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ITB12078

This chapter appears in the book, *Diversity in Information Technology Education: Issues and Controversies*
edited by Goran Trajkovski © 2006, Idea Group Inc.

Chapter VI

Under-Representation of African American Women Pursuing Higher-Level Degrees in the Computer Science/ Technology Fields

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Abstract

White males have dominated the computer sciences/technology disciplines since inception. Statistical data have shown that representation of female students in the computer sciences/technology fields has been consistently lower than for their male counterparts. Representation of African American students in these areas has been consistently low as well. There are relatively few African American women represented in the computer sciences/technology areas. The number of African American women pursuing a higher degree in these areas is almost non-existent. There are

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many factors which may contribute to this trend. This paper will focus on some of the complexities involved in this problem. Using statistical data, the author will also cover the social/economic, educational and cultural barriers which have an effect on one of these underrepresented populations. In conjunction with this information, she will include some of her own experiences as a former student and as an educator.

Introduction

American society prides itself on equal opportunities for all of its citizens. Since the Brown vs. The Board of Education decision in 1950, educational barriers were deemed unconstitutional. However, another piece of legislation, Affirmative Action/Equal Opportunity, was needed to even out the playing field for persons who did not have a fair start in the pursuit of educational and employment opportunities. Of course, these legal decisions have greatly improved the prospects of underrepresented individuals in the pursuit of higher education, but there are still problems. These problems are the result of inequities in educational and social institutions. This paper focuses on an interesting, yet overlooked, situation in higher education: the lack of African American/African American/Black females pursuing higher degrees in the computer sciences/technology areas.

What Are the Challenges?

Enrollment

If you look at any degree-granting institution in America, you will see a plethora of students, in numerous educational majors, involved in the pursuit of higher education. Figure 1 shows enrollment statistics for undergraduate students during 1999-2000.

In the computer science/technology areas, males have perpetually outnumbered the females. "According to the National Science Foundation, the number of females receiving bachelor's degrees in computer science dropped from

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