Chapter 13
The Role of HBCUs in Preparing African American Males for Careers in Information Technology

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ABSTRACT

African Americans represent only two percent of the professionals working in computer occupations. Many policy makers and researchers argue that the educational pipeline is the major impediment to hiring a more diverse workforce. In this chapter we review literature and use findings from our prior research to inform a discussion about the issue and challenges faced by African American male undergraduates enrolled in technology majors at HBCUs. Our work also highlights the unique role that HBCUs can play in broadening the educational pipeline through corporate partnerships and community outreach. We offer recommendations for attracting African American men to information technology, supporting them as they pursue undergraduate degrees, and providing professional development opportunities that foster successful careers in information technology. We conclude with a discussion of research trends to further understand the issue of under representation, and innovative strategies that HBCU s can adopt to broaden the participation of African American men in information technology.

INTRODUCTION

Since their official inception in 1965, HBCUs have made significant contributions to the educational outcomes and professional success of African American students. Overall, HBCUs educate about 10 percent of all undergraduate students (Postsecondary National Policy Institute, 2015). The number of students enrolled at HBCUs rose by 45 percent between 1976 and 2011, from 223,000 to 324,000 (NCES 2012). However, among African American college students, the percentage enrolled at HBCUs was only 9 percent in 2011, down from 18 percent in 1976 (NCES 2012). Of the African American students enrolled in HBCUs in 2011, 61 percent were women, up from 53 percent in 1976 (NCES 2012). As the proportion of African American men enrolled in HBCUs slides, so too has the share of bachelor's degrees awarded to African Americans at HBCUs - 35 percent of the bachelor's degrees earned in 1976–77, compared with 16 percent in 2010–11 (NCES, 2012). However, while the 105 HBCUs are just three percent of the nation's institutions of higher learning, they issued 16 percent of all bachelor's degrees awarded to African Americans. Moreover, 22 percent of all bachelor's degrees in science, technology, engineering and mathematics (STEM) were earned by African American students (Postsecondary National Policy Institute, 2015). In the years 2001-2009 HBCUs accounted for about 25% of all African Americans graduating with a bachelor's degree in Computer Science with Grambling State University (606), Alabama State University (508) and Florida A&M University (501) conferring the most degrees (Owens, Shelton, Bloom & Cavil, 2012). These figures, however, do not include enrollments in information technology (IT) programs like information systems, cybersecurity, information sciences, and health information technology that are not part of the computer science discipline.

As HBCUs pursue their mission of educating African Americans, they face significant challenges. The majority of students served by HBCUs and earning degrees are African American students (83 percent), many of whom are first generation students from low-income backgrounds (Lee & Keys, 2015). Serving this student population presents HBCUs with the task of maintaining affordable rates as well as ensuring student access, retention, and graduation. The undergraduate student landscape is also rapidly changing. While HBCUs competed only with each other in the past when academically prepared African American students were legally barred from attending predominantly white institutions (PWIs), today HBCUs compete with PWIs, community colleges, and for-profit colleges that aggressively recruit African American students (Lee & Keys, 2015). In addition, HBCUs, like most other US colleges and universities, must now respond to a changing higher education environment that is currently experiencing declining financial support from national and state governments, changes to federal loan programs that disadvantage low income students, increasing competition for financial resources and talented faculty, as well as declining enrollments, retention and graduation rates (Lee & Keys, 2015). On average, the HBCU retention rate is 66 percent, and the average graduation rate is 30 percent (NCES, 2011). Despite these challenges, HBCUs overproduce bachelor's degrees to African Americans nationally even though they only operate in the District of Columbia and 19 states (Lee & Keys, 2015). In addition, African American students attending HBCUs are more likely to go to graduate or professional schools than African American students from other institutional types (Lee & Keys, 2015).

Increasing academic success while preparing students for meaningful careers is critically important in a higher education environment where an undergraduate may be saddled with a national average of $28,400 in student loan debt (TICAS, 2014). To increase the value of their degree programs, a significant number of HBCUs are reevaluating their institutional missions, primarily in terms of their program offerings. According to the Association of Governing Boards of Universities and Colleges (AGB, 2014),

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