

Chapter 10

Taking Advantage of a Changing Market: Technology and the HBCU

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ABSTRACT

HBCUs can utilize new technology with the purpose of appealing to the growing market of nontraditional students. This chapter also expounds on the concept that simply introducing technology does not necessarily translate into higher student achievement. Improper implementation of technology can result in a lowering of academic productivity. HBCUs must invest heavily in development for its faculty and staff in best practices in online instruction such that their students can have the most rewarding academic experience possible. University administration must engage in their own leadership and technology development such that they can instill the necessary level of buy-in from all levels of University personnel to ensure the highest possibility of success in attracting, educating, and graduating the growing numbers nontraditional students. This chapter's significance to student engagement and retention is that HBCU's must explore ways of attracting students of the technology age, while providing them with challenging curricula that are conducive to the nontraditional student's life style.

INTRODUCTION

Students pursuing higher education are no longer exclusively of traditional age (18-23), and institutions must recognize the importance of recruiting and retaining the new nontraditional learner by offering learning experiences and co-curricular activities which meet the demands of 21st century learners as well as attending to the needs of constituents who desire employees with technological and critical thinking skills and an appreciation of a global environment. Therefore the traditional classroom of higher educa-

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tion is outdated, as is the lecturing professor (Duncanson, 2014). Although HBCUs remain committed to serving an underserved population of learners (first generation college students, especially those of African descent) as well as learners who are well prepared for graduate and professional schools, the instruments of instruction are now driven by the demands of these learners. Smartphones, tablets, and laptops are no longer an anomaly, yet students are not always well versed in moving these implements of technology beyond the use social media and entertainment; nonetheless, this technology at their fingertips demands new experiences also in the classroom, and universities are expected to offer cutting edge, technological infrastructure—Smart Boards in classrooms, iClickers for classroom interaction, distance learning classes which provide choices in instruction around busy schedules, and libraries with online access to research journals and e-books.

TECHNOLOGY DOES NOT MEAN ACHIEVEMENT

Andrea diSessa would suggest, just because universities have access to technology and materials, this does not lend itself to students having a deep understanding and comprehensive technical literacy (diSessa, 2001). Institutions must not only invest heavily in technology, but also in development for faculty and staff. The development not only includes teaching faculty and staff how to best utilize technology, but must also include best practices on implementation and pedagogy. Simply put, just providing faculty with technology does not translate into achievement. If HBCU graduates are going to be competitive, they must possess a comprehensive understanding of the technology that would allow utilization, but usage of the concepts as the foundation for inspiring innovation. Sometimes the concept of innovation is underestimated. While knowing how to utilize technology assists graduates for employment opportunities, this unknowingly pigeonholes the graduate to a life of an employee carrying out tasks. Offering a student a deeper understanding of the technology, encourages critical thinking: they learn to ask questions which further the use of technology beyond simple tasks. They will possess the tools to investigate, synthesize, and implement new ideas. In other words, when HBCU faculty have the ability to offer students a deeper understanding of the subject matter, the technology, and conceptual understanding of its place in the real world, those students become well positioned to be the innovators which move the technology to accomplish even greater tasks. HBCUs should not only produce competent candidate for various constituents in the marketplace, but also entrepreneurs able to expand it.

If a student successfully completes a programming class and learns how to program JavaScript, this student upon graduation would be an excellent candidate to work for a company such as Google, Facebook, or Microsoft. If HBCUs invest in faculty development and best practices of instruction in the area of computer programming, this could result in a more prepared student with a deeper understanding of the principles of programming and implementation. This could better position a student with the ability to develop an app, one of the fastest growing areas of entrepreneurship, or open a startup tech company, producing various applications for consumers. The more prepared and innovative the instructor, the stronger the classroom and perhaps the achievement of the motivated students; this combination can only positively impact marketability and potential for full participation in the workforce as well as entrepreneurship and expansion of the economy.

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