Chapter V

Dimensions of Sustainable Diversity in IT:
Applications to the IT College Major and Career Aspirations Among Underrepresented High School Students of Color

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Abstract

This chapter acknowledges that diversity issues in the IT field go beyond racial and ethnic measures to include disability and age, to name but two of the numerous possibilities, and a global playing field. While the chapter examines the different forces that affect the career aspirations and opportunities of individuals of color, women, the disabled and the young

as they make decisions relating to the IT field, it is not fundamentally driven by data, but by a need to develop and expand a definition and the dimensions of diversity. In doing so, we hope to provoke readers to view the issue of diversity and IT from a number of perspectives. We assert that diversity should be viewed globally with the understanding that the globalization process has begun to change the dynamics of the diversification phenomenon. Finally, in an effort to show the impact of career aspirations and what may influence the development of such aspirations among minority and nontraditional students, we report the findings of some studies that have recently been conducted. This study looks at the experiences, opportunities, attitudes and aspirations with respect to mathematics, science, computer science and information technology of underrepresented students in the federally funded Upward Bound and Math/Science Upward Bound programs. We conclude with a brief discussion of the role of social and cultural creativity and innovation, arguing that these are essential components of a notion of sustainable diversity.

Introduction

Information Technology (IT) is at the same time a complex and dynamic field of study and a profession. While populations of color, primarily Latinos and African Americans, are underrepresented among the ranks of professionals in the United States, the dynamics of employment and business development are increasingly influenced by emerging firms operating globally that benefit from profit-minded American companies eager to outsource their employment needs. The following chapter acknowledges that diversity issues in the IT field go beyond racial and ethnic measures of diversity to include disability and age, to name but two of the numerous possibilities, and a global playing field. Knowledge results from the collection, processing and distribution of information. Ultimately, then, our investigation of diversity must include, the diversity of knowledge.

Industry, government, and professional groups have recognized that the IT workforce shortage is a serious problem facing the United States. However, there is a troubling lack of women and underrepresented racial and ethnic minorities in this workforce. In 2001, 135 million people were employed, of

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