Increasing Female Enrollment in STEM Education

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NSF ATE Grant (History)

• Skilled Workers Get Jobs: Recruiting Women and Retaining ALL Students (2012-2015) -- $199,896

• Skilled Workers Get Jobs 2.0: Appalachian Impact (2015-2018) -- $900,000
Focus of Grant

• Recruit
• Retain
• Disseminate (Share)
Results from First Grant

• Female enrollment increased from 39 to 75 women (12 - 20%)
• Male enrollment increased
Our Goal For Students

... a sense of belonging
Belonging Where?

- Recruiting
- Campus
- Program
- Other students
- Faculty
The definition of insanity is doing the same thing over and over again, but expecting different results

Albert Einstein
(or Mark Twain or Benjamin Franklin)
Starting Points

• Our focus has been on increasing female enrollment in traditionally male programs

• We are looking at the 30,000 foot view - so broader generalizations
So what can we do?
When you think computer professional, who comes to mind?
Underlying Facts

• Women do not see themselves in many STEM professions
• Marketing points - salary, job potential and the technology - tend to appeal to males
Skills that Appeal

- Help others
- Work in teams
- Solve problems
Adapt Your Message to HOW Students Choose Careers

- Men ➔ Salary, job potential and the technology
- Women ➔ Help others, work in teams and solve problems
Marketing
Consider YOUR message for someone unfamiliar with the career.
Civil Engineering (BEFORE)

A course of study that prepares students to use basic engineering principles and technical skills to carry out planning, documenting and supervising tasks in sustainable land development and public works and facilities projects. Includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology, and surveying.
Civil Engineering (AFTER)

The Civil Engineering Technology curriculum trains future technicians to help make our community a better place. Civil Engineering Technicians ensure clean rivers and streams, design efficient and sustainable buildings (often retrofitting old ones), improve safety on roads to help reduce accidents, develop mass transit alternatives, ensure safe drinking water, preserve natural ecosystems for wildlife, and design infrastructure that saves lives.
Marketing Materials
Theme - Picture Yourself

- Display board
- Posters
  - Notable women
  - Technology posters
- Bulletin boards
- Bookmarks
JENNY GREER

"When I began college 16 years ago, I couldn't even turn on the computer. My education taught me design principles, how to figure things out on my own under pressure, and how to critique and sell my ideas and designs. Now, I'm developing full-scale branding and marketing campaigns for companies nationally and designing mobile and ecommerce web sites. Best of all, I've been a business owner for the past 8 years. A career in technology allows you the ability to work remotely. My education gave me the confidence to pursue my dreams. The sky is the limit!"

EDUCATION: B.F.A. in Visual Communications from Auburn University.

OCCUPATION: Small Business Owner, Creative Director, Branding Consultant, Project Director, Graphic Designer, Illustrator, Artist, Information Architect at Sound Mind Creative in the River Arts District in Asheville, NC.
NOTABLE GRADUATES

KELLIE WHITTEMORE

From A-B Tech

"A-B Tech helped me make the leap from an administrative assistant to a specialist in technology. The level of support A-B Tech offers to students is wonderful, from top-notch technology, mentoring, and placement services, to the communication between students, faculty and staff. I wouldn't be in the career I'm in today without my degree from A-B Tech."

EDUCATION: A.A.S. in Information Technology from Asheville-Buncombe Technical Community College.

OCCUPATION: Information Technology Coordinator II at the Greater Asheville Regional Airport Authority.

Gail Fitzgerald

"It's never too late to Educate!"

EDUCATION: Associate of Applied Science in Electrical Systems Technology from Asheville-Buncombe Technical Community College in 2010; Associate of Arts from Brevard Community College, Melbourne, Florida in 1977.


This material is based on work supported by the National Science Foundation under Grant Number 1042177.
Determine YOUR Goal

- Career awareness
- Recruiting
Career Awareness

- Middle school career days
- ESTEAM event (great PR)
- Women in History Month
High Schools

- Check the data
- Students vs. personnel
  - Innovative Expo
Recruiting: Go Where the Students ARE

- Displaced and unemployed worker programs
- GED students
- Undeclared majors
- Job Link
- Admissions and counseling staff

Wherever you have NON-Traditional Students
Increased Role Models and Inclusive Environments Entice Women into STEM Fields

Surveys find women are more likely to pursue classes taught by women.

by Meghan Bogardus Cortez

Meghan is an associate editor with EdTech: Focus on Higher Education. She enjoys following all the ways technology is constantly changing our world.

The gender gap in science, math, technology and engineering fields has been discussed a lot in recent years, and for good reason.
I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

Maya Angelou
Questions?