Introduction

A Systematic Analysis of the African American Educational Pipeline to Inform Research, Policy, and Practice

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Inequality, disparate representation, and denied access to opportunity are key challenges that have long plagued African Americans in their pursuit of education in the United States. These challenges have been well documented in the annals of history, chronicling the less than desired treatments in K–12 schools and universities. These three challenges have not been limited to African American students but African American professionals as well. Although African Americans constituted 33.5 million or 12% of the U.S. population in 2000, they participate in education at a lower rate. For example, of the students attending higher education institutions in 2000, 11% were African Americans. While the disparity in participation has narrowed to 1% for African Americans in higher education, the attainment gap remains a substantial challenge. In turn, most of the discussions in education focused on research and policy are hard pressed not to have a major agenda item centered on improving the conditions for African Americans.

Decades of research have described the dismal educational conditions for African Americans (e.g., Hoffman, Llagas, & Snyder, 2003; Nettles & Perna, 1997), coupled with federal legislation targeted at improving these conditions (e.g., TRIO Programs), however, the results have been slow and insignificant. Now we are operating in an era when affirmative action is losing support, targeted and preferential programs are under attack, and federal support for specific groups is being downsized. The key question remains: What systemic set of strategies is necessary to improve the conditions for African Americans throughout the educational pipeline? In this book we attempted to address this question by examining the status and recent progress of African Americans at critical stages in the educational pipeline. In addition, our goal was to provide appropriate implications for consideration by policy makers charged with addressing these issues, to advance the knowledge base for researchers concerned about African American education, and to provide praxis-based information to improve educational practice.

In the early 1960s, Coleman's *Equality of Educational Opportunity* provided large-scale empirical evidence of the underachievement of African Americans in education. *Equality of Educational Opportunity*, also known as the Coleman Report, resulted from Section 402 of the Civil Rights Act of 1964:

The Commissioner shall conduct a survey and make a report to the President and the Congress, within two years of the enactment of this title, concerning the lack of availability of equal opportunities for individuals by reason of race, color, religion, or national origin in public educational institutions at all levels in the United States, its territories and possessions, and the District of Columbia. (Coleman, Campbell, Hobson, McPartland, Mood, Weinfield, & York, 1966, p. 548)

The product became the second largest social science research project in history, with Project Talent being the largest. Approximately 570,000 K–12 students in America were tested, along with 60,000 school teachers, and detailed information on 4,000 schools was collected.

Reactions to the report were less than settled, with supporters arguing that "it is the most important source of American education ever produced" (Mosteller & Moynihan, 1972, p. 4). Meanwhile, critics (e.g., Bowles & Levin, 1968) noted that it was not methodologically sound, thus raising more questions than it answered. While these findings were potentially flawed, they were relevant to African Americans' participation in education. Several key findings prefaced perennial challenges for the education of African Americans. Nationwide median test scores in 1965 for first- and twelfth-grade students described and documented the achievement gap between African Americans and Whites. In addition, the report documented that the absence of key educational tools and interventions in homes and communities for African American students contributed greatly to their underachievement in schools.

Moreover, findings of the Coleman Report indicated that African American students were more likely to be taught by African American teachers. In conjunction, the report noted that teachers who instruct African American students tended to be less well credentialed than those who instruct White students. School counselors for African American students were less involved in their professional association, thus lagging behind in current knowledge compared to the school counselors for White students. Lastly, the disparate enrollment of African American students in higher education institutions was well documented in the report. Of the African American students enrolled at institutions of higher education, they were largely concentrated at institutions with less prestige and fewer resources. It is difficult to understand the current status of African Americans in education without examining their historical struggle over access to education.

HISTORICAL CONTEXT FOR THE EDUCATION OF AFRICAN AMERICANS: FROM SLAVERY TO THE TWENTIETH CENTURY

African Americans' plight regarding education in the United States has been a unique journey (Anderson, 1988). African Americans represent the only immigrant group to be legally denied access to education. Their conspicuous journey in education began prior to their ancestors being brought to America. Slave masters deliberated over the type and scope of training that Africans would need to be adequate slaves in America (Woodson, 1919). These slave masters believed that the slaves could not be enlightened without developing a thirst for liberation, which would make it far more difficult to exploit these new people. The majority of southern slaveholders adopted this philosophy and decided that African Americans should not be educated.

In 1661, slavery was legalized in Virginia, with other southern colonies to follow soon thereafter. Accordingly, teaching slaves to read or write was deemed illegal because it was thought to be a deterrent to slavery. While the Quakers were the first settlers of the American colonies to offer African Americans the same educational and religious opportunities as Whites, many Catholic churches were instrumental in providing education for African Americans, even within the confines of slavery (Woodson, 1919). In addition, many African American slaves were astute enough to teach themselves how to read and write. For instance, Phillis Wheatley in 1761 taught herself how to read in 16 months around age 8 (Nott, 1993).

The first African Free School was founded in New York City by the Manumission Society in 1787. By 1824, seven African Free Schools were funded by the city, such that free education for all African American children was available in New York City. In 1834, White students at Oberlin College (Ohio) voted to admit African American and women students. Lincoln University (Pennsylvania) was founded in 1854, making it the first historically Black institution specifically for college-level education. By 1870, 21% of newly freed African Americans were literate. Edward A. Bouchet received his Ph.D. in physics from Yale University in 1876, thus becoming the first African American to be awarded a doctoral degree from an American university.

Alexander Crummel established the American Negro Academy, the first national association of African American intellectual leaders in 1897. In 1907,

the Jeanes Foundation, the Negro Rural School Fund (later known as the Anna T. Jeanes Fund), was established, making it the first fund with the sole purpose of improving rural public education for African American children in the South. Atlanta University was established in 1929 as the first African American institution solely for graduate and professional education. While not a complete history, the previous section does provide a description of the initial years for African Americans in education.

KEY POLICY TOOLS FOR AFRICAN AMERICAN EDUCATION

In order to understand the level of participation that African Americans currently have in education, policy tools require attention. Policy tools are critical, because they are the elements in policy design that cause individuals to do something they would not otherwise do with the intention of modifying behaviors to solve public problems or attain policy goals (Baker, 2001; Fastrup, 1997). Moreover, policy tools have implications in public policy designs because they direct the ways in which individuals are treated. These tools are designed to change behavior through several distinct mechanisms, each of which carries significant symbolic and instrumental connotations. The authoritative perspective on policy tools assumes that without the explicit or even implicit threat of other sanctions, individuals will not treat all groups equitably. Accordingly, what follows are policy tools, broadly defined, that affected African American education.

In 1865, the U.S. Freedman Bureau was established by Congress to assist newly freed slaves with food, medicine, jobs, contracts, legal matters, and education. The bureau subsequently established over 4,000 schools for African Americans. The U.S. Congress passed the Morrill Act II in 1890, which led to the founding of historically Black land-grant institutions. The *Plessy v. Ferguson* decision in 1896 upheld that states have the constitutional authority to provide "separate but equal" accommodations for African Americans. One of the more significant early admission cases that forced states to establish separate professional programs for African Americans occurred in 1938, *Missouri ex rel. Gains v. Canada*.

Frederick D. Patterson, president of Tuskegee Institute, conceived of the United Negro College Fund (UNCF), which was incorporated in 1944. The UNCF's purpose was to enhance the quality of education for historically Black colleges and universities (HBCU) students, provide scholarships, raise operating funds, and provide technical assistance for member institutions. In *McLaurin v. Oklahoma State Regents for Higher Education* (1950), the courts found that the state must treat students of color equal to or the same as White students in

all aspects of education and services provided. Subsequently, the Supreme Court, in *Sweatt v. Painter* (1950), made it clear that when programs are not equal, it is a violation of the Equal Protection Clause. This decision was based on an evaluation of whether the legal education program at Texas State University for Negroes (TSUN) School of Law (later relocated to Texas Southern University) was equal to the program at the University of Texas Law School.

Thurgood Marshall, who was at the time special council of the National Association for the Advancement of Colored People (NAACP), argued the *Brown v. Board of Education, Topeka, Kansas*, case in front of the Supreme Court in 1954. The Supreme Court concluded that racial segregation in public schools violates the Fourteenth Amendment of the U.S. Constitution. The decision ultimately forbids racial segregation in public schools, thus providing students of color with the opportunity to attend the same public schools as White students. On the higher education level, *Frasier v. UNC Board of Trustees* (1955) represented a significant victory for African American students who were denied admission to colleges and universities on the basis of admission policies that admitted Whites only. Subsequently, in *Cooper v. Aaron* (1958), the Supreme Court ruled, based on constitutional rights, that children are not to be discriminated against in schools' admissions because of race or color.

In 1964, affirmative action policies were instituted based on the Civil Rights Act. In accordance, President Lyndon B. Johnson signed Executive Order 11246 supporting affirmative action policies and practices. The Civil Rights Act specifically exempted higher education from its jurisdiction. In the following year, Title III of the Higher Education Act stipulated aid for "strengthening developing institutions." Historically Black colleges and universities were well positioned to take advantage of these additional federal resources. The same year, the Office of Economic Opportunity started the Head Start programs, designed to address the education, health and nutrition, and social needs of low-income children and their families. As result of Title IV, Section 402, of the Civil Rights Act of 1964, James Coleman's study *Equality of Education Opportunity*, often referred to as the "Coleman Report," was conducted. Policy implications from these findings resulted in busing as a means for addressing segregation, and tracking, which inadvertently led to re-segregation.

The National Association for Equal Opportunity in Higher Education (NAFEO) was founded in 1969 primarily as a public policy advocate to address the interests of HBCUs. Due to the *Adams v. Richardson* (1973) case, the U.S. Department of Health, Education, and Welfare (HEW) was established with an affirmative obligation to enforce its duties under the Civil Rights Act of 1964 with respect to education programs that receive federal funds. The Black Mississippians' Council of Higher Education filed a class action suit, *Ayers v. Waller* (later known as *Ayers v. Fordice*), in 1975. The group requested that the state enforce Title VI of the Civil Rights Act of 1964. When the suit was filed

by HEW, it was named United States v. Fordice. The U.S. Supreme Court in 1992 ordered the state of Mississippi to dismantle its dual system of higher education. In Regents of the University of California v. Bakke (1978), the Supreme Court ruled that colleges and universities may administer carefully designed admissions programs that to some extent take race and ethnicity into account to foster diversity of their student bodies. At the same time, the court held that quotas and set-asides in admissions were illegal. In 1986, it decided the only ruling on de facto segregation and faculty assignment schemes in Wyant v. Jackson Board of Education, stating that seniority could be considered but race could not. The American Council on Education in Washington, DC, established the Office of Minorities in Higher Education in 1987.

PROBLEMATIZING THE AFRICAN AMERICAN EDUCATIONAL PIPELINE

When used in reference to education, the pipeline metaphor elicits various responses. For the most part, while some may be impartial, two camps have developed in response to the metaphor: supporters and critics. Supporters tend to find legitimacy in the use of the term as a heuristic tool to help explain the representation of a group across a large and complex enterprise such as education (e.g., Cole & Barber, 2003; Kulis, Chong, & Shaw, 1999; Kulis, Sicotte, & Collins, 2002). Meanwhile, critics tend to view the term as limited and less representative of the experiences of underrepresented populations (e.g., Bowen & Bok, 1998; Cross, 1994). Some critics (e.g., Bowen & Bok, 1998; Malveaux, 1995) have offered alternative metaphors (e.g., shape of the river and merrygo-rounds). In the context of this book, the educational pipeline metaphor is used to describe and depict critical stages in the educational process for African Americans, both as students and professionals. As such, this metaphor permits key decision makers (e.g., researchers, policy makers, and practitioners) to examine the identified stages to determine where additional attention and interventions may be needed (Bowen & Rudenstine, 1992; Turner, Myers, & Creswell, 1999). In short, the metaphor was retained for this book because it provides clear stages for interventions to improve the conditions for African Americans in education.

In the final chapter, I present an enlarged and a more tangible understanding of the pipeline metaphor for African Americans in education. This discussion extends the pipeline metaphor and attempts to provide direct connections to African American participation, attainment, and outcomes in education. This is done by drawing on knowledge from applied science. This field provides excellent guidelines and terminology to depict an enlarged understanding of the African American educational pipeline as a "free-flowing" pipe. In doing so, this new conceptualization of the pipeline encompasses the dynamic nature, multiple and parallel lines of progression, various end points, blocked passages, cracked surfaces, and nonlinear status often attributed to African American participation in education.

NATIONAL CONTEXT OF THE PARTICIPATION, ATTAINMENT, AND OUTCOMES FOR AFRICAN AMERICANS IN THE EDUCATIONAL SYSTEM

To provide a context for examining African American participation, attainment, and outcomes in education, this section highlights national-level data at key stages of the educational pipeline. The enrollment of African Americans in preschool declined 5.4% between 1991 and 1999 (see Table 1). During this 9-year period, African American preschool enrollment decreased from 182,133 in 1990 to 172,388 in 1999. In contrast, African American students' participation in elementary and secondary schools increased 13.7% from 1990 to 1999. In 1990, African American elementary and secondary school enrollment constituted 6,800,805 and 7,731,405 in 1999. High school completion rates for African American students increased slightly (3.6%) during the time of data collection. Specifically, African American students equaled 19,136,040 in 1990 and 19,817,201 in 1999.

Category	1990	1999	Change
Preschool Total Elementary/ Secondary	182,133ª	172,388	-5.4%
School Total High School	6,800,805	7,731,405	13.7%
Completion Total	19,136,040	19,817,201	3.6%

TABLE 1			
Distribution of African American Students in Pre-K-12 Schools			

Note: ^a represents 1991. Enrollment counts for preschool total enrollments were based on the number for each year: 1,239,000 in 1991 and 1,214,000 in 1999. Enrollment counts for elementary and secondary school students were based on the number for each year: 41,217,000 in 1990 and 46,857,000 in 1999. High school completion counts were based on the number for each year: 24,852,000 in 1990 and 26,041,000 in 1999.

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The participation of African Americans in professional positions in pre-K–12 schools is a critical aspect of the educational pipeline (see Table 2). African Americans who held teaching posts in pre-K–12 schools increased 10.4% from 1990 to 1999. Overall, African Americans accounted for 221,102 in 1990 and 244,035 in 1999. When examining these data more closely, the majority of African Americans held teaching positions in public schools. For example, African American teachers in public schools constituted 211,640 in 1990 and 227,505 in 1999. In addition, African American teachers in private schools equaled 9,462 in 1990 and 16,530 in 1999.

Data on school principals show that African Americans' participation increased 45.9% from 1990 to 1999. More precisely, there were 7,413 African American principals in 1990 and 10,813 in 1999. When taking into account sector (public versus private), as with teachers, the majority of African American school principals were employed at public schools. In 1990, African Americans held 6,770 of the principal positions at public schools and 9,239 in 1999, whereas, at private schools African Americans held 643 of the principal positions in 1990 and 1,574 in 1999.

Overall, the enrollment of African Americans at colleges and universities increased 38.8% from 1990 to 2000 (see Table 3). African American undergraduate enrollment was 1,247,000 in 1990 and 1,730,000 in 2000. When considering gender, African American females outnumbered African American males as undergraduates. The percentage of African Americans securing bachelor's degrees increased 70.3% between 1990 and 2000. In 1990, African Americans completed 65,341 bachelor's degrees and 111,307 in 2000. Regarding gender, African American females earned almost twice the number of bachelor's degrees compared with males.

Distribution of African American Fronssionals in Fre K 12 Schools				
Category	1990	1999	Change	
School Teachers				
Total	221,102	244,035	10.4%	
Public	211,640	227,505		
Private	9,462	16,530		
School Principals				
Total	7,413	10,813	45.9%	
Public	6,770	9,239		
Private	643	1,574		

TABLE 2				
Distribution of African American Professionals in Pre-K-12 Schools				

Note: Employment counts for school teachers were based on the number for each year: 2,915,773 in 1990 and 3,451,315 in 1999. Employment counts for school principals were based on the number for each year: 102,770 in 1990 and 110,021 in 1999.

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Category	1990	2000	Change
Undergraduate Enrollment			
Total	1,247,000	1,730,000	38.8%
Men	485,000	635,000	31.1%
Women	762,000	1,095,000	43.6%
Bachelor's Degree			
Total	65,341	111,307	70.3%
Men	26,956	38,103	41.4%
Women	41,013	73,204	78.5%
Master's Degree			
Total	16,139	38,265	137.1%
Men	5,709	11,568	102.6%
Women	10,430	26,697	156.6%
First Professional			
Total	3,575	5,416	51.5%
Men	1,672	2,110	26.2%
Women	1,903	3,306	73.7%
Doctoral Degree			
Total	1,003	1,604	59.9%
Men	417	587	40.8%
Women	586	1,017	73.5%

TABLE 3

Distribution of African American Students in Higher Education

Note: Enrollment counts for undergraduate total enrollments were based on the number for each year: 13,819,000 in 1990 and 15,312,000 in 2000. Bachelor's degree completion counts were based on the number for each year: 1,081,280 in 1990 and 1,244,171 in 2000. Master's degree completion counts were based on the number for each year: 328,645 in 1990 and 468,476 in 2000. First professional degree completion counts were based on the number for each year: 71,515 in 1990 and 79,707 in 2000. Doctoral degree completion counts were based on the number for each year: 37,527 in 1990 and 40,744 in 2000.

Master's degree completion rates for African American students more than doubled between 1990 and 2000. Collectively, African Americans secured 16,139 master's degrees in 1990 and 38,265 in 2000, which amounted to a 137.1% increase. During this time frame, master's degree completion rates increased 102.6% for African American males and 156.6% for African American females. Over a 10-year period (1990–2000), African Americans obtaining first professional degrees increased from 3,575 to 5,416, a 51.5% increase. The growth by gender was as follows: African Americans females increased by 26.2%, and African American males increased by 73.7%. The percentage of African Americans earning doctoral degrees between 1990 and 2000 increased by 59.9%. Total growth went from 1,003 in 1990 to 1,604 in 2000. More growth occurred for African American females (73.5%) during this time period than for African American males (40.8%).

African Americans holding faculty positions between 1990 and 2000 increased 39.8% (see Table 4). Specifically, in 1990 there were 23,225 African American faculty and 29,222 in 2000. During the time of data collection, African American females' representation increased at a higher rate (65.9%) than African American males (26.7%). The increase resulted in parity between African American males and females in the professoriate. African Americans holding higher education administrative positions increased 19.1% between 1990 and 2000. There were 11,796 African American administrators in 1990 and 14,047 in 2000. Between 1990 and 2000, African American females in administrative positions increased 36.0%, while African American males increased only 2.7%. As a result, African American females outnumbered African American males in administrative positions by 2000. African Americans holding university CEO positions increased 20.3% between 1993 and 2003. In 1993, African Americans held 177 of the university CEO positions and 213 in 2003. When considering gender, African American females increased 77.1%, while African American males only increased 6.3%. Even with the sizeable increase, African American males still outnumbered African American females in university CEO positions.

In summarizing data from the 1990s, African American pre-K–12 student participation saw a decline in preschool enrollment, a moderate increase in elementary and secondary school enrollment, and a modest improvement in high school completion. As pre-K–12 professionals, African Americans realized sig-

Distribution of African American Professionals in Higher Education			
Category	1990	2000	Change
Full-Time Faculty			
Total	23,225	29,222	39.8%
Men	12,483	14,660	26.7%
Women	10,742	14,562	65.9%
Full-Time Admin.			
Total	11,796	14,047	19.1%
Men	5,997	6,160	2.7%
Women	5,799	7,887	36.0%
University CEOs			
Total	177ª	213 ^b	20.3%
Men	142	151	6.3%
Women	35	62	77.1%

TABLE 4

Note: Employment counts for full-time faculty were based on the number for each year: 514,662 in 1990 and 571,599 in 2000. Employment counts for full-time administrators were based on the number for each year: 137,561 in 1990 and 158,270 in 2000. ^a represents 1993 and ^b represents 2003. University CEO counts were based on the number for each year: 2,802 in 1993 and 3,191 in 2003.

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nificant growth as school principals. Additionally, African Americans experienced moderate growth as schoolteachers. In both cases, the majority of the growth occurred in public schools. The 1990s saw much wider access and participation for African Americans in higher education compared to enrollment and attainment growth in pre-K–12 schools. It is likely that this is due in large part to the marked participation growth that African Americans experienced in pre-K–12 schools in the 1970s and 1980s. Considerable growth occurred in the higher education workforce for African Americans at several levels (e.g., faculty, administrators, and presidents). A significant share of this growth could be attributable to the participation level of African American women.

OVERVIEW OF THE BOOK

The sections of this book parallel the organization of the educational pipeline (i.e., pre-K–12 schools and higher education). The final section examines the importance of the social and technical context and its influence on the African American educational pipeline. While on the surface these sections may seem disconnected, the connections among them are essential considerations for examining the success of the African American educational pipeline. The conditions of education in pre-K–12 schools are critical in determining African Americans' readiness for postsecondary education, and they serve as building blocks for success. As African Americans' participation and success rates increased marginally compared to their counterparts, concerned groups (e.g., parents, policy makers, and researchers) continued to seek remedies to benefit individuals in this ethnic and racial category. Clearly, the multitude of problems encountered by African Americans throughout the educational pipeline requires examination across sectors.

In chapter 1, Tyrone C. Howard examines the performance of African American students on various student achievement factors and provides recommendations for how schools and teachers can improve the overall educational experiences for these students. In chapter 2, Jennifer E. Obidah, Tracy Buenavista, R. Evely Gildersleeve, Peter Kim, and Tyson Marsh explore the experiences of African American teachers who work in "hard-to-teach-in" contexts. The authors focus on African American teachers in large urban school districts (e.g., Los Angeles and New York City). African Americans in school leadership positions in K–12 schools are the subjects of chapter 3. Linda C. Tillman in this chapter explores the historical context and key roles of school principals in shaping the policy agenda for the education of African American children.

In chapter 4, Lamont A. Flowers uses longitudinal data to examine African American students' involvement in college. In chapter 5, Barbara

J. Johnson and Henrietta Pichon provide a comprehensive review of research on African Americans faculty in higher education. They explore African Americans' participation in graduate school and its impact on the professoriate. Chapter 6 provides a national portrait for African Americans in leadership positions at colleges and universities. Here Jerlando F. L. Jackson and Brandon D. Daniels report national-level data on important characteristics for African Americans in both academic and student affairs administration.

In chapter 7, Mavis G. Sanders and Tamitha F. Campbell problematize the intersection between community involvement and educational success for African American students. In chapter 8, Jelani Mandara and Carolyn B. Murray describe the importance of the role African American families play in facilitating academic achievement in their children. In chapter 9, Jeffrey G. Sumrall and Ramona Pittman explain how technology can be used to help address the achievement gap for African American students.

In closing, the goals of this book are (1) to provide a longitudinal and systemic perspective on the African American educational experience that offers a status report on the progress made since *Brown* and *Fordice*; (2) to examine the trends and challenges encountered by African American students and professionals as their participation widens in an era where multiple educational reforms are competing for limited resources; and (3) to identify and share the lessons learned across institutional components of the pipeline and to both broaden and deepen the understanding for effective practice and policy. In doing so, a systemic understanding of the African American educational pipeline should emerge.

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