



IRM PRESS

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA
Tel: 717/533-8845; Fax 717/533-8661; URL-<http://www.irm-press.com>

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

Alfreda Dudley-Sponaule, Towson University, USA

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

Copyright © 2006, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

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

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/under-representation-african-american-women/8638

Related Content

Developing Employability Skills in Information System Graduates: Traditional vs. Innovative Teaching Methods

Mohamad Osmani, Nitham M. Hindiand Vishanth Weerakkody (2018). *International Journal of Information and Communication Technology Education* (pp. 17-29).

www.irma-international.org/article/developing-employability-skills-in-information-system-graduates/200985

Andragogy

Camille Whitfield (2005). *Encyclopedia of Distance Learning* (pp. 90-96).

www.irma-international.org/chapter/andragogy/12092

Tablet PCs as Online Learning Tools

Malu Roldan (2009). *Encyclopedia of Distance Learning, Second Edition* (pp. 2017-2022).

www.irma-international.org/chapter/tablet-pcs-online-learning-tools/12024

Library Services for Distance Education Students in Higher Education

Elizabeth Buchanan (2009). *Encyclopedia of Distance Learning, Second Edition* (pp. 1380-1383).

www.irma-international.org/chapter/library-services-distance-education-students/11924

Predicting Academic Success for Business and Computing Students

Kawtar Taniand Andrew Gilbey (2016). *International Journal of Information and Communication Technology Education* (pp. 15-24).

www.irma-international.org/article/predicting-academic-success-for-business-and-computing-students/161782