

# Barriers Facing African American Women in Technology

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## INTRODUCTION

In technology education, African American women are normally in the minority. Contributing factors include the continuation of discrimination based on race and/or gender in American society, together with African American women's own self-perception, which is itself influenced by their history of discrimination. These factors in turn affect their access to technology and technology education.

## BACKGROUND

According to Thomas, Witherspoon, and Speight (2004), for many individuals, race, gender, and social class—and their influence on identity—cannot be separated. The influence of multiple identity factors must be examined, particularly for groups that experience multiple sources of oppression, such as African American women (Thomas et al., 2004). Scon (2003) suggests that race, class, and gender affect the perceptions and the expectations of the viewing audience as well as the performance of the observed individuals.

To understand a group and issues that confront them, you must look at their history (Jeffries, 1995). Emancipation from slavery in 1863 and the beginning of reconstruction in 1865 brought freedom for African Americans, but sadly they were still treated unjustly and viewed in a subordinate and inferior fashion (Christensen, 2005). Just as the larger American society believed that women were responsible for so-

cializing children and men, and uplifting families and communities, those engaged in the process of creating an African American professional class also believed that the black woman alone had the power to uproot ignorance, break down prejudice, and solve the great race problem (Shaw, 2004).

African American women teachers who taught during the early days of desegregation experienced conflicts with colleagues, administrators, and white parents—the latter often challenging their competence as teachers solely on the basis of race (Foster, 1990). Though frustrated by conflicts with white parents, some teachers recognized that their presence and success forced white parents and students to confront their own feelings of superiority (Foster, 1990) and were determined to remain in education.

Research indicates that due to differences, the majority group creates boundaries that impose limits on how minority workers will be defined in the workplace (Mabokela & Madson, 2003). European American colleagues failed to understand the differences in other ethnic groups and projected narrowly defined roles for African American teachers (Mabokela & Madson, 2003). African American women educators feel that other groups lack certain awareness or have a lack of exposure to the perspectives of people of color, and they feel that they must be bicultural: operating not only in their own world, but in one created for them by others (Roberts & Winiarczyk, 1996).

Historically paid less than their white counterparts, rarely employed except to teach African American pupils, opposed by unions seeking to preserve seniority

rights for their largely white constituencies, dismissed in large numbers following the *Brown v. Board of Education* decision, and denied access to teaching positions through increased testing at all levels, the lives and careers of African American teachers have been seriously affected by racism (Foster, 1990). African American women teachers in particular are often burdened with the extra pressure of having to prove their worth because their expertise is frequently questioned by their colleagues, as well as by their students and parents (Mabokela & Madeson, 2003).

Through being thought of as inferior teachers in their technology profession to having to prove themselves almost on a daily basis, African American women have remained a strong force in education despite the multiple barriers presented to their success.

## **BARRIERS FOR AFRICAN AMERICAN WOMEN IN TECHNOLOGY**

Before entering technology education, African American women had reservations about a career involving technology, and according to a report by the American Association of University Women, there is a gender gap in technology education (Brunner, 2003). Girls are more ambivalent about technology than boys, who are more positive regarding technology (Brunner, 2003). Young girls are conditioned to believe that skills associated with technology are for boys, and therefore girls take fewer computer science and computer design courses than boys do (Pinkard, 2005). Due to society's increasing dependence on technological skills, the continued existence of the technological gender and cultural gap is a problem that must be addressed in order to ensure that the technological tools are equally accessible to women and children of color (Pinkard, 2005). The gender and cultural technology gap is also contributed to by the level of computer usage in the home, unequal access to technology in some communities, lack of female technologically literate role models, and the negative climate in higher education toward females and minorities (Pinkard, 2005).

Computer usage in the home is very important when it comes to a child's view of technology (Pinkard, 2005). If computer usage is at a high level in the home, the child will come to view technology as very important, but if usage is low, they may not view technology as important and shy away from technology courses

completely. Also when placed in a technology class, children may have a feeling of failure because they are not as computer literate as the other students. In education it is important that every child, regardless of race, gender, or class, have access to technology in all levels of education.

Unequal access to technology in our schools is due once again to society's view of technology as an area that is dominated by males (Bush, Henle, Cohen, Jenkins, & Kossy, 2002). Counselors and parents play an important role in the selection of courses, and most young women are not encouraged to enroll in technical classes. Some educators feel that schools have unknowingly contributed to the limited enrollment of minorities and women in classes that would prepare them for high-tech careers (Brown, 2003). Career counselors should become more open to the technological potential of minorities and women, ensuring that they do not allow prejudicial thinking to keep them from offering appropriate career guidance (Brown, 2003). Those women and minorities that are in technology courses are generally there because they or their parents had to make a request to be there.

Lack of community resources is also a major factor restricting minorities and women to needed technology (Bush et al., 2002). Some African American communities may not have the funding to provide technical training for their citizens, and the only access to technology often may be what they have in the school system and the public library, but time constraints may limit the use of these resources. School districts should make it a priority for all students, regardless of race, gender, or parents' economic status, to be exposed to technology as part of their educational development.

Women of color are traditionally under-represented in technology careers as well as in most state-approved certificate and degree programs (Bush et al., 2002). One of the reasons is the lack of peer role models with technology backgrounds. Under-representation discourages African American women from entering technological careers because they do not see people like themselves (Bush et al., 2002). To remedy this situation, educational institutions should provide minority women with appropriate career information, support, and training, encouraging them to enter technology fields (Bush et al., 2002). Providing role models and mentors for African American girls would also help to engender their interest in technology careers (Brown, 2003).

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