



# Am I Career Ready?

## Preparing STEM Students for Post-Graduate Success

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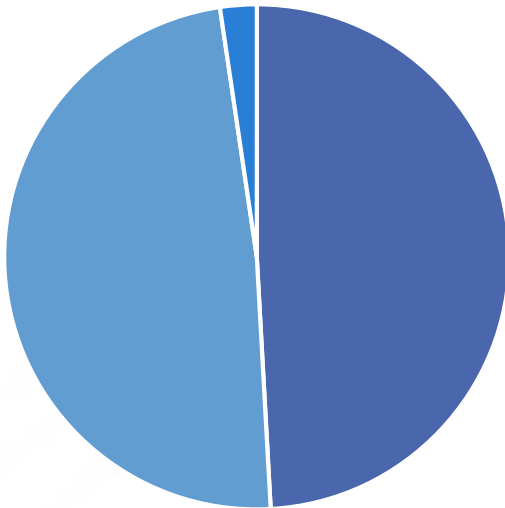
PRIME STEM Program

# Overview

- PRIME STEM Program Overview
- What is Career Readiness?
- The Facts
- The Interventions
- The Outcomes
- Next Directions
- Discussion

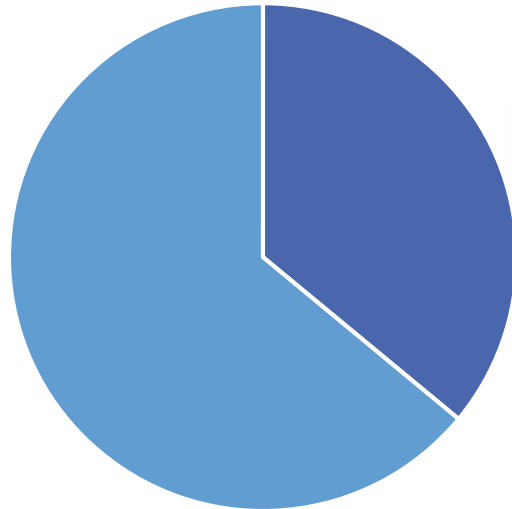
# Program Demographics

## Qualification Status



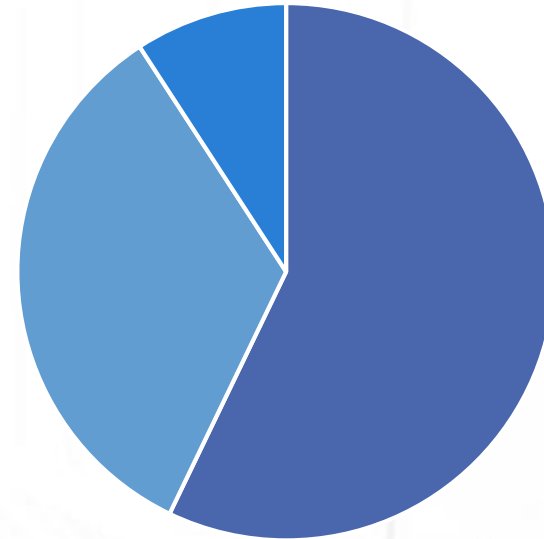
- First Generation
- Low Income
- Disabled

## Gender



- Male
- Female

## Major Area



- Life Sciences
- Engineering
- Physical Science & Math



**Discussion:**  
**What is Career Readiness?**  
**Why is it important?**  
**How can we impact it?**

# What the literature says

- To increase the number of STEM workers to meet the growing demand the pipeline to and through STEM education will have to be diversified (NSF, 2013)
- Institutions needs to initiate more intentional and targeted outreach services to these student populations (Deil-Amen & Rosenbaum, 2003)
- Extracurricular involvement in STEM activities encouraged the persistence of students in STEM majors and ultimately STEM careers (Woolnough, 1995).
- Involvement in such activities can push students to explore a field more deeply, increasing overall engagement with the career path (Olszewski-Kublius, 2006).

# What the literature says

- A study on students retained in STEM majors and careers that suggested that “...career guidance is important, especially at the secondary and college levels. Students may not understand all of the opportunities available in STEM, and may overlook some possible area of interest. Engaging activities that spark an interest and inform students of possibilities raise not only interest and achievement, but also awareness of opportunities” (Heilbronner, 2009, p. 218).



# Career Readiness (ACT, 2015)

- “The level of foundational skills an individual needs....coupled with the level of career planning skills needed to advance....or transition to other career paths.”
  - Foundational Skills
    - Cognitive- critical thinking, lab techniques, etc.
    - Non-cognitive- communication skills, integrity, etc.
  - Career Planning Skills
    - Assess interests
    - How to advance
    - Develop a viable career path/transition

# UCF First Destination Survey Statistics

- UCF 2014 First Destination Survey on graduating seniors' "immediate primary plan" upon graduation from UCF:
  - 71% of first-generation students responded "to seek full-time or part-time employment"
    - 15% had accepted a position to begin in the coming months
    - 33% would be searching or waiting on offers
    - 19% would begin searching for a position in the coming months
  - 24% were "underemployed" as they reported they were working in a position they planned to continue after graduation



# How do we impact Career Readiness?

- Create opportunities for students to reflect on gaps and find experiences or resources to fill the gaps
- Provide training for students to develop career-related skill sets
- Create networking opportunities and mentoring relationships
- Partner with local workforce boards to create financial support and work experiences

# The Interventions

STEM Career Academy, Online Career Training, and  
Internship Partnerships

# STEM Career Academy

- One day event focused on STEM career planning and preparedness
- Several workshops on:
  - Interviewing and articulating strengths
  - Elevator pitches & networking
  - LinkedIn
  - Internship and research involvement
  - Graduate school decision making
- Day ended with a one hour networking event with 35 industry professionals

# STEM CAREER ACADEMY

May 2, 2017  
Global UCF  
122

## Agenda

|         |   |  |
|---------|---|--|
| 9:00am  | Welcome & Introductions   | Dr. Rebekah McCloud<br><i>Director, TRiO Center</i>            |
| 9:30am  | Career Readiness: What does it mean and why is it important for me?   | Amy Bickel<br><i>Assistant Director, PRIME STEM</i>            |
| 10:00am | How Can I Explain This? Crafting a Personal Strengths and Values Statement  | Cayla Bartley<br><i>Coordinator, PRIME STEM</i>                |
| 10:45am | Do I Need Graduate or Professional School and How Do I Pay for It?  | Amy Bickel,<br><i>Assistant Director, PRIME STEM</i>           |
| 11:15am | It's All About Who You Know: Using LinkedIn to Build Your Network   | TBD<br><i>TBD</i>  |
| 11:45am | Break   |  |
| 12:00pm | <b>Lunch &amp; Keynote: From College to Career with The Recruiting Snitch</b><br><i>Alysse Metzler, Career Consultant and Author of "The Recruiting Snitch"</i> |  |
| 1:00pm  | Best Practices in Networking & Elevator Speeches  | Shauna Strickler<br><i>Assistant Director, Career Services</i> |
| 1:45pm  | Resumes 101 ( <i>Bring 5 Copies of your resume</i> )  | Tiana Tucker<br><i>Coordinator, Career Services</i>            |
| 2:15pm  | Putting it All Together: Elevator Speeches & Resume Critique  | Critique by Industry Recruiters & UCF Career Services Staff    |
| 3:00pm  | <b>Networking Reception with STEM Industry Professionals</b>  |  |
| 4:00pm  | Post-Academy Assignment, Event Wrap-Up & Padfolio Distribution  |  |

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TRiO Programs



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# STEM Career Academy Data

- Pre/Posttest- career readiness assessment
  - 64% (7/11) of areas showed significant gains in the immediate post-test ( $p < .05$ )
  - 73% (8/11) showed significant gains in the follow-up posttest
- Pre/Follow-up posttest gains:
  - I am confident I will be accepted into medical or professional school after graduation ( $p = .010$ )
  - I know how my interests, skills, and abilities can impact my career fit ( $p = .017$ )
  - I can articulate my values and strengths for an interview or conversation with potential networking connection ( $p = .036$ )
  - I know my “elevator speech” for networking events ( $p = .000$ )
  - I know the “best practices” for networking ( $p = .000$ )
  - I know about the opportunities on campus that exist for me to gain career-related experience while I am in college ( $p = .008$ )
  - I know professionals in my field and have networked with them ( $p = .000$ )
  - I know other students in my major/area of STEM and have networked with them ( $p = .008$ )
- Satisfaction survey yielded very positive responses

# Student Quotes

- “The topics selected were extremely relevant and useful for a career workshop. The networking reception with the industry partners was the highlight as it is a valuable opportunity to have one-on-one interactions with professionals. I benefitted the most from that.”
- “I was so happy and learned a lot from this opportunity...At UCF in the beginning, I felt left out and afraid of doing anything else besides trying to get a good grade... I was motivated and inspired by many enthusiastic and energetic presentations... For the first time, I felt alive at UCF...I am very grateful to be in the STEM program!”
- “The STEM Career Academy provided great tools, for the students who want to develop ways to understand career choices, support, and ways to get involved at UCF. Hopefully more students take advantage of this great source of information.”





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Education as she shared her...

[FIEA Students To Debut Four  
New Games Aug. 5](#)

# Career Academy: Next Steps

- Revise the model based on student responses
- Seek employers who may have internship opportunities or jobs to offer on the spot
- Incorporate a resume review/mini-interview session with industry representatives
- Going to implement a previously validated tool- Career Decision Making Scale (Osipow, 1986) for increased rigor

# Online Career Training

- We offer modules on:
  - Understanding your paycheck
  - Interviewing 101
  - Building your professional social media presence
  - Professionalism 101 (written and oral communications, norms, etc.)
  - Job search strategies
  - Career aptitude assessments (e.g. MyPlan)
- Provides students a self-guided opportunity to explore career readiness

# Workforce Development Partnership

- Partner: CareerSource Central Florida
- Individual Training Agreement
  - Acts as a scholarship for tuition
- Work Experience Program
  - Internship with a local company in field of study



# Individual Training Agreements

- Eligible through WIOA funding
  - Low-income, food stamps, laid off
- Provides tuition scholarship for the last 30 hours
  - Targeted Occupation Lists
- Still have to be qualified through WIOA process and only pays for tuition and academically related fees
- Used primarily at 2-year institutions or technical schools, but we were able to partner for the last year of coursework

# Individual Training Agreement Data

- Worked with 30 students who we suspected qualified
  - Senior, low-income, appropriate major
- 14 students qualified and completed the process
- Have been able to award \$46,182.31 in scholarships (Fall 16, Spring 17)
- Impact of these funds?
  - Students were able to go full-time
  - Work less hours
  - Purchase books and supplies
  - Complete their degree



# Internship Partnerships

- Work Experience program means pay equal to starting rate in the industry
  - Ex. \$23 per hour for Environmental Engineering
- Students in their last semester of undergraduate degree or recently graduated qualify
- Provides direct work experience for participants
  - Ex. December grad made \$25 hour for Fall semester and was offered full-time employment upon graduation

# CareerSource: Next Steps

- Collaborate more in programming/workshops
- Start hiring events/networking events for our juniors and seniors
- Try to expand majors that qualify based on their criteria
- Still working on refining the qualification process

# The Outcomes?

- In comparing APR 14-15 with APR 15-16 we saw the following increases in services (total contacts):
  - 2550% increase in career counseling/planning
  - 72% increase in Advice and assistance
  - 38% increase in financial literacy
  - 313% increase in graduate school preparation
- Total number of contacts increased 106%

The win?

*Authentic services to the students that met their needs and made an impact!*

A photograph of a modern building interior. The scene is dominated by a glass staircase with a white metal railing, leading upwards. Large windows with black frames are visible on the right side, offering a view of the sky. The overall aesthetic is clean, bright, and architectural.

**Questions? Comments?  
Your Experiences?**





## Contact Information

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