of Indian Affairs. The counties highlighted in the map on Figure 3.1 geographically show the areas of the state where American Indians are mostly concentrated. The Eastern Band of Cherokee is the only federally recognized tribe and is concentrated in Graham, Swain, and Jackson counties. The seven state-recognized tribes include the Coharie, concentrated in Sampson and Harnett counties; the Haliwa-Saponi, concentrated in Halifax and Warren counties; the Lumbee, concentrated in Robeson, Hoke, Scotland, and Cumberland counties; the Meherrin, concentrated in Hertford County; the Occaneechi Band

of the Saponi Nation, concentrated in Orange County; the Sappony concentrated in Person County; and the Waccamaw-Siouan, concentrated in Columbus and Bladen counties.

### *The Native Student Population*

The enrollment of American Indian students in the state's public schools is representative of these tribes, as well as students with tribal affiliations outside those tribes recognized by the state. In 2006–07, the number of American Indian students enrolled in public schools was 19,927, 1.4% of the total population of 1.4 million public-school students. American Indian students were not represented in all of the 115 school districts. School districts not reporting the enrollment of Native students were Alleghany County, Elkin City, Greene County, Hyde County, Mt. Airy City, and Tyrrell County. The public schools of Robeson County enroll the largest percent of American Indian students in terms of concentration of American Indian students (North Carolina Department of Public Instruction, Statistical Profile, 2007)



*Figure 3.1.* North Carolina American Indian tribes and communities.  
(Shaded areas represent primary counties of residence)

## Data

### *Source and Access*

According to Smith (2008), data retrieved from administrative records can be powerful both in the way they can be used for governmental reporting, but also in their potential for explaining social phenomena (p. 8). The data utilized in this study were derived from the administrative records of the North Carolina Department of Public Instruction (NCDPI) and the UNC General Administration (UNC-GA). NCDPI, by the random assignment of unique student identifying numbers to individual students, is able to match a student's records over time. Longitudinal educational records are maintained by NCDPI. In terms of research studies, longitudinal data allow researchers to look at the continuity and change in behavior over time, rather than just focus on brief cross-sectional snapshots of an individual's life (Smith, 2008 p. 7). The State Board of Education requires all students to take standardized achievement tests, the End-of-Grade (EOG) Tests for grades 3-8 in reading and math and the End-of-Course (EOC) Tests in high school. This

makes it possible to compare trends in student achievement data for a fixed group of students. For this study, achievement data, including the individual scale scores and proficiency levels, for a cohort of students identified as American Indian in grades 3 through 8 and high school spanning the school years 1998–99 to 2006–07, de-identified and formatted in an Excel file, was obtained directly from the Office of Strategic Policy and Planning at the NCDPI. In addition to achievement data, this student-level data file also included information about each student’s 1.) free and reduced-lunch status; 2.) grade; and 3.) school district and school in attendance. NCDPI, through its access to administrative records of the UNC General Administration, also provided data for each student in the cohort who enrolled in one of the institutions in the UNC System in the fall semester following his or her high-school graduation in 2007. These data included 1.) the school district issuing the high-school diploma; 2) those students returning for the spring 2008 semester; 3) those students returning for the fall 2008 semester; and 3) those students with a GPA greater than 2.0 after the first year of college.

A second data file containing information pertaining to schools districts and their enrollments was obtained from the School Business Administration Office at NCDPI. This data file provided the researcher the historical grade, race, and sex (GRS) data (1998–2007) for all 115 school districts. These GRS files included data regarding the gender, race, and number of American Indian students enrolled in each school and district and the total student population by school and district. Not all variables contained in the two data files from NCDPI were used in the analyses. Another source of information utilized was the fall 2007 applications, acceptance rates, and enrollments from the 2006–07 graduates of North Carolina public high schools, which was accessed from the public website of UNC-GA.

### *Sample Size*

Cohort studies allow a researcher to identify a subpopulation based on some specific characteristics and study that subpopulation over time (Creswell, 2008, p. 392). This study analyzed specific student-level data for a cohort of American Indian students enrolled in public schools. The cohort consisted of the American Indian students who were enrolled in third grade in 1998–99 and followed their educational progression through the 2006–07 school year. Because the numbers are fewer and data were unavailable for 1998, this study excluded American Indian students enrolled in public charter schools. The NCDPI student-level data file contained 1,527 student records. Thirty-two duplicate records were deleted. The sample size of American Indian students who attended public elementary, middle, and high schools beginning with the 1998 school year through 2007, consisted of 1,495 student records. In the analyses, the sample size varied for specific variables in a given year. The information conveyed, for example, missing data or changing numbers within some variables across time that could be attributed to errors in data collection, students' changes in enrollment because of relocation, withdrawals to enroll in charter schools or nonpublic schools, transfers to other states, or dropping out of school.

### *Measurement*

The variables of the study are now presented. First, the dependent variable is described followed by the independent variables.

### *Dependent Variable*

*Achievement.* Educational achievement referred to the proficiency any given student may demonstrate in the North Carolina Testing Program. The testing program consisted of

standardized achievement tests, the End-of-Grade (EOG) Tests for grades 3-8 in reading and math, and the End-of-Course (EOC) Tests in high school. The N.C. End-of-Grade (EOG) Tests include multiple-choice assessments of reading comprehension and mathematics at grades 3 through 8. The N.C. End-of-Course (EOC) Tests included multiple-choice assessments in English I, Algebra I, Geometry, and Algebra II. In addition, science EOC Tests (Biology, Chemistry, Physical Science, and Physics), and social studies EOC Tests (Civics and Economics and U.S. History) were part of the testing program. High-school students were required to score at the proficient level on five EOC tests (English I, Algebra I, Biology, Civics and Economics, and U.S. History).

As part of the data-management process and in preparation for analysis, the student-level cohort file and the historical grade, race, and sex (GRS) data files for 1998–2007 were purged of variables that were not theoretically relevant to the study. These variables were dropped for each year. Next, the student-level cohort file, in Excel format, was uploaded and converted to a PASW Statistics 18.0. Because the focus of the study was to examine academic proficiency of American Indian students and their socioeconomic status, it was necessary to recode variables. For example, the four achievement levels for the NC Testing Program, as determined by the State Board of Education, are the following:

Level I: Students performing at this level do not have sufficient mastery of knowledge and skills in the specific subject area for success at the next grade level.

Level II: Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the specific subject area and are minimally prepared to be successful at the next grade level.

Level III: Students performing at this level consistently demonstrate mastery of the Grade-level subject matter and skills and are well prepared for the next grade.

Level IV: Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work. (NCDPI, 2009)

In other words, students performing at Level I or Level II in achievement were considered non-proficient and students who scored at Level III or Level IV in achievement were considered proficient. Therefore, for each year, math and reading achievement scores were recoded in SPSS and were assigned the following values: Levels I and II equaled *nonproficient* and were assigned the value of 0. Levels III and IV equaled *proficient* and were assigned the value of 1. End-of-Course (EOC) proficiency was based on the tests associated with courses taken. The sequence for which a student chose to take his or her high-school courses and the courses taken varied. For the purpose of this study, proficiency for the high-school years (2004–07) was calculated as the average proficiency of all EOC tests taken by the student in a given year then converted to 0” for non-proficient and 1 for proficient.

#### *Independent Variables*

*Socioeconomic status.* In this study, a student’s eligibility for free or reduced lunch (FRL) in the National School Lunch Program defined economic disadvantage. This eligibility status is often used as a proxy for a student’s socioeconomic status (SES). Students from families with incomes at or below 130% of the poverty level are eligible for free meals, and those with incomes between 130% and 185% of the poverty level are

eligible for reduced-price meals (Sirin, 2005). There are limitations in using participation in the school lunch program as a measure of SES. For example, the process for determining eligibility is open to mistakes, and eligibility in lunch programs often weakly correlates with academic achievement as grade level increases, possibly as a result of adolescents being less likely than younger youth to file applications (Siren 2005). Given the limitations, eligibility for school-lunch programs is one of the most commonly used SES measure in the current literature on academic achievement (Siren 2005).

Using data reported at the end of the third-grade year, a student's free and reduced-lunch (FRL) eligibility defined the indicator for SES in this study. As Entwisle and Astone (1994) suggest, information about students' SES should be obtained from parents because they are the authoritative source on their own socioeconomic status. Therefore, assuming a parent provided student information upon enrollment in third grade (1998–99) or prior, this became the default source of SES utilized in the study. The student-level cohort data file contained five codes for FRL eligibility:

- 1.) not eligible, coded as 0
- 2.) reduced-price lunch eligibility, coded as 1
- 3.) free lunch eligibility, coded as 2
- 4.) no information available, coded as 3
- 5.) school not participating in the lunch program, coded as 4

Again, using PASW Statistics 18.0, the original code of 1 was converted to 0 to specify students of higher SES; the codes 1 and 2 were recoded to 1 to specify students of lower SES. Students coded 3 and 4 were treated as missing data.

*Density.* As defined for the purpose of this study, an American Indian enrollment of 50% or greater was considered higher density, and school districts with an enrollment of less than 50% were considered lower density. A frequency analysis on the 115 school districts identified that one school district, the Public Schools of Robeson County, maintained a higher density when compared to the other 114. The median for Public Schools of Robeson County's enrollment was 43%. The median for the remaining school districts ranged from 0.03% to 21%. These medians were consistent for each year of data. In calculating the density of each school district, the median of 43% was considered higher density and medians of 21% or less were considered lower. However, given the distribution of the American Indian students in school districts across the state, it could be argued that a district with 21% of the population enrolled could be considered higher density.

*Freshman retention.* Annual summary reports on each school district and high school, completed by the UNC General Administration, provide principals and superintendents information about the academic performance of their graduates. Freshman retention is one performance indicator. For this study, this performance indicator represents the freshmen who enrolled in a UNC institution in the fall of 2007 after graduating from high school and returned for a second year in the fall of 2008. Those students reentering the

UNC System in fall 2008, in the original cohort file, were coded a 1 and those who did not enter the system were coded a 0.

### Analytical Procedures

Because the proficiency of students in this study is a categorical variable, paired sample t-tests and chi-square tests with cross-tabulation were performed at an alpha level of 0.05. Categorical data are data that categorize things and consist of frequencies for each category. A type of categorical variable, called a nominal variable, is one that has two or more categories. However, there is no ordering to the categories. The chi-square test is a procedure for testing hypotheses when data are categorical. It is also, as in this case, used when investigating whether a distribution of one variable is contingent on a second variable (Howell, 2010). Another technique selected for this study was the paired-sample t-test. The paired-sample t-test for correlated means is an appropriate statistical analysis to compare two means on one dependent variable when the two means can be matched or paired on a particular characteristic (Urdan, 2005). This is a repeated-measure analysis in which the same participants' scores on a single dependent variable will be compared by time (pretest vs. posttest).

To establish the general context in Research Question 1, it was necessary to first identify whether a pattern of change existed in proficiency from third through eighth grade. Paired sample t-tests were completed to compare third-grade proficiency to eighth-grade proficiency. A significant difference was found between the proficiency at the two grades.

Therefore, a series of grade-by-grade paired-sample t-tests were performed to identify at what point the change in position occurred, such as in which grade a change occurred. For hypothesis two, the dependent variable was proficiency (two categories) and the independent variable was SES, both high and low. This analysis included a cross-tabulation with a chi-square test by year for reading and math and in high school. This analysis produced an output of 12 tables. The same type of cross-tabulation with chi-square test was conducted to address Research Question 3. The dependent variable was proficiency, and the independent variables were SES and density, both high and low. The analysis for Research Question 3 produced 24 tables of output. To address Research Question 4, a cross-tabulation with a chi-square test was also used. This analysis did not include a gamma coefficient. A logistic regression was used for Research Question 5 to assess the effects of SES, density and student achievement on freshman retention among American Indian students.

### Chapter Summary

The methodology for this study examined whether schools make a significant difference in the educational patterns of American Indian students attending public schools in North Carolina, particularly students from economically disadvantaged backgrounds. Using secondary data, it explored whether evidence existed to support whether Bourdieu's theoretical framework of habitus offered an explanation of the past and present patterns of academic achievement and attainment of American Indians and, therefore, contributed to the

construction and confinement of their present social and economic conditions (Mills & Gale, 2007).

This study aimed to further support the mission of the North Carolina State Advisory Council on Indian Education by addressing the gap in the literature on the state's indigenous student population, as well as providing quantitative analyses of Indian academic achievement in the state. As stated by Mills and Gales (2007), "Sociologists such as Bourdieu force us to make conscious those things that we might prefer to leave unconscious, even though some may have a certain resistance to such analysis" (p. 444).

The Odum Institute at the University of North Carolina at Chapel Hill assisted the researcher with cleaning and analyzing data using PASW Statistics 18.0. Through analytical procedures such as a paired-sample t-test, several chi-square analyses, and a logistic-regression analysis, the researcher's hypotheses were tested. It was hypothesized that results of the analyses would be consistent with Bourdieu's theoretical framework of habitus and would offer a possible explanation for the deep-seated inequalities schools help perpetuate while at the same time they promoting educational reforms and policies that promised a high-quality education for all children regardless of race, income, or where they live.

The next chapter will present the results of the analytical procedures and a discussion of the results in terms of the theoretical framework. Following a discussion of the results, the subsequent chapter will address conclusions, implications for further research, and

education-policy ramifications as practical implications for school leaders working with American Indian students in North Carolina.

## **CHAPTER FOUR**

### **RESULTS**

The purpose of this quantitative study was to investigate Bourdieu's theoretical concept of habitus to determine whether it is predictive of the educational-achievement patterns for American Indian students in North Carolina. Specifically, this study investigated the academic proficiency for a cohort of American Indian students entering third grade in 1998 and examined their progression through public schools in North Carolina through 2007 to determine whether there had been significant patterns and changes in the students' achievement over time. Freshman retention was also examined for those American Indian students entering a UNC System institution of higher education as freshmen in fall 2007. In this chapter, the researcher describes the results of the study's major and guiding questions. Descriptive statistics are presented for the variables associated with the research questions.

The major research question for this study was "Did schools make a positive, significant difference in the educational achievement patterns for American Indian students, more specifically those from economically disadvantaged backgrounds, who attend public schools in North Carolina?" From the major research question, five guiding subquestions became integral components of the study. Second, the results of the findings related to each research question and its corresponding hypothesis are presented and described in the successive sections. All statistical tests were conducted using an alpha level of 0.05.

## Descriptive Statistics

The initial step in analyzing the data involved descriptive statistics for each variable used in the study. Frequency tables were created for each variable using PASW Statistics 18.0.. Frequencies and percentages are presented in Table 1. One thousand four hundred ninety-five American Indian students participated in the study. The students were tracked from 1998, when they were in third grade, through 2007, when they were in twelfth grade. For example, results for grades 3-8 show that 815 (57.0%) students were proficient in math in 1998, and 919 (79.8%) students were proficient in math in 2003. Eight hundred fifteen (57.5%) students were proficient in reading in 1998 and 933 (81.5%) students were proficient in reading in 2003. Table 1 also reflects frequencies for the proficiency for high school and also for SES and school-district density. Seventy-five percent of the students were identified as lower SES compared to 25% higher SES. On average, the higher density of American Indian students in school districts ranged from 50% to 54%. The range for lower density school districts ranged from 45% to 47%.

Table 1

*Frequencies and Percentages on American Indian Proficiency, SES, and School-district Density*

	Proficient		Not Proficient	
End-of Grade (EOG) and End-of-Course (EOC) Test Scores	<i>n</i>	%	<i>n</i>	%
Math				
Grade 3 (1998 )	815	57.0	615	43.0
Grade 4 (1999)	1000	75.1	332	24.9
Grade 5 (2000)	913	71.3	368	28.7
Grade 6 (2001)	909	75.7	292	24.3
Grade 7 (2002)	895	77.6	259	22.4
Grade 8 (2003)	919	79.8	232	20.2
Reading				
Grade 3 (1998 )	815	57.5	602	42.5
Grade 4 (1999)	782	59.4	534	40.6
Grade 5 (2000)	805	63.4	465	36.6
Grade 6 (2001)	700	59.4	479	40.6
Grade 7 (2002)	749	65.8	390	34.2
Grade 8 (2003)	933	81.5	212	18.5

## High School

Grade 9 (2004)	767	80.7	183	19.3
Grade 10 (2005)	590	67.4	286	32.6
Grade 11 (2006)	401	62.2	244	37.8
Grade 12 (2007)	88	36.2	155	63.8

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	High		Low	
SES	<i>n</i>	%	<i>n</i>	%
	313	24.6	961	75.4

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Density of American Indian Students in Districts	High Density		Low Density	
Years	<i>n</i>	%	<i>n</i>	%
Grade 3 (1998 )	794	54.1	675	45.9
Grade 4 (1999)	767	54.1	650	45.9
Grade 5 (2000)	739	54.9	606	45.1
Grade 6 (2001)	626	54.2	528	45.8
Grade 7 (2002)	653	52.7	597	47.3
Grade 8 (2003)	637	54.1	540	45.9
Grade 9 (2004)	527	54.1	448	45.9

Grade 10 (2005)	455	50.5	446	49.5
Grade 11 (2006)	435	51.8	405	48.2
Grade 12 (2007)	125	50.4	123	49.6

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### Research Question 1

To what extent did patterns of American Indian students scoring proficient and non-proficient in reading and math on North Carolina's state assessments from 1997–98 to 2002–03 (grades 3–8) and 2003–04 to 2006–07 in high school reflect a positive change in position that is sustainable over time?

Fifteen paired-samples *t* tests were conducted to test Hypothesis 1 and to determine whether a statistically significant difference existed in the percent of American Indian students scoring proficient from 1998 to 2007 in reading and math on North Carolina's state assessments from, grades 3 through 12. Hypothesis 1 proposed, following Research Question 1, that schools over time would not make a significant difference in the educational achievement for the cohort of American Indian students in this study.

First, an exploratory analysis was conducted on the students' math and reading proficiency in 1998 and 2003 and their high-school proficiency based on End-of-Course Tests in 2004 and 2007. Table 2 shows the results of these tests. For math proficiency comparing 1998 to 2003, the paired-sample *t*-test was statistically significant:  $t(1,126) = -13.88, p = .000$  as the mean score in 1998 ( $M = 0.60, SD = 0.49$ ) was statistically lower than the mean score in 2003 ( $M = 0.81, SD = 0.39$ ). The mean difference was -0.21 with a 95% confidence interval of -0.24 to -0.18. For reading proficiency from 1998 vs. 2003, the paired-sample *t*-test was statistically significant:  $t(1,114) = -15.23, p = .000$  as the mean score in 1998 ( $M = 0.61, SD = 0.49$ ) was statistically lower than the mean score in 2003 ( $M = 0.83, SD = 0.38$ ). The mean difference was -0.22 with a 95% confidence interval of -0.25 to -0.19.

For high school proficiency from 2004 vs. 2007, the paired-sample t-test was statistically significant:  $t(181) = 7.98, p = .000$ , indicating the mean score in 2004 ( $M = 0.76, SD = 0.43$ ) was statistically higher than the mean score in 2007 ( $M = 0.40, SD = 0.49$ ). The mean difference was 0.36 with a 95% confidence interval of 0.27 to 0.45.

Table 2

*Paired-sample t-Test for Math and Reading Proficiency 1998 vs. 2003 and High-school Proficiency 2004 vs. 2007*

Variable	1998		2003		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Math proficiency	0.60	0.49	0.81	0.39	-13.88	1156	.001
Reading proficiency	0.61	0.49	0.83	0.38	-15.23	1114	.001

Variable	2004		2007		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
High-school proficiency	0.76	0.43	0.40	0.49	7.98	181	.001

### *Interpreting the Data*

The results of the pilot analysis Table 2 shows reveal that the proficiency of American Indian students in both math and reading was significantly higher in grade 8 in 2003 than in grade 3 in 1998. These students showed greater proficiency in reading than in math. These patterns indicated a positive trend in achievement in grades 3–8. However, in the high-school years, a comparison of mean proficiencies in 2004 and 2007 reflected a reversal in this trend. American Indian students had a significantly lower mean proficiency score in grade 12 in 2007 when compared to grade 9 in year 2004.

Because the exploratory analysis revealed a significant difference in proficiency between 1998 and 2007, a separate analysis for each year was conducted to identify where the significant differences in proficiency occurred. These results are shown in Table 3. For math proficiency from 1998–99, the paired-sample t-test was statistically significant:  $t(1,321) = -13.56, p = .000$  as the mean score in 1998 ( $M = 0.58, SD = 0.49$ ) was statistically lower than the mean score in 1999 ( $M = 0.75, SD = 0.43$ ). The mean difference was -0.17 with a 95% confidence interval of -0.20 to -0.15. For reading proficiency from 1998–99, the paired-sample t-test was statistically significant:  $t(1,306) = -0.48, p = .632$  suggesting mean differences did not exist.

Table 3

*Paired-sample t-Test on Math and Reading Proficiency 1998–2003 and High-school Proficiency 2004-2007*

	1998		1999		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 3 to Grade 4							
Math proficiency	0.58	0.49	0.75	0.43	-13.56	1321	.000
Reading proficiency	0.59	0.49	0.60	0.49	-0.48	1306	.632

	1999		2000		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 4 to Grade 5							
Math proficiency	0.76	0.43	0.72	0.45	3.68	1265	.000
Reading proficiency	0.60	0.49	0.64	0.48	-3.40	1252	.000

	2000		2001		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 5 to Grade 6							
Math proficiency	0.74	0.44	0.77	0.42	-2.48	1178	.013
Reading proficiency	0.67	0.47	0.60	0.49	5.65	1161	.000

	2001		2002		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 6 to Grade 7							
Math proficiency	0.77	0.42	0.78	0.42	-0.88	1137	.337
Reading proficiency	0.61	0.50	0.67	0.47	-4.68	1116	.000

	2002		2003		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 7 to Grade 8							
Math proficiency	0.79	0.41	0.82	0.38	-3.03	1098	.000
Reading proficiency	0.66	0.47	0.85	0.36	-13.85	1087	.000

	2004		2005		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 9 to Grade 10							
High-school proficiency	0.86	0.34	0.70	0.46	8.81	744	.000

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	2005		2006		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 10 to Grade 11							
High-school proficiency	0.71	0.46	0.65	0.48	2.32	553	.007

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	2006		2007		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade 11 to Grade 12							
High-school proficiency	0.46	0.50	0.36	0.48	2.32	169	.021

For math proficiency from 1999–2000, the paired-sample *t*-test was statistically significant:  $t(1,265) = 3.68, p = .000$  as the mean score in 1999 ( $M = 0.76, SD = 0.43$ ) was statistically higher than the mean score in 2000 ( $M = 0.72, SD = 0.45$ ). The mean difference was 0.04 with a 95% confidence interval of 0.02 and 0.07. For reading proficiency from 1999–2000, the paired-sample *t*-test was statistically significant:  $t(1252) = -3.40, p = .001$ , as the mean score in 1999 ( $M = 0.60, SD = 0.49$ ) was statistically lower than the mean score in 2000 ( $M = 0.64, SD = 0.48$ ). The mean difference was -0.04 with a 95% confidence interval of -0.06 to 0.02.

For math proficiency from 2000, the paired-sample *t*-test was statistically significant:  $t(1,178) = -2.48, p = .013$  as the mean score in 2000 ( $M = 0.74, SD = 0.43$ ) was statistically lower than the mean score in 2001 ( $M = 0.77, SD = 0.45$ ). The mean difference was -0.03 with a 95% confidence interval of -0.52 to -0.01. For reading proficiency from 2000–2001, the paired-sample *t*-test was statistically significant:  $t(1,161) = 5.65, p = .000$ , suggesting

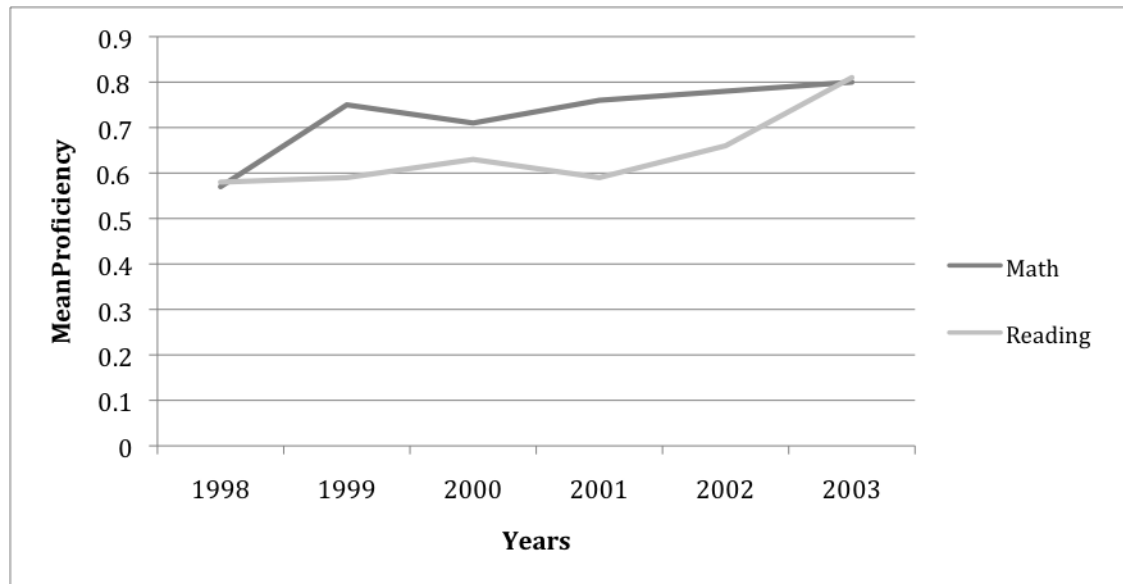
the mean score in 2000 ( $M = 0.67$ ,  $SD = 0.47$ ) was statistically higher than the mean score in 2001 ( $M = 0.60$ ,  $SD = 0.49$ ).

For math proficiency from 2001–2002, the paired-sample t-test was not statistically significant:  $t(1,137) = -0.88$ ,  $p = .337$  as no statistically significant differences existed. For reading proficiency from 2001–2002 the paired-sample t-test was statistically significant,  $t(1,116) = -4.68$ ,  $p = .000$  as the mean score in 2001 ( $M = 0.61$ ,  $SD = 0.50$ ) was statistically lower than the mean score in 2002 ( $M = 0.67$ ,  $SD = 0.47$ ). The mean difference was -0.06 with a 95% confidence interval of -0.09 to -0.04.

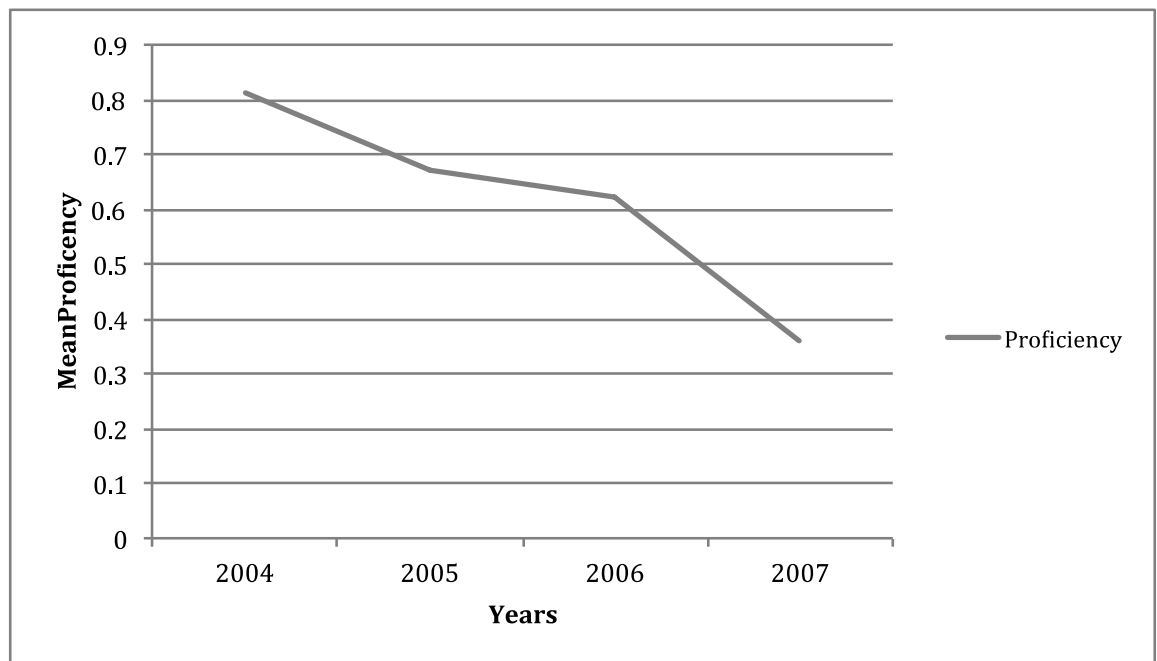
For math proficiency from 2002–2003, the paired-sample t-test was not statistically significant:  $t(1,098) = -3.03$ ,  $p = 0.003$  as the mean score in 2002 ( $M = 0.79$ ,  $SD = 0.41$ ) was statistically lower than the mean score in 2003 ( $M = 0.82$ ,  $SD = 0.38$ ). For reading proficiency from 2002–2003, the paired-sample t-test was statistically significant:  $t(1,087) = -13.85$ ,  $p = .000$  as the mean score in 2002 ( $M = 0.66$ ,  $SD = 0.47$ ) was statistically lower than the mean score in 2003 ( $M = 0.85$ ,  $SD = 0.36$ ). The mean difference was -0.18 with a 95% confidence interval of -0.21 to -0.16.

For high-school proficiency from 2004–2005, the paired-sample t-test was statistically significant:  $t(744) = 8.81$ ,  $p = .001$ , as the mean score in 2004 ( $M = 0.86$ ,  $SD = 0.34$ ) was statistically higher than the mean score in 2005 ( $M = 0.70$ ,  $SD = 0.46$ ). The mean difference was 0.16 with a 95% confidence interval of 0.12 to 0.19. For high-school proficiency from 2005–2006, the paired-sample t-test was also statistically significant:  $t(553) = 2.69$ ,  $p = .007$  suggesting the mean score in 2005 ( $M = 0.71$ ,  $SD = 0.46$ ) was statistically higher than the mean score in 2006 ( $M = 0.65$ ,  $SD = 0.48$ ). Again, for high-school proficiency from 2006–2007, the paired-sample t-test was statistically significant:  $t$

(169) = 2.32,  $p = .021$  as the mean score in 2006 ( $M = 0.46$ ,  $SD = 0.50$ ) was statistically higher than the mean score in 2007 ( $M = 0.36$ ,  $SD = 0.48$ ). The mean difference was 0.10 with a 95% confidence interval of 0.02 to 0.18. Figures 4.1 and 4.2 show the mean proficiency patterns for American Indian students in reading and math from 1998 to 2003 in grades 3–8 and high school from 2004 to 2007. The numbers in Figures 4.1 and 4.2 represent the means for American Indian students from 1998–2003 in math and reading, and high school from 2004–2007. Each year, the mean proficiency is presented. The patterns shown in Figure 4.1 present an upward trend in proficiency. In Figure 4.2 the trend tends downward and supports Hypothesis 1, which is that over time schools did not make a significant difference in the educational achievement for the cohort of American Indian students in this study.



*Figure 4.1.* Mean proficiency proportion for American Indian students in reading and math from 1998–2003.



*Figure 4.2.* Mean proficiency proportion for American Indian students in high school from 2004–2007.

For math proficiency, in American Indian students, from grades 3 to 4, a statistically significant increase occurred. For grades 4 to 5, a statistically significant decrease in math proficiency occurred. From grades 5 to 6, a statistically significant increase in math proficiency occurred. From grades 7 to 8, a statistically significant increase in math proficiency occurred, as well.

For reading proficiency, in American Indian students, grades 4–8, a statistically significant mean difference occurred year to year. From grades 4 to 5, reading proficiency statistically significantly increased. From grade 5 to 6, reading proficiency statistically significantly decreased. For grade 6–8, a statistically significant improvement occurred in reading proficiency year to year.

For American Indian students in high school, year to year, a statistically significant decrease occurred in mean proficiency scores. From grades 9–12, American Indian students statistically scored significantly lower year to year on proficiency tests.

## Research Question 2

In a comparison of proficiency, do statistically significant differences exist in student achievement across time between low SES American Indian students and higher SES American Indian students?

Hypothesis 2 is that American Indians with low SES will perform lower on tests than American Indians with high SES. To examine this hypothesis, 16 cross-tabulation chi-square tests were conducted to assess whether, in a comparison of proficiency, statistically significant differences existed in student achievement across time between low SES

American Indian students and high SES American Indian students. Table 4 shows the results for these chi-square analyses.

Figure 3 shows the results of the tests visually displaying the average percent proficient on math and reading for American Indian students 2004–2007 for low vs. high SES. The chi-square test for the math proficiency and SES table in 1998 was significant:  $\chi^2(1) = 37.15, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES in 1998 was significant:  $\chi^2(1) = 42.95, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

Table 4

*Chi-square Tests on Math, Reading, and High-school Proficiency 1998–2007*

Variable	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
<b>Grade 3</b>					
Math 1998				37.15	.000
High SES	88 (28.6)	220 (71.4)	308 (100)		
Low SES	444 (48.5)	472 (51.5)	916 (100)		
Reading 1998				42.95	.000
High SES	83 (26.9)	225 (73.1)	308 (100)		
Low SES	438 (48.3)	468 (51.7)	906 (100)		
<b>Grade 4</b>					
Math 1999				17.18	.000
High SES	49 (15.9)	260 (84.1)	309 (100)		
Low SES	245 (27.7)	641 (72.3)	886 (100)		

Reading 1999			27.42	.000
	84 (27.3)	224 (72.7)	308	
High SES			(100)	
	386 (44.3)	486 (55.7)	872	
Low SES			(100)	
<b>Grade 5</b>				
Math 2000			28.03	.000
	49 (16.7)	244 (83.3)	293	
High SES			(100)	
	283 (32.9)	576 (67.1)	859	
Low SES			(100)	
Reading 2000			37.16	.000
	64 (21.8)	229 (78.2)	293	
High SES			(100)	
	354 (41.7)	494 (58.3)	848	
Low SES			(100)	
<b>Grade 6</b>				
Math 2001			18.80	.000
	41 (14.6)	239 (85.4)	280	
High SES			(100)	

	219 (27.5)	576 (72.5)	795 (100)		
Low SES					
Reading 2001				39.50	.000
	70 (25.2)	208 (74.8)	278 (100)		
High SES					
	364 (46.8)	414 (53.2)	778 (100)		
Low SES					
<b>Grade 7</b>					
Math 2002				20.54	.000
	33 (12.3)	235 (87.7)	268 (100)		
High SES					
	197 (25.7)	570 (74.3)	767 (100)		
Low SES					
Reading 2002				31.86	.000
	55 (20.6)	212 (79.4)	267 (100)		
High SES					
	300 (39.7)	455 (60.3)	755 (100)		
Low SES					
<b>Grade 8</b>					
Math 2003				31.38	.000

	22 (8.4)	239 (91.6)	261 (100)		
High SES					
	189 (24.6)	578 (75.4)	767 (100)		
Low SES					
Reading 2003				24.20	.000
	22 (8.4)	239 (91.6)	261 (100)		
High SES					
	169 (22.2)	593 (77.8)	762 (100)		
Low SES					
<b>Grade 9</b>					
High School 2004				12.92	.000
	28 (11.7)	211(88.3)	239 (100)		
High SES					
	138 (22.6)	473 (77.4)	611 (100)		
Low SES					
<b>Grade 10</b>					
High School 2005				20.75	.000
	46 (21.0)	173 (79.0)	265 (100)		
High SES					

	212 (38.1)	344 (61.9)	556 (100)		
Low SES					
<b>Grade 11</b>					
High School 2006				11.47	.001
	49 (29.0)	120 (71.0)	169 (100)		
High SES					
	181 (44.1)	229 (55.9)	410 (100)		
Low SES					
<b>Grade 12</b>					
High School 2007				0.04	.846
	32 (61.5)	20 (38.5)	52 (100)		
High SES					
	104 (63.0)	61 (37.0)	165 (100)		
Low SES					

*Note.*  $df = 1$ , Values in parenthesis are percentages

The chi-square test for the math proficiency and SES table in 1999 was significant:  $\chi^2(1) = 17.18, p = .000$ , suggesting that students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. The chi-square test comparing reading proficiency and SES in 1999 was significant:  $\chi^2(1) = 27.42, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing math proficiency and SES in 2000 was significant:  $\chi^2(1) = 28.03, p = .000$ , suggesting that students who were low SES tended to be non-proficient at a higher rate than those who were at a higher SES. The chi-square comparing reading proficiency and SES in 2000 was significant:  $\chi^2(1) = 37.16, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing math proficiency and SES in 2001 was significant:  $\chi^2(1) = 18.80, p = .000$ , suggesting that students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. The chi-square test comparing reading proficiency and SES in 2001 was significant:  $\chi^2(1) = 39.50, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing math proficiency and SES in 2002 was significant:  $\chi^2(1) = 20.54, p = .000$ , suggesting that students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. The chi-square test comparing reading proficiency and SES in 2002 was significant:  $\chi^2(1) = 31.86, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing math proficiency and SES in 2003 was significant:  $\chi^2(1) = 31.38, p = .000$ , suggesting that students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. The chi-square test comparing reading proficiency and SES in 2003 was significant:  $\chi^2(1) = 24.20, p = .000$ ,

suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing high-school proficiency and SES in 2004 was significant:  $\chi^2(1) = 12.92, p = .000$ , suggesting that students who were low SES tended to be nonproficient at a higher rate than those who were at a higher SES.

The chi-square test comparing high-school proficiency and SES in 2005 was significant:  $\chi^2(1) = 20.75, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES.

The chi-square test comparing high-school proficiency and SES in 2006 was significant:  $\chi^2(1) = 11.48, p = .001$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square comparing high-school proficiency and SES in 2007 was not significant:  $\chi^2(1) = 0.04, p = .846$ .

### *Interpreting the Data*

Data in Table 4 reveal that socioeconomic backgrounds make a difference in the proficiency of American Indian students. From grades 3–8, American Indian students from higher SES backgrounds tended to score proficient in both math and reading, and American Indian students who tended to score nonproficient tended to be from lower SES backgrounds. Likewise, in high school, for grades 9–11, as the students tended to score

proficient, they tended to be in the higher SES group. However, for grade 12, significant differences did not exist between SES and proficiency.

The results in Figures 4.3 and 4.4 illustrate that from 1998 to 2007 American Indian students from higher socioeconomic backgrounds consistently reflected greater mean proficiencies than students of lower socioeconomic backgrounds. The only exception is results for the last year of high school, which show greater proficiency for lower SES students. Overall, the proficiency of lower SES students is significantly lower than those of higher SES and suggest that Bourdieu's theoretical framework of habitus is supported, that is, "the habitus is the source of 'objective' practices, but is itself a set of 'subjective' generative principles produced by the 'objective' patterns of social life" (Jenkins, 2002, p. 82). As hypothesized, higher SES American Indian students showed higher rates of academic proficiency on standardized math, reading, and high-school assessments than students from lower SES backgrounds.

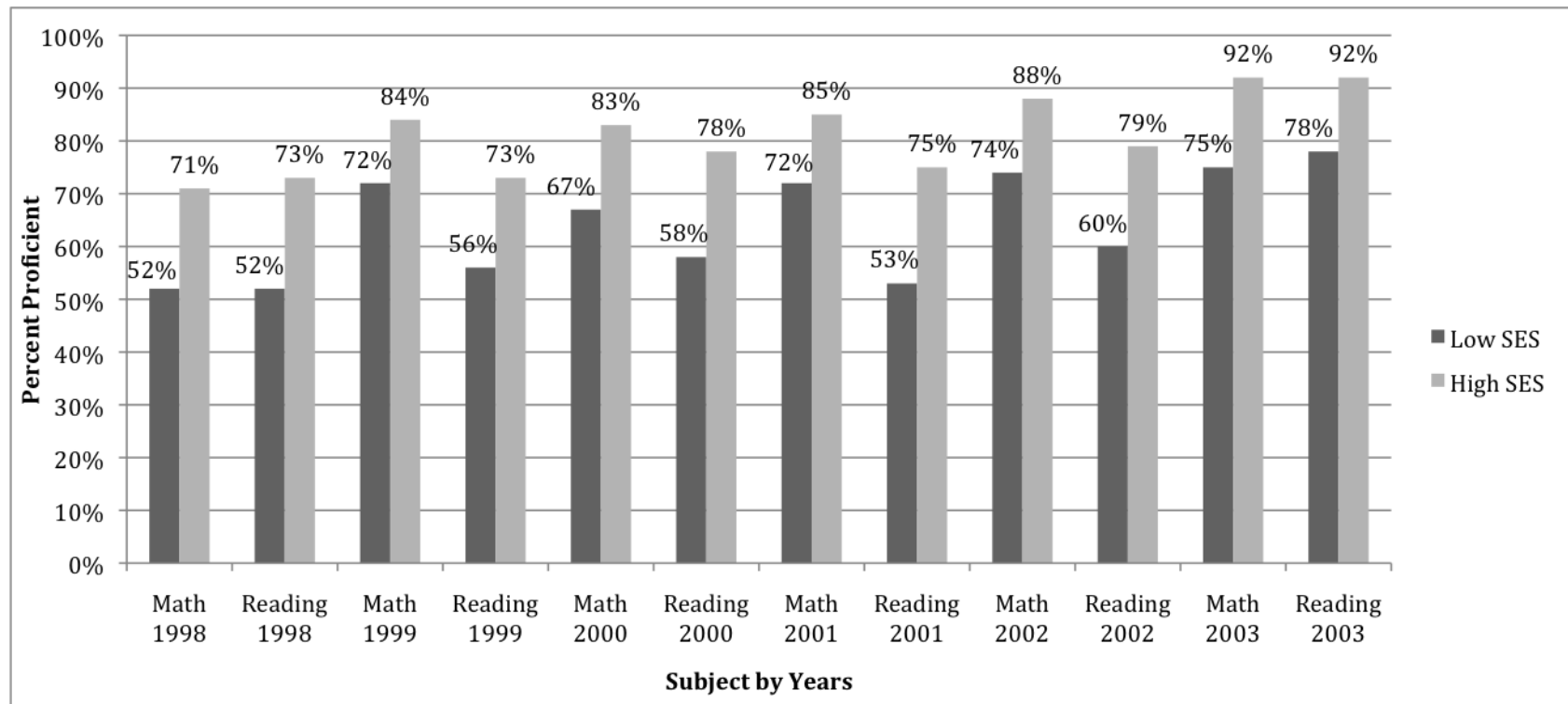
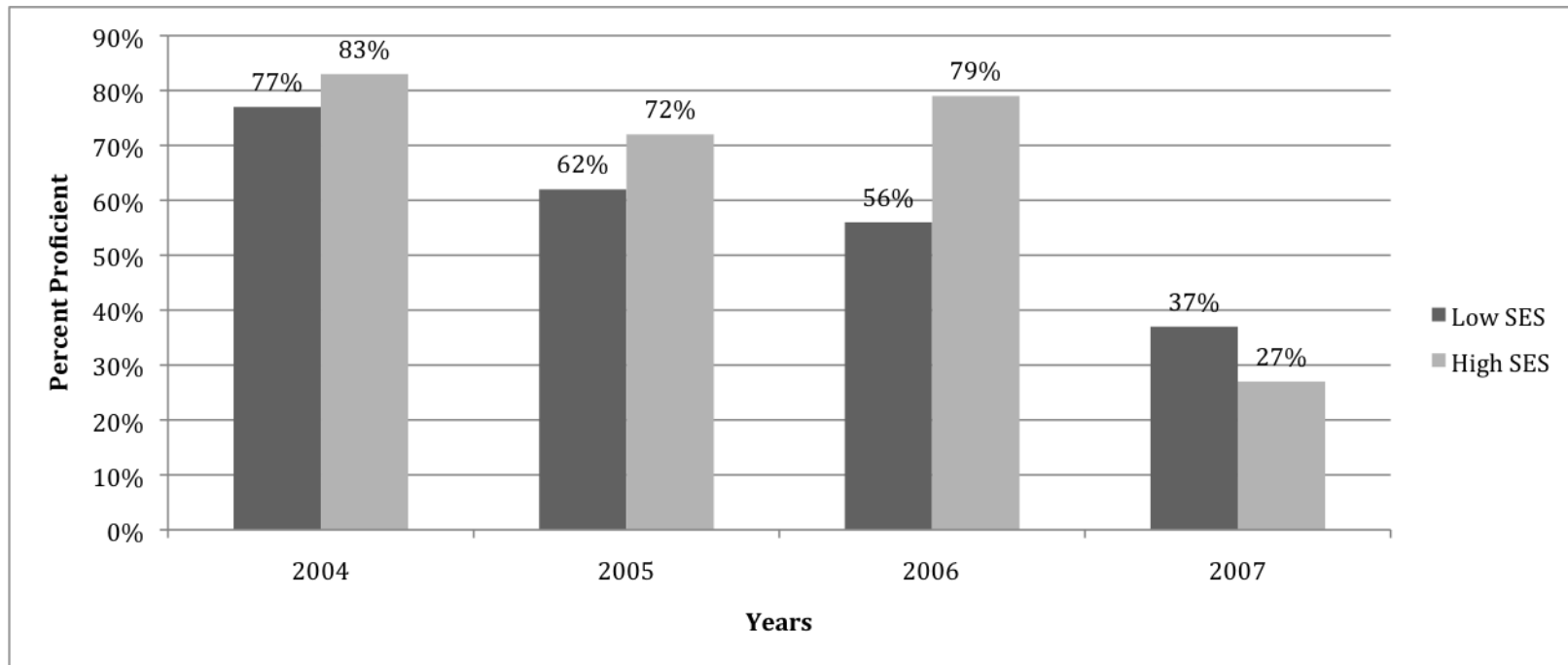


Figure 4.3. Percent proficiency on math and reading for American Indian students 1998–2003 for low vs. high SES.



*Figure 4.4.* Percent proficiency of high-school American Indian students 2004–2007 for low vs. high SES.

### Research Question 3

Did the relationships found between SES and students' proficiency differ by school-district density?

To examine Research Question 3, 24 chi-square tests were conducted to assess whether a statistically significant relationship existed between math and reading proficiency scores (high vs. low) and SES (high vs. low) by school-district density (high vs. low) across grades and/or years. The hypothesis (H3) was that the density of a school district in terms of the percentage of American Indian students it enrolled would not make a difference in the math, reading and high-school proficiency of lower SES students.

*1998*

The chi-square test comparing math proficiency and SES with low district density in 1998 was significant:  $\chi^2(1) = 17.42, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 1998 was significant:  $\chi^2(1) = 18.20, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 5 presents the results of the chi-square tests.

Table 5

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 1998 (Grade 3)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				17.42	.000
High SES	40 (24.5)	123 (75.5)	163 (100)		
Low SES	162 (43.5)	210 (56.5)	372 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				18.20	.000
High SES	38 (23.3)	125 (76.7)	163 (100)		
Low SES	157 (42.7)	211 (57.3)	368 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### *Interpreting the Data*

In low-density districts in 1998, for both math and reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. As shown in Table 5, 76% of the third-grade American Indian students from higher socioeconomic backgrounds were proficient in math and 77% scored

proficiency in reading. In comparison, 57% of the third-grade students from lower socioeconomic backgrounds scored proficiency in math and reading.

The chi-square test comparing math proficiency and SES with high district density in 1998 was significant:  $\chi^2 (1) = 17.86, p = .000$ , suggesting that, in high-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with high district density in 1998 was significant:  $\chi^2 (1) = 22.27, p = .000$ , suggesting that, in high-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 6 presents the results of the chi-square tests.

Table 6

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 1998 (Grade 3)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				17.86	.000
High SES	46 (39.9)	94 (67.1)	140 (100)		
Low SES	279 (52.9)	248 (47.1)	527 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				22.27	.000

---

High SES	43 (30.7)	97 (69.3)	140 (100)
Low SES	277 (53.2)	244 (46.8)	521 (100)

---

*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In high-density districts in 1998, for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 1998 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES they tended to be nonproficient. As shown in Table 6, 67% of the American Indian third-grade students from higher socioeconomic backgrounds were proficient in math, and 69% scored proficiency in reading. In comparison, only 47% of the third-grade students from lower socioeconomic backgrounds scored proficiency in math and reading.

### *1999*

The chi-square test comparing math proficiency and SES with low district density in 1999 was significant:  $\chi^2 (1) = 4.30, p = .038$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 1999 was significant:  $\chi^2 (1) = 7.98, p = .005$ , suggesting that, in low-density districts, students who were low SES tended to be nonproficient at a higher rate than those who were at a higher SES. Table 7 presents the results of the chi-square tests.

Table 7

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 1999 (Grade 4)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				4.30	.038
High SES	29 (17.4)	138 (82.6)	167 (100)		
Low SES	97 (25.5)	284 (74.5)	381 (100)		

Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				7.98	.005
High SES	42 (23.3)	124 (74.7)	166 (100)		
Low SES	142 (37.8)	234 (62.2)	376 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### *Interpreting the Data*

In low-density districts in 1999 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In low-density districts in 1999 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. As shown in Table 7, 67% of the American Indian fourth-grade students

from higher socioeconomic backgrounds were proficient in math, and 69% scored proficiency in reading. In comparison, only 47% of the fourth-grade students from lower socioeconomic backgrounds scored proficiency in math and reading.

The chi-square test comparing math proficiency and SES with high district density in 1999 was significant:  $\chi^2(1) = 14.41, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with high district density in 1999 was significant:  $\chi^2(1) = 17.97, p = .000$ , suggesting that, for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 8 presents the results of the chi-square tests.

Table 8

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 1999 (Grade 4)*

Math	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				14.41	.000
High SES	19 (13.5)	122 (86.5)	141 (100)		
Low SES	148 (29.3)	357 (70.7)	505 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				17.97	.000
High SES	41 (29.1)	100 (70.9)	141 (100)		
Low SES	244 (49.2)	252 (50.8)	496 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### *Interpreting the Data*

In high-density districts in 1999 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 1999 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. Table 8 shows 87% of the American Indian fourth-grade students from higher socio-economic backgrounds were proficient in math, and 71% scored proficiency in

reading. In comparison, only 71% of the fourth-grade students from lower socioeconomic backgrounds scored proficiency in math, and 51% scored proficiency in reading.

2000

The chi-square test comparing math proficiency and SES with low district density in 2000 was significant:  $\chi^2(1) = 14.14, p = .000$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES and, as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 2000 was significant:  $\chi^2(1) = 21.00, p = .000$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 9 presents results of the chi-square tests.

Table 9

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 2000 (Grade 5)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				14.14	.000
High SES	19 (12.4)	134 (87.6)	153 (100)		
Low SES	98 (27.8)	255 (72.2)	353 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				21.00	.000

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High SES	24 (15.9)	127 (84.1)	151 (100)
Low SES	127 (36.4)	222 (63.6)	349 (100)

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*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2000 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In low-density districts in 2000 for reading, as students tended toward high SES, they tended to be proficient. Again, as students tended toward low SES, they tended to be nonproficient. As Table 9 shows, 88% of the American Indian fifth-grade students from higher socioeconomic backgrounds were proficient in math and 84% scored proficiency in reading. In comparison, only 72% of the fifth-grade students from lower socioeconomic backgrounds scored proficiency in math, and 64% were proficient in reading.

The chi-square test comparing math proficiency and SES with high district density in 2000 was significant:  $\chi^2 (1) = 13.22, p = .000$ , suggesting that as students tended to be proficient, they tended toward higher SES and, as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with high district density in 2000 was significant:  $\chi^2 (1) = 13.57, p = .001$ , suggesting that, for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 10 presents the results of the chi-square tests.

Table 10

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 2000 (Grade 5)*

Math	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				13.22	.000
High SES	28 (20.9)	106 (79.1)	134 (100)		
Low SES	184 (37.7)	304 (62.3)	488 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				13.57	.000
High SES	39 (28.7)	97 (71.3)	136 (100)		
Low SES	223 (46.4)	258 (53.6)	481 (100)		

*Note.* *df* = 1, Values in parenthesis are percentages

#### *Interpreting the Data*

In high-density districts in 2000 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 2000 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. As Table 10 shows, 88% of the American Indian fifth-grade students from higher socioeconomic backgrounds were proficient in math, and 84% scored proficiency in

reading. In comparison, only 72% of the fifth-grade students from lower socioeconomic backgrounds scored proficiency in math, and 64% were proficient in reading.

2001

The chi-square test comparing math proficiency and SES with low district density in 2001 was significant:  $\chi^2 (1) = 4.61, p = .032$ , suggesting that, in low density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 2001 was significant:  $\chi^2 (1) = 12.96, p = .000$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 11 presents the results of the chi-square tests.

Table 11

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 2001 (Grade 6)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				4.61	.032
High SES	24 (18.2)	108 (81.8)	132 (100)		
Low SES	90 (27.8)	234 (72.2)	324 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$

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			12.96	.000
High SES	33 (25.0)	99 (75.0)	132 (100)	
Low SES	139 (43.0)	184 (57.0)	323 (100)	

---

*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2000 for math, as students in fourth grade tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In low-density districts in 2000 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. As Table 11 shows, 82% of the American Indian sixth-grade students from higher socioeconomic backgrounds were proficient in math, and 75% scored proficiency in reading. In comparison, only 72% of the sixth-grade students from lower socioeconomic backgrounds scored proficiency in math, and 57% scored proficiency in reading.

The chi-square test comparing math proficiency and SES with high district density in 2001 was significant:  $\chi^2 (1) = 11.88, p = .001$ , suggesting that as students in high-density districts tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with high district density in 2001 was significant:  $\chi^2 (1) = 20.72, p = .000$ , suggesting that, for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 12 presents the results of the chi-square tests.

Table 12

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 2001 (Grade 6)*

Math	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				11.88	.001
High SES	17 (13.4)	110 (86.6)	127 (100)		
Low SES	127 (28.4)	320 (71.6)	447 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				20.72	.000
High SES	35 (28.0)	90 (72.0)	125 (100)		
Low SES	220 (51.0)	211 (49.0)	431 (100)		

*Note.* *df* = 1, Values in parenthesis are percentages

### *Interpreting the Data*

In high-density districts in 2001 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 2001 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. As Table 12 shows, 87% of the American Indian sixth-grade students from higher socioeconomic backgrounds were proficient in math, and 72% scored proficiency in reading. In comparison, 72% of the sixth-grade students from lower

socioeconomic backgrounds scored proficiency in math, and 49% scored proficiency in reading.

2002

The chi-square test comparing math proficiency and SES with low district density in 2002 was significant:  $\chi^2(1) = 14.68, p = .000$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES and, as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 2002 was significant:  $\chi^2(1) = 18.75, p = .000$ , suggesting that, in low-density districts, students who were low SES tended to be nonproficient at a higher rate than those who were at a higher SES. Table 13 presents the results of the chi-square tests.

Table 13

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 2002 (Grade 7)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				14.68	.000
High SES	13 (9.1)	130 (90.9)	143 (100)		
Low SES	84 (24.3)	262 (75.7)	346 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$

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			18.75	.000
High SES	22 (15.4)	121 (84.6)	143 (100)	
Low SES	120 (35.0)	223 (65.0)	343 (100)	

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*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2002 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES they tended to be nonproficient. In low-density districts in 2002 for reading, as students tended toward high SES, they tended to be proficient. Also, students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. As Table 13 shows, 91% of the American Indian seventh-grade students from higher socioeconomic backgrounds were proficient in math, and 85% scored proficiency in reading. In comparison, only 76% of the seventh-grade students from lower socioeconomic backgrounds scored proficiency in math, and 65% scored proficiency in reading.

The chi-square test comparing math proficiency and SES with high district density in 2002 was significant:  $\chi^2(1) = 6.92, p = .009$ , suggesting that students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. The chi-square test comparing reading proficiency and SES with high district density in 2002 was significant:  $\chi^2(1) = 12.37, p = .000$ , suggesting that, for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient they tended toward lower SES. Table 14 presents the results of the chi-square tests.

Table 14

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 2002 (Grade 7)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				6.92	.009
High SES	19 (15.3)	105 (84.7)	124 (100)		
Low SES	113 (26.8)	308 (73.2)	421 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				12.37	.000
High SES	32 (26.0)	91 (74.0)	123 (100)		
Low SES	180 (43.7)	232 (56.3)	412 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### *Interpreting the Data*

In high-density districts in 2002 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 2002 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES they tended to be nonproficient. Table 14 illustrates 85% of the American Indian seventh-grade students from higher socioeconomic backgrounds were proficient in math, and 74% scored proficiency in reading. In comparison, only 73% of the seventh-grade students from lower

socioeconomic backgrounds scored proficiency in math, and 56% scored proficiency in reading.

2003

The chi-square test comparing math proficiency and SES with low district density in 2003 was significant:  $\chi^2 (1) = 16.22, p = .000$ , suggesting that, in low-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with low district density in 2003 was significant:  $\chi^2 (1) = 14.49, p = .000$ , suggesting that in low density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 15 presents results of the chi-square tests.

Table 15

*Chi-square Tests on Math and Reading Proficiency and SES for Low-density Districts in 2003 (Grade 8)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				16.22	.000
High SES	13 (9.7)	121 (90.3)	134 (100)		
Low SES	85 (26.8)	232 (73.2)	317 (100)		
Reading	Not proficient	Proficient	Total	$\chi^2$	$p$

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			14.49	.000
High SES	8 (6.0)	126 (94.0)	134 (100)	
Low SES	65 (20.4)	254 (79.6)	319 (100)	

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*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2003, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be not proficient. In high-density districts in 2003, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. Data in Table 15 illustrate 90% of the American Indian eighth-grade students from higher socioeconomic backgrounds were proficient in math, and 94% scored proficiency in reading. In comparison, only 73% of the eighth-grade students from lower socioeconomic backgrounds scored proficiency in math, and 80% scored proficiency in reading.

The chi-square test comparing math proficiency and SES with high district density in 2003 was significant:  $\chi^2 (1) = 16.73, p = .000$ , suggesting that as students in high-density districts tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. The chi-square test comparing reading proficiency and SES with high district density in 2003 was significant:  $\chi^2 (1) = 8.92, p = .003$ , suggesting that for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 16 presents the results of the chi-square tests.

Table 16

*Chi-square Tests on Math and Reading Proficiency and SES for High-density Districts in 2003 (Grade 8)*

Math	Not proficient	Proficient	Total	$\chi^2$	$p$
				16.73	.000
High SES	8 (6.6)	114 (93.4)	122 (100)		
Low SES	101 (23.2)	335 (76.8)	436 (100)		

Reading	Not proficient	Proficient	Total	$\chi^2$	$p$
				8.92	.003
High SES	14 (11.5)	108 (88.5)	122 (100)		
Low SES	103 (24.0)	326 (76.0)	429 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### *Interpreting the Data*

In high-density districts in 2003 for math, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. In high-density districts in 2003 for reading, as students tended toward high SES, they tended to be proficient. Also, as students tended toward low SES, they tended to be nonproficient. Data in Table 16 illustrate 93% of the American Indian eighth-grade students from higher socioeconomic backgrounds were proficient in math, and 89% scored proficiency in reading. In comparison, only 77% of the eighth-grade students from lower

socioeconomic backgrounds scored proficiency in math, and 76% scored proficiency in reading.

2004

The chi-square test comparing high-school proficiency and SES with low district density in 2004 was significant:  $\chi^2(1) = 9.04$ ,  $p = .003$ , suggesting that in low-density districts, students who were at a low SES tended to be nonproficient at a higher rate than those who were at a higher SES. Table 17 presents the results of the chi-square tests.

The chi-square test comparing high-school proficiency and SES with low district density in 2004 was significant:  $\chi^2(1) = 3.84$ ,  $p = .050$ , suggesting that in high-density districts, as students tended to be proficient, they tended toward higher SES, and as students tended to be nonproficient, they tended toward lower SES. Table 19 presents the results of the chi-square tests.

Table 17

*Chi-square Tests on High-school Proficiency and SES for Low-density Districts in 2004 (Grade 9)*

High School	Not proficient	Proficient	Total	$\chi^2$	$p$
				9.04	.003
High SES	9 (7.3)	114 (92.7)	123 (100)		
Low SES	49 (19.2)	206 (80.8)	255 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

Table 18

*Chi-square Tests on High-school Proficiency and SES for High-density Districts in 2004*

(Grade 9)

High School	Not proficient	Proficient	Total	$\chi^2$	$p$
				3.84	.050
High SES	19 (16.4)	97 (83.6)	116 (100)		
Low SES	89 (25.2)	264 (74.8)	353 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2004, as American Indian ninth-grade students tended toward high SES, they tended to be proficient (93%). Also, as ninth-grade students tended toward low SES, they tended to be nonproficient (81%). In high-density districts in the same year, as students tended toward high SES, they tended to be proficient (84%), whereas the 75% of the students from low SES backgrounds were not proficient.

### *2005*

The chi-square test comparing high-school proficiency and SES with low district density in 2005 was significant:  $\chi^2 (1) = 10.96, p = .001$ , suggesting that as students in high-density districts tended to be proficient, they tended toward higher SES and, as students tended to be nonproficient, they tended toward lower SES. Table 19 presents the results of the chi-square tests.

The chi-square test comparing high-school proficiency and SES with high district density in 2005 was significant:  $\chi^2 (1) = 9.23, p = .002$ , suggesting that for students in high-density districts, as they tended to be proficient, they tended toward higher SES, and as

students tended to be nonproficient, they tended toward lower SES. Table 20 presents the results of the chi-square tests.

Table 19

*Chi-square Tests on High-school Proficiency and SES for Low-density Districts in 2005 (Grade 10)*

Variable	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				10.96	.001
High SES	22 (18.8)	95 (81.2)	117 (100)		
Low SES	92 (35.8)	165 (64.2)	257 (100)		

*Note.* *df* = 1, Values in parenthesis are percentages

Table 20

*Chi-square Tests on High-school Proficiency and SES for High-density Districts in 2005 (Grade 10)*

Variable	Not proficient	Proficient	Total	$\chi^2$	<i>p</i>
				9.23	.002
High SES	22 (22.4)	76 (77.6)	98 (100)		
Low SES	115 (39.4)	177 (60.6)	292 (100)		

*Note.* *df* = 1, Values in parenthesis are percentages

### *Interpreting the Data*

In low-density districts in 2005, as American Indian tenth-grade students tended toward high SES, they tended to be proficient (81%). Also, as tenth-grade students tended toward low SES, they tended to be nonproficient (64%). In high-density districts in 2005, as

students tended toward high SES they tended to be proficient (78%). Also, as students tended toward low SES, they tended to be nonproficient (61%).

2006

The chi-square test comparing high-school proficiency and SES with low district density in 2006 was significant:  $\chi^2 (1) = 11.45$   $p = .001$ , suggesting that as students in high density districts tended to be proficient, they tended toward higher SES and, as students tended to be non-proficient, they tended toward lower SES. Table 21 presents the results of the chi-square tests.

The chi-square tests comparing high-school proficiency and SES with high district density in 2006 was not statistically significant:  $\chi^2 (1) = 1.82$ ,  $p = .178$ . Table 22 presents the results of the chi-square analysis.

Table 21

*Chi-square Tests on High-school Proficiency and SES for Low-density Districts in 2006 (Grade 11)*

Variable	Not proficient	Proficient	Total	$\chi^2$	$p$
				11.45	.001
High SES	20 (26.3)	56 (73.7)	76 (100)		
Low SES	89 (49.2)	92 (50.8)	181 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

Table 22

*Chi-square Tests on High-school Proficiency and SES for High-density Districts in 2006 (Grade 11)*

Variable	Not proficient	Proficient	Total	$\chi^2$	$p$
				1.82	.178
High SES	26 (30.2)	60 (69.8)	86 (100)		
Low SES	85 (38.5)	136 (61.5)	221 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

*Interpreting the Data*

In low-density districts in 2006, as American Indian eleventh-grade high SES students tended to be proficient (74%), and low SES students tended to be nonproficient (51%). In high-density districts in 2006, significant differences did not exist on proficiency by SES.

*2007*

The chi-square tests comparing high-school proficiency and SES with low district density in 2007 was not statistically significant:  $\chi^2 (1) = 1.02, p = .314$ . Table 23 presents the results of the chi-square tests. The chi-square test comparing high-school proficiency and SES with high district density in 2007 was not statistically significant:  $\chi^2 (1) = 0.41, p = .523$ . Table 24 presents the results of the chi-square tests.

Table 23

*Chi-square Tests on High-school Proficiency and SES for Low-density Districts in 2007 (Grade 12)*

Variable	Not proficient	Proficient	Total	$\chi^2$	$p$
				1.02	.314
High SES	14 (53.8)	12 (46.2)	26 (100)		
Low SES	50 (64.9)	27 (35.1)	77 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

Table 24

*Chi-square Tests on High-school Proficiency and SES for High-density Districts in 2007 (Grade 12)*

Variable	Not proficient	Proficient	Total	$\chi^2$	$p$
				0.41	.523
High SES	18 (69.2)	8 (30.8)	26 (100)		
Low SES	53 (62.4)	32 (37.6)	85 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

In 2007, a significant difference did not exist in proficiency by SES in high- or low-density schools for American Indian twelfth graders. As shown in the results of the analyses testing Hypothesis 3, the density of a school district in terms of the percentage of American

Indian students it enrolled did not reveal a significant difference in the percentages of proficiency for lower SES American Indian students on state assessments in math, reading, and high-school assessments. Results supported the presented hypothesis.

#### Research Question 4

How does the freshman retention of American Indian students who graduated from North Carolina's public high schools and enrolled in the UNC System in the fall of 2007 compare to the retention of the population of non-American Indian students enrolled in the system during the same period of time?

It is hypothesized following Research Question 4 that American Indian students who graduated from North Carolina's public high schools and entered the UNC System as freshmen in the fall of 2007 when compared to the retention of non-American Indian students who entered the system during the same period of time will reflect a lower percentage of retention. Data retrieved from the UNC System were used in this analysis. According to UNC-GA records, a total of 22,775 students entered the system. The total number of students who identified as American Indian was 266. Eighty-two percent of the non-American Indian student population returned for a second year in fall 2008. As Table 25 shows, the percentage of American Indian students returning was 73.3 (195 out of the 266 American Indian students). This reveals a drop out rate of 27% compared to 18% for non-American Indian students. The percentage of non-American Indian students returning was 82%. To examine the hypothesis, a chi-square analysis was conducted to examine the difference between the freshman-retention rate of American Indian students who enroll in the UNC System and non-American Indian students enrolled in the system in 2007. The

result was statistically significantly different:  $\chi^2(1) = 4.53, p = .03$ , suggesting American Indian students have a lower reenrollment rate than non-American Indian students, which supported the proposed hypothesis.

Table 25

*Chi-square Test on Freshman retention in Institutions of the UNC System*

Variable	Retained In Year 2	Not Retained In Year 2	Total	$\chi^2$	<i>p</i>
				4.53	.030
American Indian Students	195 (73.3)	71 (26.6)	266 (100)		
Non-American Indian Students	18458 (81.9)	4051 (18.1)	22509 (100)		

*Note.*  $df = 1$ , Values in parenthesis are percentages

#### Research Question 5

How did students' SES, school density, and student proficiency affect freshman retention for American Indian students?

For Research Question 5, three logistic regressions were used to assess the effects of SES, density, and student achievement, separately, on freshman retention among American Indian students in the cohort. Further, it was hypothesized that the students' SES background would affect their retention in higher education institutions but not their level of proficiency nor the density of the American Indian student population in the school district from which they completed high school. Results revealed that SES and the percent proficient were significant predictors of freshman retention separately, so a fourth logistic regression was conducted with SES and the percent proficient as simultaneous predictor variables.

The results of the logistic regression where SES predicted freshman retention was significant:  $\chi^2(1) = 17.83, p = .000$ , suggesting that the independent variable (SES) was a significant predictor of freshman retention of American Indian students. The pseudo ( $R^2$ ) for SES alone was 15.8% of the variance in freshman retention, and overall, the regression correctly predicted 77.3% of freshman retention among American Indian students.

The results of the logistic regression with percent proficient predicting freshman retention was significant:  $\chi^2(1) = 5.00, p = .025$ , suggesting that the independent variable (% proficient) was a significant predictor of freshman retention of American Indian students. The pseudo ( $R^2$ ) for percent proficient was 4.3% of the variance in freshman retention, and overall, the regression correctly predicted a 79.8% freshman retention among American Indian students.

The results of the logistic regression with density predicting freshman retention was not significant:  $\chi^2(1) = 1.33, p = .249$ . Density accounted for ( $R^2$ ) 1.1% of the variance in freshman retention. Hence, American Indian density is not a significant predictor of freshman retention.

The results of the logistic regression with percent proficient and SES predicting freshman retention was significant:  $\chi^2(2) = 19.11, p = .000$ , suggesting that in the overall model, the independent variables were significant predictors of freshman retention of American Indian students. The pseudo ( $R^2$ ) for SES and percent proficient was 17.8% of the variance in freshman retention, and overall, the regression correctly predicted a 78.4% freshman retention among American Indian students. The only significant predictor in the model was SES. Hence, we go back to model 1 to interpret the effect of SES. As students tended toward high SES, they were 5.24 times more likely to be retained. Table 26

summarizes the results of the regression. As hypothesized, students' SES backgrounds significantly affected their retention in higher education institutions. Their level of proficiency was predicted to show no significance. However, results showed evidence of some when it was modeled alone. The significance shown was not to the degree of the students' SES. Density of the American Indian student population in the school district from which students' completed high school, as predicted, did not significantly affect freshman retention of this population.

Table 26

*Logistic Regression of Retention of American Indians at UNC System Universities on SES, Percent Proficient, and American Indian Density*

<b>Variables</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
SES	0.18*			0.19*
Percent Proficient		1.02*		1.02
AI Density			0.34	
Model $\chi^2$ (df)	17.83(1)*	5.00(1)*	1.33(1)	19.12(2)*

\* $p < .05$

### *Interpreting the Data*

When modeled alone, SES and percent proficient were both significant predictors of freshman retention, meaning that as the students tended toward high SES or proficiency, they were more likely to be retained. Density was not a significant predictor of freshman retention. When the significant, independent variables were entered as simultaneous predictors, the only variable found to be significant was SES. As the students tended toward high SES, they were more likely to be retained.

### Summary of Results

This chapter presented the results and analysis of data for a cohort of American Indian students entering third grade in 1998 and examined their progression in North Carolina's public schools through 2007 to determine whether significant patterns and changes occurred in the students' achievement over time. More specifically, the study focused on American Indian students from lower socioeconomic backgrounds. For 195 students in the cohort entering college after high-school graduation, an analysis of freshman retention was conducted. The results provide evidence and support for Bourdieu's theoretical framework of habitus. Descriptive statistics including frequencies, percentages, and means were used to statistically analyze the data. The patterns of proficiency shown in the results provide evidence that over time, schools did not make a significant difference in the educational achievement for the cohort of American Indian students in this study, particularly those students from lower socioeconomic backgrounds. Higher SES American Indian students show higher rates of academic proficiency on standardized math, reading, and high-school assessments than students from lower SES backgrounds. The only exception was the results showing that lower SES students scored higher in proficiency in

2007, the last high-school year. In terms of school density, no significant differences were found in the percentages of proficiency for both higher and lower SES American Indian students on state assessments in math, reading, and high school End-of-Course Tests. For students pursuing postsecondary college degrees, the results are similar to those found at the elementary and secondary level.

SES was the only strong predictor of freshman retention for American Indian students in the UNC System. The students' proficiency has some effect, but not like the students' SES. Density of the American Indian student population in the school district from which students completed high school revealed no significant affect on freshman retention. The following chapter provides conclusions and implications based on the findings of this study. It also provides an explanation and discussion of conclusions based on the theoretical framework and implications for practice for school leaders working with American Indian populations. In addition, it presents recommendations for further research.

## **CHAPTER FIVE**

### **CONCLUSIONS AND IMPLICATIONS**

Following a brief overview of the purpose and methodology, this chapter summarizes key findings from the results of the study, including explanations and conclusions based on the theoretical framework applied. Generally speaking, results of this study indicate consistency with Bourdieu's theoretical concept of habitus and its predictability of the educational achievement patterns for American Indian students in North Carolina. Through habitus, individuals internalize dispositions to the degree that they become part of the way they perceive and think about the social world and their places in it. The chapter concludes with implications for school leaders working with American Indian populations and recommendations for further research related to American Indian education.

#### **Purpose**

The purpose of this quantitative study was to investigate Bourdieu's theoretical concept of habitus to determine whether it was predictive of the educational achievement patterns for American Indian students in North Carolina. If affirmative, then it would suggest that the entire system of changes, interventions, and other reforms schools employed in the past decades have not changed the pattern of low achievement or the likelihood of a better quality of life for the American Indian population. If affirmative, it would also suggest, as Bourdieu would argue, that the role of the school in reproducing the exiting social order will not change until and unless it is confronted in the context of the larger sociopolitical system.

This study focused on the academic proficiency for a cohort of American Indian students entering third grade in 1998 and examined their progression through the state's public schools through 2007, including the college retention for those entering a higher education institution in the UNC System following their graduation from high school. The theoretical concept of habitus was the lens applied in addressing the major research question for the study, "Do schools make a positive, significant difference in the educational-achievement patterns for American Indian students, more specifically those from economically disadvantaged backgrounds, who attend public schools in North Carolina?" Five guiding research questions were addressed:

- 1.) To what extent do patterns of American Indian students scoring proficient and non-proficient in reading and math on North Carolina's state assessments from 1997–98 to 2002–03 (grades 3–8) and 2003–04 to 2006–07 in high school reflect a positive change in position that is sustainable over time?
- 2.) In a comparison of proficiency, do statistically significant differences exist in student achievement across time between low SES American Indian students and higher SES American Indian students?
- 3.) Do the relationships between SES and students' proficiency differ by school district density?
- 4.) How does the freshman retention of American Indian students who graduated from North Carolina's public high schools and enrolled in the UNC System in fall 2007 compare to the retention of the population of non-American Indian students enrolled in the system during the same period of time?

5.) How do students' SES, school density, and student proficiency affect freshman retention for American Indian students?

The major research hypothesis (Hypothesis 1) was that over time, schools do not make a significant difference in the educational achievement patterns for the American Indian student population attending public schools in North Carolina, more specifically those students from economically disadvantaged backgrounds. It was further hypothesized that:

- American Indian students with higher SES will consistently and over time maintain greater academic proficiency on standardized math, reading, and high-school assessments than American Indian students with a lower SES (Hypothesis 2).
- The density of the American Indian student population in a school district will make little difference in the proficiency of students with a lower SES (Hypothesis 3).
- American Indian students who graduated from North Carolina's public high schools and entered the UNC System as freshmen in fall 2007 will be retained at a lower rate when compared to the retention of non-American Indian students who entered the system during the same period of time (Hypothesis 4).
- Students' SES backgrounds will affect their retention in higher education institutions more than their level of proficiency and the density of the American Indian student population in the school district for which they attend (Hypothesis 5).

### Review of Methodology

The data analyzed in this study were obtained from the longitudinal administrative records of the North Carolina Department of Public Instruction (NCDPI) and the UNC

General Administration (UNC-GA). Achievement data, the dependent variable in the study, were the individual proficiency levels each year for a cohort of students identified as American Indian in grades 3–8 and high school spanning the school years 1998–99 to 2006–07. For the purpose of this study, proficiency for the high-school years (2004–07) was calculated as the average proficiency of all End-of-Course Tests taken by the student in a given year. The independent variables were 1.) socioeconomic status (SES) based on students' eligibility for free or reduced lunch (FRL); 2.) density, which was determined by a district's American Indian enrollment of 50% or greater (high density) or less than 50% (low density); and 3.) freshman retention, based on the percent of American Indian freshmen entering a UNC institution in fall 2007 after graduating from high school and returning for a second year in fall 2008.

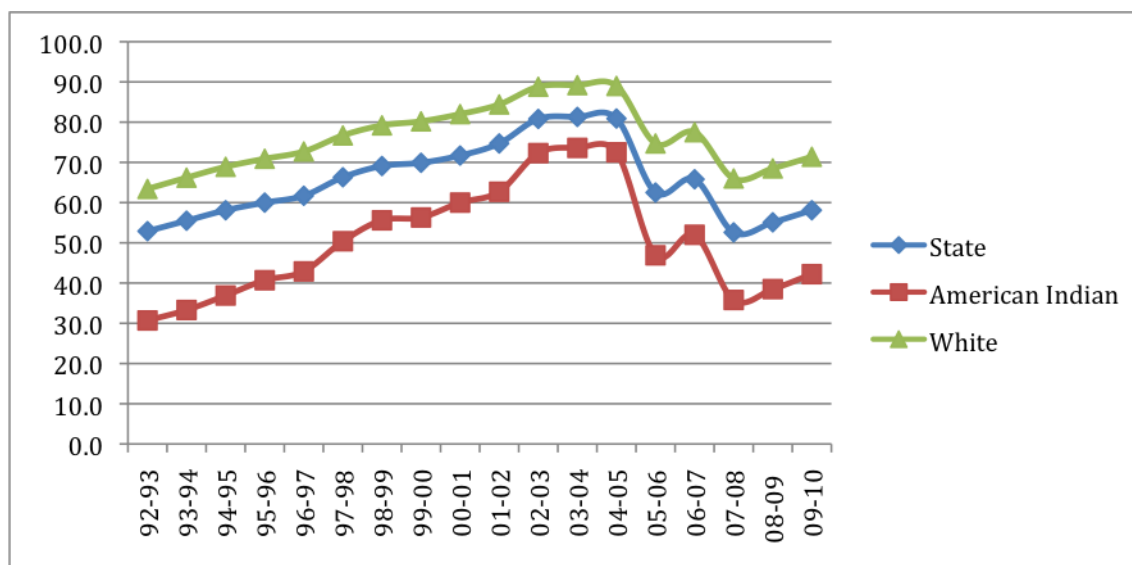
The sample size of American Indian students who attended public elementary, middle, and high schools beginning with the 1998 school year through 2007, consisted of 1,495 students, which made up the American Indian student cohort file containing all student-level data. In the analyses, the sample size varied for specific variables in a given year. The American Indian student cohort file was used to run the analyses for all research questions, with the exception of Research Question 4. To address this question, a separate file of data from the UNC System and information from the system's website were used for analyses. All analyses were conducted using the Predictive Analytics Software (PASW) Statistics 18.0 application, and all statistical tests were conducted using an alpha level of 0.05.

The first step in the data analyses was to explore the data using descriptive statistics. Frequency distributions for each categorical variable in the study were conducted and

corresponding tables were created. Next, the major and guiding research questions were addressed through Pearson chi-square (cross-tabulation) statistics. Logistic-regression tests were used in assessing the effects of SES, density, and student achievement on freshman retention.

### Key Findings

To set the context, although this study focused solely on the academic proficiency of American Indian students, evidence supports that this subgroup in North Carolina has consistently scored below the state and White student populations for the past 18 years. Figure 5.1 illustrates these patterns as reflected in the statewide percent of students at or above Level III proficiency in both reading and mathematics, 1992–93 to 2009–10.



*Figure 5.1.* 1992–93 to 2009–10 End-of-Grade Test results statewide percent of students at or above Level III proficiency in both mathematics and reading, grades 3–8, for American Indian and White subgroups. *Source:* NCDPI, Division of Accountability Services.

As presented in Chapter 2, research literature related to American Indian education extensively documents that American Indian students on a national scale consistently score

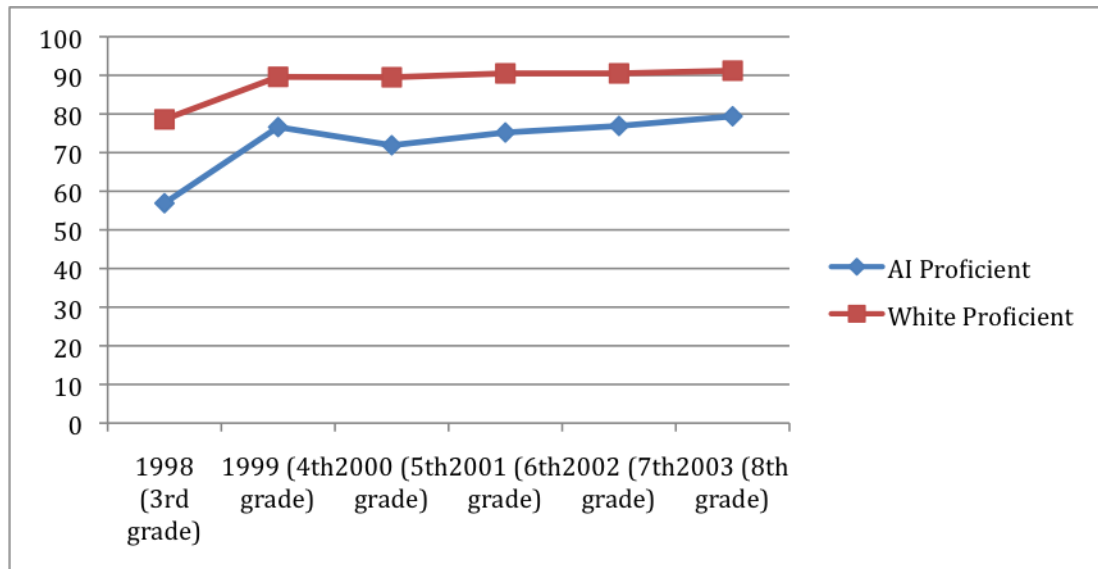
lower than other ethnic groups on academic-achievement measures. Figure 5.1 clearly illustrates the circumstances in North Carolina are no different. In reviewing reports about the academic achievement of American Indian students in North Carolina, such as the annual reports of the State Advisory Council on Indian Education, the researcher found a majority of the reporting tended to present static data or provide snapshots on the population's achievement at a given time. The reports failed to provide a deeper analysis of student achievement within the American Indian student subgroup. In light of what is known about the academic achievement of American Indians when compared to the state's White student population, this study sought to address this absence in an attempt to better understand the academic achievement within the population as it relates to socioeconomic status, density, and freshman retention in higher education institutions.

#### *An Exploratory Analysis*

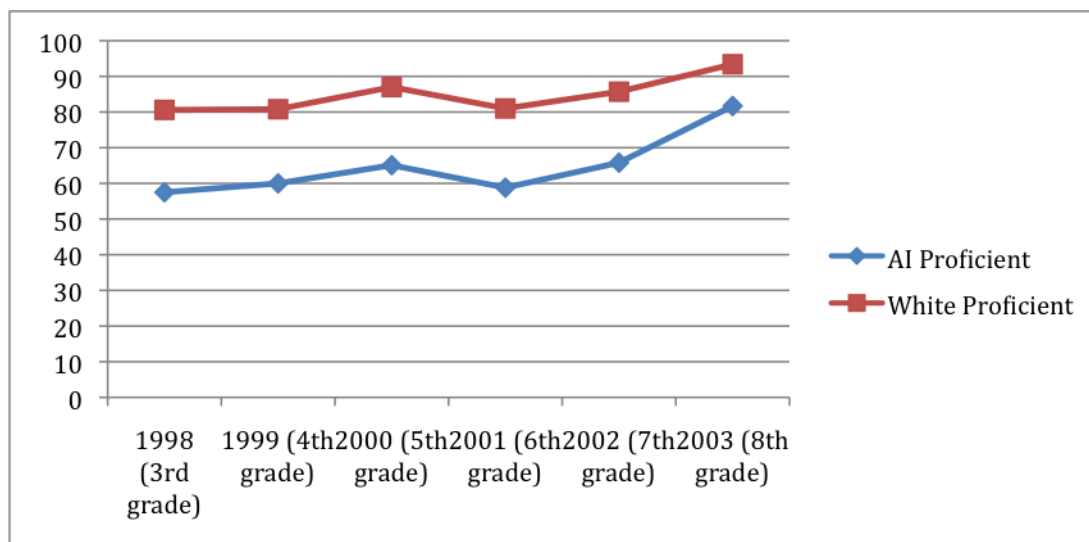
As a first step, an initial paired-sample t-test was conducted to compare third-grade math and reading proficiency in 1998 to eighth-grade math and reading proficiency in 2003 to determine whether differences existed within this grade span. There was a statistically significant difference in math proficiency when comparing 1998 ( $M = 0.60$ ,  $SD = 0.49$ ) to 2003 ( $M = 0.81$ ,  $SD = 0.39$ ) proficiencies;  $t(1,126) = -13.88$ ,  $p = .000$ . These results revealed that American Indian students scored higher proficiency in eighth grade in 2003 than they did in third grade (1998). A similar pattern showed in comparing 1998 reading proficiency in third grade ( $M = 0.61$ ,  $SD = 0.49$ ) to the 2003 proficiency in eighth grade ( $M = 0.83$ ,  $SD = 0.38$ );  $t(1,114) = -15.23$ ,  $p = .000$ . In both subjects, American Indian students appeared to perform better the longer they were in school. However, despite this seemingly

positive trend reflected within the American Indian subgroup, it is important to note that the patterns were consistent to those presented in Figure 5.1.

American Indian students from 1998–2003 participating in this study did not fair as well when compared to proficiency levels of White students. In 1998, the percent of American Indian students at or above Level III proficiency on third grade End-of-Grade Tests in math was 57%, compared to 79% for White students, a difference of 22 percentage points. In reading, 56% of American Indian students were at or above Level III proficiency, compared to 81% of Whites. This reflects a difference of 25 percentage points (NCDPI, Division of Accountability Services, 1997–98, 2002–03). By 2003, the proficiency of American Indian students revealed gains particularly in reading, but a discrepancy continued to exist when compared to White students. Figure 5.2 shows the statewide percent of students at or above Level III proficiency in mathematics, 1998–2003, and Figure 5.3 presents the statewide percent of students at or above Level III proficiency in reading, 1998–2003.



*Figure 5.2.* 1998–2003 End-of-Grade Test results statewide percent of students at or above Level III proficiency in mathematics, grades 3–8, for American Indian and White subgroups. *Source:* NCDPI, Division of Accountability Services.



*Figure 5.3.* 1998–2003 End-of-Grade Test results statewide percent of students at or above Level III proficiency in reading, grades 3–8, for American Indian and White subgroups. *Source:* NCDPI, Division of Accountability Services.

When analyzing high-school achievement, the proficiency of American Indian high-school students, 2004–2007, showed an opposite trend to that in 1998–2003, grades 3–8, where students appeared to excel in their earlier years of schooling. The findings from this initial analysis led to a year-by-year inspection of students’ proficiency to examine students’ proficiency as they transitioned grade to grade.

#### *Year-to-Year Transitions*

*Earlier years (grades 3–8).* Analyses of data from the earlier years of schooling showed that American Indian students made significant gains in math proficiency at each grade-level transition. The greatest gains (17 percentages points) were found in the third-grade to fourth-grade transition. However, the following year’s data revealed a slight decrease of 4 percentage points from fourth grade to fifth grade. Based on statewide results, American Indian students were the only group to show a decrease in proficiency during this grade level transition (North Carolina State Testing Results, 1998–99, 1999–00). The year-

by-year analysis in reading showed that American Indian students' proficiency improved between each grade-level transition. A significant gain of 29 percentage points occurred from seventh grade to eighth grade. However, a review of statewide results found that similar gains were experienced by all student subgroups in this given year. When looking at the fifth grade to sixth grade, a decrease in American Indian proficiency of 7 percentage points occurred. However, as in the case previously mentioned, this pattern occurred for all student subgroups statewide during this grade transition (North Carolina State Testing Results, 2000–01, 2002–03).

Test bias, as noted in Chapter 2, could be a potential explanation for the sporadic nature of the observed patterns of proficiency. For example, Locklear (1996) found a wide disparity between subgroup scores, which revealed some ethnic groups having more difficulty selecting correct responses. He conducted his study in a school district in North Carolina with the highest enrollment of American Indian children and suggested that test-item bias existed on the North Carolina End-of-Course (EOC) English I Tests and other state tests. The process used for standard setting under the NC Statewide Testing Program provides an opportunity for test bias to exist. For example, the process determining the academic-achievement standards or cut scores for each year includes teacher-judgment data, the students' actual test scores, and the test items. Using an examinee-based method of standard setting, expert judges who are knowledgeable of students' achievement in various domains outside of the testing situation categorize students into various achievement levels. These judgments are then compared to students' actual scores. North Carolina teachers serve as the expert judges in the standard setting process because they are considered able to make informed judgments about students' achievements based on the fact they have

observed the breadth and depth of the students' work during the given school year. Research about effective teachers supports that teachers' attitudes about students, knowledge of subject matter, and understanding and knowledge about the culture of students are all shown to promote improved student performance (Stronge, et al., 2004). Yet, in North Carolina, a majority of American Indian students are in classrooms taught by non-Native teachers who are uninformed about the tribes in the state or their unique Native cultures and heritage (State Advisory Council on Indian Education, 2009). This information provides a strong indication that test bias could be inherent in the standard setting process as it relates to the state's Native population given its reliance on teachers' knowledge of individual students, and, in this case, their limited or non-existent expertise of American Indian communities and their cultures.

Another explanation for the variations in achievement results lies within our society's unquestionable acceptance of tests as meaningful, fair, and infallible instruments for improving student learning. English (2002) reminded that a powerful meta-narrative exists that "tests are neutral and meritocratic tools blind to cultural differences and that when employed to measure school success, they can do so objectively and efficiently" (p. 306). As we have seen in the implementation of the No Child Left Behind Act in public schools, tests are major devices that control and manipulate curricula, teaching, and learning. Tests are not neutral, but instead are embedded in the political, social, and educational contexts and are often used to define and impose knowledge, create de facto policies, and exclude unwanted groups (Shohamy, 2007). In other words, tests create dependence that leads to the marginalization of students who do not pass them. Shohamy further stated that the power of tests comes from the trust marginalized groups who are affected by them place in the tests.

Accordingly, tests are instrumental in reaffirming societal powers and in maintaining social order (Shohamy, 2007). A competing metanarrative, according to English, suggests that intelligence is culturally constructed and encompasses all cultural aspects within a class and socioeconomic structure, such as language patterns, manners, dress, and attitudes about education. One key conclusion in the Coleman Study (1966) was “only a small part of [student achievement] is the result of school factors, in contrast to family background differences between communities” (Coleman et al., 1966, p. 297). For example, socioeconomic status (SES) significantly impacts student achievement. Coleman’s finding was also supported by Jencks (1972), who concluded that genetics, socioeconomic conditions, and other demographic characteristics, such as parents’ educational attainment levels, shape children and determine how well they do in school (p. 256). In effect, as long as students’ performances on tests also reflect poverty, racial, and class differences as the research literature notes, neutrality and the equity of tests as measurements, particularly for underprivileged minority students, is unfair and far from being neutral. Bernstein (1996) summarized this point:

There is likely to be an unequal distribution of images, knowledges, possibilities, and resources that will affect the rights of participation, inclusion, and individual enhancement of groups of students. It is highly likely that the students who do not receive these rights in school come from social groups who do not receive these rights in society. (p. 8)

Despite the documented flaws, however, variances are inherently dismissed in the current climate of accountability and tests continue to be used as primary measurement tools for defining student success in current reform models.

*High-school years.* In this study, when comparing to the American Indian performance in earlier grades, high-school patterns of proficiency differed. Results revealed

a lower proficiency in grade 12 ( $M = 0.40$ ,  $SD = 0.49$ ) compared to grade 9 ( $M = 0.76$ ,  $SD = 0.43$ ) for high-school American Indian students. The difference was statistically significant different:  $t(181) = 7.98$ ,  $p = .000$ . However, a couple of important considerations should be taken into account when interpreting these results. First, EOC proficiency is based on the tests associated with courses taken. For the purpose of this study, proficiency for the high-school years (2004–07) was calculated as the average proficiency of all EOC tests taken by the student in a given year. Second, according to state-testing reports, most high-school students complete tested courses prior to their last year of high school (North Carolina State Testing Results, 2006–07). Therefore, the sample size for high-school proficiency varied each year with a smaller sample in 2007. The sample of students in the study was found to decrease significantly over time. The decrease can be attributed to students leaving to attend charter or private schools or transfers to schools out of state, but most likely it results more so from a significant crisis impacting the state's Native communities.

American Indian students in North Carolina in grades 9–12 drop out of school in disproportionate numbers. In 2006–07, American Indians had the lowest four-year graduation rate (55.6%) in the state (State Advisory Council on Indian Education, 2008) and, for more than a decade, have annually experienced the highest drop-out rate of any other ethnic group in the state. The persistency of this issue is complex and multifaceted. *The Final Report of the Indian Nations at Risk Task Force* (1991) stated that the success of American Indian students in schools requires overcoming a host of barriers:

- limited opportunities to enrich their language and developmental skills in the preschool years;

- unfriendly school climate that fails to promote appropriate academic, social, cultural, and spiritual development;
- curriculum presented from a purely Western perspective, ignoring all the historical perspective of American Indian and Alaska Natives can contribute;
- low expectations and relegation to low-ability tracks resulting in poor academic performance;
- loss of Native language and the wisdom of older generations;
- extremely high dropout rates where the school climate is not supportive of Natives;
- teachers with inadequate skills and training to teach effectively;
- limited access to library and learning resources;
- lack of Native educators as role models;
- economic and social problems in families and communities such as poverty, single-parent homes, family violence, suicide, substance abuse, and psychological problems;
- a shift away from spiritual values that are critical to the wellbeing of individuals and society as a whole;
- lack of opportunity for parents and communities to develop a real sense of participation;
- overt and subtle racism in schools combined with lack of multicultural focus in schools; and
- limited access to colleges and universities because of insufficient funding (p. 8–9).

Most recently, Faircloth and Tippeconnic (2010) indicated that lack of student engagement is the main contributing actor to the dropout crisis. Factors specific to American Indian and Alaska Native students these authors outlined included feeling unwanted or “pushed out” of schools, poor quality of student-teacher relationships, lack of parental support, peer pressure, distance from school, difficulty with classes, poor attendance, grade retention, lack of future plans and goals, low expectations and language barriers, discipline problems, inability to adjust to school environment, economic necessity to work at home or on a job, and poverty among a number of other factors (Wax, 1967; Deyhle, 1989; Swisher & Hoisch, 1992; Brandt, 1992; Colodarci, 1983; Platero, et al., 1986; Chan & Osthimer, 1983; Bowker, 1992; Reyhner, 2006, cited in Faircloth & Tippeconnic, 2010).

Deyhle and Swisher (1997), in their review of education studies, concluded that research pertaining to dropping out of school tended to ignore the barriers schools create for Native students. The problem was most often attributed to the student. However, American Indian students attributed their decision to leave school to pressures and problems outside of their individual control. Interviews with American Indian dropouts in North Carolina, which the State Advisory Council on Indian Education conducted in 2003, concluded that American Indian students who dropped out of the state’s public schools were not necessarily academically weak students or students who disliked schools and learning. Instead, these youth were bright and talented students who excelled in elementary school and lost their way when reaching middle or high school, choosing to leave school after consecutive years of feeling disconnected to, ignored by, and unimportant to the adults and the majority student population around them (State Advisory Council on Indian Education, 2003).

Unfortunately, a significant impact of choices made limits options for competitive incomes and also contributes to sustaining the existing cycle of poverty and social ills, such as illiteracy, unemployment, suicide, substance abuse, teen pregnancy, crime, and violence in the state's Native communities.

### *Student Achievement and Socioeconomic Status (SES)*

For Research Question 2, cross-tabulation chi-square tests sought to determine whether there were differences in student achievement across time between lower SES American Indian students and higher SES American Indian students. It was found that students who were from lower SES backgrounds tended to be nonproficient at a higher rate than those who were from higher SES backgrounds. Within the American Indian subgroup, these findings support Bourdieu's position about cultural capital. Students with higher SES, American Indian students in this case, from homes with cultural capital are better equipped in comparison to American Indian students from disadvantaged home environments. This suggests American Indian students from more privileged home environments have acquired throughout their childhood from their parents patterns of thought and behaviors (habitus) consistent with the dominant values schools expect. To the contrary, the lower SES American Indian students from disadvantaged backgrounds experience from the start a disadvantage that leads to higher rates of nonproficiency. As previously stated and documented by research literature presented in Chapter 2, SES significantly impacts student achievement. Results pertaining to the American Indians in North Carolina's public schools in this study were consistent with this research.

### *Student Achievement, SES, and School Density*

The cross-tabulation chi-square tests assessing whether the relationship between proficiency in math and reading of lower SES and higher SES American Indian students differed by the density of the school district were consistent with results found in Research Question 2. Results reveal that the proficiency of American Indian students, regardless of their attendance in schools, with significant numbers or fewer numbers of American Indians remained the same. As predicted, the density of a school district in terms of the percentage of American Indian students it enrolled did not make a difference in the math, reading, and high-school proficiency of lower SES students.

### *Postsecondary Freshman retention*

In recent years, higher education institutions have increased enrollments among minority groups, as well as the availability of financial aid for low-income students (Almeida, 1999; Harrington, 2010). Nevertheless, certain minorities still experience difficulty in the transition from the K-12 school system to higher education (Kanu, 2006). Native Americans are the least likely to enroll in public institutions and the least likely to persist and graduate (Pavel, 1992; Larimore & McCellan, 2005). Further, for the American Indian students who do enroll, their first-year retention rates are the lowest rate of all ethnic groups (Harrington, 2010). In examining the difference between the freshman-retention rate of American Indian students and non-American Indian students who enrolled in the UNC System in 2007, it was discovered that American Indian students have a lower reenrollment rate than non-American Indian students. The UNC System reported 266 American Indian students entering in the fall semester of 2007 with 195 (73%) returning in the fall semester of 2008. Eighty-two percent of non-American Indian students returned.

Effects of students' SES, proficiency, and school density on freshman retention was examined by conducting three logistic regressions, which revealed that when modeled alone, SES and percent proficient were both significant predictors of freshman retention. This revealed that, as the students tended toward high SES or proficiency, they were more likely to be retained in college. School density was not found to be a significant predictor of freshman retention. SES was the only strong predictor of freshman retention for American Indian students in the UNC System. The students' proficiency had some effect but not like the students' SES.

Larimore and McCellan (2005), in a review of the limited higher education literature on Native American retention, noted that factors and forces that influence students' decision to persist with college remains uncertain. Several studies pointed to support from family, supportive staff, institutional commitment, personal commitment, and connections to homeland and culture as key factors in persistence (Dodd, Garica, Meccage, & Nelson, 1995; Falk & Aitken, 1984; Jackson & Smith, 2001; Reyhner & Dodd, 1995; Rindone, 1988, as cited in Larimore and McCellan, 2005). Almeida (1999) identified inadequate family financial resources to support education because of poverty backgrounds as an obstacle. Other barriers cited included burdensome and complex paperwork hurdles in securing financial assistance, requirements for financial contributions by the student, unacknowledged costs, such as college moving and medical expenses, childcare expenses for some, and distrust of non-native officials at the institutions.

In contrast and presenting reason for further study, Tierney (1992), cited in Larimore and McCellan (2005), found in a multi-institutional qualitative study that families' socioeconomic backgrounds were not significant in predicting Native American persistence

as they were for White students, even though the Native population tended to come from lower socioeconomic backgrounds more so than their White peers. Institutional factors are significant in terms of retention of Native students, according to Wright (1985) and cited in Larimore and McCellan (2005), in that American Indians present unique academic, social, cultural, and psychological needs as they establish themselves in the academic and social structure of the system. Thus, persistence can be attributed to the experiences on campus and American Indians' abilities to navigate the financial elements, as well as cultural conflicts of the higher education environment.

### Implications of Bourdieu's Habitus

For the participants in this study, results clearly suggest that public schools in North Carolina have not made a positive, significant difference in the educational achievement patterns for American Indian students, particularly those from low SES backgrounds. Further, the proficiency patterns of the state's American Indian students in grades 3–8 and high schools suggest that inequalities exist and are reproduced year after year. However, looking solely at outcomes is inadequate for explaining or gaining an understanding of what is occurring. According to Bourdieu, it is necessary to examine the social space where interactions, transactions, and events take place. More specifically, an analysis of the:

object of investigation in its specific historical and local and relational context as well as an interrogation of the ways in which previous knowledge about the object under investigation has been generated, by whom and whose interests were served by the knowledge generating practices. (Thomson, p. 67, as cited in Grenfell, 2008)

To examine said interactions, Bourdieu provides concepts of habitus, capital, and field. This section explains how these concepts create and reproduce social inequality through schools.

The historical context of American Indians and their education is an unquestionable tragic story of how dominant policies of the US government caused destruction of their way

of life and customs. Under the cloak of progress by either secular or religious agencies, in both overt and covert ways, Native people were forced to marginalize or erase their cultural ways of being for that which was preferred by the dominant. What the researcher's review of the literature also revealed was that an oppression continues to negatively impact the future educational success and economic prosperity of American Indians, albeit in different ways. Out of necessity to maintain their cultural identity and for tribal survival, American Indians continue to battle a powerful resistance from the dominant as they seek cultural validation of their identity and support for their children to succeed in America's public schools. The motive underlying the powerful resistance comes from the demands of our education system to maintain the pre-existing social order, that is, the unequal distribution of cultural capital between students. Cultural capital defines the status of an individual or group within society. With this being said, the group with more cultural capital in terms of economic, social, and political resources is dominant. As the dominant group, these people shape the values, ways of thinking, and practices of the social world. They define and control the official histories that support their dominant practices that in turn, are circulated and repeated with authority and are practiced and embodied in the social consciousness of all. Institutions such as government, education, and other bureaucracies are at the dominant group's disposal to "mold mental structures and [impose] common principles of vision and division" (Bourdieu, 1994, as cited in Webb, et al., 2002, p. 92). It is the culture of the dominant group that is embodied in education institutions. In other words, by imposing meanings and ways of thinking and acting, schools "operate to perpetuate specific power relations as they unfold and are expressed in the dynamic of social evolution" (Grenfell, 2008, p. 159). By maintaining the status quo, the dominant group benefits from the

profitability of capital accumulation and sustained positions of social privilege while subordinated groups endure symbolic violence and suffering.

### *Reproduction of Inequalities*

Bourdieu's contention is that the educational inequality existing in public schools can only be explained by examining both economic and cultural relations. His concept of capital refers to the amount of economic, cultural, social, and symbolic resources an individual has, whereas the concept of habitus explains how individuals internalize their objective chances of succeeding based on their economic and cultural background, as well as what is common for their social class. The education field, as in schools, "reinforces rather than redistributes the unequal distribution of cultural capital" (Schwartz, 1997, p. 191) and "deflects attention from and contributes to the misrecognition of its social reproduction function" (p. 191). Schools "privilege certain cultural heritages" (Swartz, 1997, p. 199) and exclude others, such as the cultural values of American Indian communities. Instead, the cultural values of middle class families are accepted as the norm and schools reward them. Because most American Indian students tend to come from lower income homes, they are disadvantaged because of the cultural differences that exist. Middle class families may also employ resources and capital to improve their students' academic trajectories. Lower status American Indian families lack the cultural capital or resources to pursue such options. Success in school, as Bourdieu argues, is determined by the amount and type of cultural capital inherited from families rather than by measures of individual talent or achievement:

The notion of cultural capital initially presented itself to me, in the course of research, as a theoretical hypothesis which made it possible to explain the unequal scholastic achievement of children originating from different social classes by relating academic success, i.e., the specific profits which children

from the different classes and class fractions can obtain in the academic market, to the distribution of cultural capital between the classes and class fractions. (Bourdieu, as cited in Reay, 2004).

In this study, the SES of the participants represented cultural capital. The students' SES was derived from their eligibility for free or reduced lunch based on their parents' level of income. The rationale for this approach was because the participants were not yet at the stage where socioeconomic classification based typically on financial independence could take place. On that account, it is their parents' statuses on which their own cultural capital was established. As previously stated, American Indians from lower socioeconomic backgrounds in this study consistently experienced lower achievement over time in comparison to those from higher socioeconomic backgrounds. What is derived here is a clear relationship showing that students' "academic success is strongly related to parents' background" (Swartz, 1997, p. 198). Natives from advantaged backgrounds showed a higher rate of proficiency. Therefore, their success, as Bourdieu would suggest, is from the cultural capital inherited from their families, which provided them an advantage. Those students with less cultural capital were disadvantaged from the start and, as shown in the results of the study, were less likely to experience the same success.

The notion of habitus further explains the complicity. For Bourdieu, "habitus is a cultural agent before it is a social form of identity" (Webb et al., 2002, p. 117). Emerging from early socialization experiences and restructured through interactions with the social world, habitus "sets structural limits for action" while also "generating perceptions, aspirations and practices that are consistent with the conditions under which it was produced" (Swartz, 1997, p. 103). Thus habitus is a product of early socialization experiences, particularly those that occur within a family, and continues to restructure itself

by what an individual encounters in the outside world. It forms individuals' dispositions and "recurring patterns of social outlook—the beliefs, values, conduct, speech, dress and manners that are inculcated by everyday experiences within the family, the peer group and the school" (Mills, 2008, p. 100). Dispositions that make up habitus reflect the social context in which they were acquired and, therefore, shape what the person perceives as reasonable or unreasonable, likely or unlikely, natural or unthinkable. It also predisposes individuals to adjust their aspirations and expectations accordingly. As Bourdieu explained, "agents shape their aspirations according to concrete indices of the accessible and the inaccessible, of what is and is not for us" (Swartz, 1997, p. 107). Consequently, individuals tend to naturally move toward those social fields and positions within them that best match their dispositions and, in turn, avoid those that conflict. In reading the future that fits them and acting accordingly, individuals' accept their social reality as the way things are. They "accept their fate and misrecognize the arbitrary for the essential" (Grenfell, 2008, p. 59).

"Cultural differences, according to Deyhle and Swisher (1997), intertwine with socio-structural factors to create an educational context that ensures failure for many American Indian students" (p. 163). The patterns of proficiency for American Indian students reflected in the graphs presented earlier in the chapter tend to correspond to the conditions of habitus. The interrelated interactions between cultural capital and habitus appear to suggest a valid explanation for the persistent patterns of lower proficiency and educational attainment observed in this study, but information was insufficient to draw definitive conclusions. However, several studies cited in a literature review by Deyhle and Swisher (1997), included interviews with American Indian dropouts that support that structural barriers and the dominant group's expectations of them forced them to leave

school. For example, Coladarci (1983) pointed to social relations, particularly with teachers who exhibited lack of care for them and lack of relevance to what they wanted in life. Platero (1986) identified boredom, problematic interactions with other students, and absenteeism as the top reasons students expressed. Deyhle (1992) received similar responses, namely, cultural rejection from teachers and others, curricula content not aligned to life's goals, resistance to basic remedial or vocational tracking in high school that was perceived as limiting their opportunities, and financial burdens. A common theme in each of these studies was that the students' felt "pushed out" by the system despite their desire to stay in school (Deyhle & Swisher, 1997). Awareness of the mechanisms at work in the reproduction of inequalities in schools, as Bourdieu outlined, offers an opportunity for further investigation. We know there are some American Indian students who do succeed by choosing to adapt to the system and the rules the dominant group outlines. However, some drift through schools while others do not see the value in graduating and choose to drop out. By making choices of this nature and by accepting the superiority of others in the social world as natural or as the way things are, American Indians participate in their own subjugation and the reproduction of the social stratifications.

The relationship between capital and habitus is important because it shows how an individual's capital can condition his or her way of thinking, can lead to a certain habitus, and can result in an unconscious belief in the legitimacy of inequality. This process of constructing shapes society and what its members accept as natural and inevitable (Webb et al., 2002). Those who occupy particular positions tend to submit to conditions the field(s) articulates as the core values and fundamental principles of truth and necessity. As Swartz (1997) described, beliefs and attitudes develop over time, function "below the level of

consciousness and language” (p. 105), and become deeply embodied. As a result, the dominated consciously accept things without resistance or realizing the oppression or that there are any alternatives to the status quo.

### *Unsuccessful Reforms*

With the implementation of the No Child Left Behind Act of 2002, the recent federal education reform, American Indian students in North Carolina’s public schools have shown minimal academic progress. The same can be said for prior reforms such as the Goals 2000: Educate American Act and the Improving America’s Schools Act, which were both aimed at helping all children reach high standards. With this, it is safe to conclude that the entire system of changes, interventions, and other reforms schools employed in the past decades have not been effective in improving the educational outcomes for Native youth. European American “thought, knowledge and power structures dominate present-day society” (Brayboy, 2005, p. 430). From the perspective of Native Americans, education reforms have not worked because the dominant ideals continue to marginalize or exclude their rich cultural heritage and presence. Herman Agoyo, a Tewa-speaking Native American in New Mexico, illustrates this depiction in Sando and Agoyo’s *Po'pay: Leader of the First American Revolution*:

As I stand and look back years away from that time, I have come to the conclusion that it was not the lack of substantial educational opportunities that was most detrimental; rather, it was the fact that all that schooling taught me many things of the world but nothing of myself or my people and our history. I learned about the causes of the American Revolutionary War and all the wars between then and now. I learned about Plato, ancient Greece, and the rise and fall of the Roman Empire, but not one word was ever spoken of the great leader of the Pueblo Revolt of 1680, Po'pay. In fact, even the Pueblo Revolt itself has been merely a footnote in most history books, if it's mentioned at all. (p. xii)

According to Bourdieu, a “coherent and explicit program of reform can only emerge by looking at the functions of schools, both technical and social” (Grenfell, 2007, p. 158). NCLB and the reforms preceding have failed to do this. Instead, these reform initiatives have been partial approaches that claimed equal opportunities for access to education but fail many disadvantaged students because the core conditions of inequality remain unaddressed. For the most part, reforms come about by politicians to tackle immediate problems with changes economic policies guide rather than “taking time to consider fundamental rethinking and reshaping of education and its institutions” (Grenfell, 2007, p. 169). Any notion of equal education for all is idealistic because none of the functions of the education system can be “defined independently of a given state of the structure of class relations” (Grenfell, 2008, p. 159). Therefore, it remains likely that American Indian students, particularly those from lower socioeconomic backgrounds, will not experience significant educational gains from any current or future reform initiatives, nor will the role of schools change until and unless the ideals behind the power and dominance in the context of the larger sociopolitical system are confronted.

#### Implications for School Leaders

The achievement of American Indian students has not been substantially improved in that students are engaged in a perpetual cycle of low achievement, as evidenced by findings in this study. As noted, past and current education reforms have not changed the pattern of low achievement for Native students because deeply ingrained ideals and inequalities continue to define educational policies. As a result, American Indian students are considered less likely to be successful when compared to their White peers, and that expectation, too often, is the reality (Noley, 1992). The analyses of American Indian

patterns of proficiency conducted in this study provided evidence of this. Many of the current education reform models promote provisions outlining equal access and support to ensure minority and disadvantaged students succeed educationally. Standards and improved test performance have increasingly become integral parts of these reform movements. Yet, both standards and tests represent the social and cultural knowledge and language for the dominant class, and, therefore, work against most minority populations. Well-meaning intentions and reforms have continued to fail because Euro-American ideals persist while American Indian worldviews are disregarded. Instead of embracing differences and validating the academic and cultural needs of American Indian students, reforms such as the current NCLB Act and others have caused states to submit to new standards that do not acknowledge what is most crucial for Native students to succeed.

Bourdieu's mission was to explain the social, political, and cultural practices that surrounded him in a manner that would help others restore the meaning of their actions (Swartz, 1997). Here lies the first implication for school leaders, policy makers, and educators at every level. Schools need leaders who possess the fortitude to radically rock the boat, embrace differences, and challenge the status quo that is currently perpetuated in schools. However, before doing so, an individual must first tackle their personal internalized dispositions. Consistent with Bourdieu's argument, through habitus, individuals have unconsciously been led to value the dominant culture to the rich culture and heritage of others who have been marginalized in the process. Senge (2006), in *The Fifth Discipline*, discusses *mental models* as "deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action" (p. 9). Devaluing stereotypes and remnants of colonial education along with

misinformed histories about Native people are prevalent in today's society and schools. A common perception in North Carolina's public schools is that American Indians are a part of history that no longer exists. Therefore, a radical disruption is necessary and must first begin with reflection on oneself, one's personal assumptions, and actions. Lomawaima (1999) supports this position in the context of the broader education community in stating,

As long as stereotypical ideas are accepted as natural facts, they will never be scrutinized, analyzed or revised. They will become dominating influences in the training of young minds, Native and non-native alike. Native and non-native educators have an opportunity and responsibility to scrutinize, analyze and revise the natural truths and pedagogical theory and practice they implement every day. (p. 21)

School leaders working in Native communities and schools serving American Indian students must also realize relationships reflecting a genuine, mutual understanding and respect for one another are critical to improving American Indian education. The key to the success of American Indian students is the establishment of meaningful relationships, not only within the school between teachers and administrators, but also with community and tribal leaders. Tribal communities value their relationships with schools, and they want active engagement. In interviews the State Advisory Council on Indian Education (2008) conducted, a Cherokee Native commented:

We don't only want a place at the table. We'd like to have a voice as how things should go for us and not have things administered on us. We need to be involved and part of the decisions and in shaping what we know works for us. (p. 20)

Through meaningful relationships, intercultural understanding and a climate for collaborative learning and leadership are created. White, Ober, Frawley, and Bat (2009) argued for what some indigenous people in Australia's Northern Territory label *both ways* education. Instead of just being one way (called *kartiya*, that is, a European way of schooling), they argue for a *kartiya* and *ngumpit* (Aboriginal) way together. "This concept

of two-way schooling, which involved reciprocity and obligation, involve[s] curriculum, knowledge, policies and power” (White, Ober, Frawley, & Bat, 2009, p. 91).

School leaders working in Native communities and schools serving American Indian students must also understand the profound affect historical attempts to eliminate American Indian cultures and languages have on Native communities. As the Cherokee Native articulated, “For our Indian people, education is needed for success but also to reestablish the importance of our identity and our own culture” (State Advisory Council on Indian Education Report, 2008, p. 21). This is the crux of the power struggle. As Brayboy and Castagno (2009) asserted in their research:

No evidence is found in Indian Country that parents and communities do not want their children to be able to read and write and do mathematics and science—these communities are keenly aware of this need and are engaged in this process but they insist that children’s learning to “do” school and should not be an assimilative process; rather it should happen by engaging culture. (p. 31).

American Indian parents and communities support an educational approach that values both Native and Western knowledge because both are necessary to benefit Native communities. It is important for school leaders to provide leadership to ensure some connection to the American Indian cultural, traditional values, knowledge and resources of the state’s American Indian community so they are perceived to be just as legitimate as those of the dominant class.

#### Recommendations for Further Research

It was found in this study that Bourdieu’s habitus has a role in the dismal achievement patterns and educational attainment level of American Indian youth attending North Carolina education institutions. It adds to the body of evidence suggesting that American Indian students in North Carolina are very much the product of the social,

political, historical, and family environments that shape them. Unfortunately, the scope of this study does not come close to uncovering the multiple facets of the state's Indian communities, their cultures, and varied educational experiences. A good starting point is to begin by more fully exploring the symbolic violence in the broader context of society and in educational institutions, particularly the symbolic violence economically disadvantaged students face. First, this study only sought evidence to support whether Bourdieu's theoretical framework of habitus provided a sufficient explanation and predictability of the educational achievement patterns of American Indian students in North Carolina. A further examination to eliminate other alternative explanations, causal factors, or relationships would provide more validity and a closer connection to his theory, particularly in terms of existing inequalities. This study was entirely quantitative, and the stories and actual qualitative descriptions of the experiences of American Indian students and community members are not included. For example, interviews could provide greater insight and possible explanations and rationale for the patterns of achievement and educational attainment and the impacts on Native communities. This study by design investigated the achievement of American Indian students from higher socioeconomic backgrounds compared to students from lower socioeconomic backgrounds. It would be interesting to expand the scope of the study to examine whether the same relational patterns of achievement found are similar for White students and whether the lower SES White students score at a higher proficiency than higher and lower SES American Indians. This study also only examined the patterns of achievement for a single cohort of American Indian students. An examination of multiple cohorts would possibly offer further validation of the study's findings.

The following research questions are based on findings from this study. In some cases, the suggestions are similar to other types of studies and literature pertinent to American Indian education including those aimed at gaining a better understanding of the cultural and tribal identity aspects as it relates to the education attainment of Native youth. The following are recommended:

- 1.) How can it be distinguished if academic progress of American Indians is impeded by cultural discontinuity in the classroom, identity issues, and social problems such as poverty?
- 2.) How do the effects of history of internalized oppression affect school leaders' and teachers' abilities to advance successful student performance?
- 3.) Do school leaders and teacher-education programs in universities provide effective training for teaching American Indian children? How can these education programs become more effective in preparing teachers to teach Native children and school leaders to engage with Native communities?
- 4.) How can American Indians collaborate with universities to develop teacher and school-leader preparation programs that foster cultural sensitivity, focus on tribal-language development, and prepare teachers to meet the needs of culturally and linguistically diverse students?
- 5.) Which school-reform model works best for American Indian students?
- 6.) How can school leaders break social-class barriers in schools?
- 7.) What is the relationship between academic achievement and American Indian culture?
- 8.) What factors have enabled some American Indian students from lower

socioeconomic backgrounds to succeed in schools?

- 9.) What is being done to develop and validate assessment instruments for use with American Indian students?
- 10.) How are the diversity and complexity of American Indian populations addressed in developing culturally sound standards?

### Conclusion

The philosophy of educating Native Americans by Lt. Richard Henry Pratt in 1875 in off-reservation schools was, “Kill the Indian, save the man” (Perdue & Green, p. 82). It can be argued that the same philosophy is still being followed in America’s schools as it pertains to Native Americans, only the result is that as the Indian is being killed and so is the man (and woman, as well). The educational history for American Indians was cultural genocide and an attack on Natives’ cultural identity. In the past, education silenced the American Indian culture by teaching students to undermine their own language and way of life. Now, in the typical public-school classroom, American Indian students have become invisible because assimilative ideas and dominant political forces remain engaged. Thus, Bourdieu’s conceptual notion of habitus, capital, and field offers a better understanding of the influence of one’s environment on one’s attitudes, thoughts, and actions. Therefore, the primary finding of this study that SES influences educational achievement and attainment was not surprising. Even though we know education is the great equalizer, our schools in fact reproduce and legitimize inequality by granting prestige and value of one culture over another. The thought of changing the entire sociopolitical structures that perpetuate this violence appears hopeless and daunting. However, Bourdieu contends that “if worlds are constructed, then they can be re-constructed in other ways and in other words” (Grenfell,

2008, p. 196) to save the American Indian youth.

Appendix 1:  
IRB Approval Letter



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

OFFICE OF HUMAN RESEARCH ETHICS  
Medical School Building 52  
Mason Farm Road  
CB #7097  
Chapel Hill, NC 27599-7097  
(919) 966-3113  
Web site: [ohre.unc.edu](http://ohre.unc.edu)  
<https://my.research.unc.edu> for IRB status  
Federalwide Assurance (FWA) #4801

**To:** Priscilla Maynor  
School of Education  
308 Elam St Holly Springs, NC 27540

**From:** Behavioral IRB

A handwritten signature in blue ink, appearing to read "Lawrence Rosenthal /ch".

**Date:** 5/12/2010

**RE:** Determination that Research or Research-Like Activity does not require IRB Approval  
**Study #:** 10-0803

**Study Title:** Bourdieu's Habitus and the Educational Achievement of North Carolina's American Indian Students: An Empirical Study

This submission was reviewed by the above-referenced IRB. The IRB has determined that this submission does not constitute human subjects research as defined under federal regulations [45 CFR 46.102 (d or f) and 21 CFR 56.102(c)(e)(1)] and does not require IRB approval.

**Study Description:**

**Purpose:** To investigate Bourdieu's theoretical concept of *habitus* to see if it is predictive of the educational achievement and socioeconomic status of American Indian students in North Carolina.

**Participants:** A cohort of the American Indian students who were enrolled in North Carolina's public schools in 1998-99 through the 2008-09 school year, and who participated in the state assessment program.

**Procedures:** analyses of secondary data to examine the educational achievement trajectories and patterns for a cohort of American Indian students who entered third grade in 1998 through their graduation and/or 2008-09. It will also examine freshman retention rates in higher education.

If your study protocol changes in such a way that this determination will no longer apply, you should contact the above IRB before making the changes.

CC:Fen English, School Of Education

## REFERENCES

- Abelev, M., (2009). Advancing out of poverty: Social class worldview and its relation to resilience. *Journal of Adolescent Research*. 24(1). 114-141.
- Allen, E. E., & Hood, L. (2000). Biotechnology, inquiry, and public education. *Trends in Biotechnology*. 18, 329-330.
- Almeida, D. A. (1999). *Postsecondary Financial Aid for American Indians and Alaska Natives*. Charleston, W.V.: ERIC Clearinghouse on Rural Education and Small Schools (EDORC 993).
- Aronowitz, S. & Giroux, H. (1993). *Education still under siege*. (2nd ed.) Critical studies in education and culture. Westport, CT: Bergin & Garvey.
- Barnhart, C. (2001). A history of schooling for Alaska Native people. *Journal of American Indian Education*, 40(1), 1-30.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: Theory, research, critique*. London, UK: Taylor & Francis.
- Berry, B. (1969). *The education of American Indians*. Washington, DC: US Government Printing Office.
- Beaulieu, D. (2008). Native American education research and policy development in an era of No Child Left Behind: Native language and culture during the administrations of Presidents Clinton and Bush. *Journal of American Indian*, 47(1), 10-45.
- Bodley, J. (2003). *The power of scale: A global history approach*. Armonk, NY: M.E. Sharpe.
- Boloz, S. A., & Varrati, R. (1983). *Apologize or analyze: Measuring academic achievement in the reservation school*. (ERIC Document Reproduction Service No. ED232817).
- Bourdieu, P. & Passeron, J. (2000). *Reproduction in Education, Society, and Culture*. London: Sage Publications.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge, UK: Cambridge University Press.
- Bowker, A. (1992, May). The American Indian female dropout. *Journal of American Indian education*, 31(3), 3-21.
- Bowles, S., and Gintis, H. (1976). *Schooling in Capitalist America*. NY: Basic Books Inc.

- Brandt, E.A. (1992, January). The Navajo area student dropout study: Findings and implications. *Journal of American Indian Education*, 31(2), 48-63.
- Brayboy, B., & Castagno, A. (2009). Self-determination through Self-education: Culturally Responsive Schooling for Indigenous Students in the USA. *Teaching Education*, 20(1), 31-53.
- Brayboy, B. M. J. (2005). Toward a tribal critical race theory in education. *Urban Review*, 37(5), 425-446.
- Butterfield, R., & Pepper, F. (1991). *Improving parental participation in elementary and secondary education for American Indian and Alaskan Native students* (Report No. RC-018-612). Washington, DC: US Department of Education. (ED343754).
- Center for Education Policy (2009). *State Test Score Trends through 2007-08, Part 3: Are achievement gaps closing and is achievement rising for all?* Retrieved on October 30, 2009, from [www.cep-dc.org](http://www.cep-dc.org).
- Chan, K.S., & Osthimer, B. (1983). *Navajo youth and early school withdrawal: A case study*. Los Alamitos, CA: National Center for Bilingual Research. (ERIC Document Reproduction Service No. ED 240 414).
- Cleary, L. M., & Peacock, T. (1998). *Collected Wisdom: American Indian Education*. Boston: Allyn & Bacon.
- Clotfelter, C., Ladd, H., & Vigdor, J. (2009). The academic achievement gap in grades 3 to 8. *Review of Economics & Statistics*, 91(2), 398-419. Retrieved from Business Source Premier database.
- Connolly, P. & S. Hill (2004). Symbolic violence, locality and social class: The educational and career aspirations of 10-11 year old boys in Belfast. *Pedagogy, Culture, & Society*, 12(1), 15-33.
- Coggins, K., Williams, E., & Radin, N. (1997). The traditional tribal values of Ojibwa parents and the school performance of their children: An exploratory study. *Journal of American Indian Education*, 36(3), 1-15.
- Coladarci, T. (1983). High school dropout among Native Americans. *Journal of American Indian Education*, 23, 15-22.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F.D., et al. (1966). *Equality of educational opportunity*. Washington, DC: US Government Printing Office.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: Pearson Merrill Prentice Hall.

- Delong, D. H. (1993). *Promises of the past: A history of Indian education*. Golden, CO: North American Press.
- Deloria, V. (1991). *Indian education in America*. Boulder, CO: American Indian Science & Engineering Society.
- Demmert, W. G., Grissmer, D. & Towner, J. (2006). A review and analysis of the research on Native American students. *Journal of American Indian Education*, 45(3), 5-23.
- Demmert, W., & Towner, J. (2003). A review of the research literature on the influences of culturally based education on the academic performance of Native American students. Portland, OR: Northwest Regional Educational Lab.
- Demmert, W. (2001). *Improving academic achievement among Native American students: A review of the literature*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.
- Deyhle, D. (1989). Pushouts and pullouts: Navajo and Ute school leavers. *Journal of Navajo Education*, 6(2), 36-51.
- Deyhle, D. (1992). Constructing failure and maintaining cultural identity: Navajo and Ute school leavers. *Journal of American Indian Education*, 31, 24-47.
- Deyhle, D. & Swisher, K. (1997). *Research in American Indian and Alaskan Native education: From assimilation to self-determination*. Review of research in education presented at the American Educational Research Association, Washington, DC.
- Dodd, J. M., Garcia, M., Meccage, C., and Nelson, J. R. (1995). American Indian student retention. *NASPA Journal*, 33, 72-78.
- English, F. W. (2002). On the intractability of the achievement gap in urban schools and the discursive practice of continuing racial discrimination. *Education and Urban Society*, 34(3). 298-311.
- Executive Order 13096 of August 6, 1998 on American Indian and Alaskan Native Education. *Federal Register*, 63(154). August 11, 42681.
- Executive Order 13336 of April 30, 2004 on American Indian and Alaskan Native Education. *Federal Register*, 69(87). May 5, 23295.
- Equality of educational opportunity (Coleman) study (EEOS), 1966 [electronic resource]* (1995). In Inter-university Consortium for Political and Social Research. (Ed.) Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research [distributor]. Retrieved from <http://search.lib.unc.edu?R=UNCb5960332>; Available via the UNC-Chapel Hill Libraries. <http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/06389.xml>

- Faircloth, Susan C., & Tippeconnic, III, John W. (2010). The dropout/graduation rate crisis among American Indian and Alaska Native students: Failure to respond places the future of Native peoples at risk. Los Angeles, CA: The Civil Rights Project/Proyecto Derechos Civiles at UNCL. [www.civilrightsproject.ucla.edu](http://www.civilrightsproject.ucla.edu)
- Falk, D. R., and Aitken, L. P. (1984). Promoting retention among American Indian college students. *Journal of American Indian Education*, 23(2), 24-31.
- Fuchs, E. & Havighurst, R. J. (1972). *To Live on this earth: American Indian education*. Garden City, NY: Doubleday.
- Garcia, D. R., (2008). Mixed messages: American Indians achievement before and since the implementation of no child left behind. *Journal of American Indian Education*. 47(1). 136-154.
- Giroux, H. A. (1981). *Ideology, culture and the process of schooling*. Philadelphia: Temple University Press.
- Greene, R. & Kersey, H. (1975). Upgrading Indian education: A case study of the Seminoles. *School Review*, 83, 345-61. (EJ113653)
- Grenfell, M. (eds) 2008. Pierre Bourdieu: Key Concepts.
- Grenfell, M. (2007). *Pierre Bourdieu: Education and Training*. London: Continuum International Publishing Group.
- Grenfell, M. & James, D. (2004). Change in the Field: Changing the field: Bourdieu and the methodological practice of educational research. *British Journal of Sociology of Education*. 25 (4). 507-523.
- Hale, J. E. (2001). *Learning while Black: Creating educational excellence for African American children*. Baltimore: The John Hopkins University Press.
- Harrington, C. (2010). The impending education crisis for American Indians: Higher education at the crossroads. *Indigenous Policy Journal*. 11(3). Retrieved December 30, 2010, at [http://www.indigenouspolicy.org/ipjblog/category/Vol-XXI-No-3-\(Fall-2010\).aspx](http://www.indigenouspolicy.org/ipjblog/category/Vol-XXI-No-3-(Fall-2010).aspx)
- Harris, D. N. & Herrington, C. D. (2006). Accountability, standards, and the growing achievement gap: Lessons from the past half-century. *American Journal of Education*, 112(2), 209-238.
- Harvard Civil Rights Project (2005). *Confronting the graduation rate crisis in the South*. Cambridge, MA: Civil Rights Project at Harvard University.

- Howell (2010). *Statistical methods for psychology* (7th ed). Belmont, CA: Wadsworth Cengage Learning.
- Indian Nations at Risk Task Force (1991). *Indian nations at risk: An educational strategy for action*. Washington, DC: US Department of Education.
- Jackson, A. P. & Smith, S. A. (2001). Postsecondary transitions among Navajo students. *Journal of American Indian Education*. 40(2), 28-47.
- Jeffries, R. B., (2003). Successfully educating urban American Indian students: An alternative school format. *Journal of American Indian Education*. 42 (3). 40-57.
- Jencks, C. & Phillips, M. (1998). *The Black-White test score gap*. Washington, DC: Brookings Institution Press.
- Jencks, C., Smith, M., Acland, H., Bane, M. J., Cohen, D., Gintis, H., et al. (1972). *Inequality*. New York: Basic Books.
- Jenkins, R. (2002). *Pierre Bourdieu*. London: Routledge.
- Karen, F. (2002). Changes in access to higher education in the United States: 1980-1992. *Sociology of Education*, 75 (3), 191-210.
- Kanu, Y. (2006). Getting them through the college pipeline: Critical elements of instruction influencing school success among Native Canadian high school students. *Journal of Advanced Academics*, 18(1). 116-145.
- Kingston, P. W. (2001). The unfulfilled promise of cultural capital theory. *Sociology of Education*, 88-99.
- Laureau, A. (2003). *Unequal Childhoods: Class, race, and family life*. Berkley and Los Angeles, CA: University of California Press Ltd.
- Ladson-Billings, G. (1999). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational Researcher*, 35(7), 3.
- Larimore, J. & McClellan, G. (2005). Native American student retention in US postsecondary education. *New Directions for Student Services*, 109. 17-31.
- Lee, J. & Bowen, N. K., (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal*. 43(2), 193-218.
- Lipka, J., & McCarty, T. (1994). Changing the cultural of schooling: Navajo and Yup'ik cases. *Anthropology and Education Quarterly*, 25(3), 266-284.

- Locklear, Joseph M. (1996). End-of-Course test item bias analysis in the public schools of Robeson County, North Carolina (Doctoral dissertation, South Carolina State University, 1996). *Dissertation Abstracts International*, 58 (08A), 3100.
- Lomawaima, K. T. & McCarty, T. (2006). To remain an Indian: Lessons in democracy from a century of Native American education. New York: Teachers College Press.
- Lomawaima, K. T. & McCarty, T. (2002). When tribal sovereignty challenges democracy: American Indian education and democratic ideal. *American Educational Research Journal*, 39(2), 279-305.
- Lomawaima, K. T. (1999). The unnatural history of American Indian education. Chapter 1 in *Next steps: Research and practice to advance Indian education*, (pp. 3-31).
- Lomawaima, K. T. (1995). Educating Native Americans. In J.A. Banks & C.A.M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 331-42). New York: Macmillan.
- Maynor, Malinda (2005). Native American identity in the segregated South: The Indians of Robeson County, North Carolina, 1872–1956. PhD dissertation, University of North Carolina at Chapel Hill, United States – North Carolina. Retrieved April 21, 2010, from Dissertations & Theses @ University of North Carolina at Chapel Hill. (Publication No. AAT 3170494).
- Meriam, L. (1928). *The problems of Indian administration*. Baltimore: John Hopkins University Press.
- McCarty, T. L. (2008). American Indian, Alaska Native, and Native Hawaiian education in the era of standardization and NCLB—An introduction. *Journal of American Indian Education*. 47(1). 1-9.
- McCarty, T. L. (Ed.). (2005). *Language, Literacy, and Power in Schooling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Mills, C. (2006). Opportunity and resignation within marginalized students: towards a theorization of the reproductive and transformative habitus. *Critical Studies in Education*. 49(2). 99-111.
- Mills, C. (2008). Reproduction and transformation of inequalities in schooling: the transformative potential of the theoretical constructs of Bourdieu. *British Journal of Sociology of Education*, 29(1). 79-89.
- Mills, C. & Gale, T. (2007). Researching social inequalities in education: towards a Bourdieuan methodology. *International Journal of Qualitative Studies in Education*. (20)4. 433-447.

- Moon, N. W., 2003-08-16. Theory of Misrecognition or Misrecognition of Theory? Engaging Bourdieu and His Critics. Paper presented at the annual meeting of the American Sociological Association, Atlanta Hilton Hotel, Atlanta, GA. *Online* <.PDF>. 2009-05-26 from [http://www.allacademic.com/meta/p107288\\_index.html](http://www.allacademic.com/meta/p107288_index.html)
- Moran, R., Rampey, B. D., Dion, G., & Donahue, P. (2008). *National Indian education study 2007 part I: Performance of American Indian and Alaska Native students in grades 4 and 8 on NAEP 2007 reading and mathematics assessments* (NCES 2008-457). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, US Department of Education.
- Nash, R. (1990). Bourdieu on educational and social and cultural reproduction. *British Journal of Sociology of Education*. 11(4). 431-447.
- National Center for Education Statistics (NCES) (2005). *The Nation's Report Card: Reading and Mathematics State Snapshot Report*. Washington, DC: US Department of Education.
- National Center for Education Statistics (NCES) (2008). *The Nation's Report Card: Reading and Mathematics State Snapshot Report*. Washington, DC: US Department of Education.
- National Center for Education Statistics (NCES) (2009). *The Nation's Report Card: Reading and Mathematics State Snapshot Report*. Washington, DC: US Department of Education.
- National Center for Education Statistics (NCES) (2006). *National Indian Education study 2005 part I: Performance of American Indian and Alaska Native students at grades 4 and 8 on NAEP 2007 reading and mathematics assessments*. Washington, DC: US Department of Education.
- National Center for Education Statistics (NCES) (2007). *National Indian Education study 2006 part I: Performance of American Indian and Alaska Native students at grades 4 and 8 on NAEP 2007 reading and mathematics assessments*. Washington, DC: US Department of Education.
- National Center for Education Statistics (NCES) (2008). *National Indian Education Study 2007 part I: Performance of American Indian and Alaska Native students at grades 4 and 8 on NAEP 2007 reading and mathematics assessments*. Washington, DC: US Department of Education.
- Newman, D. L. (2005). Ego development and ethnic identity formation in rural American Indian adolescents. *Child Development*. 76(3), 734-746.

- Noley, G. (1992). *Educational reform and American Indian cultures*. Washington, DC: Office of Research and Educational Improvement. (ERIC Document Reproduction Service No. ED 362341)
- Noll, E. (1998). Experiencing literacy in and out of school: Case studies of two American Indian youths. *Journal of Literacy Research*, 30(2), 205–232.
- North Carolina Department of Public Instruction. (2007). *Statistical profile*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2001). *North Carolina state testing results, 2001-02*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2003). *North Carolina state testing results, 2002-03*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2007). *North Carolina state testing results, 2006-07*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2009). *North Carolina accountability program*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2008). *Annual dropout report*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Department of Public Instruction. (2001). *Minority achievement gap report: Trends in subgroup performance*. Raleigh, NC: North Carolina Department of Public Instruction.
- North Carolina Justice Center. (2010). *Exposing the gap: North Carolina schools are still failing minority students*. Raleigh, NC: North Carolina Justice Center.
- Oakley, C. (2005). *Keeping the circle: American Indian identity in eastern North Carolina 1885-2004*. Lincoln, NE: University of Nebraska Press.
- Patrick, R. (2008). Perspectives on change: a continued struggle for academic success and cultural relevancy at an American Indian school in the midst of No Child Left Behind. *Journal of American Indian Education*. 47(1). 65-81.
- Pavel, D. M. (1992). *American Indians and Alaska Natives in higher education: Research on participation and graduation* (ERIC Digest). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools (ED 348 197).
- Perdue, T. & Green, M. (2010). *North American Indians: A Very Short Introduction*. Oxford, UK: Oxford University Press.

- Peshkin, A. (1997). *Places of memory: Whiteman's schools and Native American communities*. Mahway, NJ: Lawrence Erlbaum.
- Phillips, S. (1983). *The invisible culture: Communication in classroom and community on the Warm Springs Indian Reservation*. Prospect Heights, IL: Waveland.
- Platero, P., Brandt, E.A., Witherspoon, H., & Wong, P. (1986). *Navajo students at risk: Final report for the Navajo area dropout study*. Window Rock, AZ: Navajo Nation.
- Reay, D. (2004). It's all becoming a habitus: Beyond the habitual use of habitus in educational research. *British Journal of Sociology of Education*. 25(4), 431-444.
- Reyhner, J. A. (2006). *Education and language restoration*. Philadelphia, PA: Chelsea House Publishers.
- Reyhner, J. & Dodd, J. (1995, January). Factors affecting the retention of American Indian and Alaska Native students in higher education. Paper presented at the first annual conference of Expanding Minority Opportunities, Tempe, Arizona.
- Rindone, P. (1988). Achievement motivation and academic achievement of Native American students. *Journal of American Indian Education*. 28(1), 1-8.
- Price, H. B. (2002). *Achievement matters*. NY: Kensington Publishing Corp.
- Ross, T. E. (1999). *American Indians in North Carolina: geographical interpretations*. Southern Pines, NC: Karo Hollow Press.
- Sando, J. S. & Agoyo, H. (Eds.) *Po'Pay: Leader of the first American revolution*. Santa Fe, New Mexico: Clear Light Publishing.
- Senge, P. (2006). *The fifth discipline: The art and practice of the learning organization*. NY: Doubleday/Currency.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453. Retrieved December 30, 2010 from <http://www.jstor.org/stable/3515987>
- Shohamy, E. (2007). The power of language tests, the power of the English language and the role of ELT. *International Handbook of English Language Teaching*. Springer International Handbook of Education. 15(3). 521-531. Retrieved December 30, 2010, from [www.springerlink.com/content/rnp45h3458168454](http://www.springerlink.com/content/rnp45h3458168454)
- Smith, D. C., Leake, D. W., & Kaamekona, N. (1998). Effects of a culturally competent school-based intervention for at-risk Hawaiian students. *Pacific Educational Research Journal*, 9(1), 3-22. (EJ592505)

- Smith, E. (2008). *Using secondary data in educational and social research*. United Kingdom: Open University Press.
- Spring, J. (2001). *Deculturalization and the struggle for equality: a brief history of the education of dominated cultures in the United States* (3rd ed.). Boston: McGraw-Hill Company, Inc.
- Spring, J. (1976). *The sorting machine*. NY: David McKay Company, Inc.
- State Advisory Council on Indian Education (2003). *Remaining and Becoming: Annual report to the State Board of Education*. Raleigh, NC: North Carolina Department of Public Instruction.
- State Advisory Council on Indian Education (2009). *Weaving Innovative Educational Opportunities for American Indian Students: Annual report to the State Board of Education*. Raleigh, NC: North Carolina Department of Public Instruction.
- State Advisory Council on Indian Education (2008). *Tribes, communities, and schools: Fostering student success through partnerships: Annual report to the State Board of Education*. Raleigh, NC: North Carolina Department of Public Instruction.
- St. Germaine, R. (2000). A chance to go full circle: Building on reforms to create effective learning. Prepared for the National American Indian and Alaska Native Education Research Agenda Conference. May 30-June 1, Albuquerque, New Mexico.
- Sronge, J., Tucker, P., & Hindman, J. (2004). *Handbook for Qualities of Effective Teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Swartz, D. (1997). *Culture and power*. Chicago: The University of Chicago Press.
- Tierney, W. G. (1992). An anthropological analysis of student participation in college. *Journal of Higher Education*, 63, 603-618.
- Tippeconnic, J. (2000). Reflecting on the past: Some important aspects of Indian education to consider as we look toward the future. *Journal of American Indian Education*. 39 (2). 39-48.
- Tharp, R. G. (2006). Four hundred years of evidence: culture, pedagogy, and Native America. *Journal of American Indian Education*. 45(2). 6-25.
- Tharp, R., & Yamauchi, L. (1994). *Effective instructional conversation in Native American classrooms: Education practice report*. Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning.
- Thompson, Vernon Ray (1973). A history of the education of the Lumbee Indians of Robeson County, North Carolina from 1885 to 1970. EdD dissertation, University of

Miami, United States – Florida. Retrieved April 21, 2009, from Dissertations & Theses: Full Text. (Publication No. AAT 7414331).

Trimble, J. E. (2000). Social psychological perspectives on changing self-identification among American Indians and Alaska Natives. In R.H. Dana (Ed.), *Handbook of cross-cultural and multicultural personality assessment*. Mahway, NJ: Erlbaum.

Tyack, D. & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.

Tyack, D. (1974). *The one best system*. Cambridge, MA: Harvard University Press.

Urdan, T. C. (2005). *Statistics in plain English* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

UNC General Administration, reports and publications. Retrieved June 6, 2010, from <http://www.northcarolina.edu/ira/ir/analytics/fresh.htm>

US Census (2006-08). American Community Survey. Washington, DC: US Census Bureau.

US Census (2000). Statistical Data Profiles. Washington, DC: US Census Bureau.

US Senate. (1969). *Indian education: A national tragedy, a national challenge* (Report No. 91-501). Washington, DC: US Government Printing Office, Retrieved November 30, 2007, from <http://www.tedna.org/pubs/Kennedy/toc.htm>. (ED034625)

Wacquant, L. (1998). *Pierre Bourdieu, InKey sociological thinkers*, ed. R. Stones. 215 29. New York: New York University Press.

Watanabe, S. (2008). Because we do not know their way: Standardizing practices and peoples through habitus, the NCLB “highly-qualified” mandate, and PRAXIS I examinations. *Journal of American Indian Education*. 47(1). 118-135.

Wax, M., Wax, R., & Dumont, R. Jr. (1989). Formal education in an American Indian community. Prospect Heights, IL: Waveland Press. (Original work published in 1964).

Webb, J., Schirato, T., & Danaher, G. (2002). *Understanding Bourdieu*. London: Sage Publications.

White House Conference on Indian Education. (1992) The final report of the White House Conference on Indian Education (Vols. I and II). Washington, DC: White House Conference on Indian Education.

White, N., Ober, R., Frawley, J., & Bat, M. (2009) Intercultural leadership: Strengthening leadership capabilities for indigenous education. In N. Cranston and L. Ehrich (Eds.) *Australian school leadership today* (pp. 85-103). Queensland, Australia: Australian Academic Press.

- Winstead, T., et al. (2008). Language, sovereignty, cultural contestation, and American Indian schools: No Child Left Behind and a Navajo test case. *Journal of American Indian Education*. 47(1). 46-64.
- Wilkins, D. E. (2002). American Indian Politics and the American Political System. New York: Rowman & Littlefield Publishers, Inc. White House Conference on Indian Education (1992). *The final report of the White House Conference on Indian education*, Washington, DC.
- Wright, B. (1985). Programming success: Special student services and the American Indian college student. *Journal of American Indian Education*, 24(1). 1-7.
- Yazzie, T. (2000). *Holding a mirror to "eyes wide shut": The role of native cultures and languages in the education of American Indian students*, (RC 022-508). Washington, DC: Office of Educational Research and Improvement. (ED 444-778)