Opportunities for Low-Income Women In STEM Fields at Community Colleges

STEMTech Conference

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Why focus on STEM fields?

- Education provides pathway to economic security
- STEM fields have economic payoff
- Women are underrepresented in STEM
- Promising programs at community colleges

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Part I

Importance of STEM Jobs for Women

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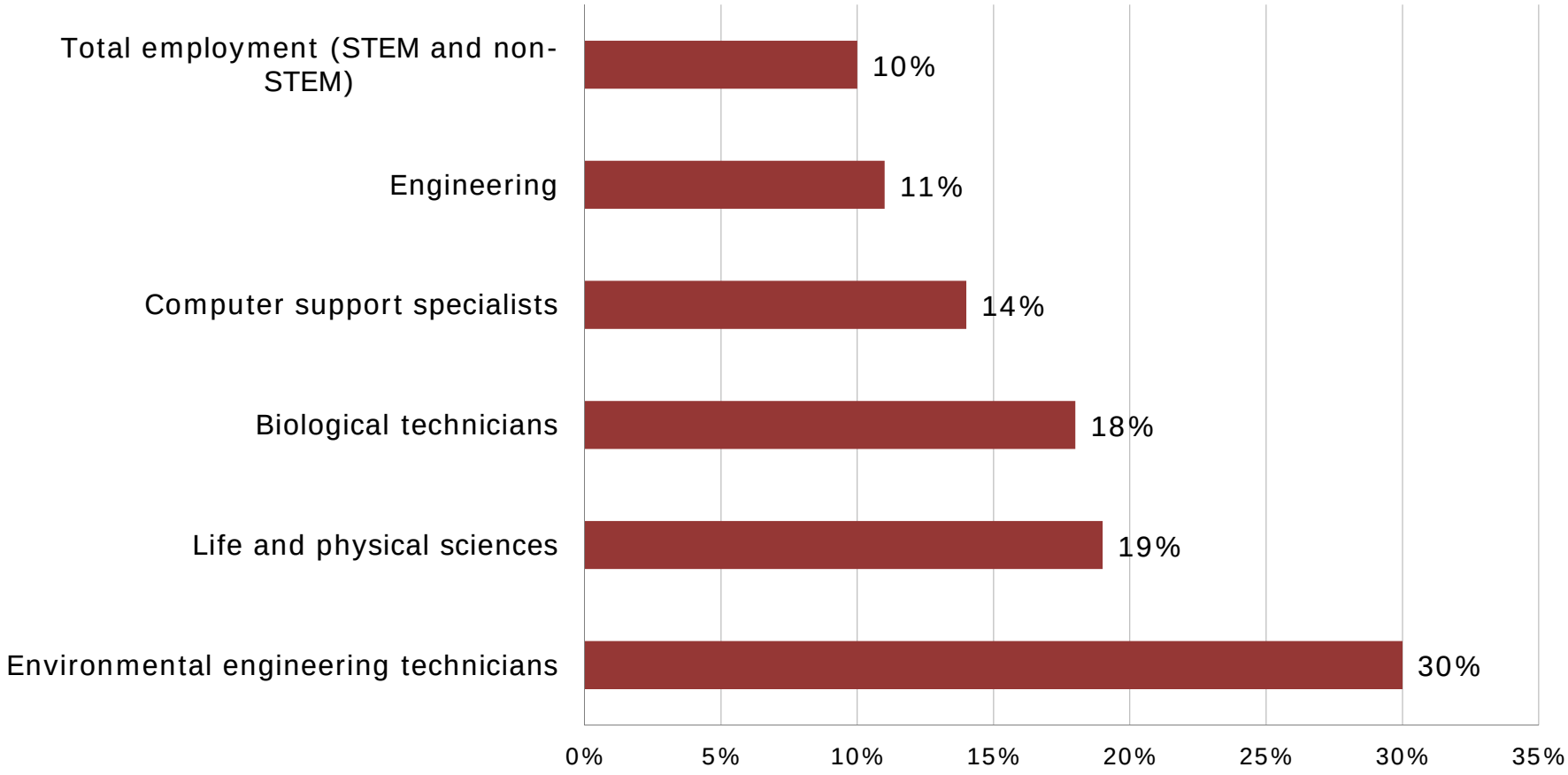
Figure 1. Projected Growth in Employment in Selected STEM Occupations, 2008-2018



Source: Bureau of Labor Statistics. 2010b. *Occupational Outlook Handbook, 2010-11 Edition*.

Table 1. Women's Median Annual Earnings and Share in Selected STEM Occupations by Educational Requirements, 2009

	Median Annual Earnings for Women ($)	Women's Earnings as Percent of Men's Earnings	Share of Female Workers in Occupation
STEM Occupations			
Occupations requiring Baccalaureate degree			
Electrical and Electronics Engineers	$71,944	86.4%	8.8%
Computer Software Engineers	$77,878	87.0%	19.9%
Civil Engineers	$63,619	81.2%	11.9%
Occupations requiring Associate's degree			
Computer Support Specialists	$46,859	92.2%	28.9%
Engineering Technicians, except Drafters	$41,091	78.3%	16.0%
Biological Technicians	$42,483	95.4%	41.1%

Source: IWPR compilation of data from the U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2009

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Table 2. Women's Median Annual Earnings in STEM and Non-STEM Fields with Associate's Degrees, 2009

	Median Annual Earnings for Women ($)	Women's Earnings as Percent of Men's Earnings	Share of Female Workers in Occupation
STEM Occupations			
Computer Support Specialists	$46,859	92.2%	28.9%
Engineering Technicians, except Drafters	$41,091	78.3%	16.0%
Biological Technicians	$42,483	95.4%	41.1%
Non-STEM Occupations			
Teacher's Assistants	$18,759	72.4%	89.9%
Licensed Practical and Vocational Nurses	$36,997	90.0%	91.7%
Paralegals and Legal Assistants	$42,932	96.2%	86.5%

Source: IWPR compilation of data from the U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2009

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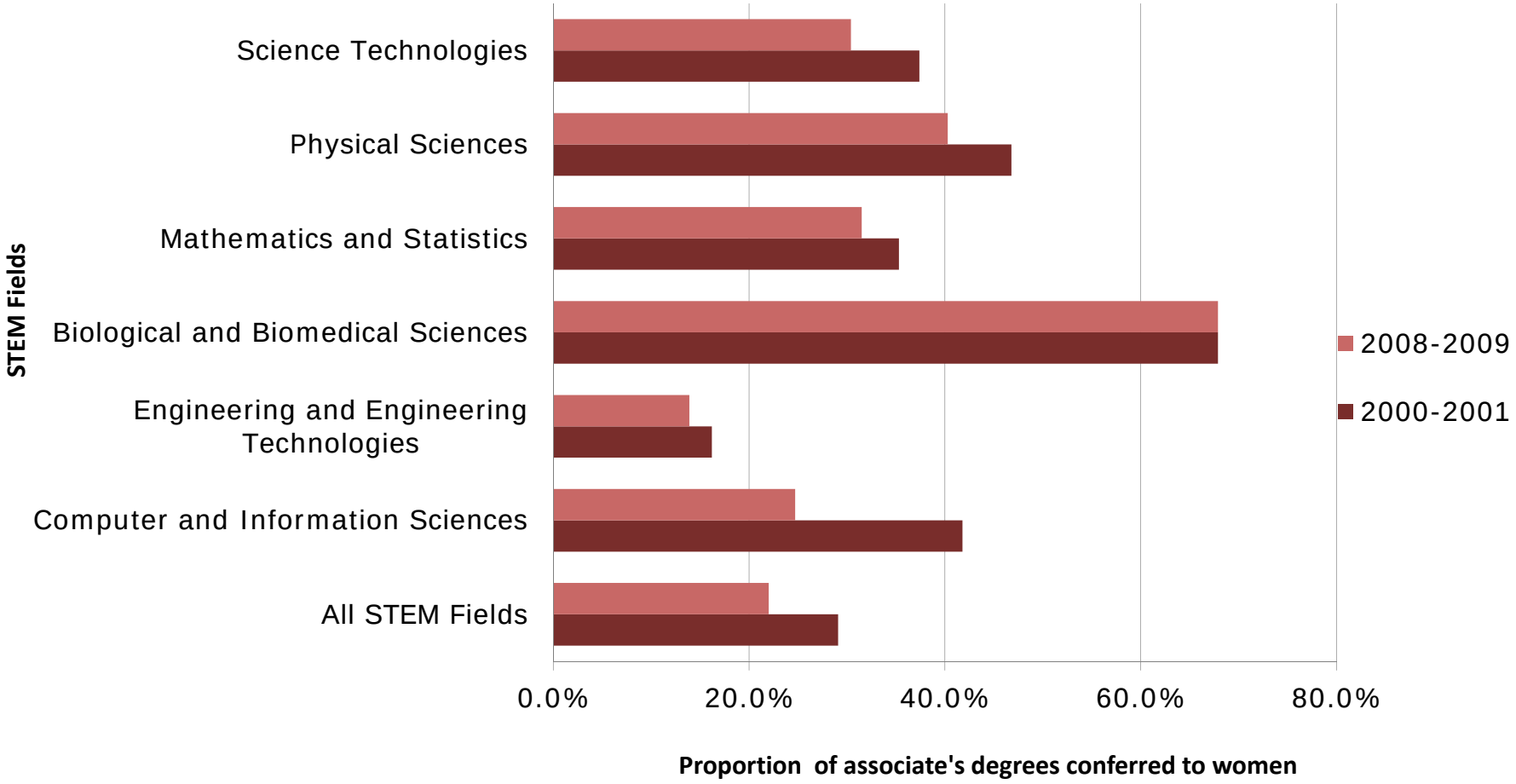
Part II

Women, STEM, and Community Colleges

Figure 2. Percentage of Associate's Degrees Awarded to Women by STEM Field, 2000-2001 and 2008-09



Source: U.S. Department of Education. National Center for Education Statistics. Postsecondary Awards

Receipt of Associate's Degrees by Women of Color

- **Women of color receive a small proportion of associate's degrees in STEM fields**
- **The proportion of STEM associate's degrees earned by:**
  - **White women (14 percent)**
  - **African American women (3.3 percent)**
  - **Hispanic women (2.2 percent)**

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Part IV

Promising STEM Programs

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Promising approaches to support women's success in STEM

- Proactive recruitment
- Solid financial Support
- Quality, affordable child care
- Developmental programs
- Individualized academic counseling and advising
- Solid educational pathways
- Curricular and instructional approaches that appeal to women

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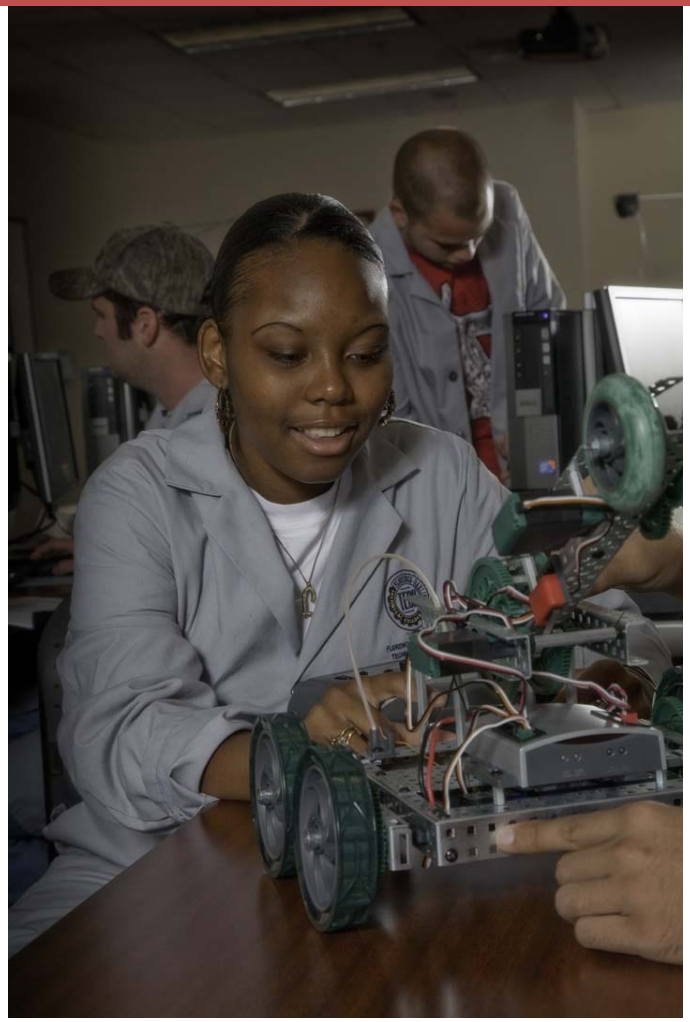
Grace Hopper Scholars Program

The South Carolina Advanced Technological Education Center



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MESA Community College Program

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The Regional Center for Next Generation Manufacturing

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Part V

Conclusions and Recommendations

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Broad action is needed on several fronts

- Research
- Community colleges
- Public policies

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Investing in STEM is a "win-win"

- Women students receive credentials for STEM careers
- Special benefits for low-income women, women of color, and student parents
- Nation benefits from expanded STEM workforce
- Report available: www.iwpr@org

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