

WELCOME TO



A SCTCS Division of Academics, Student Affairs & Research Initiative

TILT

TEACHING & LEARNING TUESDAY

**Electrical Engineering & Culturally Responsive
Teaching Practices**

September 20, 2022

2:30pm

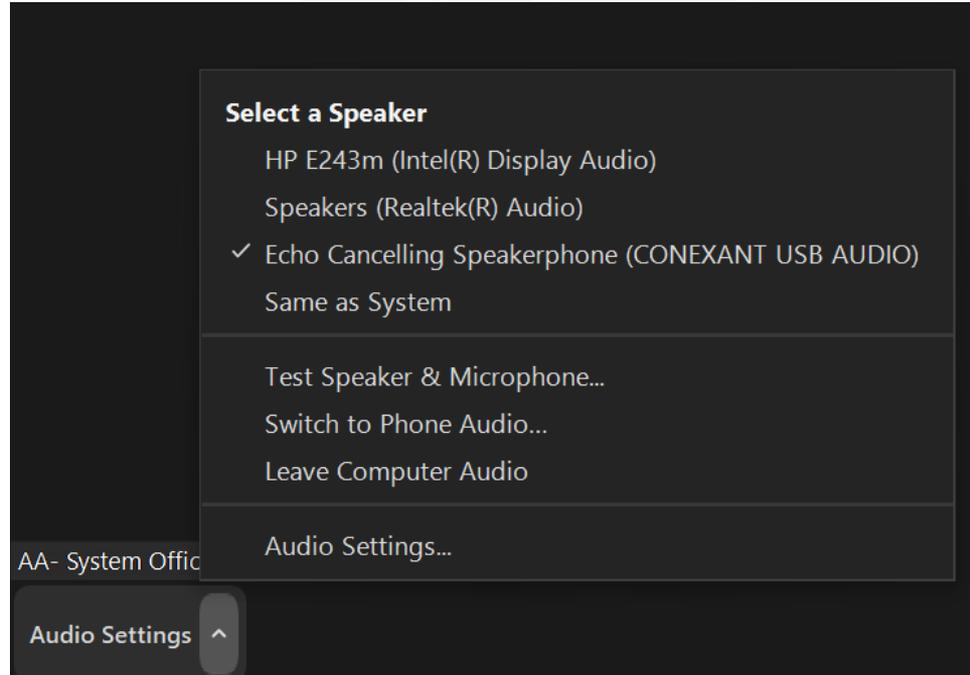
ABOUT THE PRESENTER



Dr. Sherisse Jackson

Orangeburg-Calhoun Technical College

ZOOM WEBINAR



ZOOM WEBINAR

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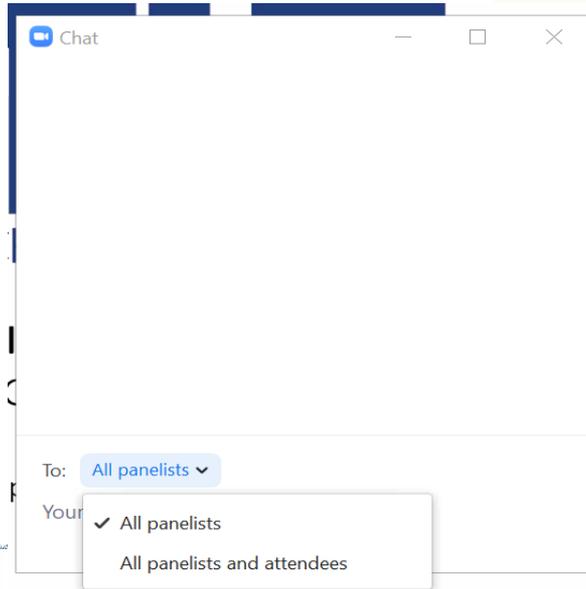
View Options ▾

- Zoom Ratio
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- ✓ Fit to Window
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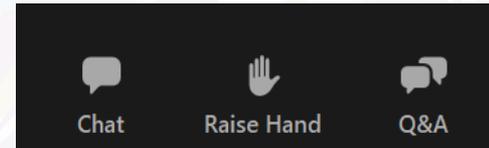
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- 300%

ZOOM WEBINAR

Chat



Raise Hand and Q&A





SC Technical College System - TLT

**ELECTRICAL ENGINEERING AND CULTURALLY
RESPONSIVE TEACHING PRACTICES**

Presenter: Sherisse G. Jackson, PE, EdD

LEARNING COMMUNITY IN ENGINEERING EDUCATION



**Interpersonal
Relationships**

**Actively
Involved**

**Meaningful
Interactions**

CULTURALLY RESPONSIVE TEACHING (Gay, 2010)



KNOWLEDGE OF STUDENT POPULATION

CARING FOR OUR STUDENTS

INCORPORATE STUDENT INTEREST

COLLABORATIVE LEARNING

SHARING OUR STORIES



Welcome!

Posted Jan 4, 2021 8:00 AM

Hi Everyone!

Welcome to OCtech! Here's a little about my background and my goals.



I look forward to meeting you and learning more about you in the coming weeks!

Best,

Dr. Jackson

INTRODUCTIONS



Dr. Jackson ▾

Sherisse Jackson posted Aug 14, 2022 8:24 PM  **Subscribed**

Which statement about me is false?

- a. I was born in Philadelphia, PA.
- b. When I have time for recreational activities, I enjoy scrapbooking.
- c. I helped redesign the emergency lighting at the National Museum of Natural History.
- d. I graduated from Lower Richland High School in Hopkins, SC.

SET HIGH EXPECTATIONS



Research Project ▾



Starts Feb 21, 2022 8:00 AM

Prepare a PowerPoint presentation about the following:

Investigate related occupations for instrumentation and electrical engineering. Select a minimum of three jobs. Describe what the person does at work (i.e. job responsibilities). Describe the benefits of the job. Include which position you would apply for and why.

Download

Expand All | Collapse All

0 % 0 of 4 topics complete

[Research PowerPoint Rubric](#) ▾

Word Document

[Research PowerPoint](#) ▾

Assignment

How to Create a PowerPoint ▶

REFLECTIVE MOMENT



How do you introduce yourself and set high expectations for your students?



GETTING TO KNOW OUR STUDENTS



Interest Form

Where did you attend high school?

Your answer _____

Name your hobbies

Your answer _____

What is your favorite college football team?

Your answer _____

What is your favorite professional football team?

Your answer _____

CONTACT INSTRUCTOR ASSIGNMENT



☰ **Contact the Instructor** ✓

📄 Assignment ✓

🕒 Due January 17 at 11:59 PM 🕒 Starts Jan 11, 2021 8:00 AM

Send a message to Dr. Jackson via email (jacksonsg@octech.edu) or the Remind App. After reading the syllabus and reading the information currently available to you in D2L. Describe what will be the most challenging part of this course for you.

OPEN COMMUNICATION – REMIND APP



Enter this number

81010 ?

Text this message

@e63kek ?



Q & A DISCUSSION FORUM



Questions During Online Learning ▾

Hi Everyone,

Please post all questions you have here so that we all have the same information. I will answer all questions by 8 am the following day.

Thanks,

Dr. Jackson

Topic	Threads	Posts	Last Post
Questions and Answers ▾	0	0	

CHECKPOINTS



Students

Student-Instructor Conference

Please review the available slots below and click on the button to sign up.

You can call (803) 268-2581 or use the Zoom link <https://us02web.zoom.us/j/3941540852>

Thank you!

Dr. Jackson

ONLINE ALTERNATIVE



Survey - Student-Instructor Conference

Answer the following questions based on your current experience in this course. A response is required for all items. If you do not have a comment, please type none.

Thank you for your time!

Dr. Jackson

* Required

Name *

Your answer

What aspects of this course were most useful or valuable? *

Your answer

What other activities would you like to see in this course? *

Your answer

REFLECTIVE MOMENT



How do you get to know your students and encourage communication in your classroom?



COLLABORATIVE LEARNING ACTIVITIES

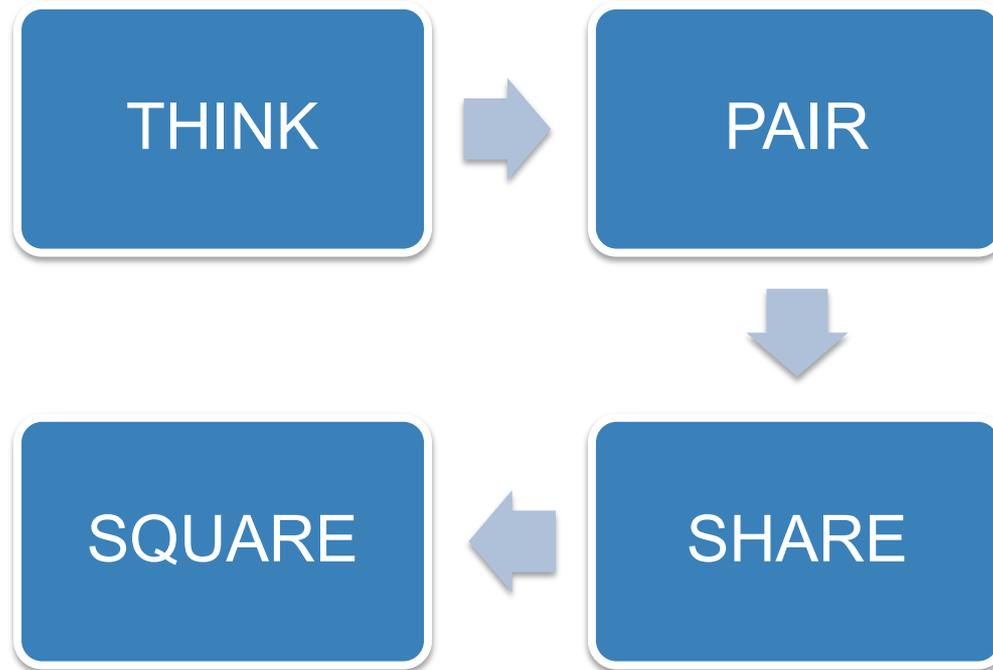


RECIPROCAL TEACHING

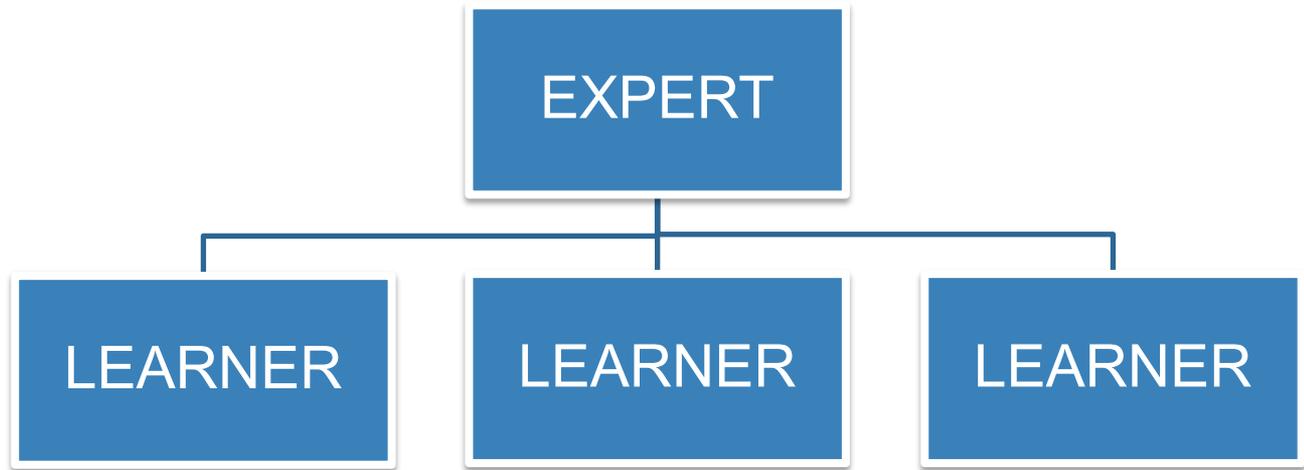
DISCUSSION FORUMS

DESIGN PROJECTS

RECIPROCAL TEACHING (TPSS)



RECIPROCAL TEACHING (MODIFIED JIGSAW)



DISCUSSION FORUMS



Safety Precautions

 Available on Monday, January 11, 2021 8:00 AM EST Must post first.

When working in a lab environment, safety precautions must be taken to protect ourselves from electrical shock. Read the safety precautions in Chapter 1 of your textbook. After reading these safety precautions, examine the photo below. Discuss at least three safety precautions that were probably ignored and resulted in this accident.



Things to think about to help you write your responses to your classmates:

What did I learn from this post?

Can I relate this learning to another class?

Can I relate this learning to something I see every day?

COLLABORATIVE LEARNING SPACE



<input type="checkbox"/>	Groups	Members	Assignment	Discussions	Locker
<input type="checkbox"/>	Collaborative Learning (3) ▼				
<input type="checkbox"/>	Group 1	3		Discussion Forum	Group Files
<input type="checkbox"/>	Group 2	3		Discussion Forum	Group Files
<input type="checkbox"/>	Group 3	3		Discussion Forum	Group Files

DESIGN PROJECTS – STUDENT SELECTED



DEER CAMERAS

DIGITAL WATCHES

AUTOMOBILE SYSTEMS

ELECTRICAL BUILDING SYSTEMS

REFLECTIVE MOMENT



How do you implement collaborative learning in your classroom?



???QUESTIONS???



(NON)DIVERSITY IN ENGINEERING



REPORT | APRIL 1, 2021



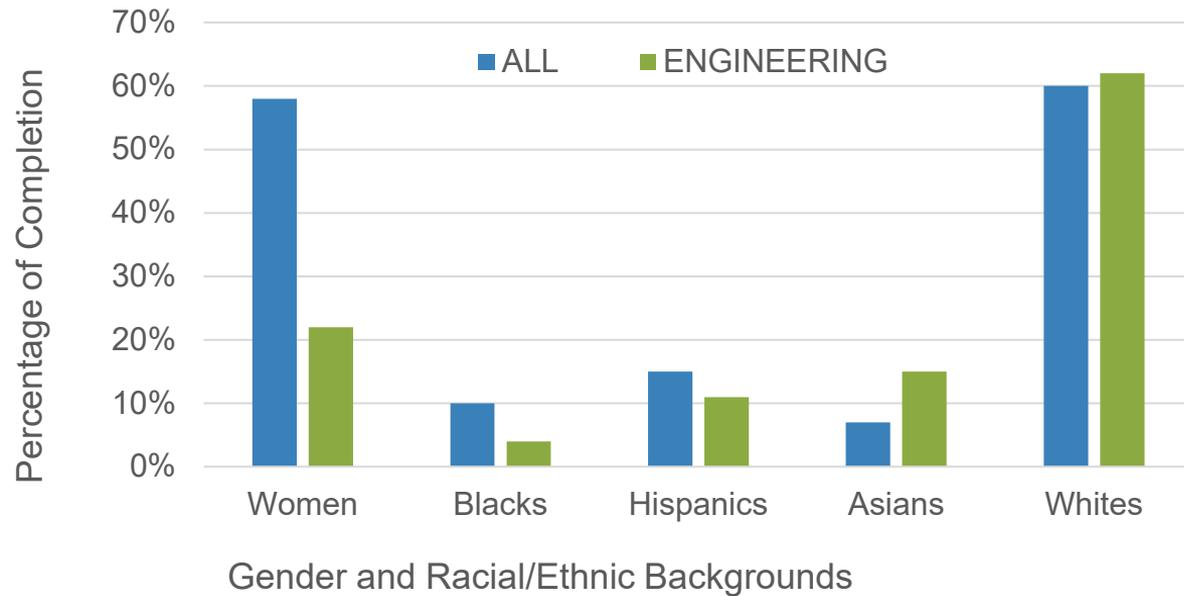
STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity

Higher education pipeline suggests long path ahead for increasing diversity, especially in fields like computing and engineering

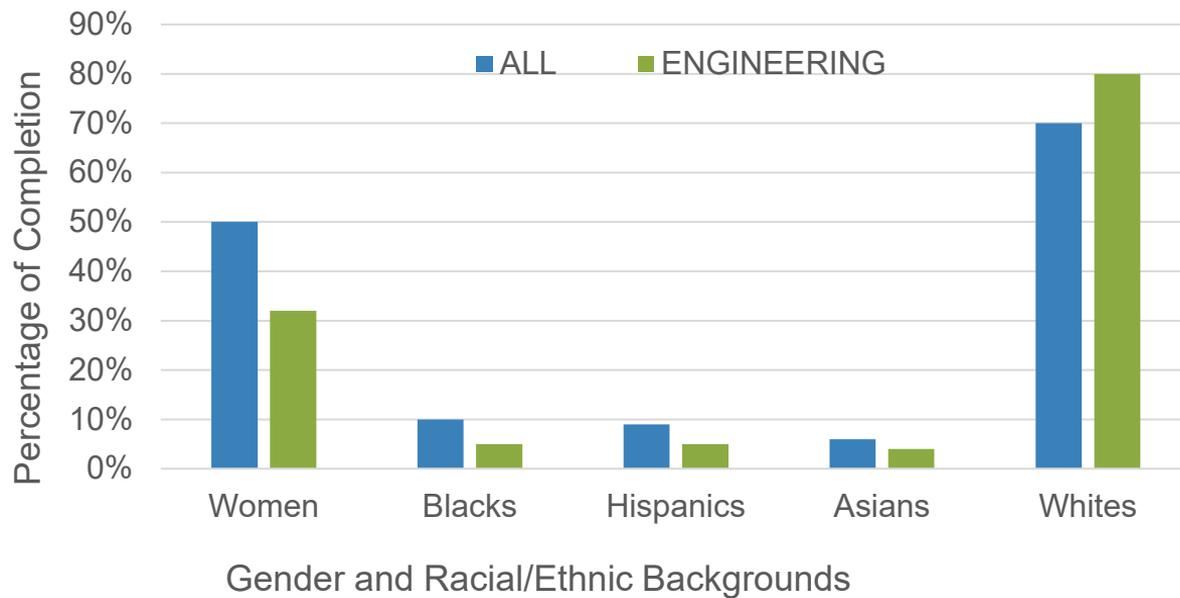
BY RICHARD FRY, BRIAN KENNEDY AND CARY FUNK



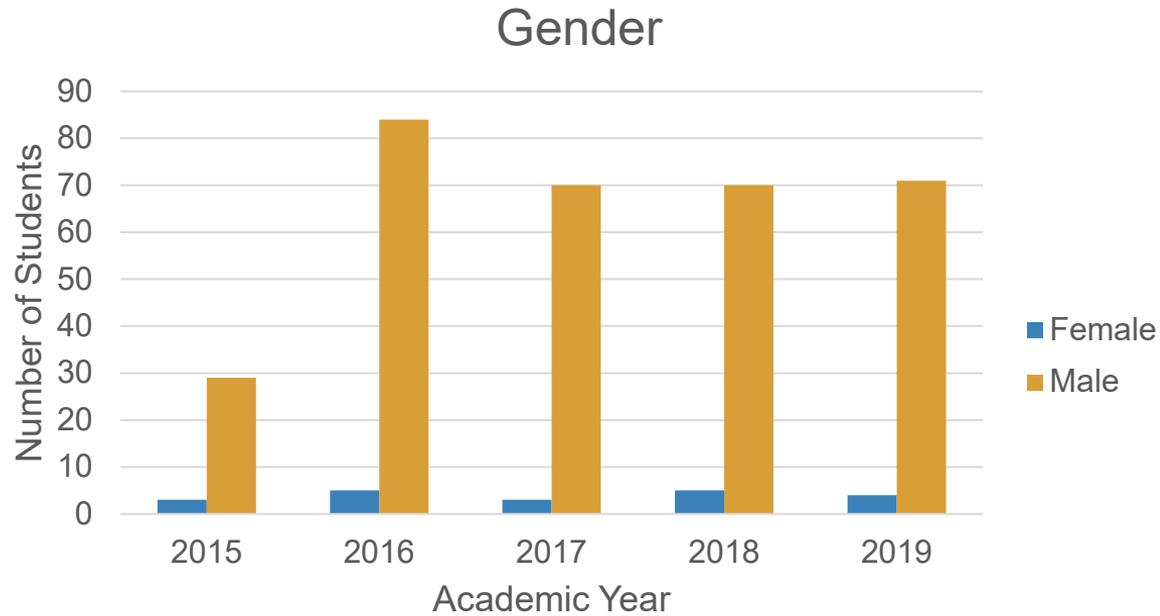
AWARDING OF UNDERGRADUATE DEGREES



AWARDING OF UNDERGRADUATE DEGREES IN SC



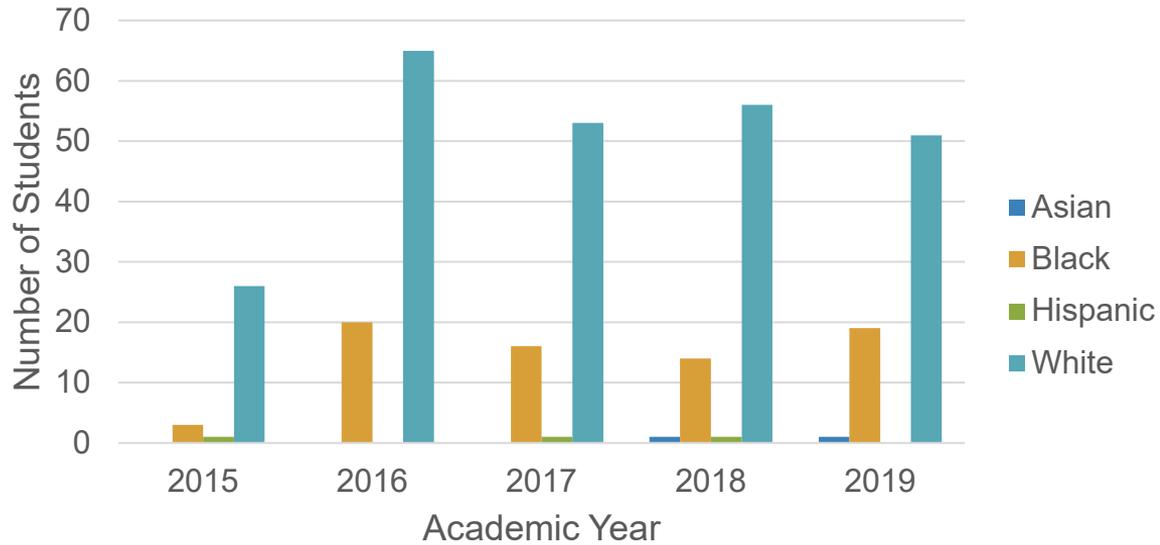
EET PROGRAM DEMOGRAPHICS



EET PROGRAM DEMOGRAPHICS



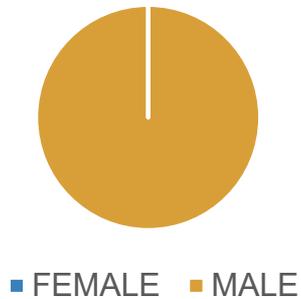
Ethnic/Racial Backgrounds



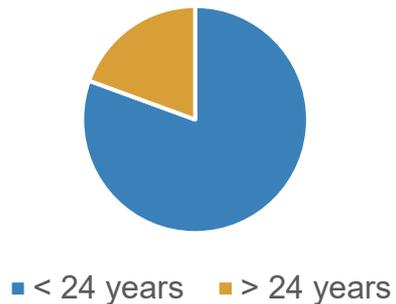
RESEARCH: SURVEY PARTICIPANTS



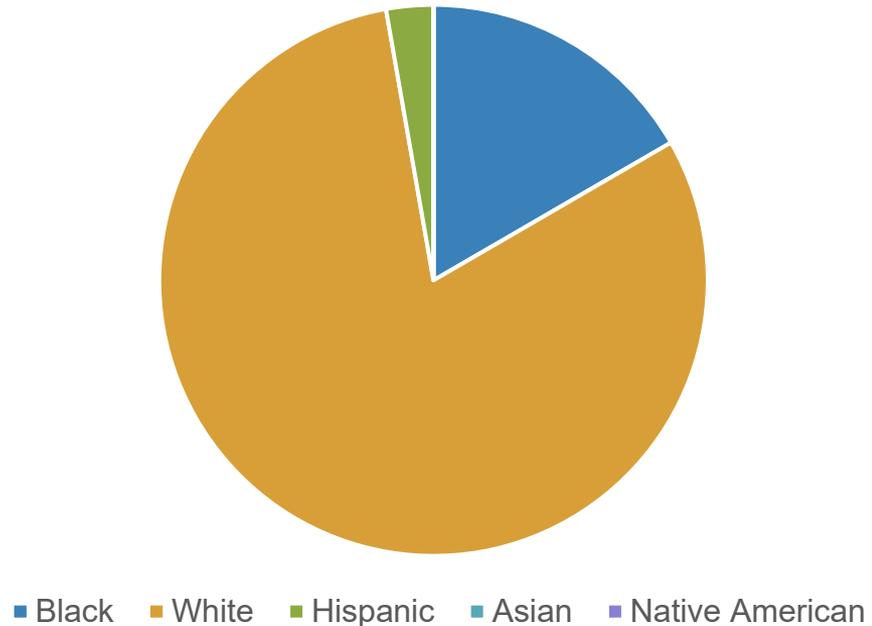
Gender



Age



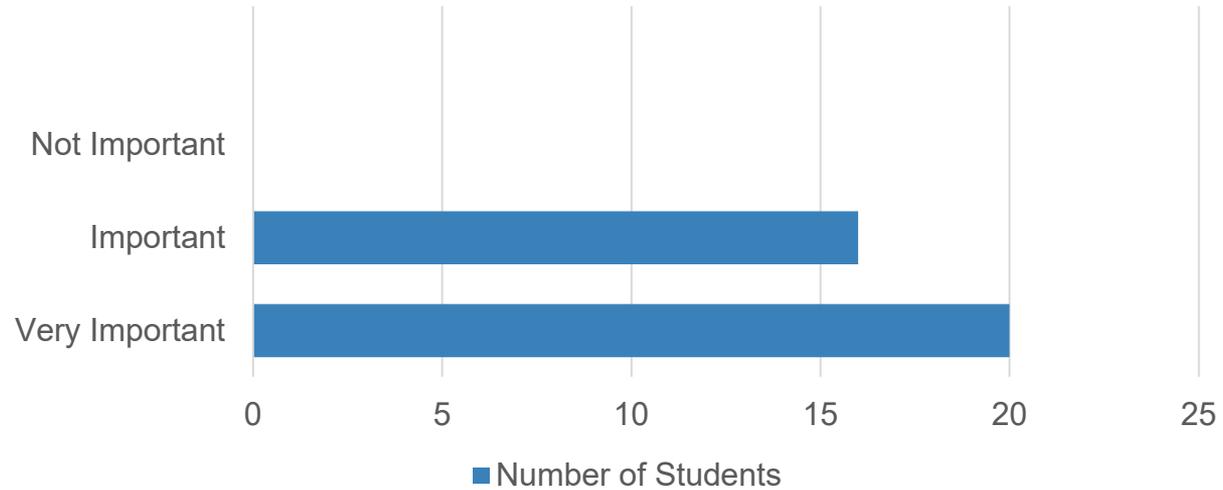
Ethnic/Racial Backgrounds



SURVEY DATA



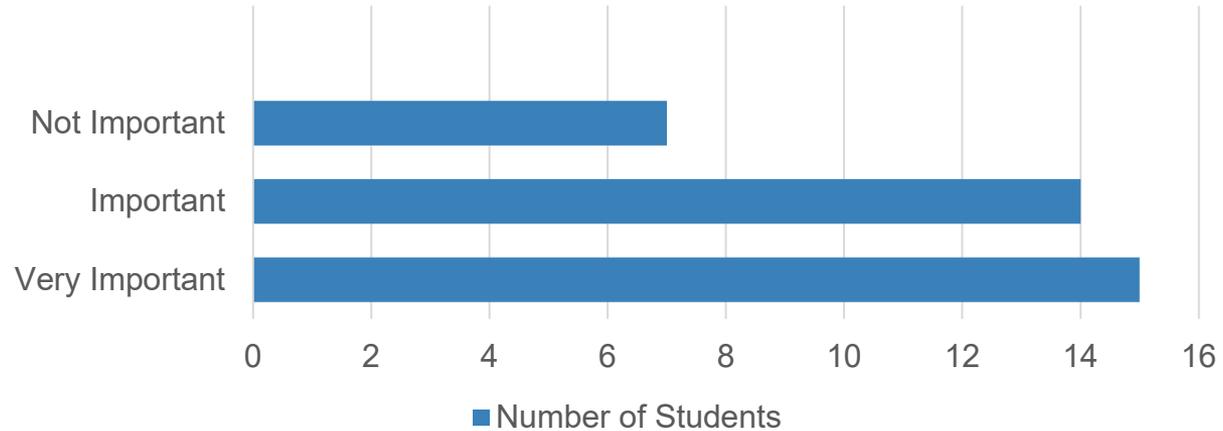
High Wage



SURVEY DATA



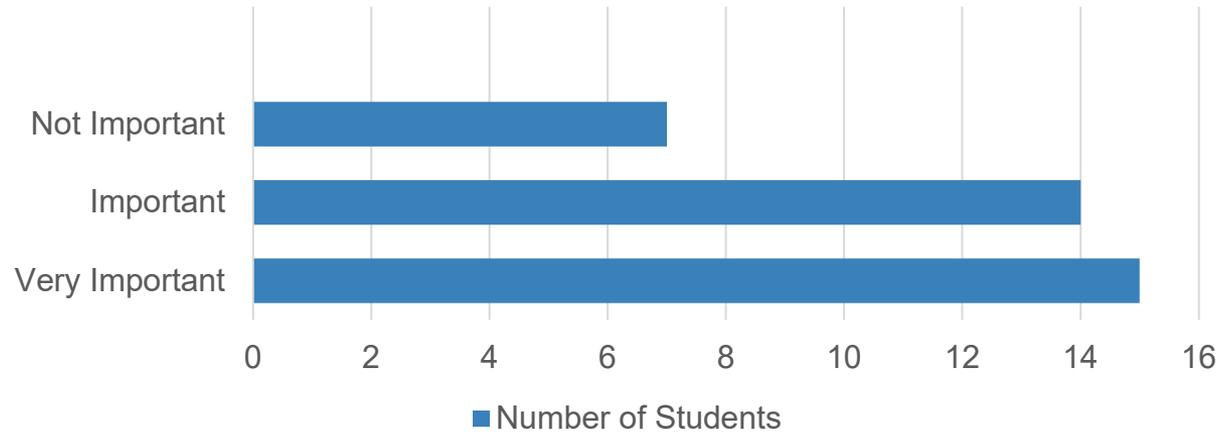
Availability of jobs near home



SURVEY DATA



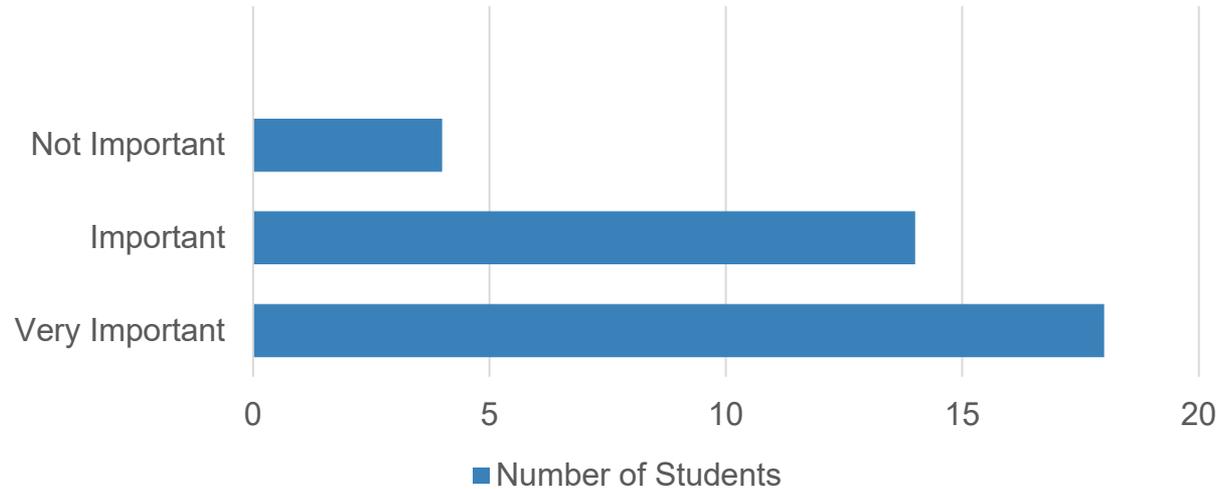
My friends think it's a good career for me



SURVEY DATA



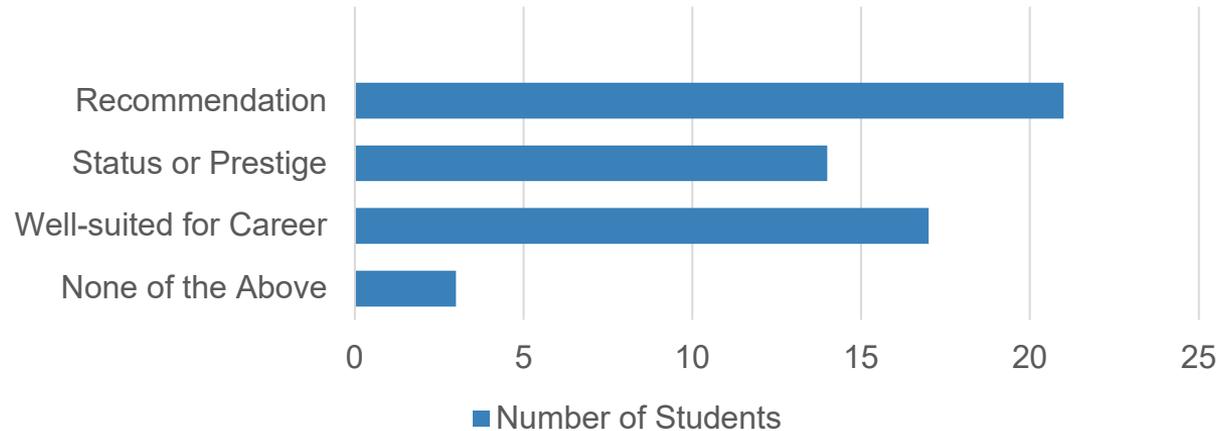
I know someone who does this type of work



SURVEY DATA



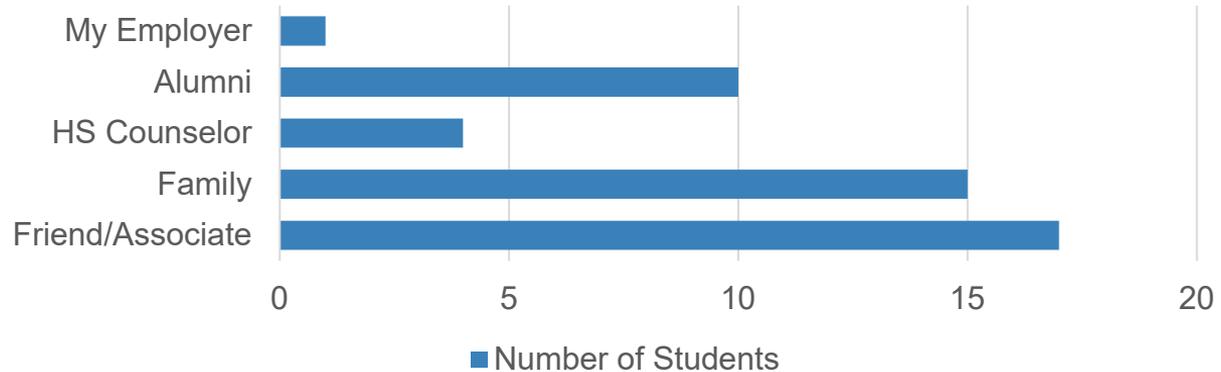
I chose this career path for the following reason(s):



SURVEY DATA



If you selected “recommendation”, who recommended this program to you:



INTERVENTION



CYCLE 1

- ELECTRONIC MESSAGE

CYCLE 2

- VOICE CALL

CYCLE 3

- MAIL POSTCARD

Based on Culturally
Responsive Teaching
Practices (Gay, 2010)

FINDINGS AND FUTURE PLANS



POSITIVE EXPERIENCE

SEND TEXT MESSAGES

SPHERES OF INFLUENCE

???QUESTIONS???





THANKS!

Any questions?

You can find me at:

- jacksonsg@octech.edu



REFERENCES



- Coleman, A. (2020). D-STEM equity model: Diversifying the STEM education to career pathway. *Athens Journal of Education*. <https://www.athensjournals.gr/education/2018-2539-AJE-STEAM.pdf>
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2022 TLT FALL SESSIONS

October 18, 2022

Creating Killer OERs

Mark Knockemus & Ron Stafford
Northeastern Technical College

November 15, 2022

Removing Transfer Obstacles: Meta-Majors and Guided Pathways for University Transfer Students

John McGill, Cassandra Verardi, Amanda Lauren
York Technical College



Want to showcase your expertise? Is there a teaching technique that has been effective in the classroom? Apply to be a TLT presenter! For more information and full schedule:
www.sctechsystem.edu/tlt

GIVE US YOUR FEEDBACK

<https://www.surveymonkey.com/r/Sept22TLT>

