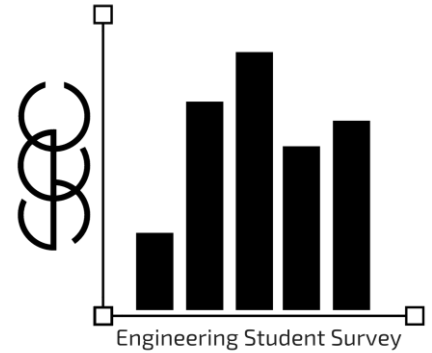
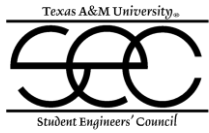


# ENGINEERING STUDENT SURVEY

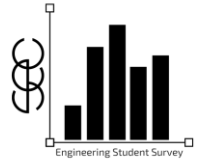


## Results Presentation

February 4, 2021



# Survey Executive Summary

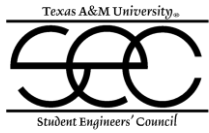


## Mission

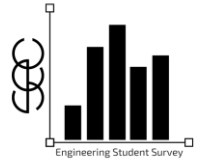
A primary mission of the Student Engineers' Council is to serve as the representative voice for the students within the College of Engineering. This survey seeks to communicate the student perspective to College of Engineering administration.

## Survey Restructuring

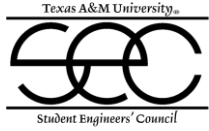
In addition to new survey sections and general restructuring, all sections were shortened significantly to promote a greater response rate while maintaining the insights of the survey.



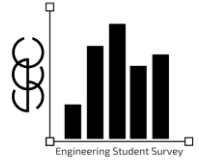
# Survey Question Breakdown



- Introduction/Demographic Questions – 10
- Undergraduate Student Questions – 11
- ETAM Questions – 3
- Graduate Student Questions – 4
- Post-Graduation Questions – 13
- Engineering Student Organization Questions – 3
- International Experience Questions – 7
- COVID-19 Questions – 5
- Diversity & Inclusion Questions – 10
- Career Fair Questions - 8

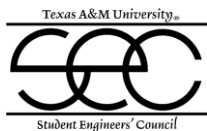


# Survey Response Summary

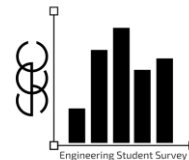


6-Week Survey Period  
November 1, 2020 – December 9, 2020

3,116 Total Respondents  
~15% of Engineering Student Body  
(84% from Undergraduate Students + 16% from Graduate Students)



## Special Thanks



*Dr. Andrea Ogilvie, Assistant Dean for Student Success*

*Dr. Karan Watson, Inst. for Engineering Education Innovation*

*Dr. Tracy Hammond, IEEI*

*Kiersten Potter, SEC President*

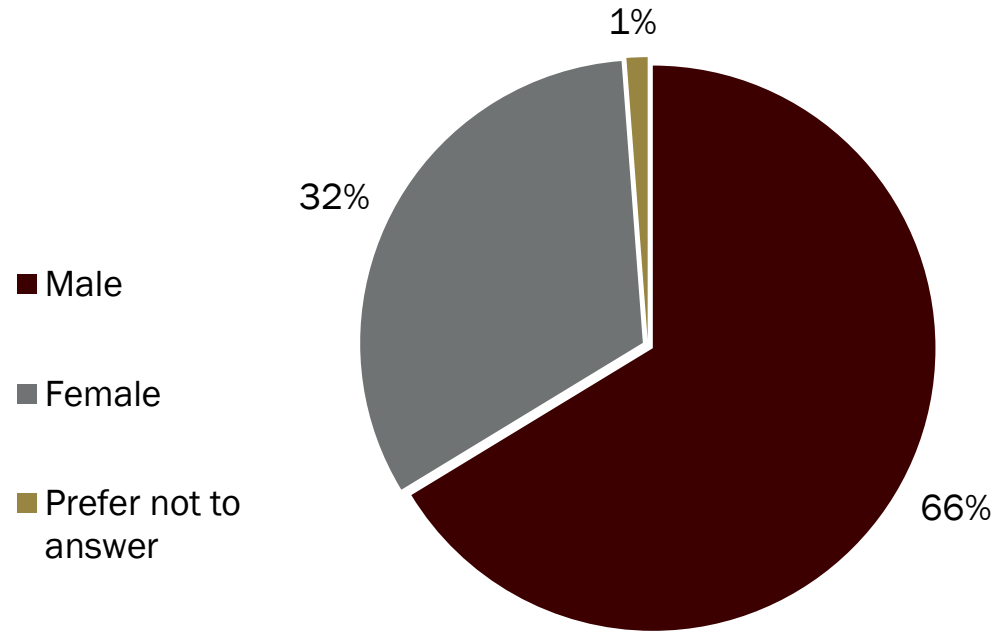
*Kade Flitton, SEC VP Internal*

# Introduction/Demographic Questions

Asked to all students

Responses: 2991

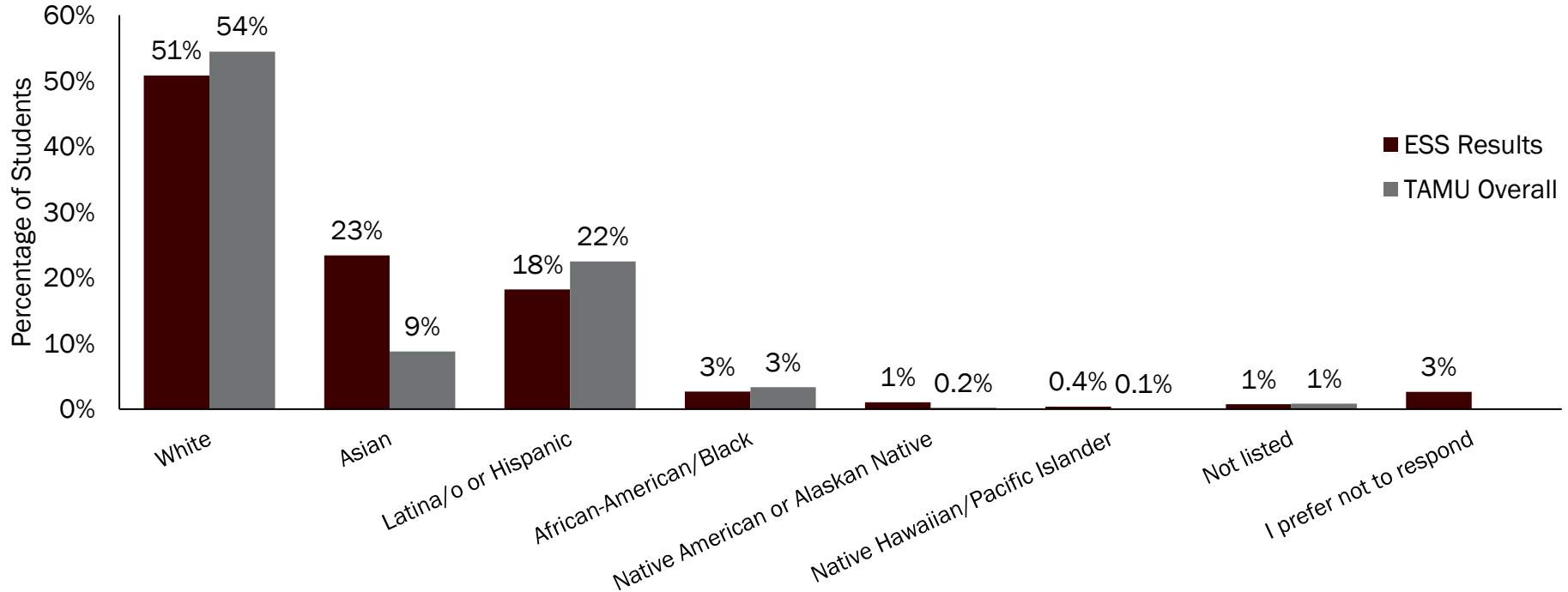
Sex/Gender:





Responses: 2990

*Check all that apply: Race/Ethnic Identification*



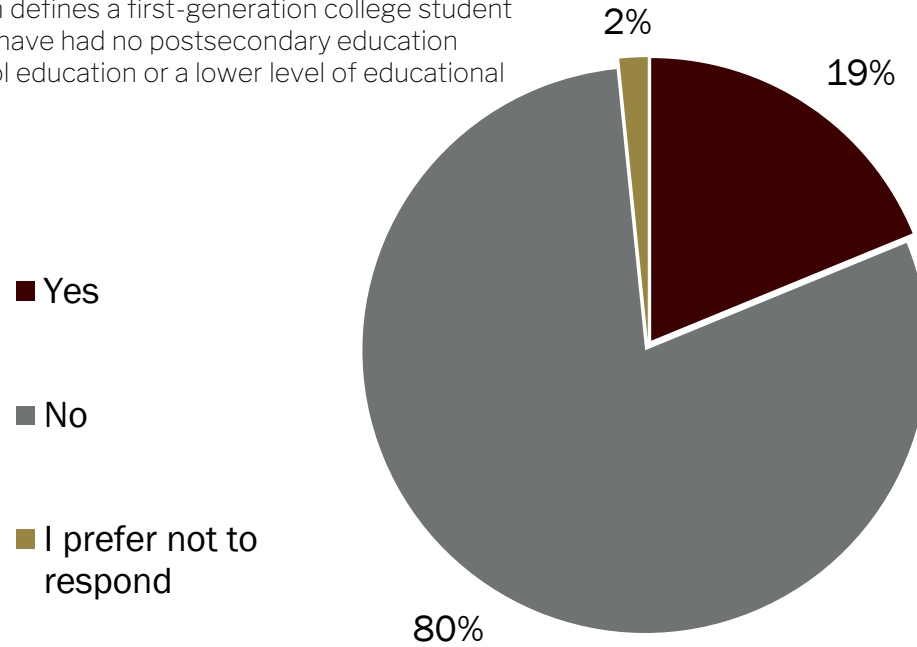




Responses: 2990

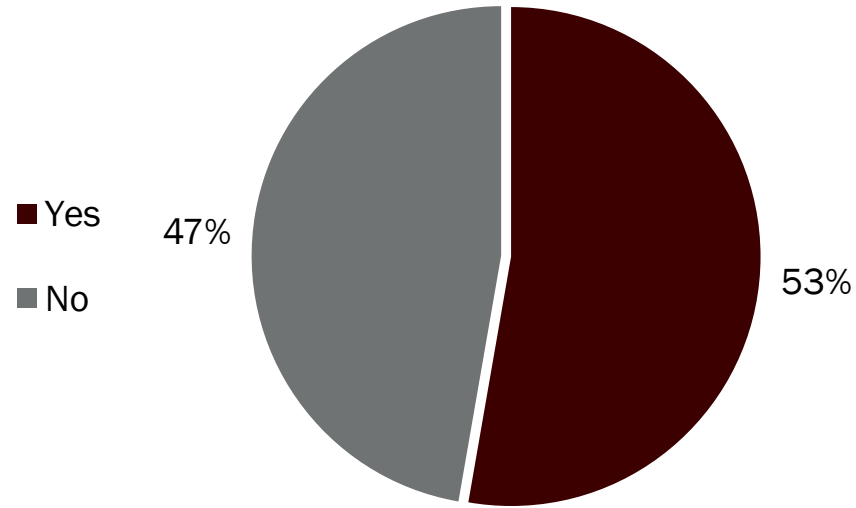
# Are you a first-generation college student?

The U.S. Department of Education defines a first-generation college student as a person "whose parents both have had no postsecondary education experience and have a high school education or a lower level of educational attainment."



Responses: 2990

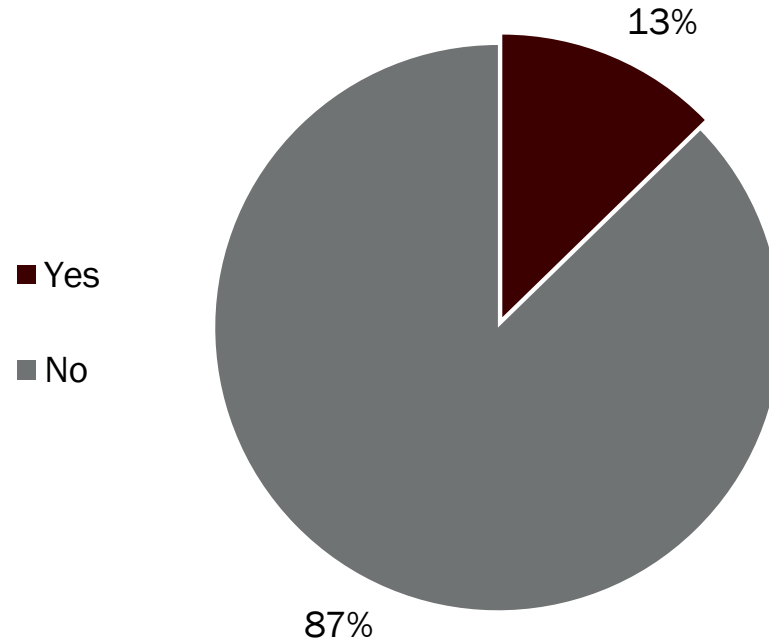
Are you the first member of your family to study/have a career in engineering?



Responses: 2990



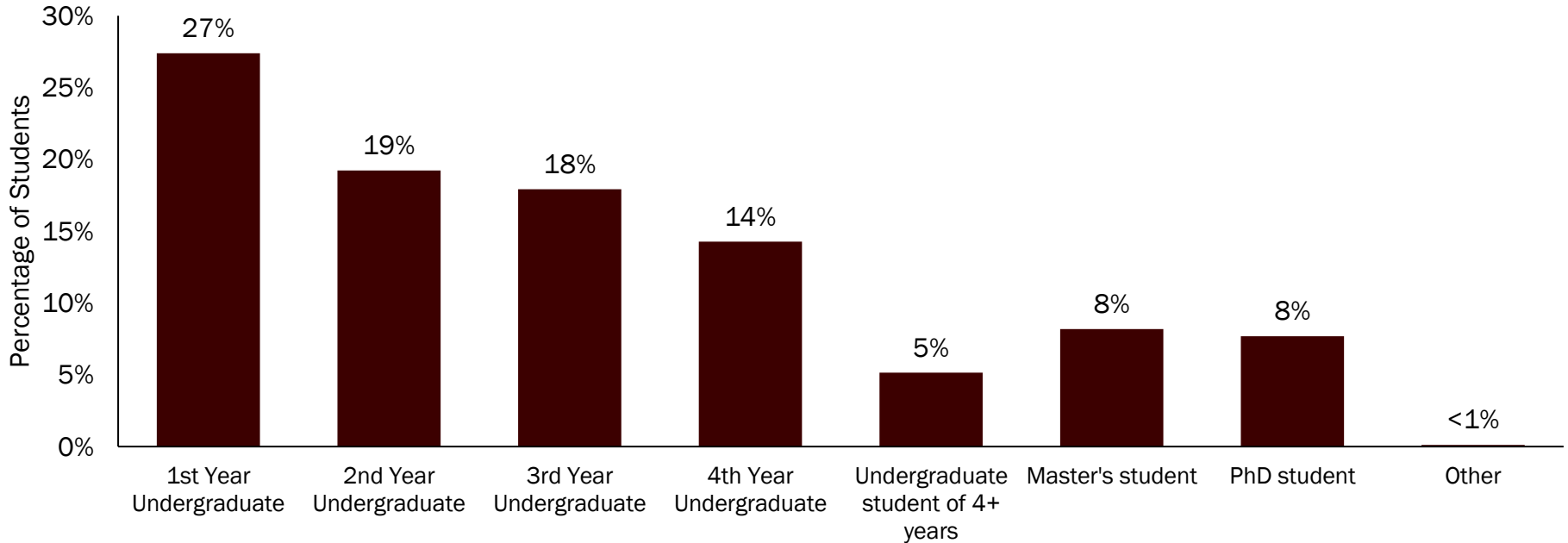
Are you an international student?





Responses: 2990

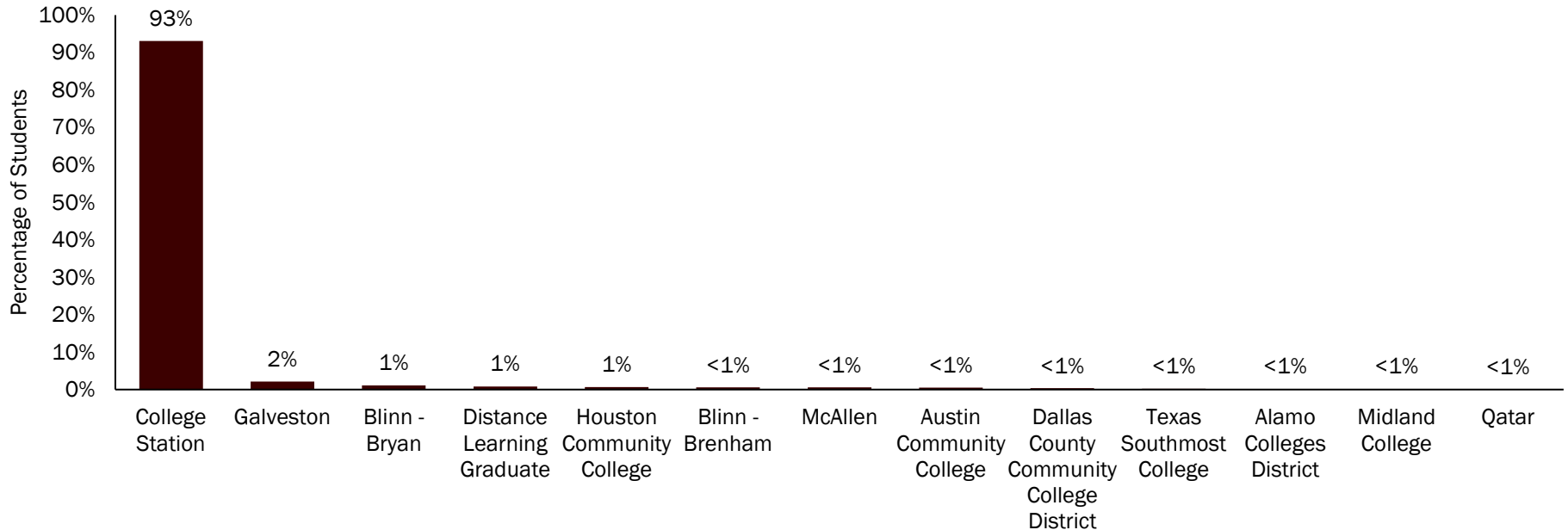
Which of the following most accurately represents your class at Texas A&M University?





Responses: 2990

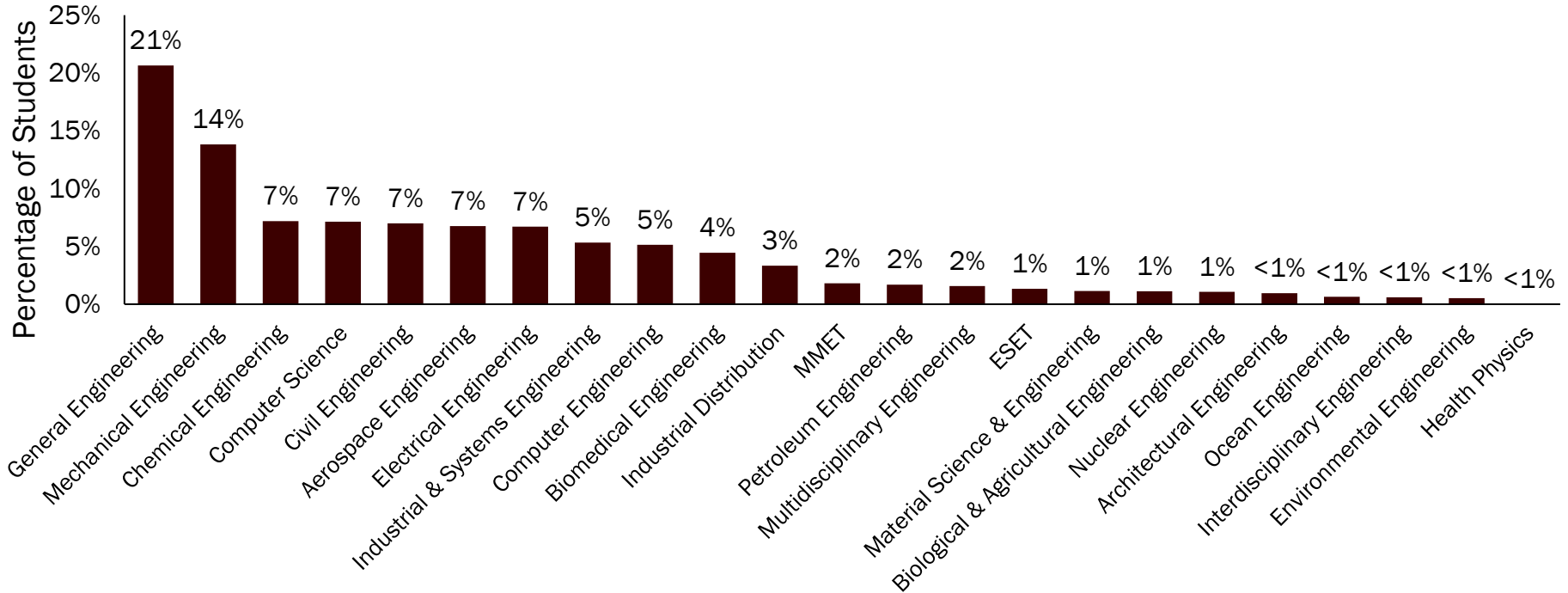
At which campus do you take the majority of your courses?





Responses: 2490

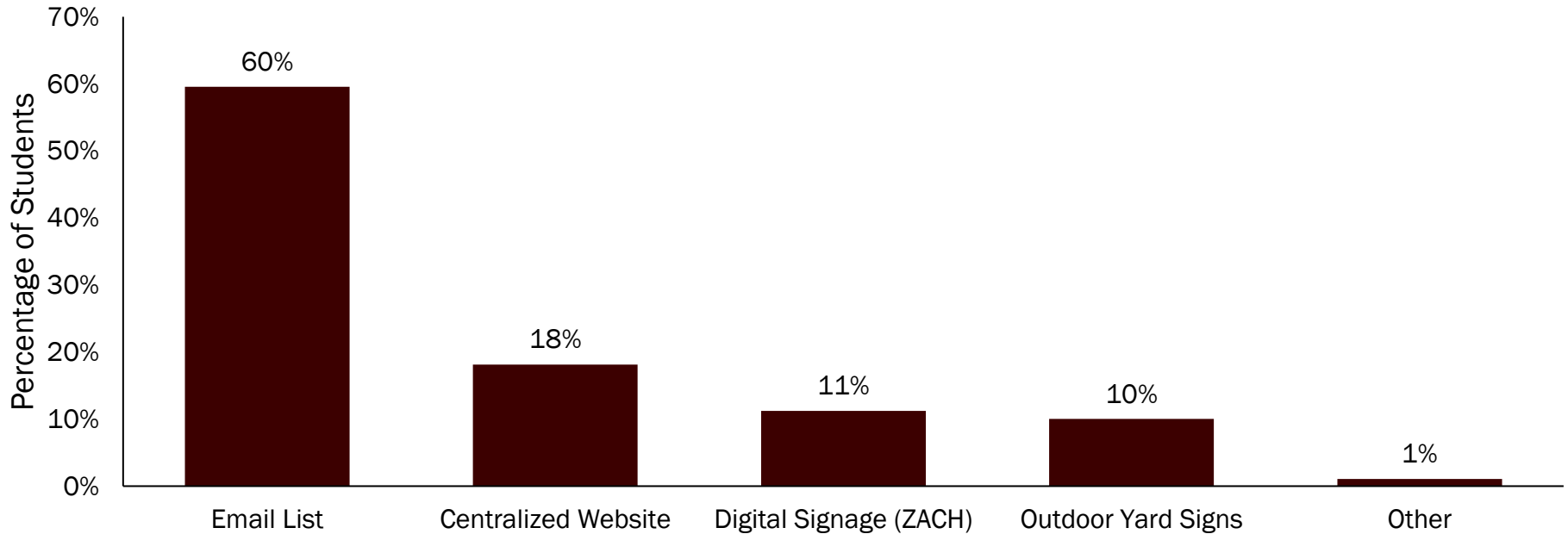
# What is your major?





Responses: 4386

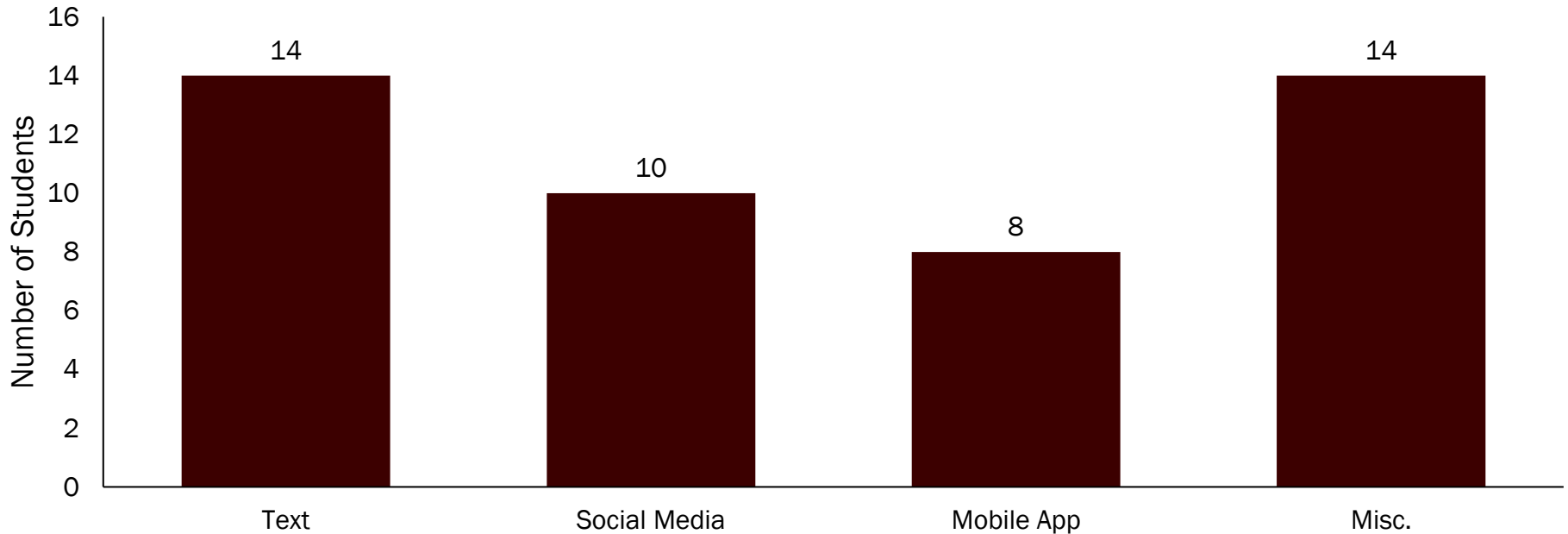
*Check all that apply:* How would you prefer to receive information about events happening around the College of Engineering?





Responses: 46

*Open-Ended:* How would you prefer to receive information about events happening around the College of Engineering? – Other



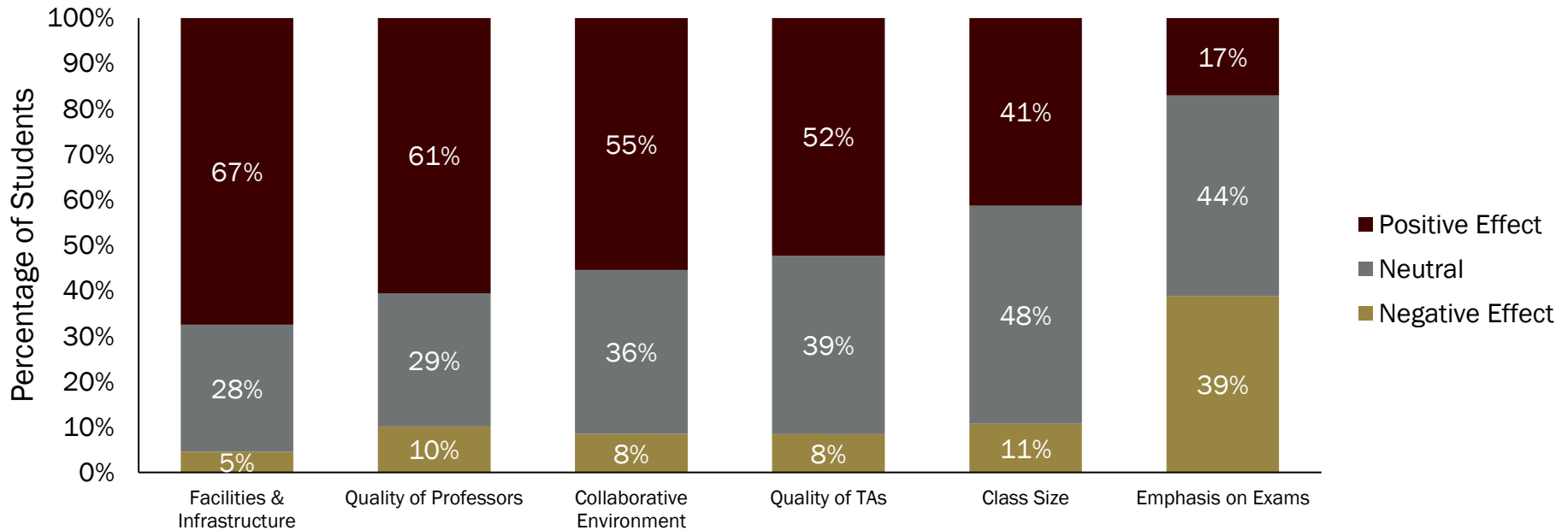


# Undergraduate Student Questions

Asked to undergraduate students only

Asked to undergraduate students only  
Responses: 2430

Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.



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Responses: 2430



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.

### Facilities & Infrastructure

- "Most of the facilities are well-suited learning environments."
- "It's hard to collaborate and use the facilities when Zach is essentially closed."

### Quality of Professors

- "Professors are generally helpful and look into the students' best interests when teaching material."
- "There is no consistency in the professors. Quality [...] is great or awful and I know most people would also say the same. A class grade should not solely depend on the professor."

*Open-Ended:* Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.

### Collaborative Environment

- "A&M has a highly collaborative environment if you are lucky enough to be in an engineering major and class that is able to have extroverted individuals."
- "Neither me or any of the students were assigned to groups. Collaboration between students and learning how to work as a team should be encouraged."

### Quality of TAs

- "My personal experience with TAs has been nothing but amazing but I do know people who would not say the same."
- "I feel like in some of my classes I've had really great TAs that care you learn the material and others that don't care to be there and it shows."

g0æ1/2 əP μð<sup>01/23/3</sup>° μ<sup>3</sup>ə1/2əμ<sup>01/20</sup>əPðE  
Responses: 2430



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.

### Class Size

- "I have small class sizes and that means we all are pretty close and work nicely together. Really a plus."
- "The class sizes can sometimes be way too big. Some classes having 100+ students naturally has a way of drowning out a lot of voices."

### Emphasis on Exams

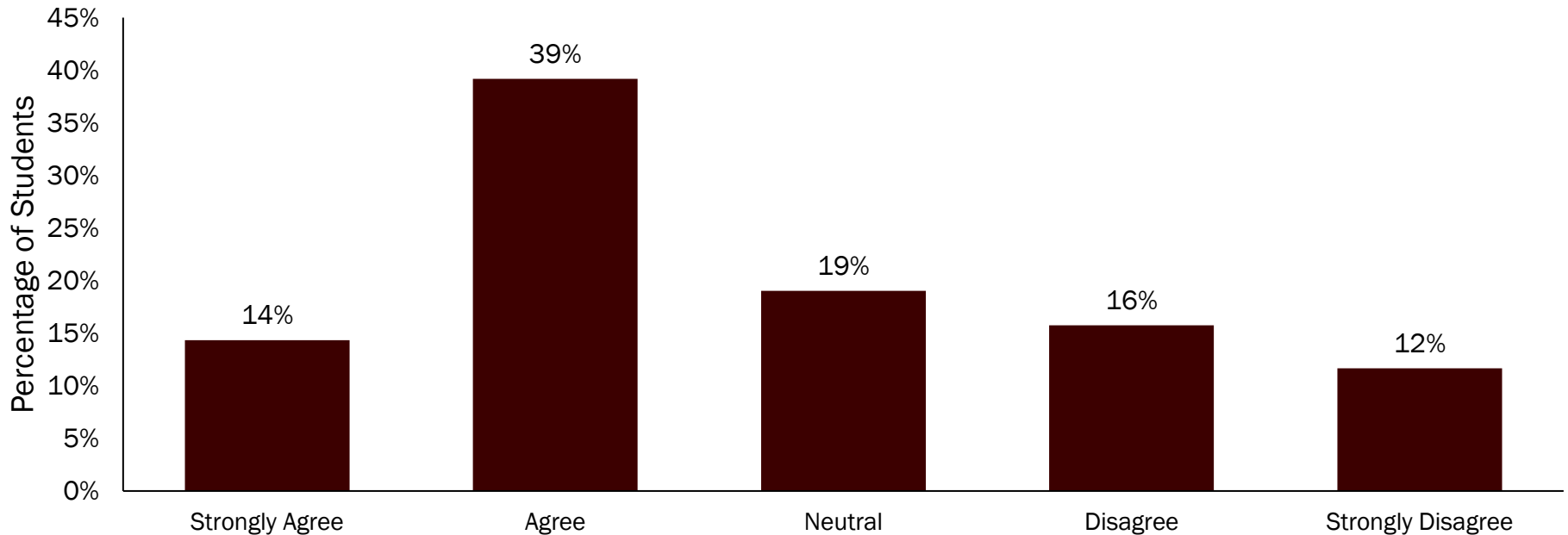
- "I feel like exams are not a good representation of your learning anymore. Projects are a much better way of learning and showing your growth (if done right)."
- "I had multiple classes where 45% of my final grade was from one test. That doesn't make sense or show mastery of skill."

# First-Year Coursework Questions

Asked to undergraduate students beyond their first year

Asked to undergraduate students beyond their first year  
Responses: 1345

Please indicate how well ENGR 102 coursework adequately prepared you for your upper-level engineering coursework.



*Asked to undergraduate students beyond their first year*  
Responses: 161



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Explain your reasoning for how adequately the ENGR 102 coursework prepared you for your upper-level coursework.

### Aided in Upper-Level Classes

- “I have used the coding skills I learned in 102 every single semester since I took the class. Learning python has been a very useful and practical skill, thanks to 102 I have done very well on coding assignments in upper-level classes.”

### Real World Applications

- “ENGR 102 was useful in that it teaches Python which is a widely used programming language that is useful for tons of applications in the working world.”

### Teamwork

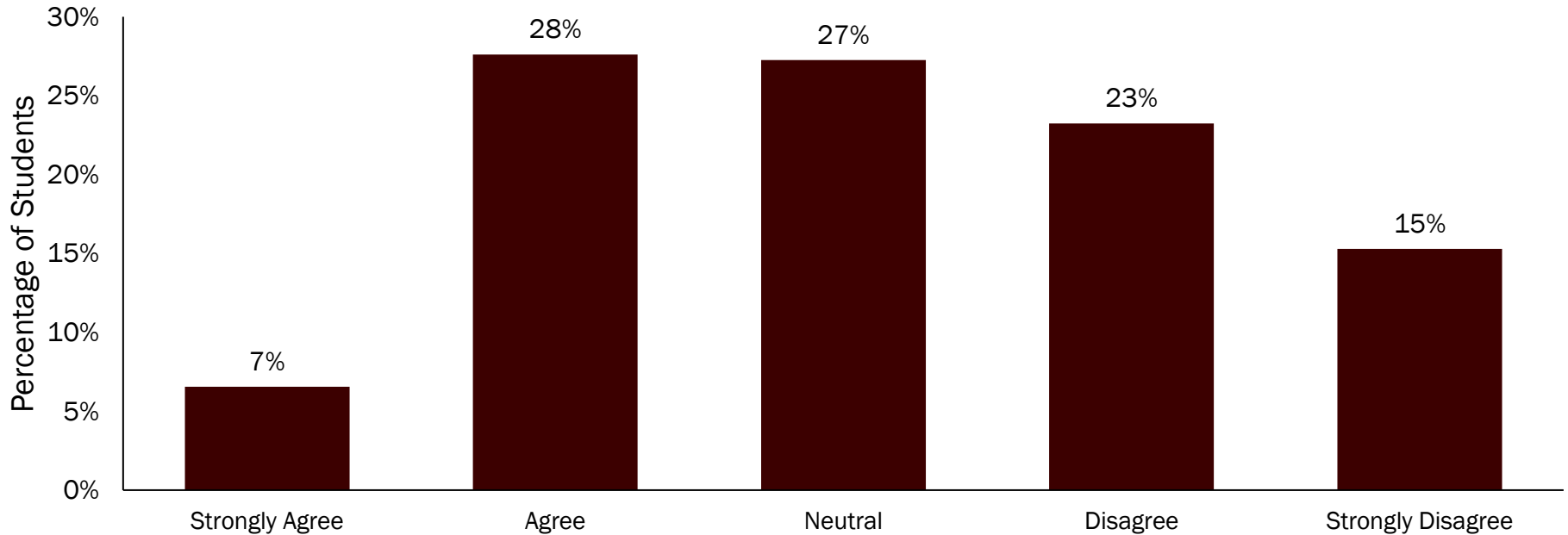
- “ENGR 102 helped me practice working with other people and solve tasks that are relevant to my major.”



Responses: 1144



Please indicate how well ENGR 216 coursework adequately prepared you for your upper-level engineering coursework.



Responses: 169



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Explain your reasoning for how adequately the ENGR 216 coursework prepared you for your upper-level coursework.

### Physics & Statistics Concepts

- “ENGR 216 gave me a deeper understanding of physics and statistics.”

### Virtual Format Lab Issue

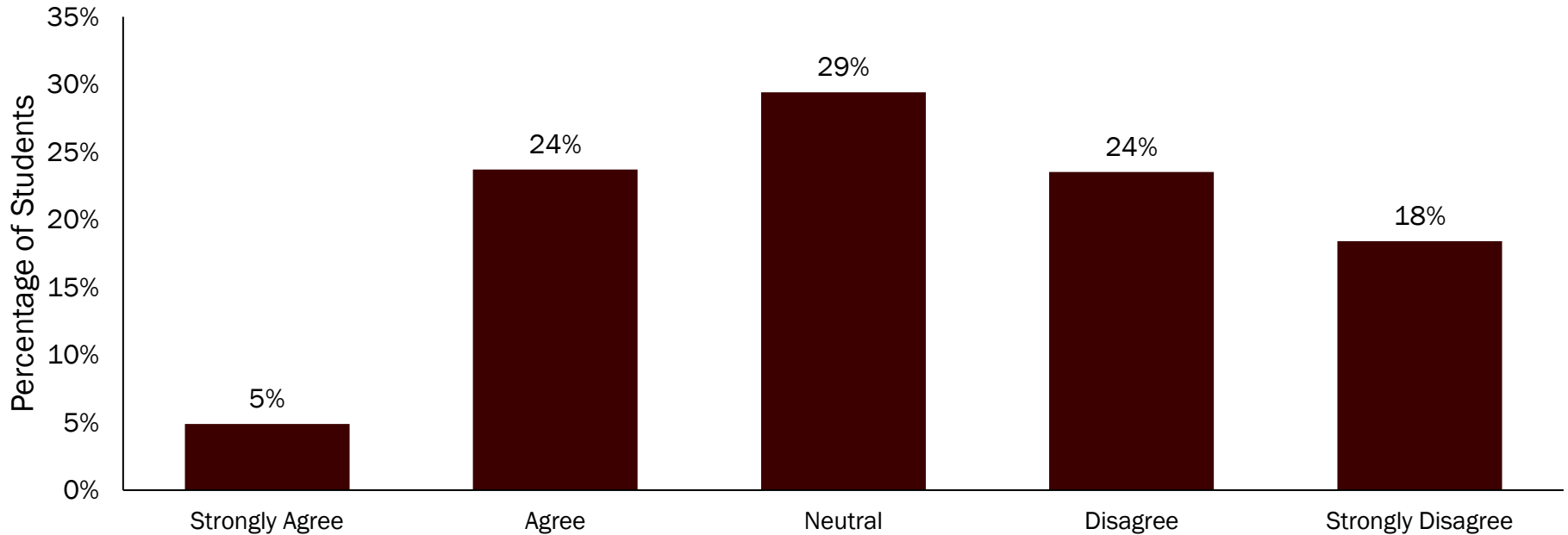
- “Taking ENGR 216 online didn’t really give all of the information or steps to take the data given and allow me to figure out how to calculate the results on my own successfully.”

### Lecture Format Issue

- “The lecture format for ENGR 216 is simply reading information off of a screen which is not how I learn.”

Asked to undergraduate students beyond their first year  
Responses: 999

Please indicate how well ENGR 217 coursework adequately prepared you for your upper-level engineering coursework.



*Asked to undergraduate students beyond their first year*  
Responses: 163



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Explain your reasoning for how adequately the ENGR 217 coursework prepared you for your upper-level coursework.

### Hands on Learning

- “Data collection, analysis, and the lab write-ups were super practical and had a helpful hands-on learning method.”

### Surface Level Information

- “The lectures in ENGR 217 felt extremely rushed, and I don't feel like I took much away from it other than vague, surface level facts.”

*Asked to undergraduate students beyond their first year*



**ENGINEERING**  
TEXAS A&M UNIVERSITY

*Open-Ended:* Explain your reasoning for how adequately the First-Year engineering coursework prepared you in general.

### Helpful Professors

- “The professors were helpful on trying to help me understand what is being taught to ensure an easier learning time in the next class.”

### Diversified Skills

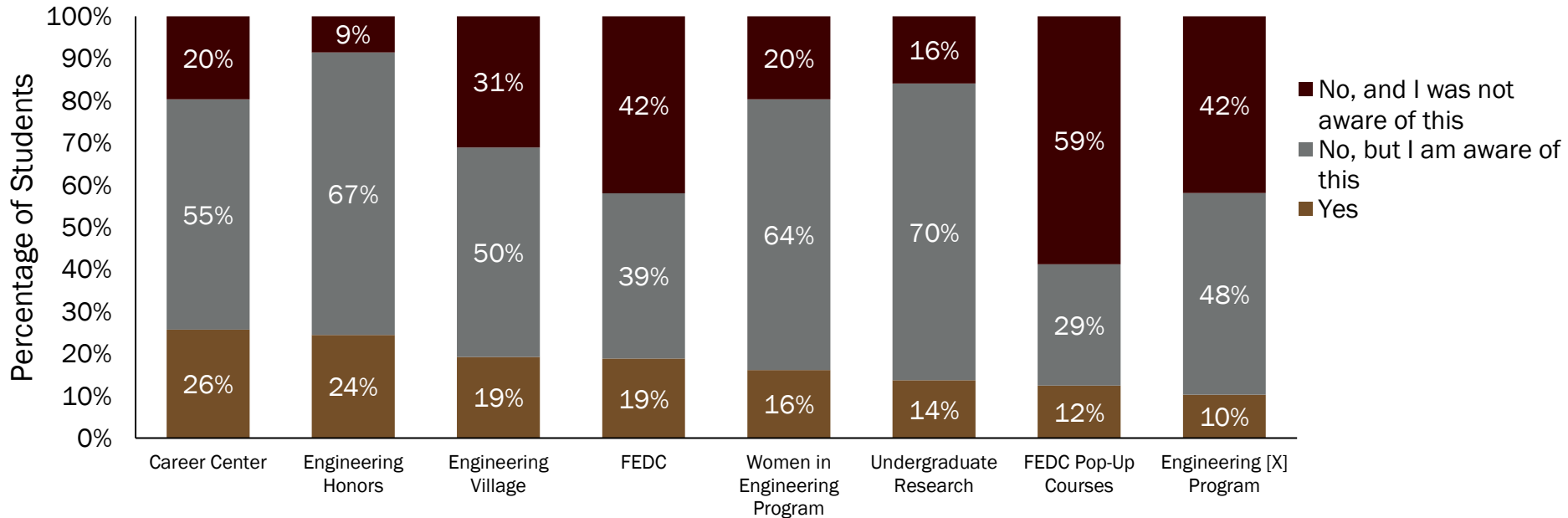
- “The technical thought process will definitely help and the coding experience diversifies my skills.”

# Academic Support Questions

Asked to undergraduate students

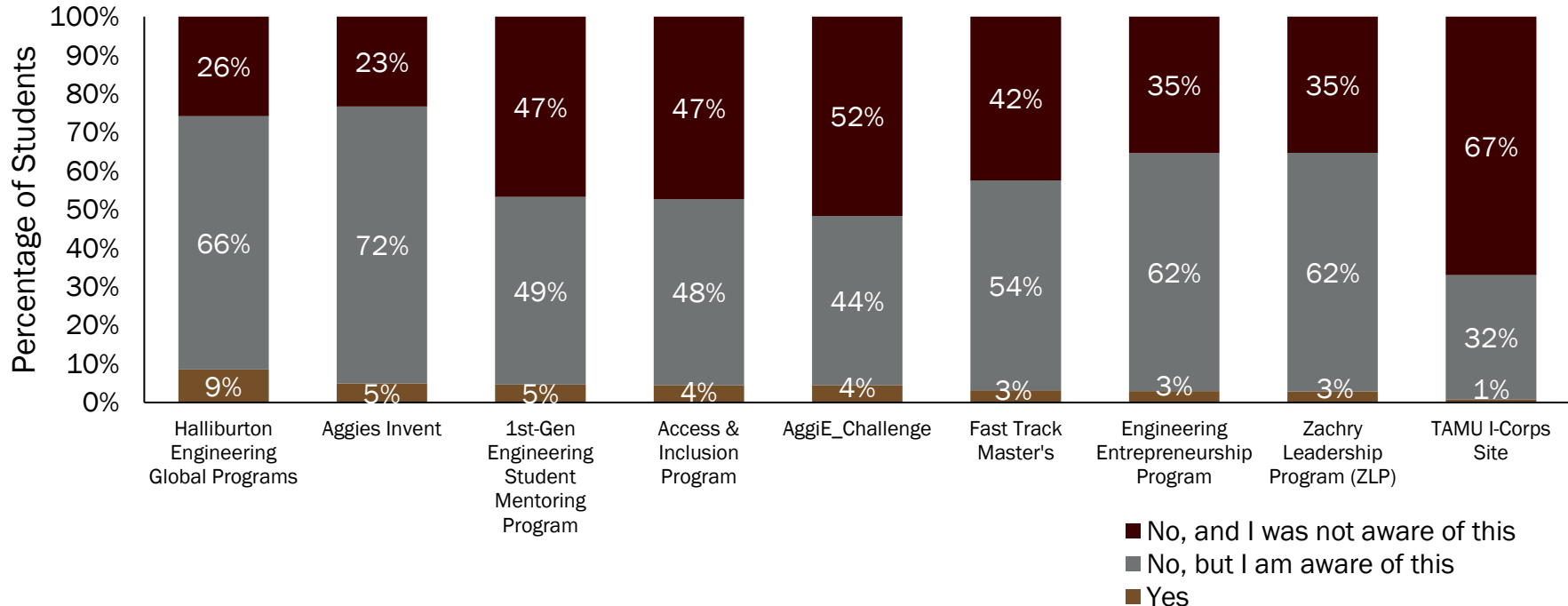
Responses: 2367

## Have you used the following Academic Enrichment Programs?



Responses: 2367

## Have you used the following Academic Enrichment Programs?

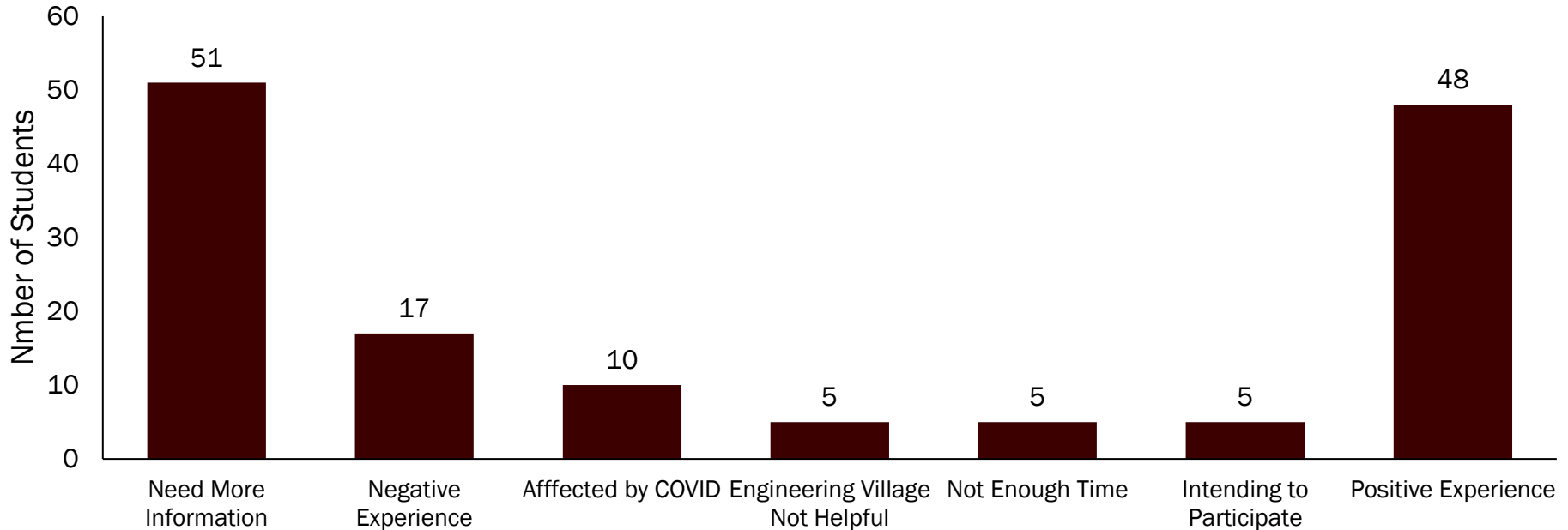






Responses: 183

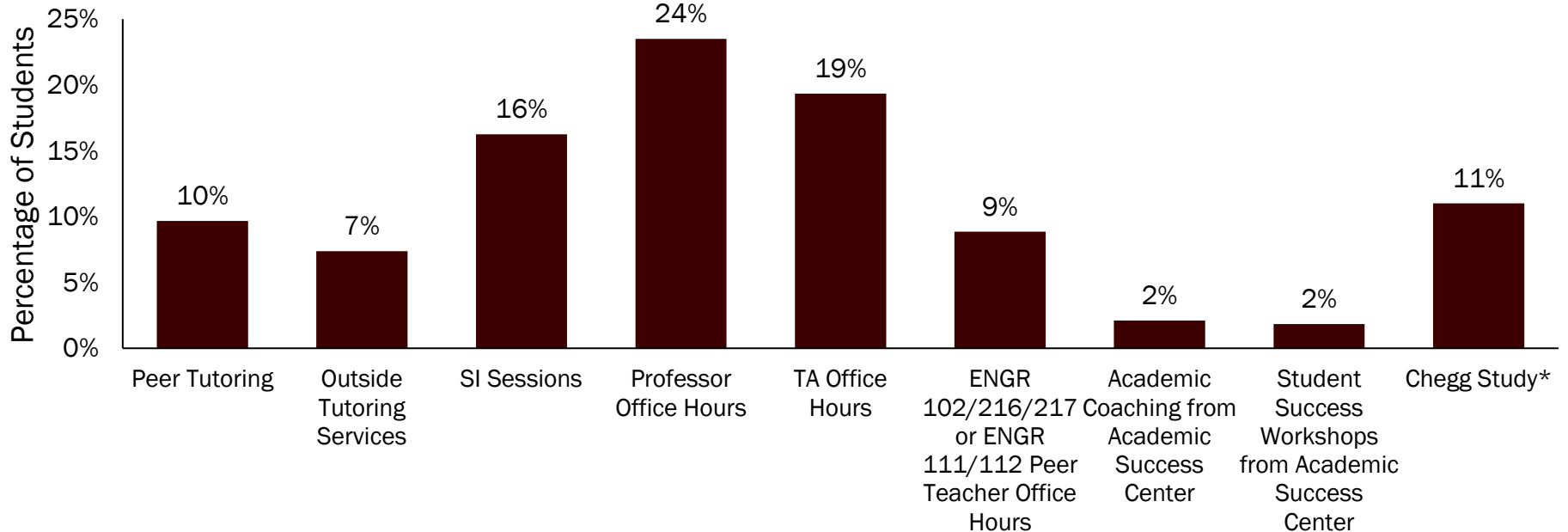
*Open-Ended: If you have any comments regarding the Academic Enrichment Programs above, please provide those here.*





Responses: 6961

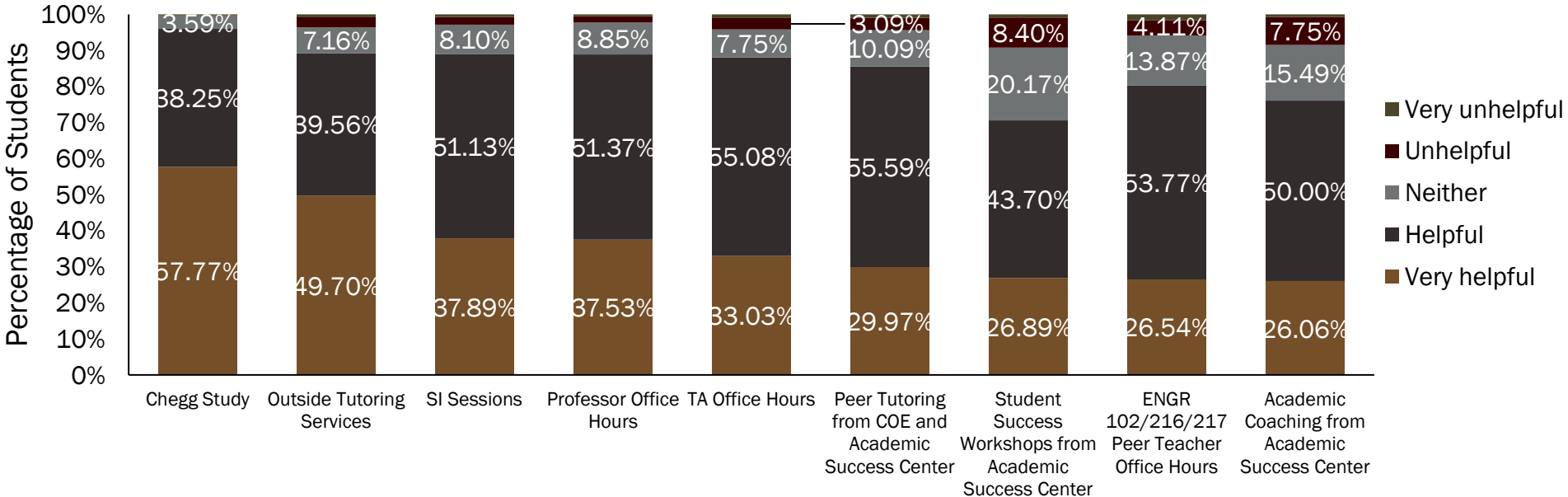
Select all of the following Academic Support Services that you have utilized.





Responses: 6789

How helpful are the following Academic Support Services in helping you succeed academically?.





Responses: 310

*Open-Ended: What additional Academic Support Services and resources would be helpful in you succeeding academically?*

Aid for Upper-Level Courses

- “I would like to see more aid for upper-level courses. But none are really offered for my major. Maybe like basic general tutoring”

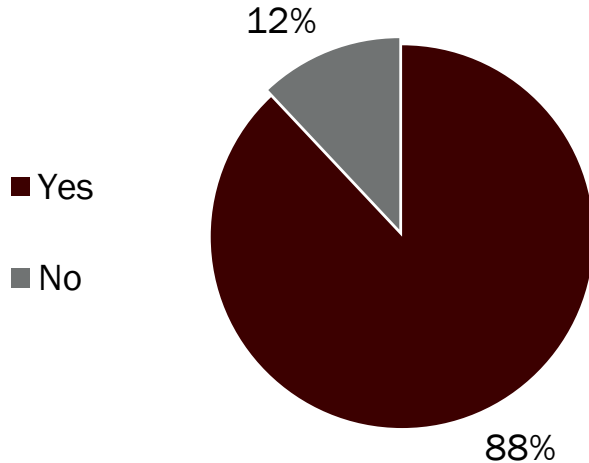
Approved Alternatives to 3<sup>rd</sup> Party Websites such as Chegg Study

- “I am glad to say that I have reached the point in which Chegg is no longer a useful source of information regarding my studies. I understand the dislike with students using this tool as it undermines the studying process in several courses however I would like to point out in particular that it is one of the only tools that allows for a clearer understanding of some of the abstract ideas asked in HW assignments in particular those asked in courses such as Fluids dynamics, physics E&M, and such where the particular abstract idea might not be clearly conveyed during lectures or upon asking for help from the TA or Professor..”



Responses: 2301

Y/N: When registering for the Fall 2020 semester, were you able to register for all of the courses you needed?



Open-Ended: Top courses students could not register for:

1. ENGL 210 (11)
2. ENGL 104 (8)
3. ENGR 482 (5)
4. ENGR 216 (4)
5. ENGR 217 (4)

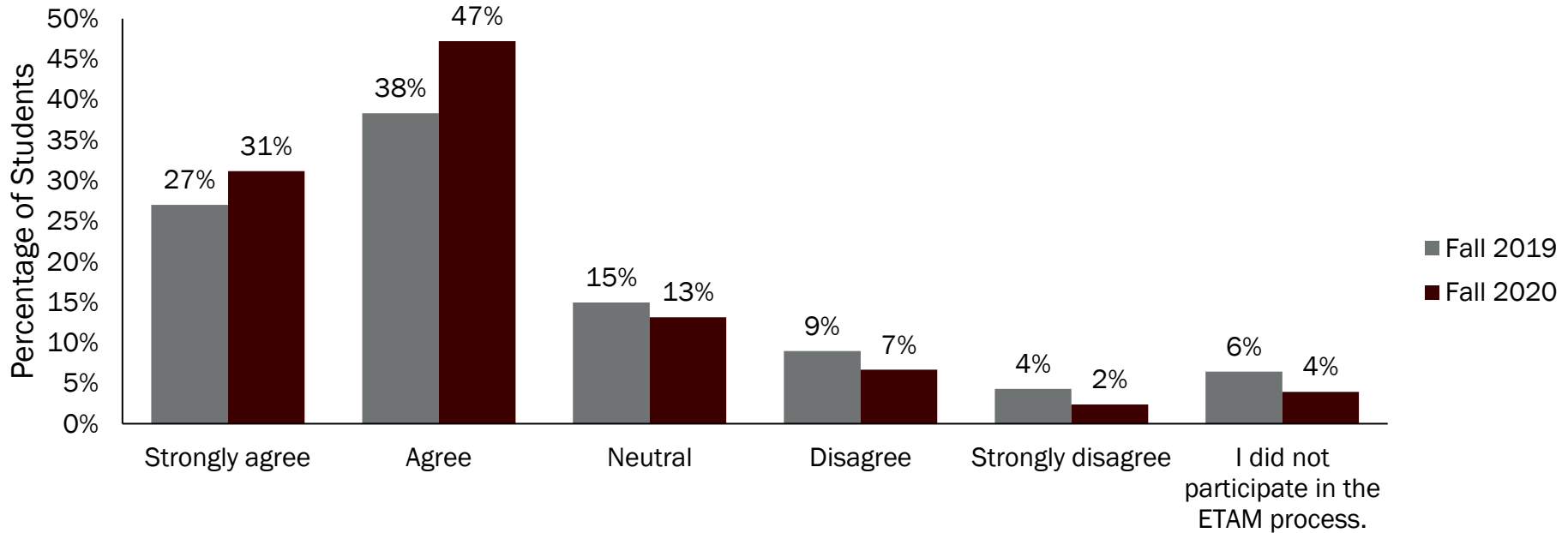
# Entry-to-a-Major Questions

Asked to second-year undergraduate students



Responses: 510 (Prev. Year: 1485)

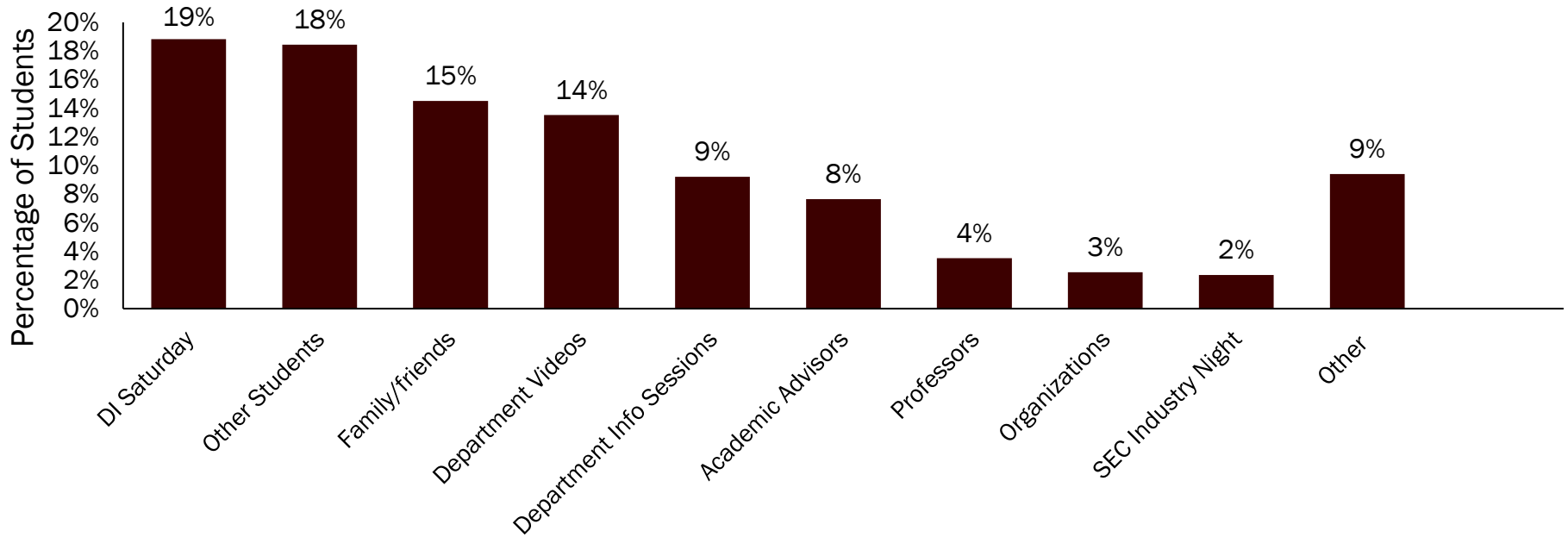
I receive(d) sufficient information about the different majors to make an informed decision about my major.





Responses: 510

During your first year at Texas A&M University, what is/was the most helpful source of information when applying to your major?

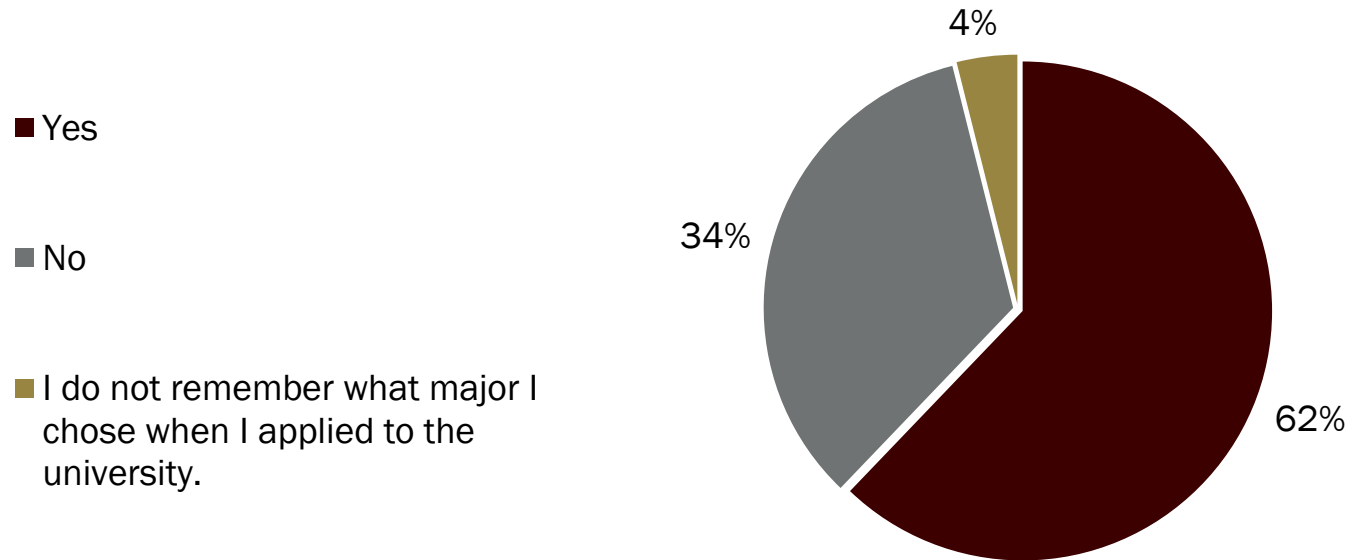






Responses: 510

To your memory, when undergoing the ETAM process, was your first-choice major the same major you chose when you applied to TAMU?



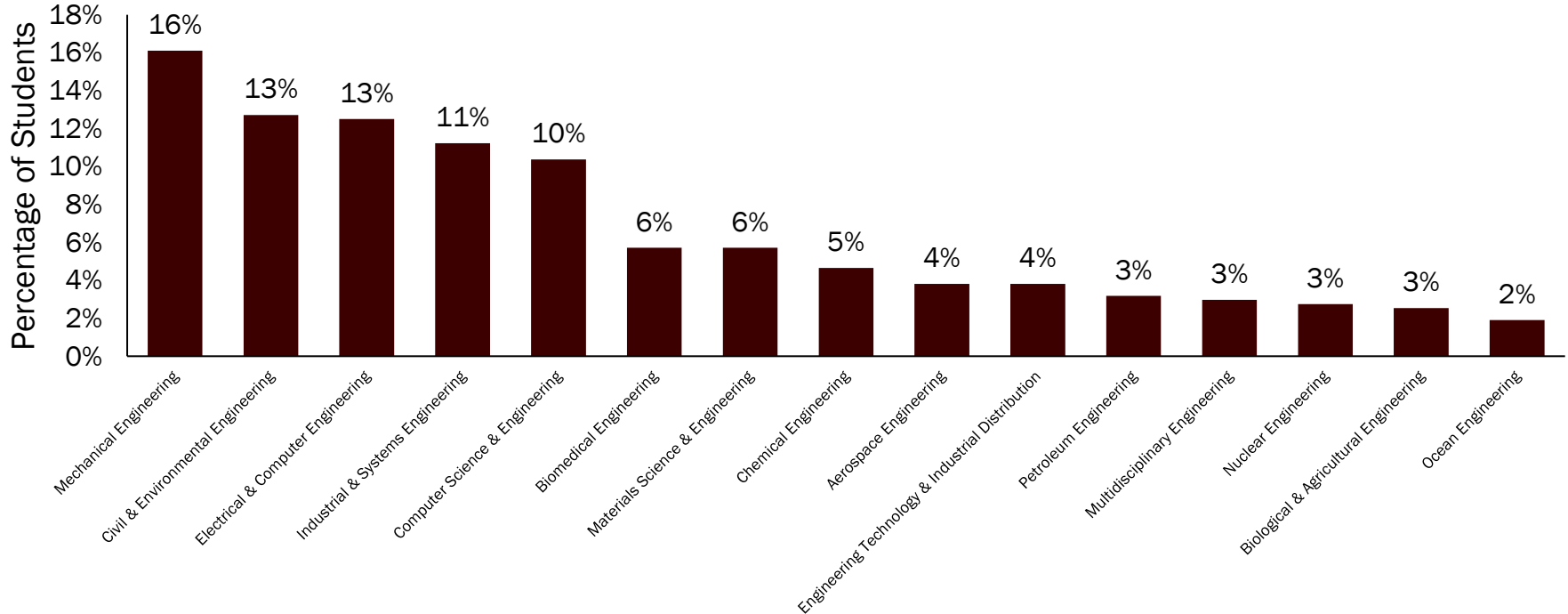
# Graduate Student Questions

Asked to Master's & PhD students



Responses: 472

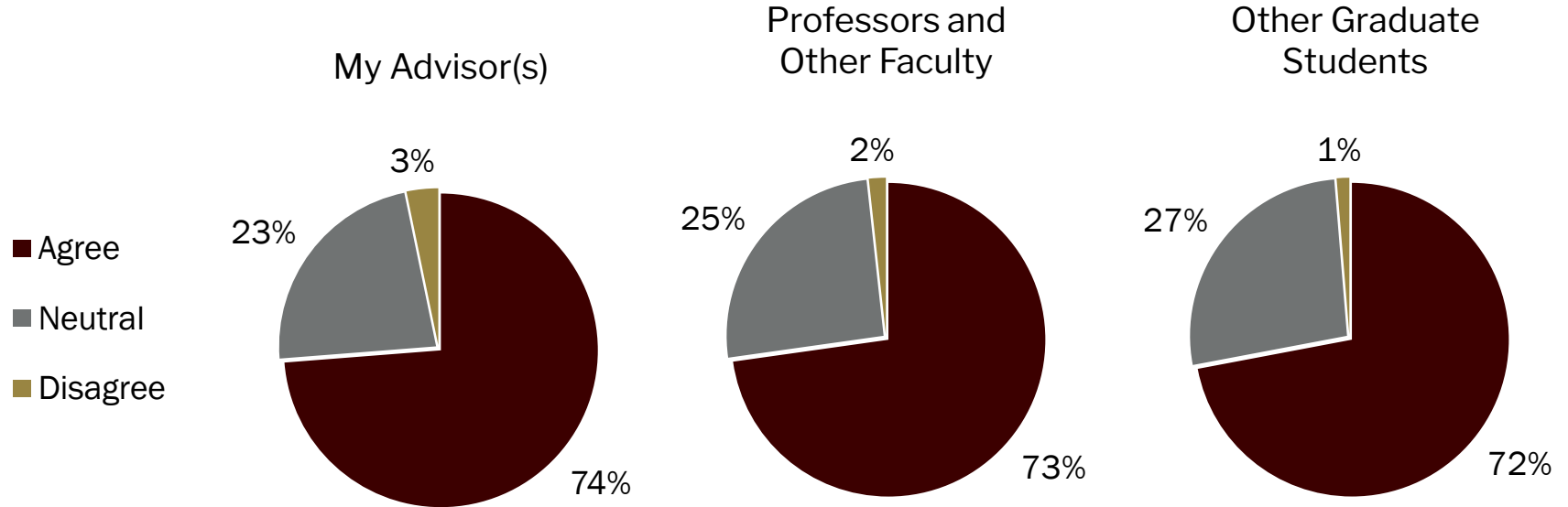
## What department are you in?





Responses: 461

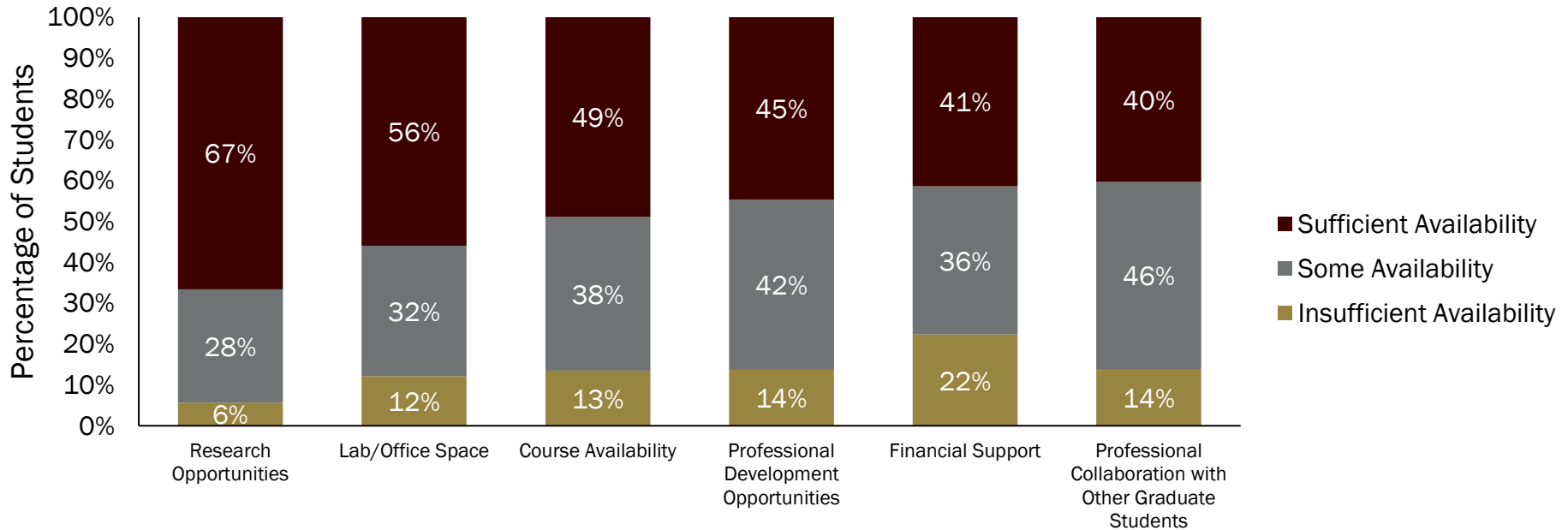
I have a positive relationship with:





Responses: 461

Please rate the extent to which the following resources are available to you as a Graduate Student.





Responses: 63

Open-Ended: Please provide any additional feedback you may have on the availability of resources to you as a Graduate Student.

### Lack of Financial Support or Funding

- “More financial support to be given to every Master's student who is pursuing research.”

### Unfavored Virtual Format

- “As a new student it has been extremely difficult to build any sort of relationship with my advisor/professors/other graduate students with everything being conducted online.”

### Lack of Resources and Classes Offered

- “The one resource I wish graduate students had access to would be a workshop/maker space such as the EDC”
- “It would be helpful for planning purposes to post the likely semesters at which courses are taught. “

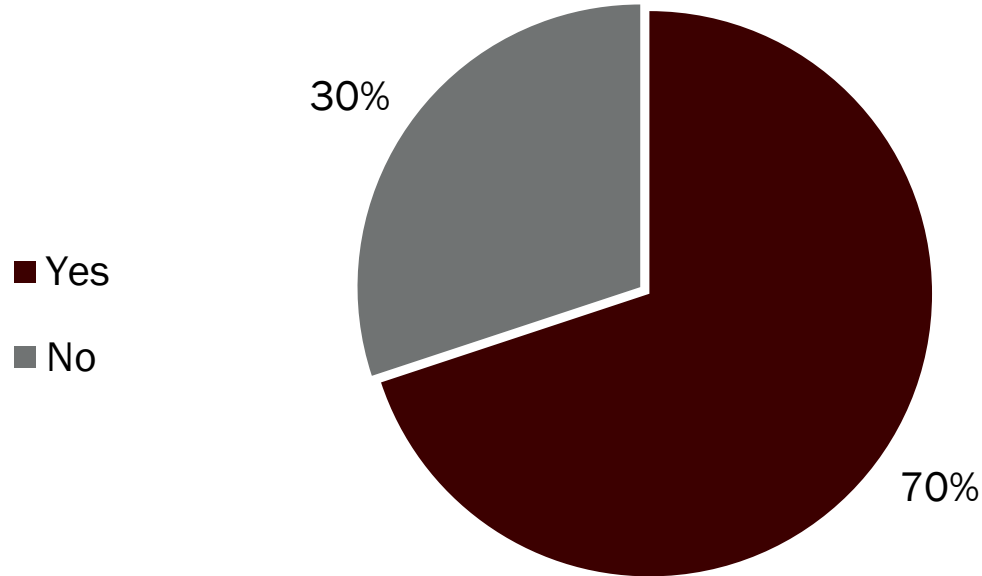
# Post-Graduation & Career Questions

Asked to graduating students

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Responses: 359



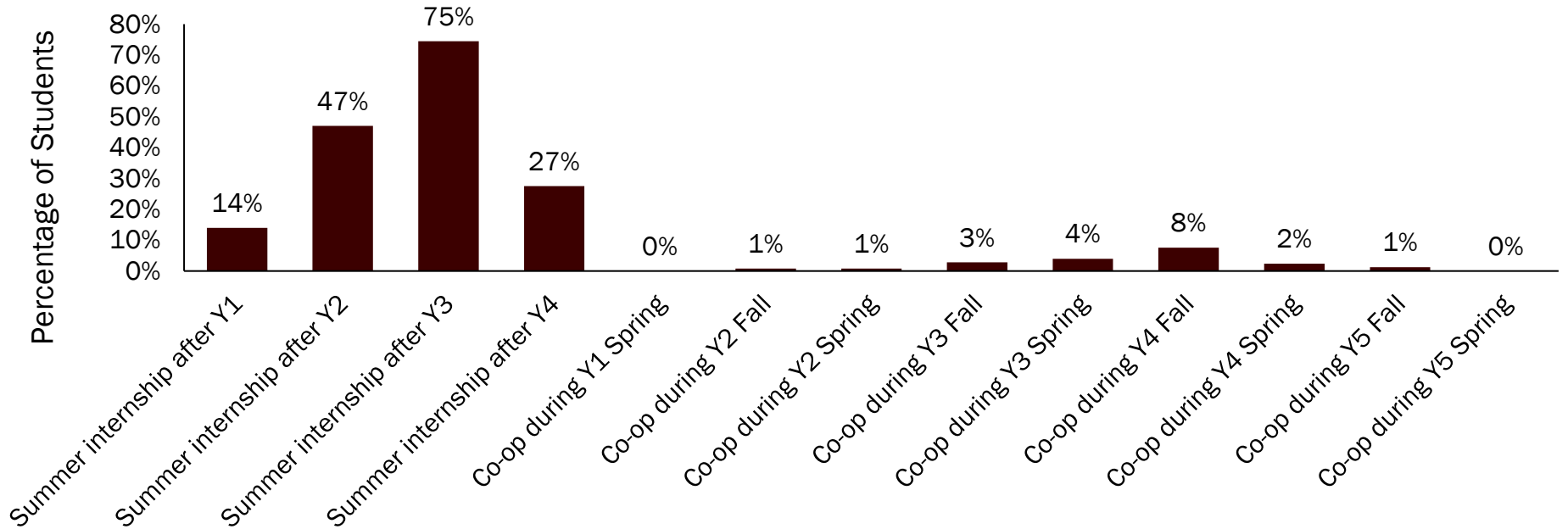
Have you completed an internship or co-op?





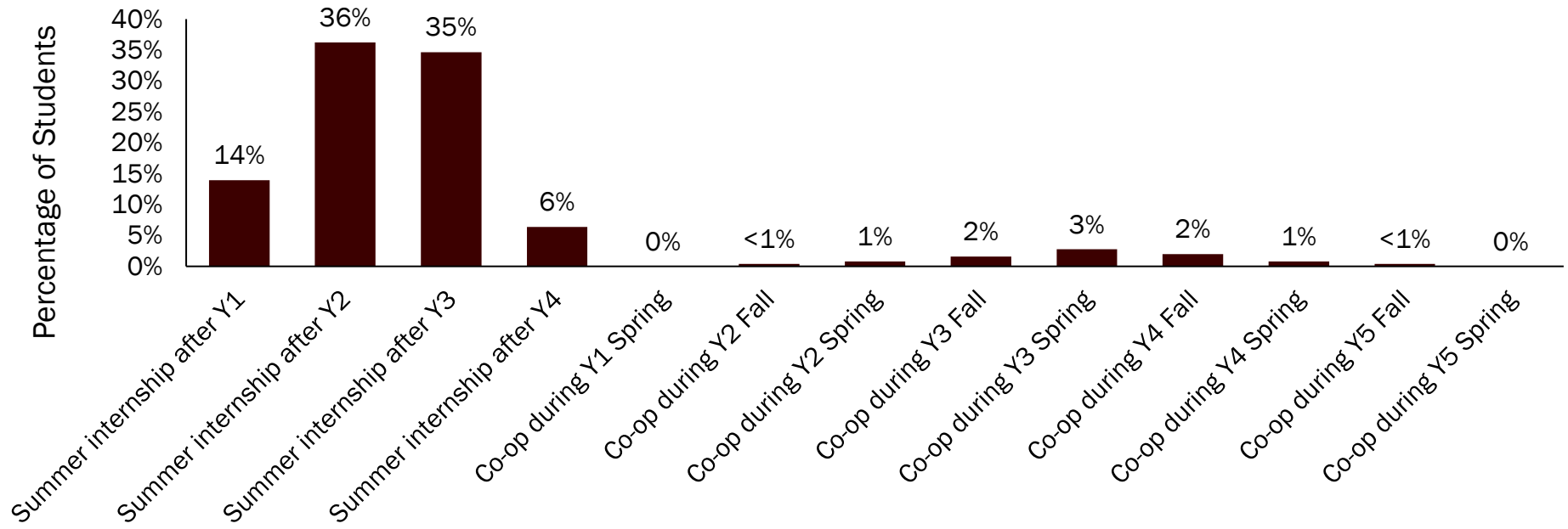
Responses: 251

Check all that apply: Classify your internship/co-op experience(s).



Responses: 251

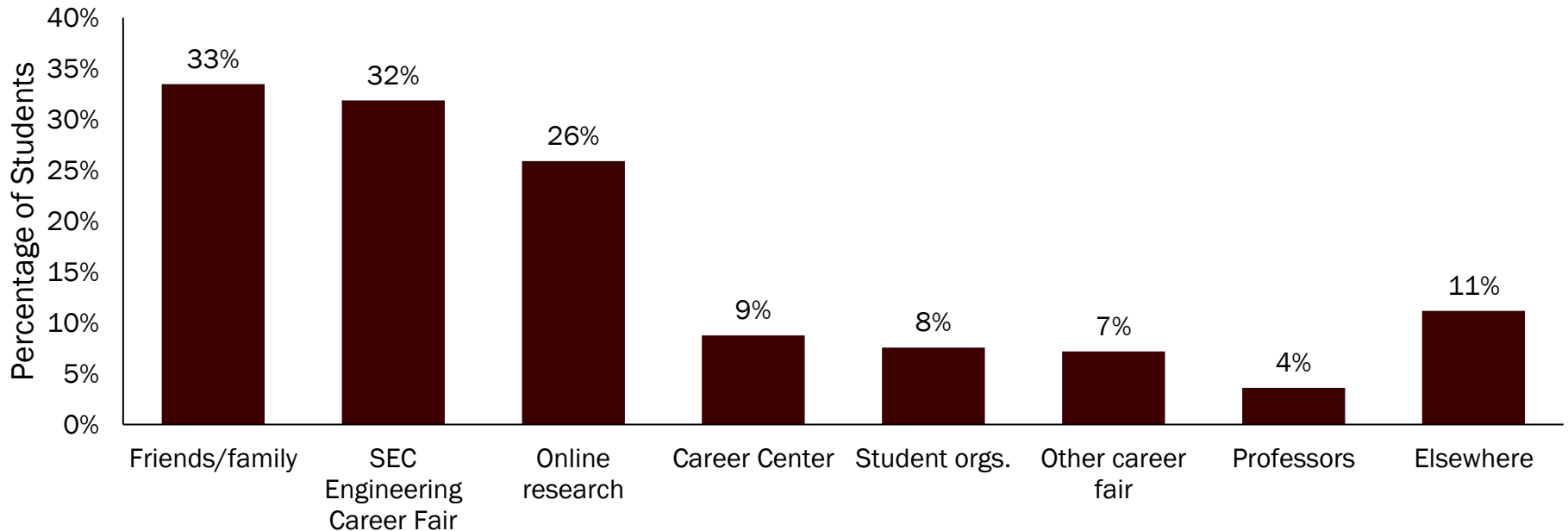
# When was your *first* internship/co-op experience?



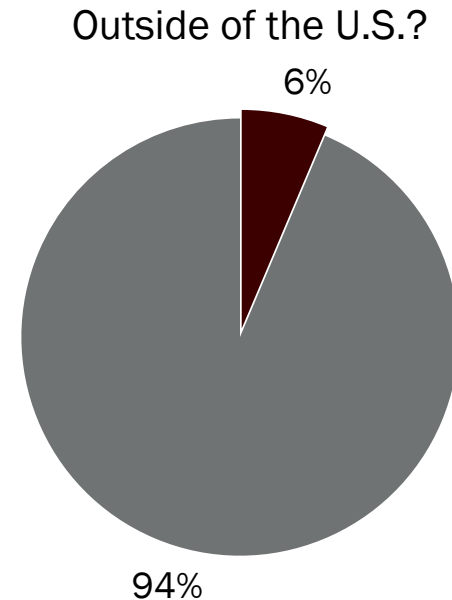
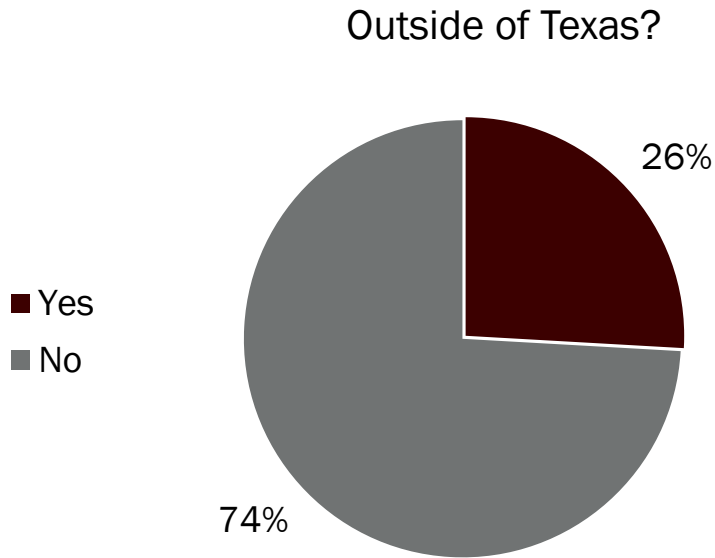
Asked to students who have completed an internship/co-op  
Responses: 251



Check all that apply: How did you obtain your internship/co-op experience(s)?

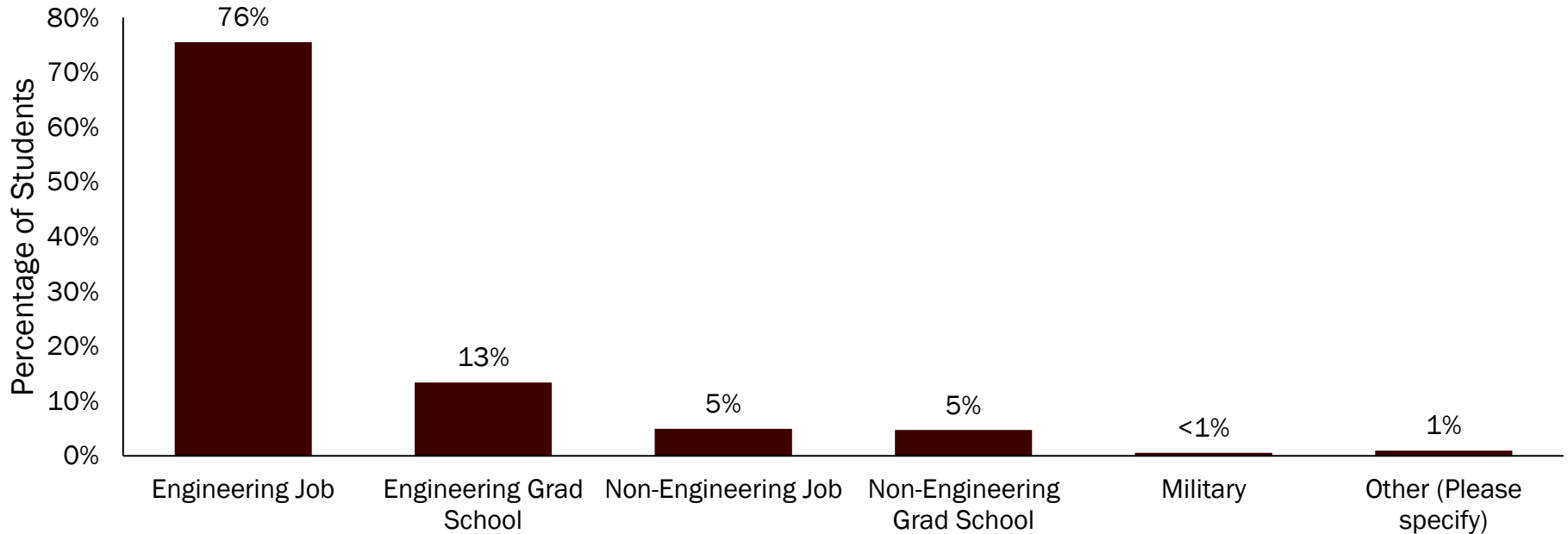


Have you completed an internship/co-op experience outside of Texas? The United States?



Responses: 531

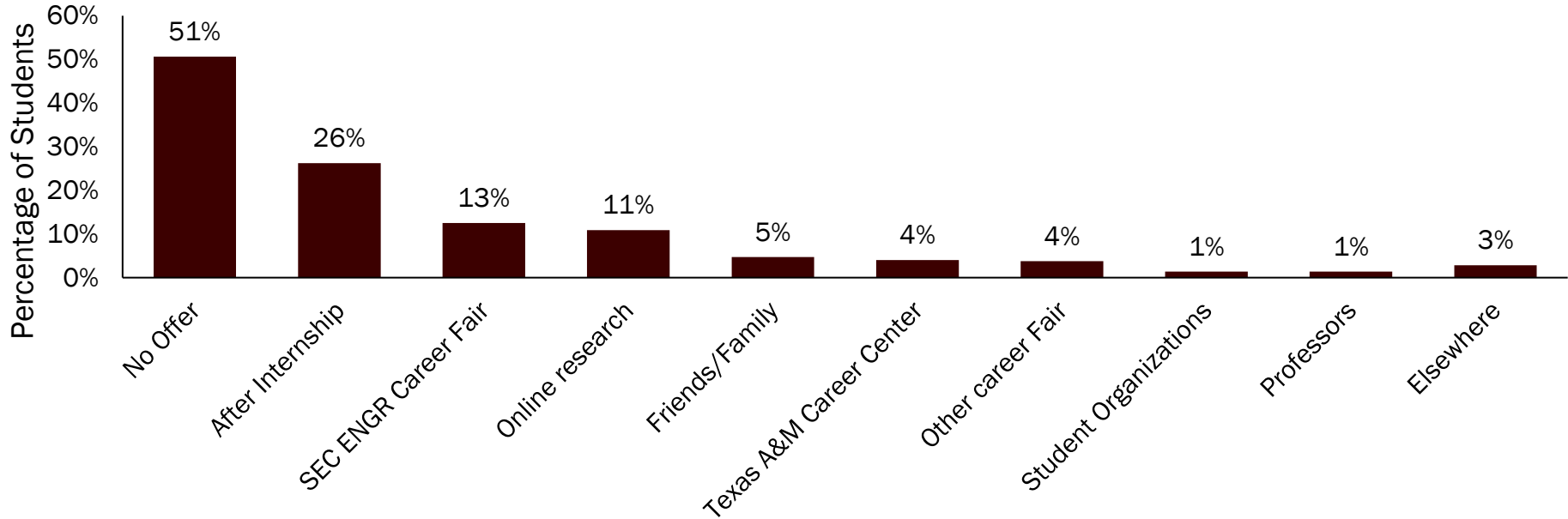
Which one of the following will you pursue after you graduate?



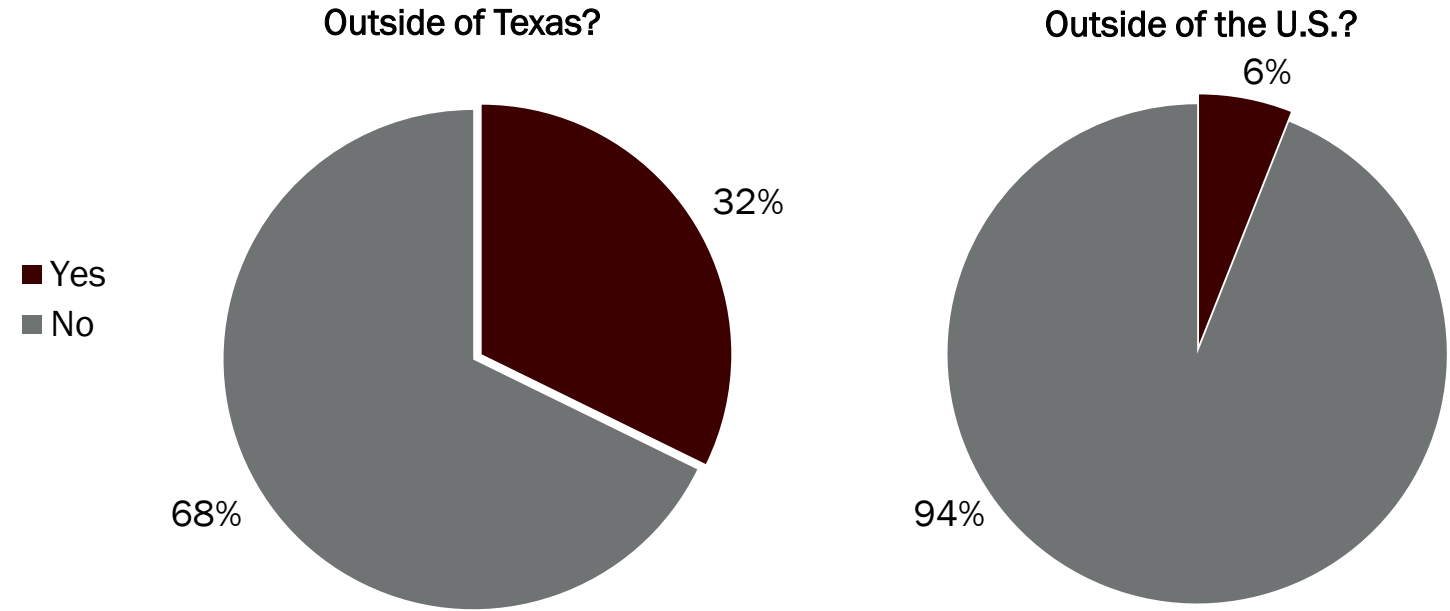
Responses: 423



Check all that apply: How did you obtain your full-time job opportunity?

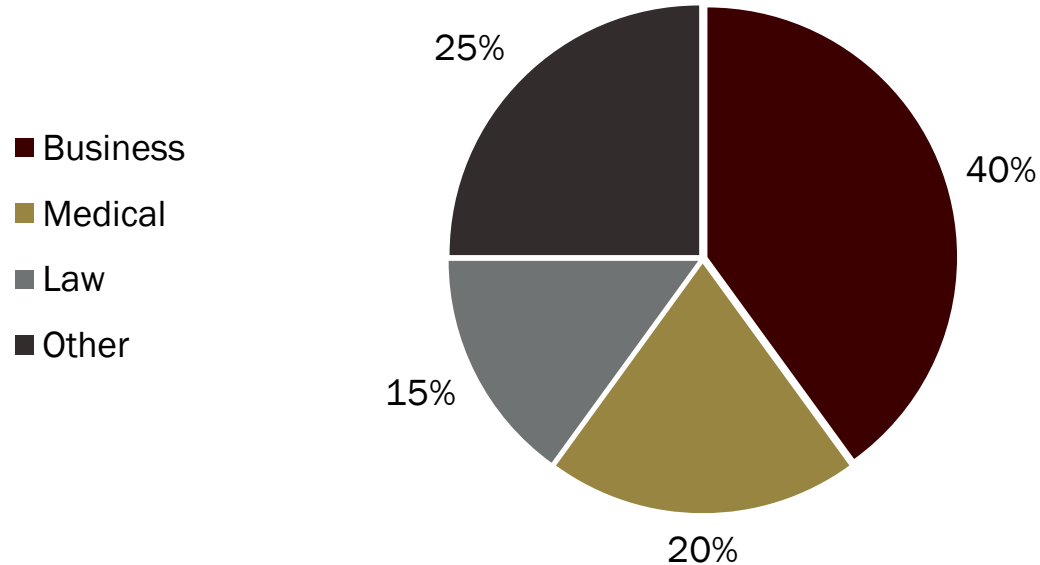


Is your full-time job opportunity outside of Texas? The United States?



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Responses: 20

What kind of graduate school are you pursuing after you graduate?





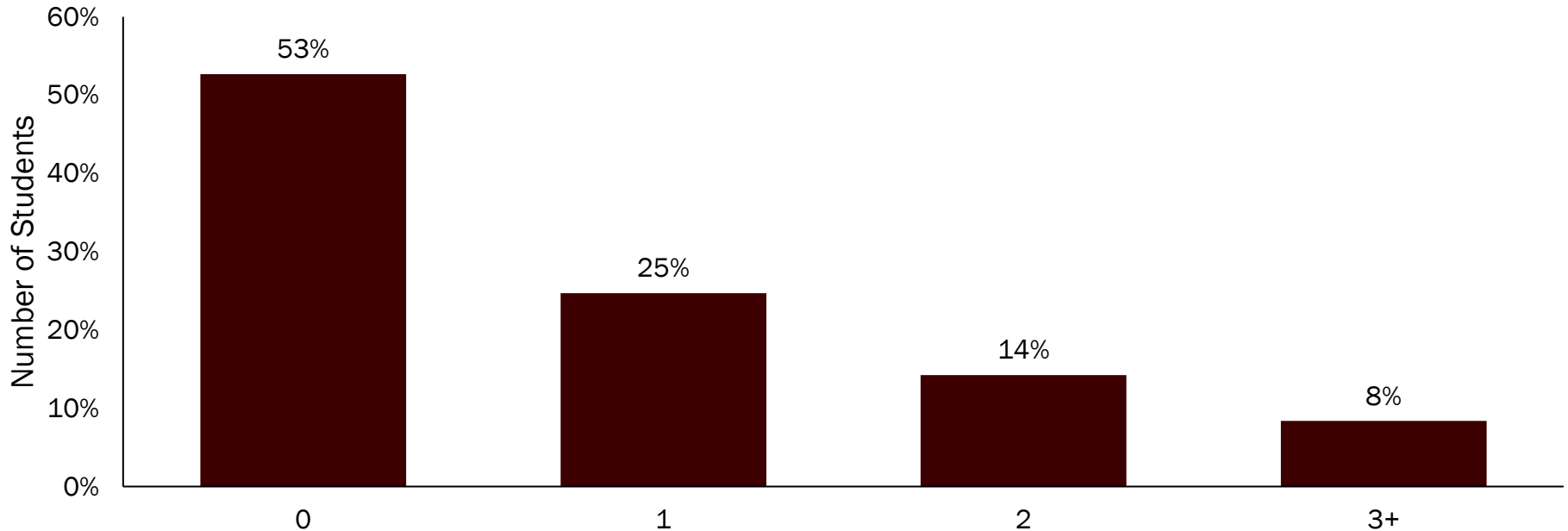
# Engineering Student Organization Questions

Asked to all students



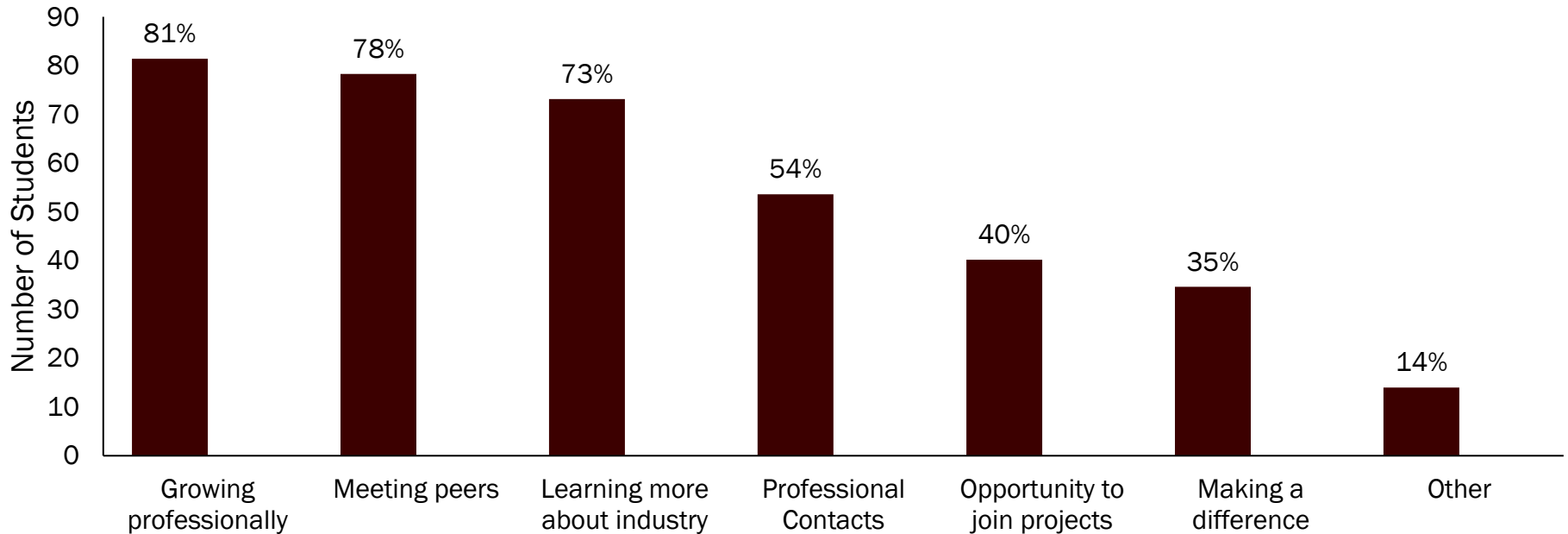
Responses: 3116

*Check all that apply:* What Engineering Student Organizations and/or societies are you currently involved in?



Asked to students involved in 1 or more ESO  
Responses: 1475

Why did you become involved in your student organization(s)?  
(Select all that apply).



Asked to all student involved in 1 or more ESO  
Responses: 206



*Open-Ended:* Why did you become involved in your student organization(s)? (Select all that apply).

### Personal Development

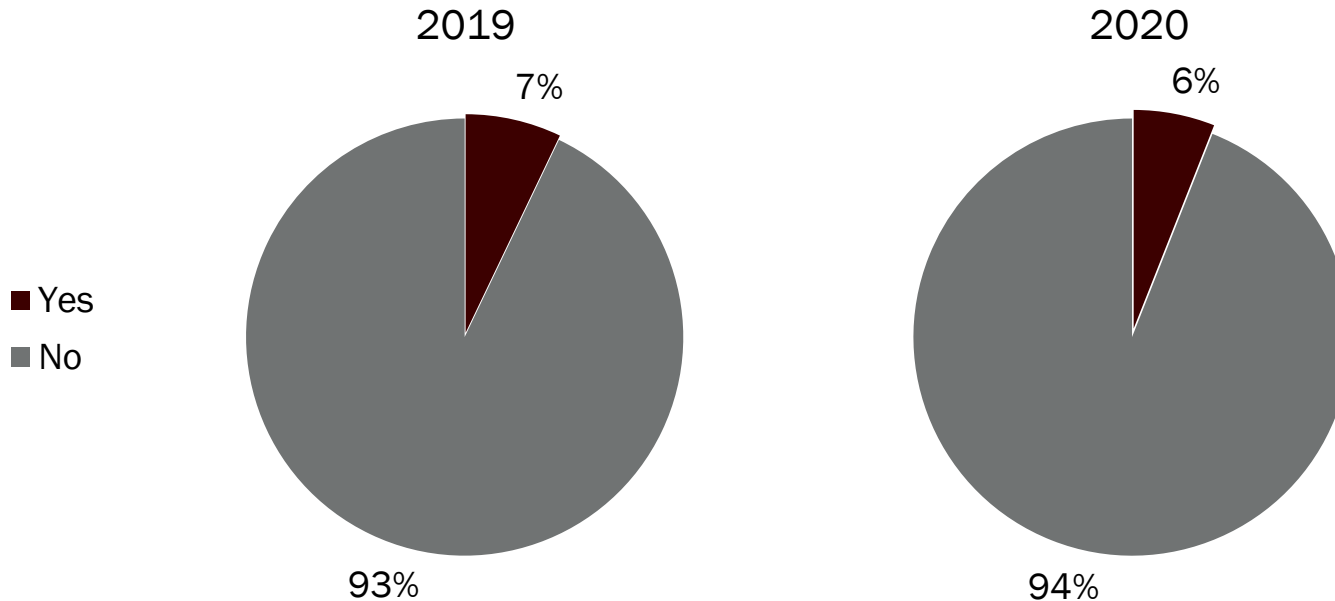
- “Applicable life skills including time management, leadership, public speaking, event planning, and communication skills.”

### Not in a Student Org

- “I plan to join groups, however the pandemic has disrupted many of my plans for the current and upcoming semester.”
- “I have not involved myself in these organizations due to remote learning.”

Responses: 2720

Did you attend the Engineering Student Organization (ESO) Open House this semester on Wednesday, August 26th?



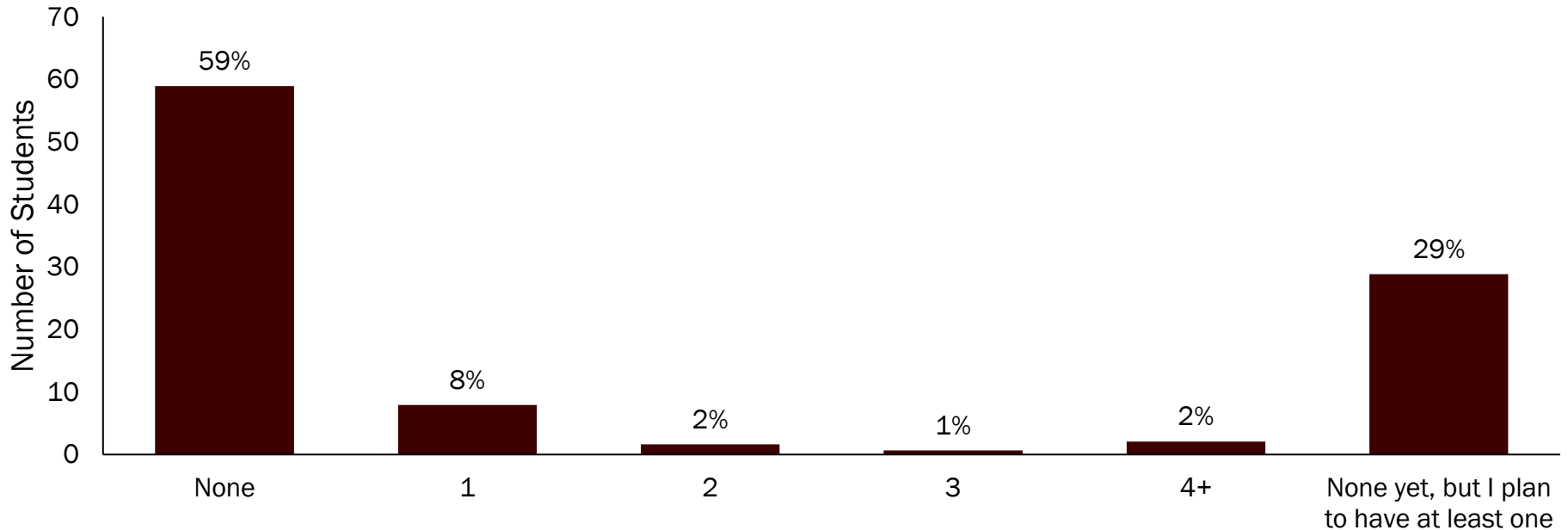
# International Experiences Questions

Asked to all students



Responses: 2719

How many learning experiences have you had outside the U.S. while in college?



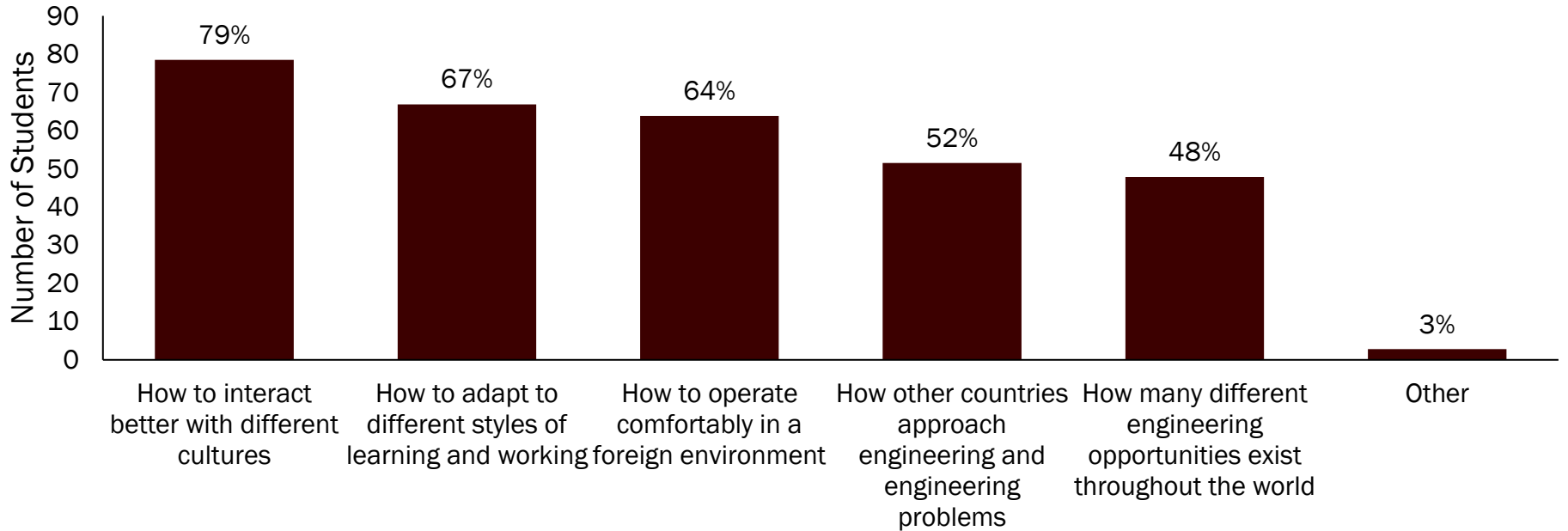




Responses: 326



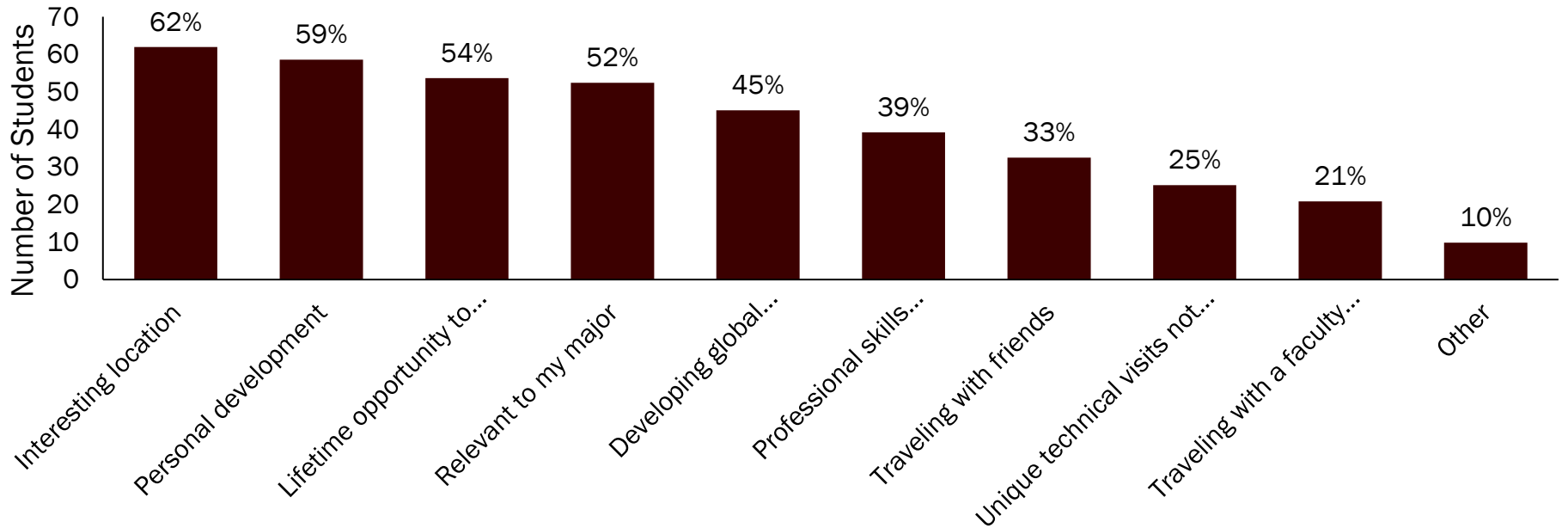
What did you learn during your international learning experience and how will it make you a better engineer?



Responses: 326



# Why did you choose to participate in international learning experience(s)?



*Asked to students who have completed 1 or more experiences abroad*  
Responses: 32



## *Open-Ended: Why did you choose to participate in international learning experience(s)?*

### Personal Connection

- “I’m originally from a foreign country where I graduated a university.”
- “I was a TA because the program was in my country of origin.”

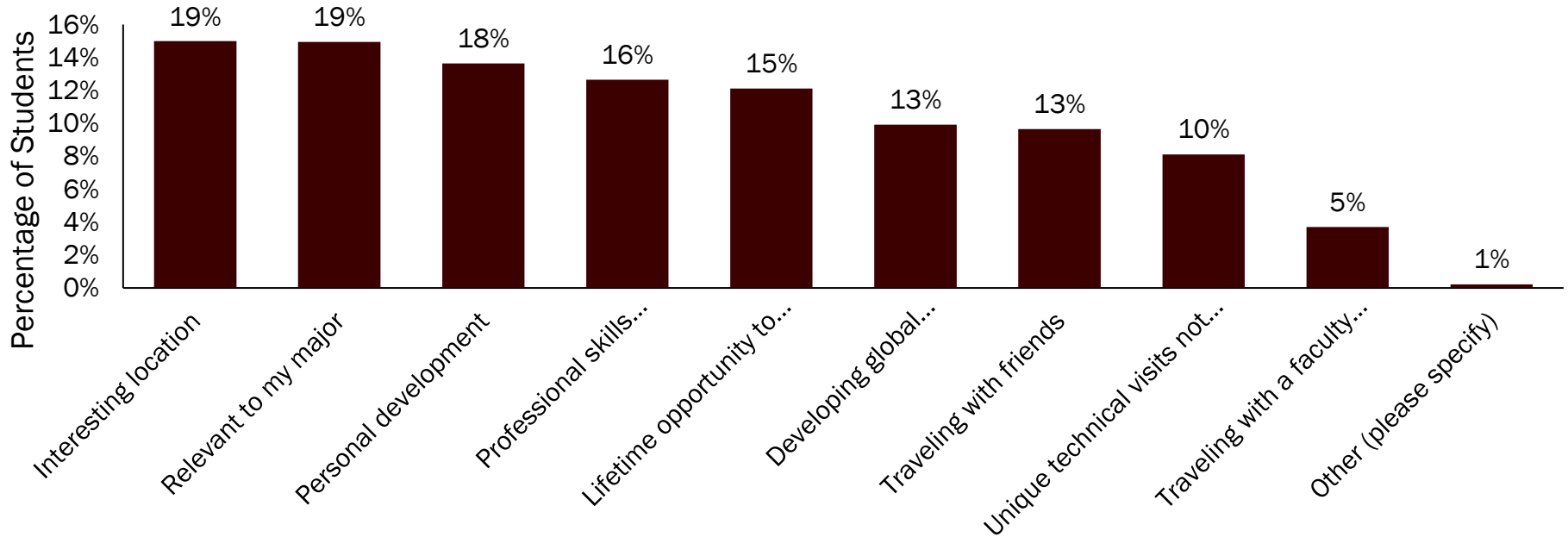
### Academic

- “To meet the ENGR[x] requirement.”

Asked to students who have not completed any experiences abroad  
Responses: 2393



What aspects of an international learning experience would make you want to participate in it?

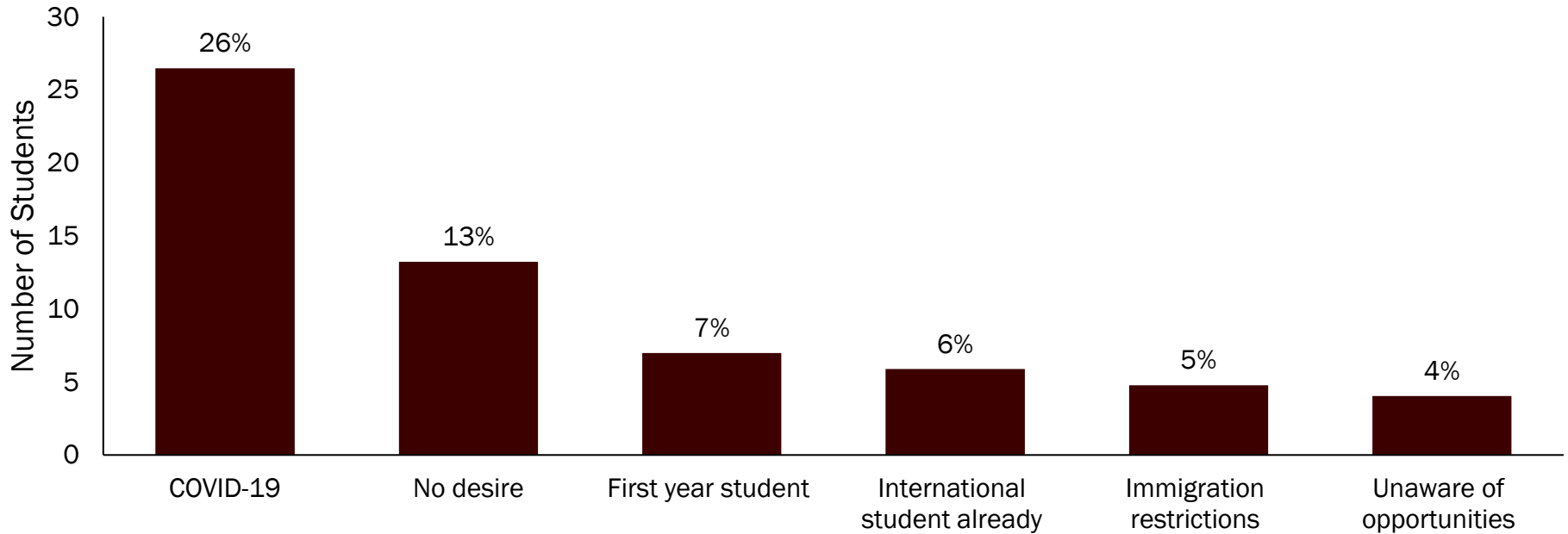






Responses: 272

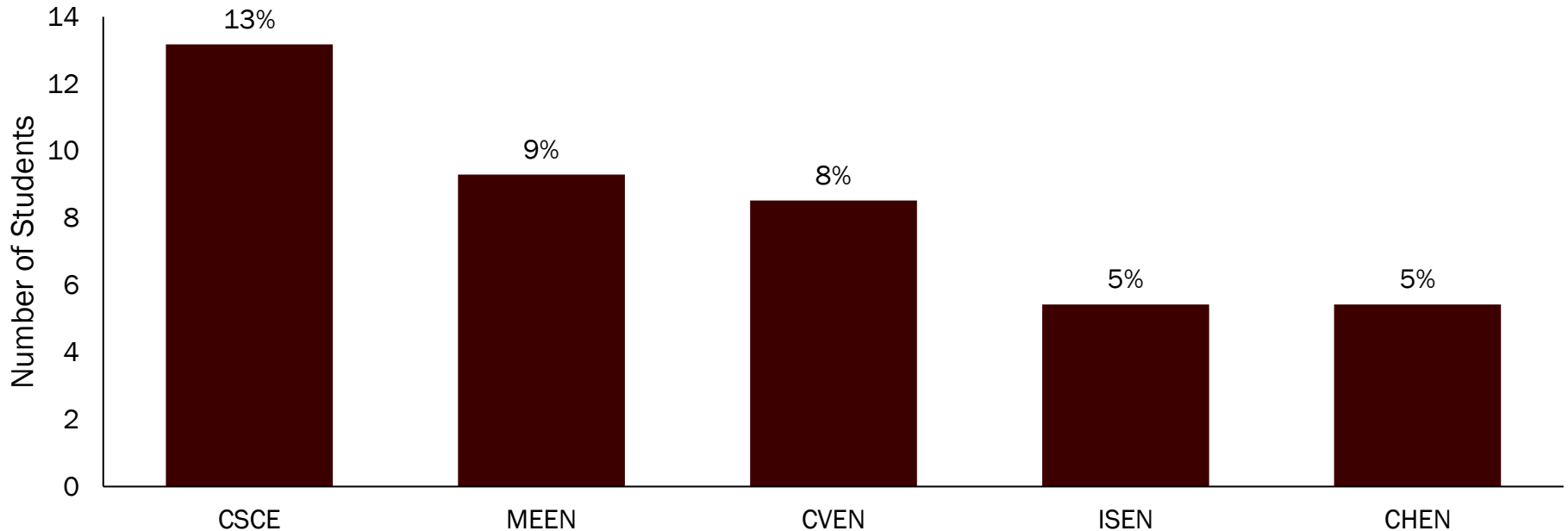
## Factors for students who selected “other” as a reason to not participate in international learning experiences.





Responses: 129

up 1/20k 0 1/2°Z If there are any courses you think could work well as a study-abroad opportunity, please provide those below. (optional)



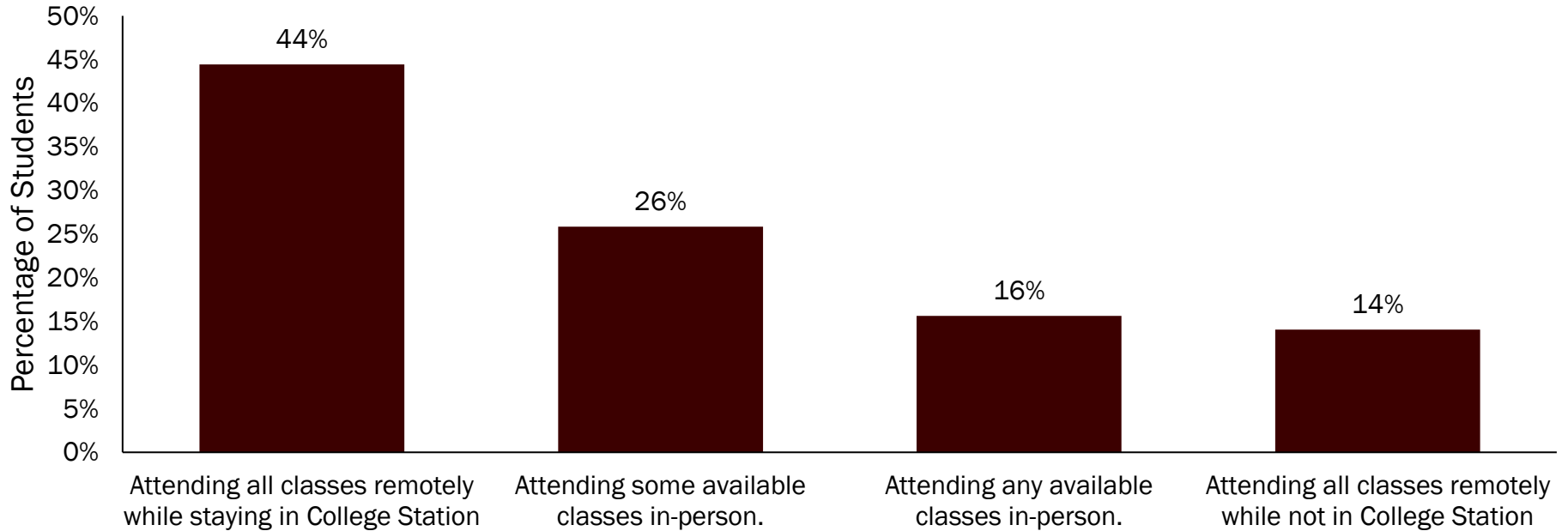
# COVID-19 Questions

Asked to all students



Responses: 2693

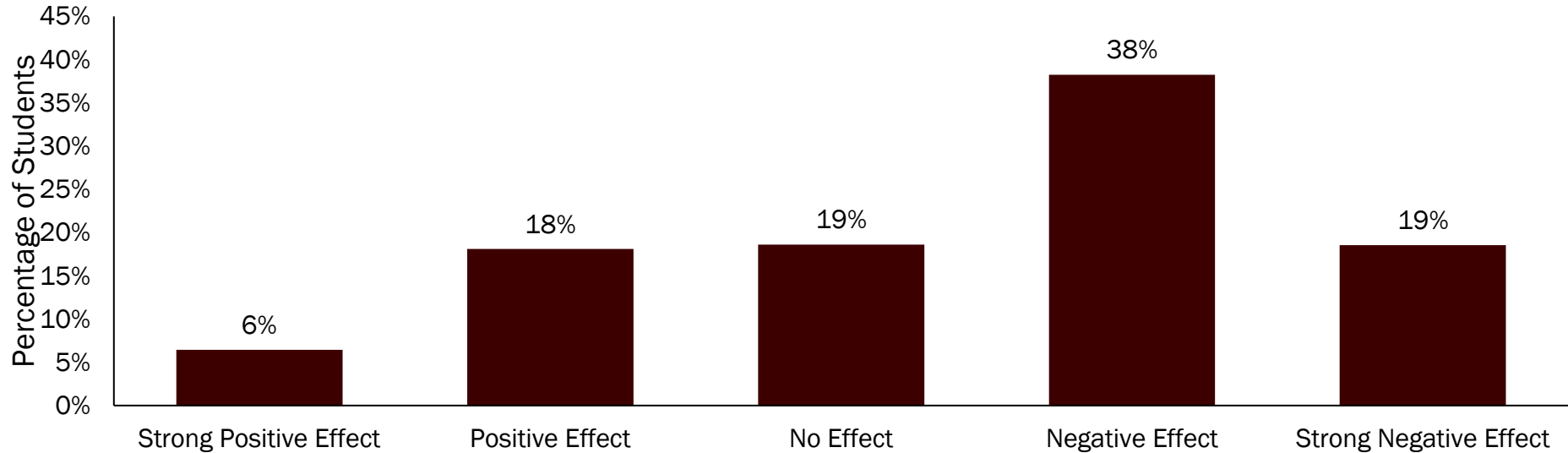
Please indicate your choice in completing coursework this semester.



Responses: 1197

What effect, if any, did your chosen course delivery method have on your ability to reach your academic potential this semester?

**Attending all classes remotely while staying in College Station**

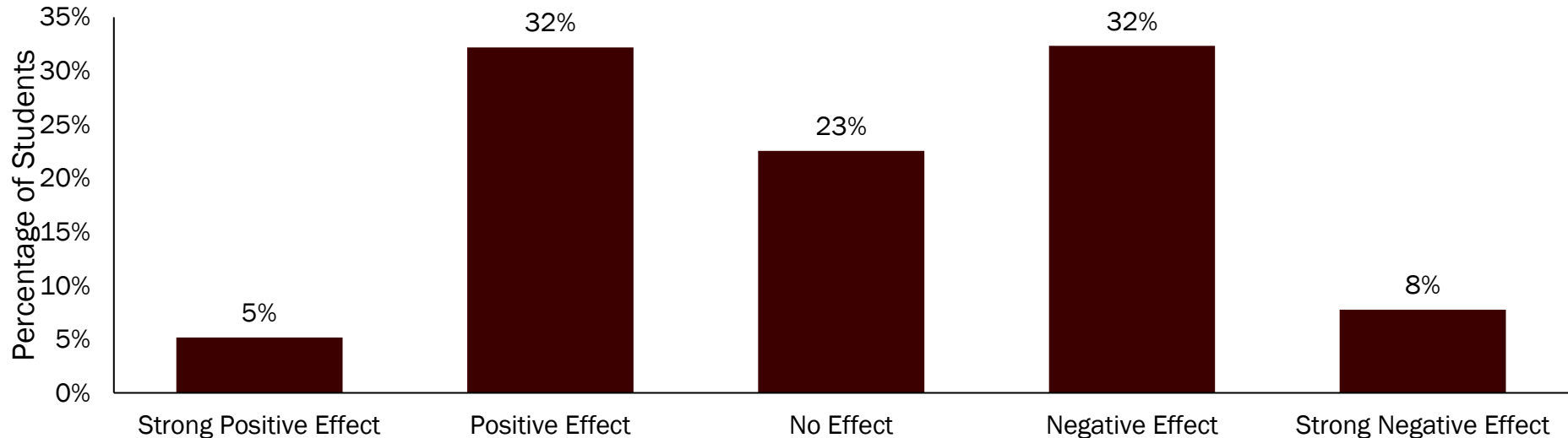


Asked to those attending some available classes in-person  
Responses: 696



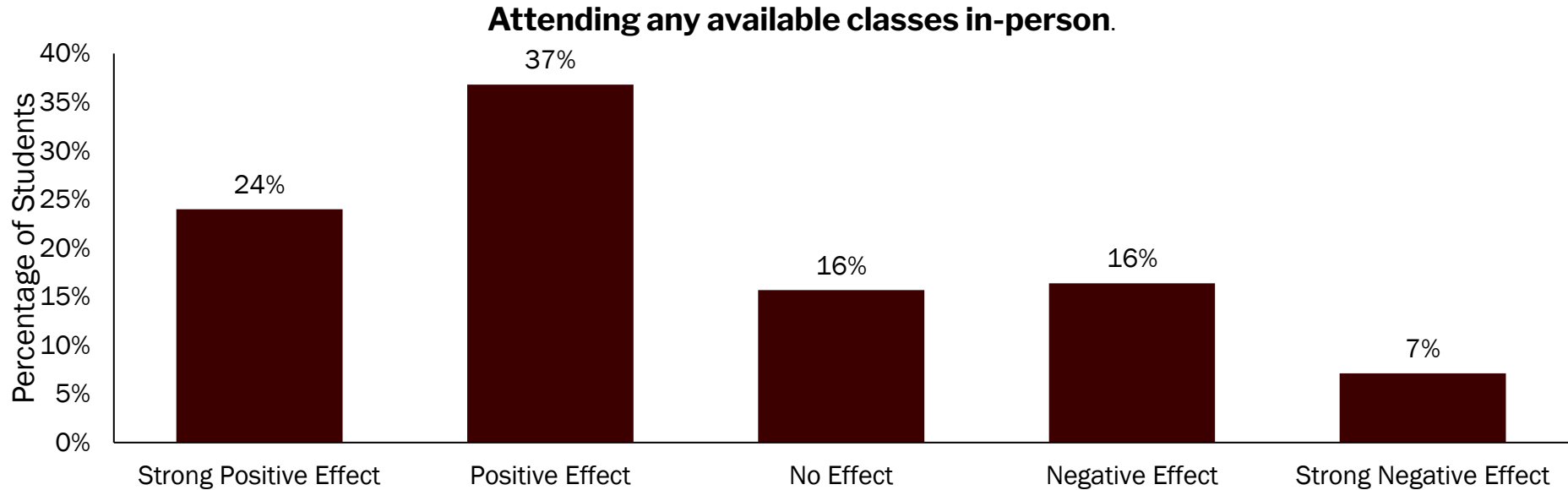
What effect, if any, did your chosen course delivery method have on your ability to reach your academic potential this semester?

**Attending some available classes in-person.**



Responses: 421

What effect, if any, did your chosen course delivery method have on your ability to reach your academic potential this semester?

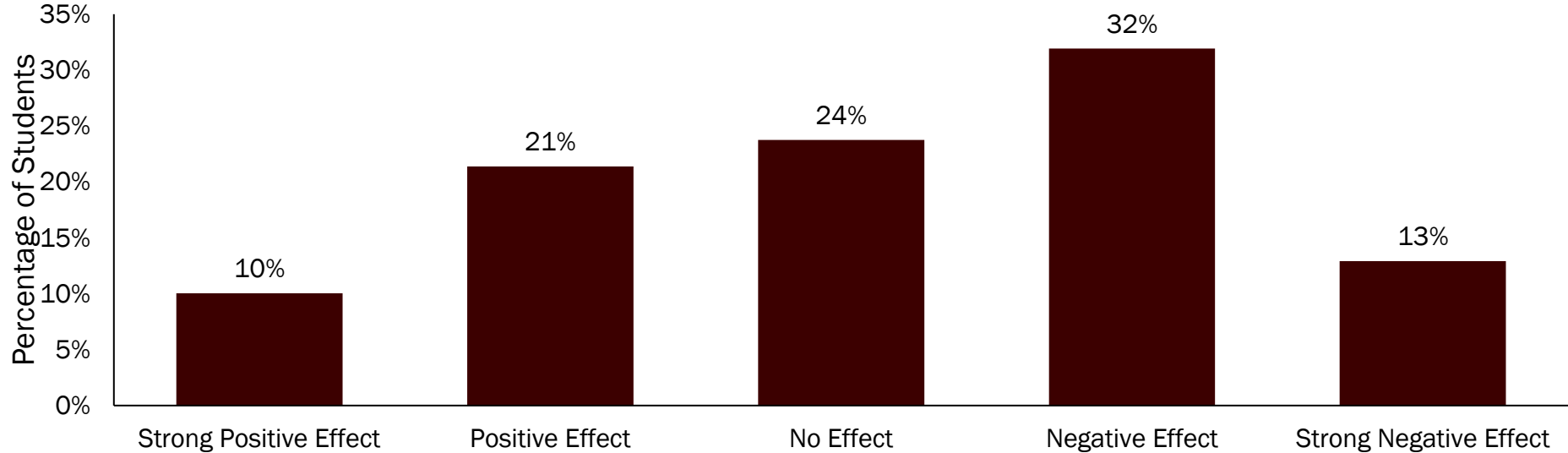


Asked to those attending class remotely while not in C.S.  
Responses: 379



What effect, if any, did your chosen course delivery method have on your ability to reach your academic potential this semester?

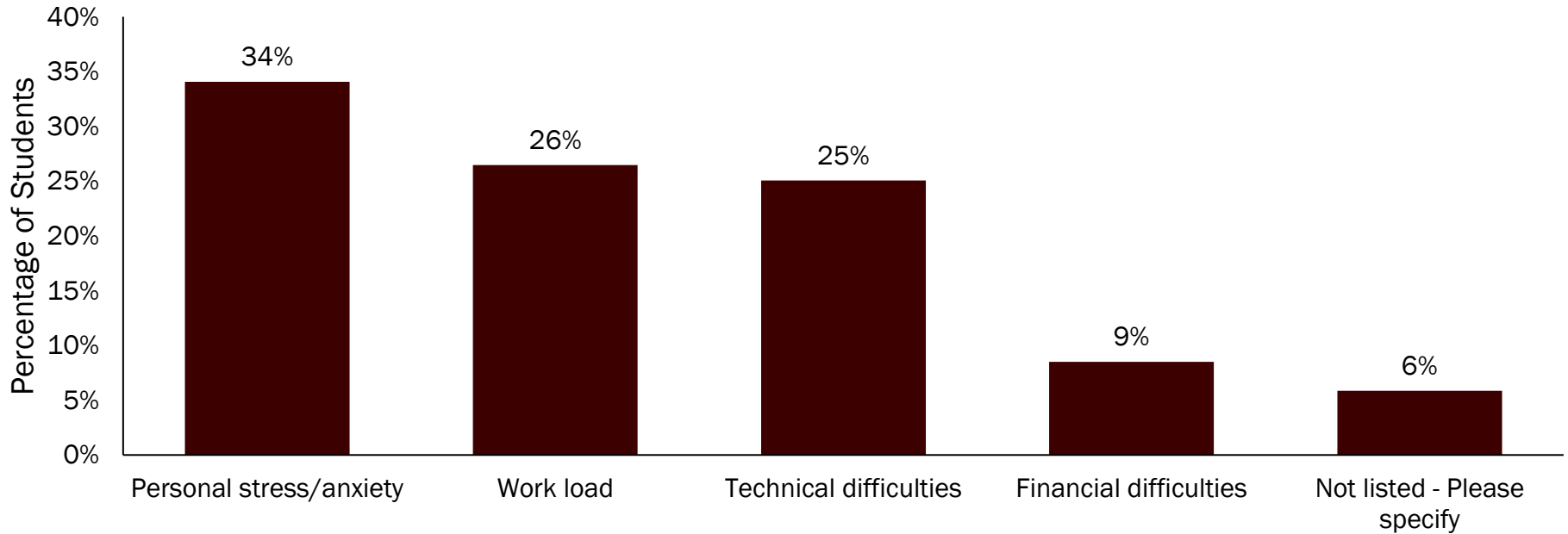
**Attending all classes remotely while not in College Station**





Responses: 6000

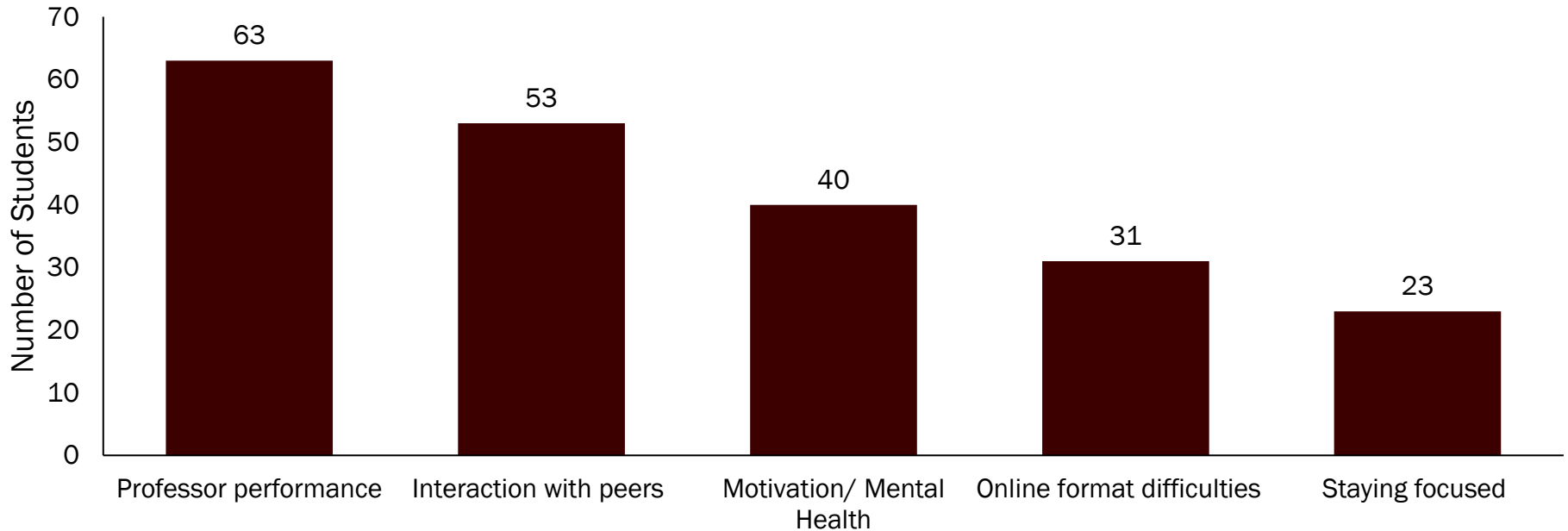
Which of the following challenges to your semester have been made more significant by COVID-19?





Responses: 339

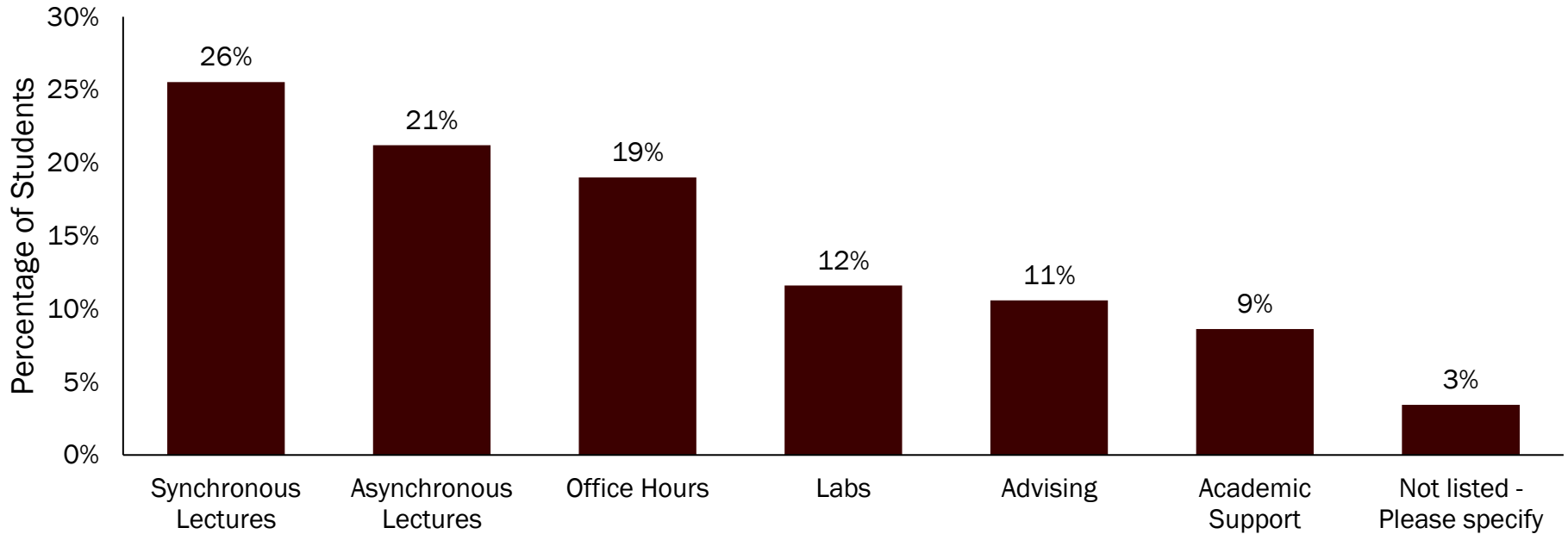
up 1/20 1/20 1/20 1/20 1/20  
Responses for those who selected “Not Listed” to the challenges of COVID-19.





Responses: 5463

Which of the following have been conducive to your academic success in this semester's format?

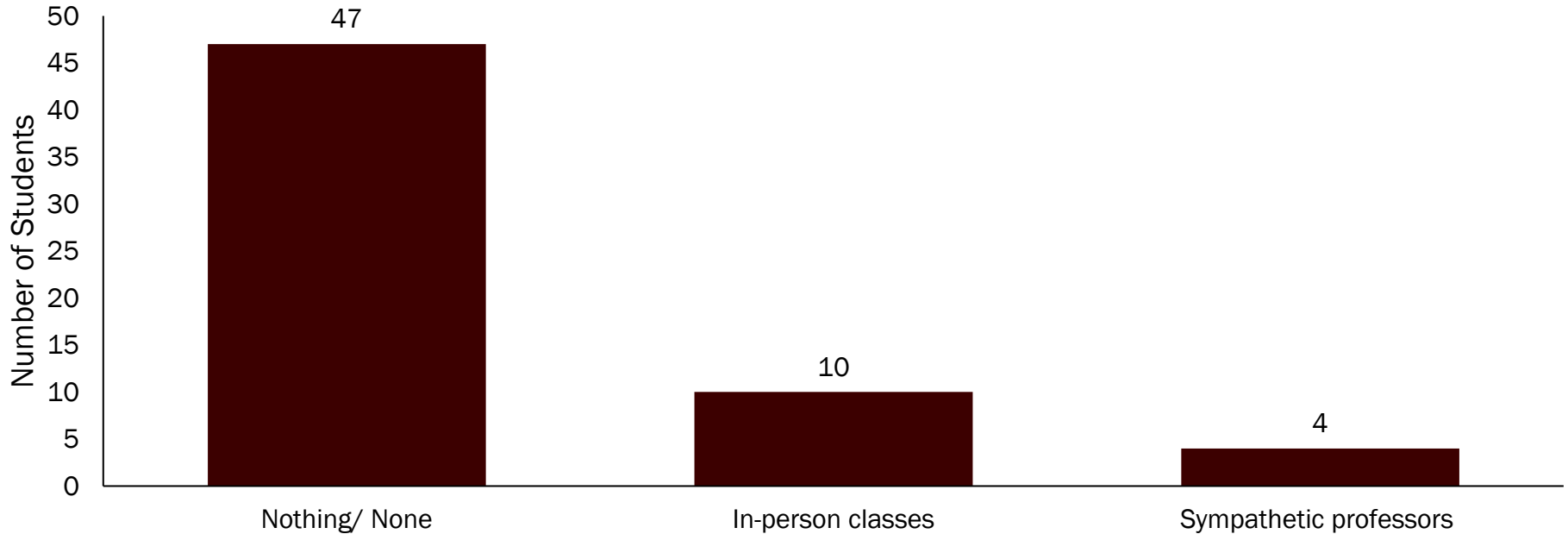






Responses: 164

Responses for those who selected “Not Listed” to things that were conducive to academic success.





Responses: 493

Please provide feedback on any new policies or resources this semester that would continue to benefit the college after COVID-19 if kept in place.

### Recorded Lecture

- “Recorded lectures are useful if you want to go back to a particular concept covered in lecture. Posting of notes and other resources in their entirety is extremely helpful for reference purposes.”

### Advising

- “Remote advising is great because I don't have to worry about how I am going to route my day around campus.”

### Health

- “I am a huge fan of the numerous hand sanitizer stations, and I think those could continue to be stocked after COVID-19.”

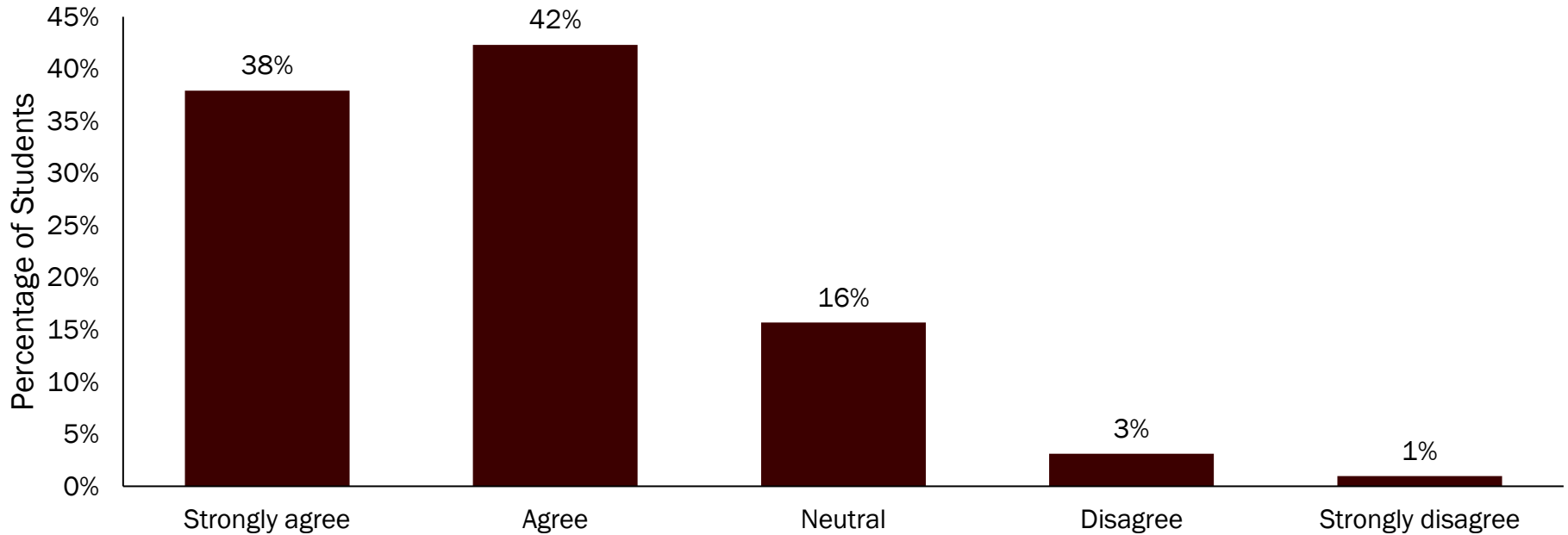
# Diversity & Inclusion Questions

Asked to all students



Responses: 2690

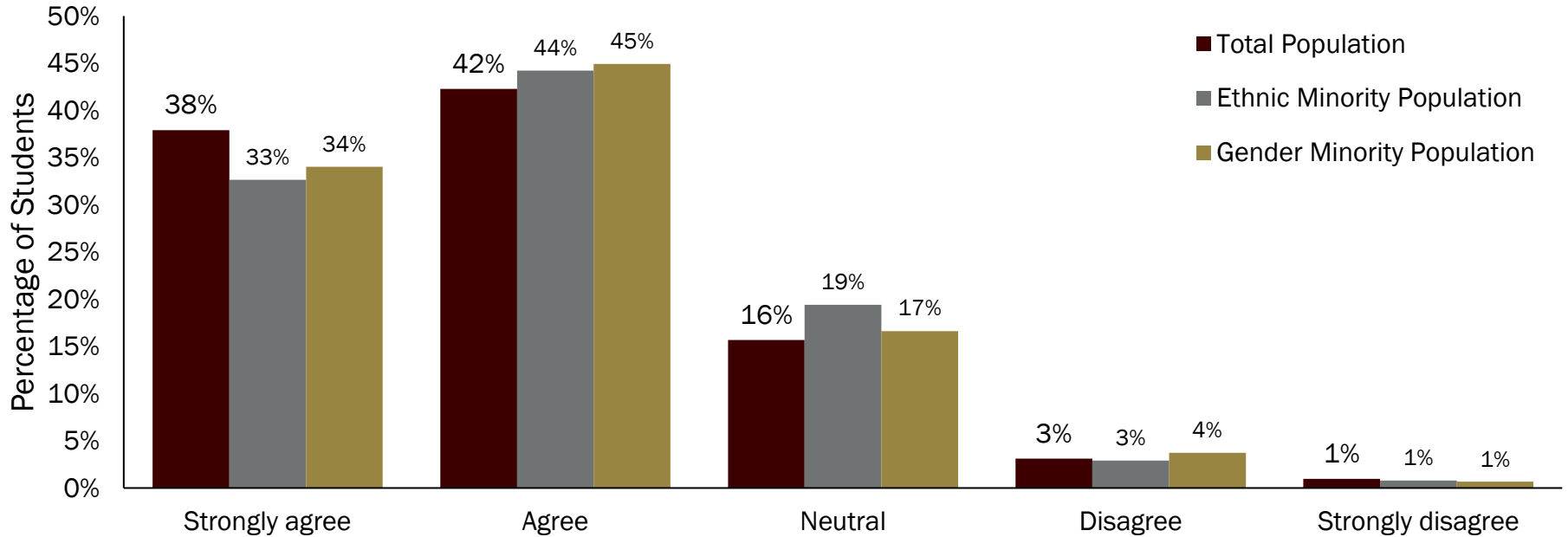
I feel welcome in the College of Engineering.





Responses: 2690

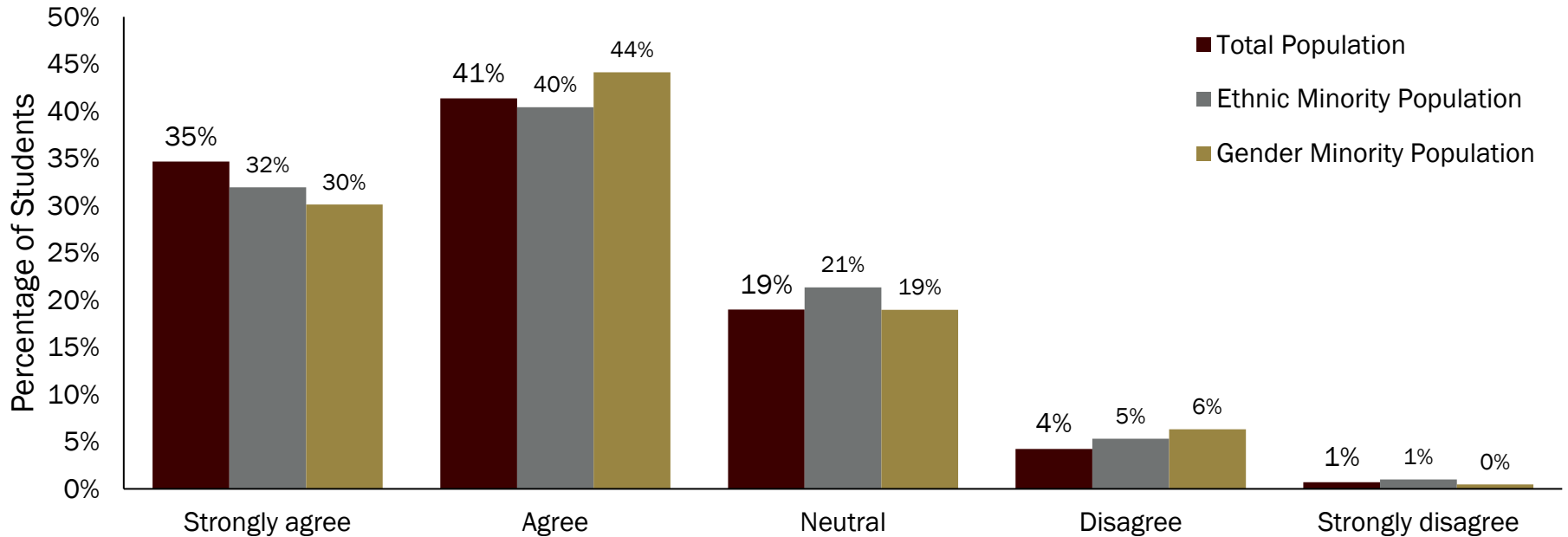
I feel welcome in the College of Engineering.





Responses: 2690

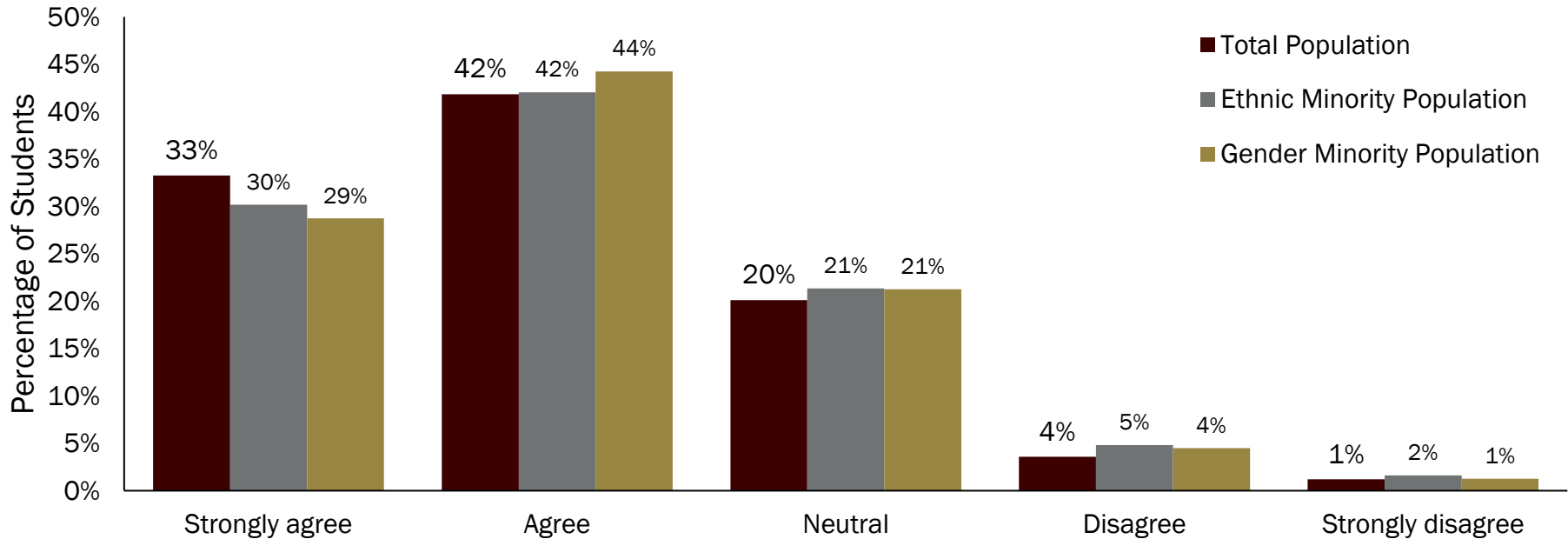
The College of Engineering promotes a diverse engineering student body.





Responses: 2690

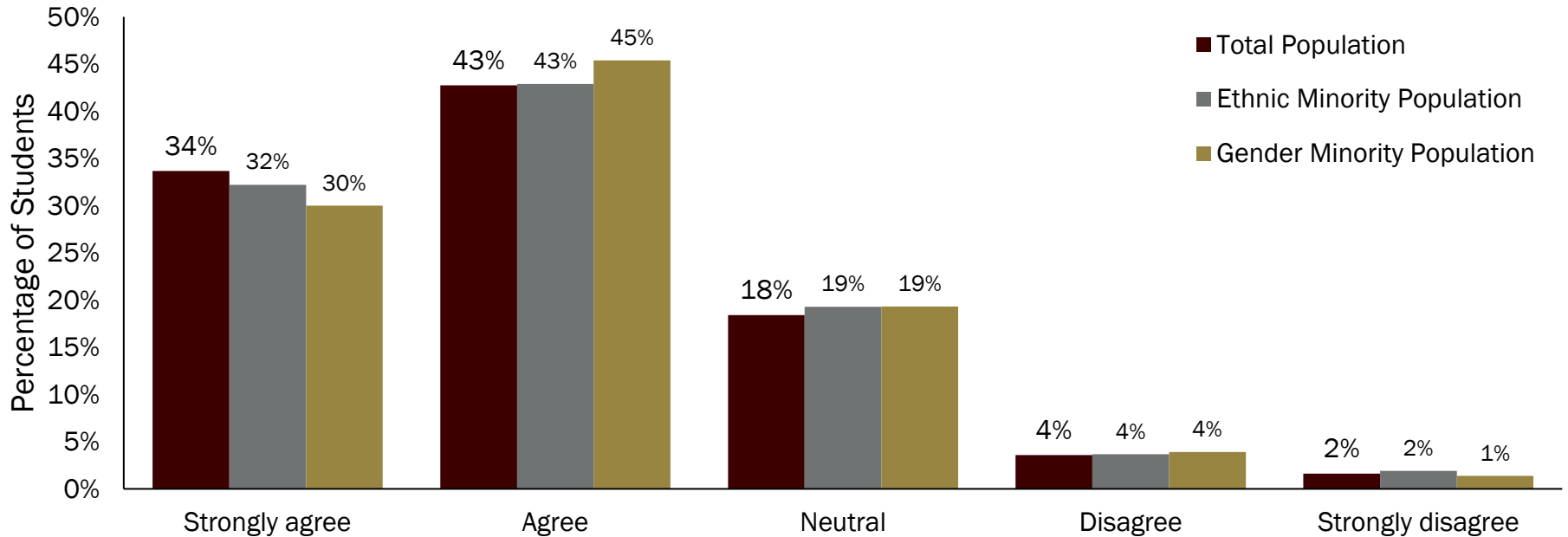
The College of Engineering values diversity by having a diverse engineering faculty.





Responses: 2690

The College of Engineering values intellectual diversity and thought.



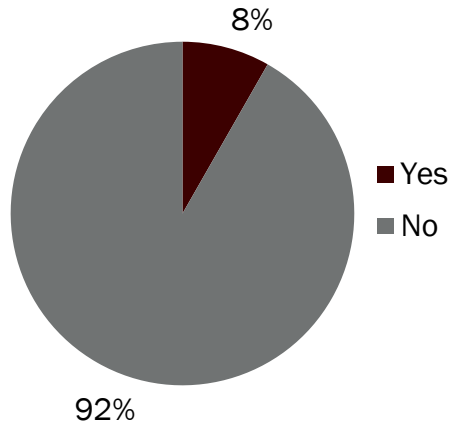




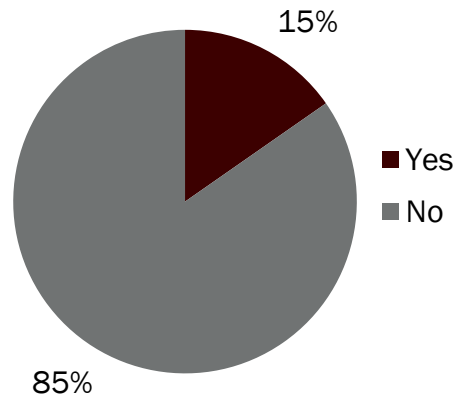
Responses: 2688

Have you experienced discrimination in the College of Engineering?

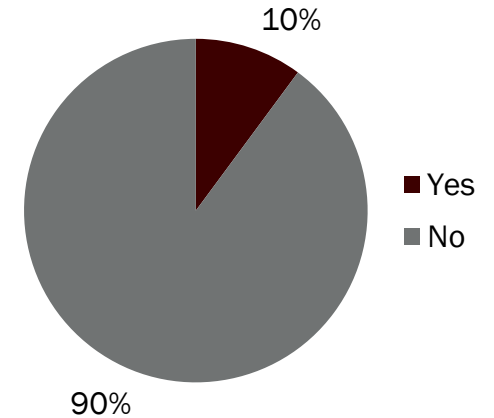
Total Population



Answered by a Gender Minority



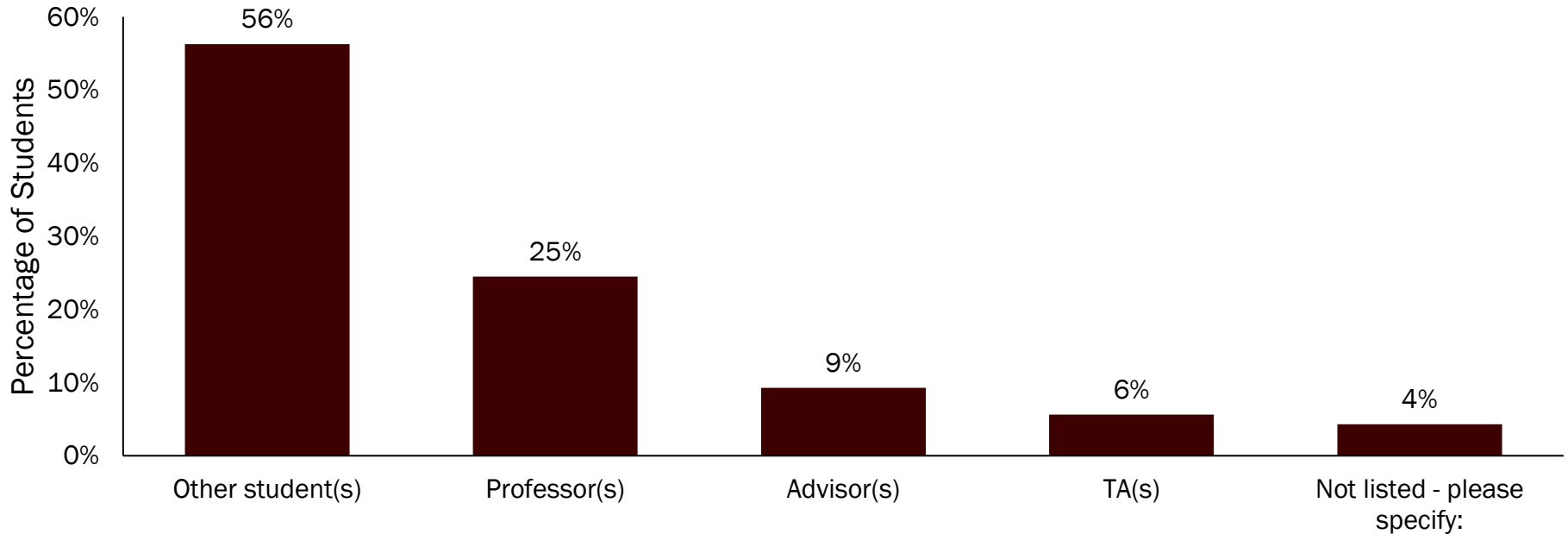
Answered by a Racial or Ethnic Minority



Asked to students who have experienced discrimination  
Responses: 302

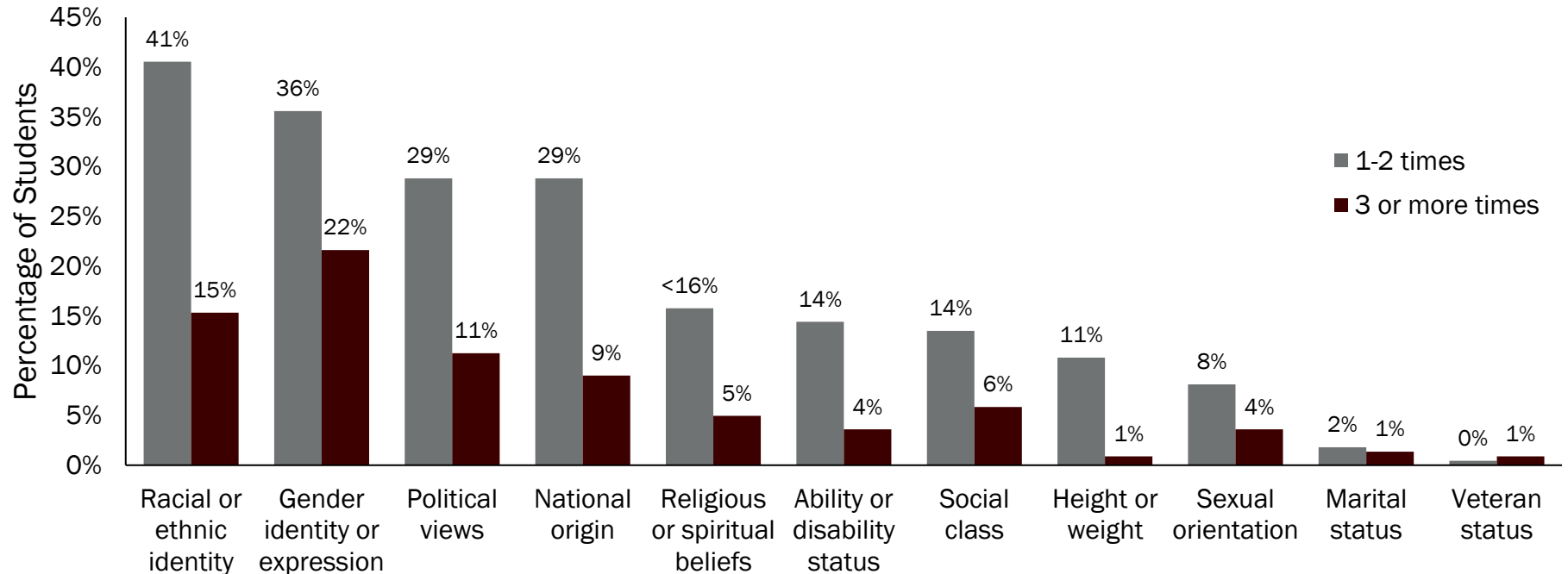


Check all that apply: Which of the following groups have discriminated against you?



Responses: 222

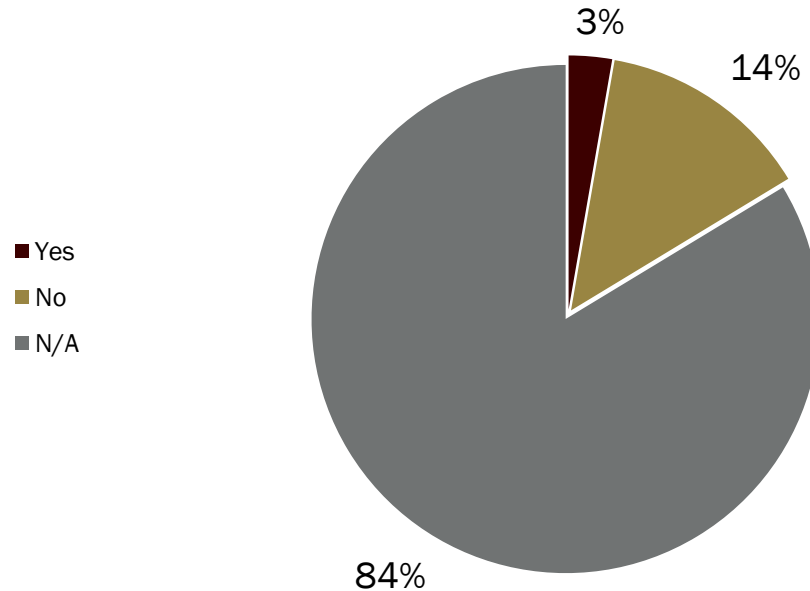
Check all that apply: Over the past year, how often have you experienced discriminatory events within the College of Engineering because of your...





Responses: 2688

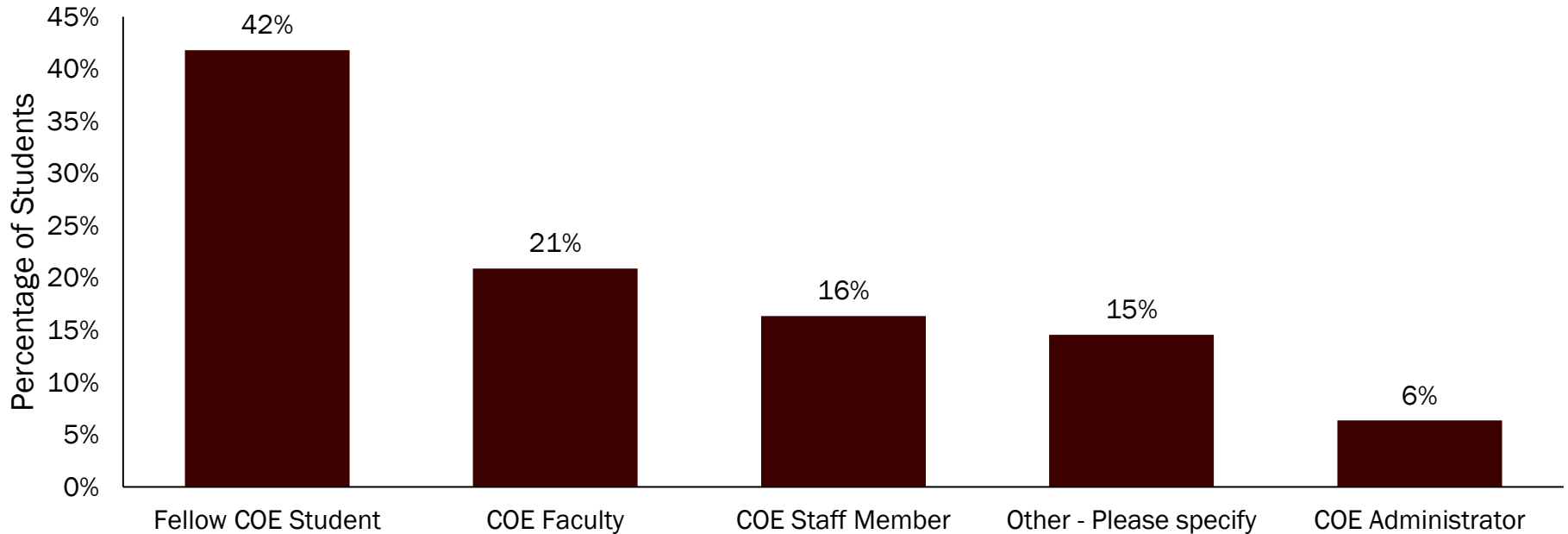
If you experienced or witnessed any discrimination within the College of Engineering, did you inform somebody else of the incident?



Asked to students who informed someone of discrimination  
Responses: 110



Check all that apply: Who did you tell?

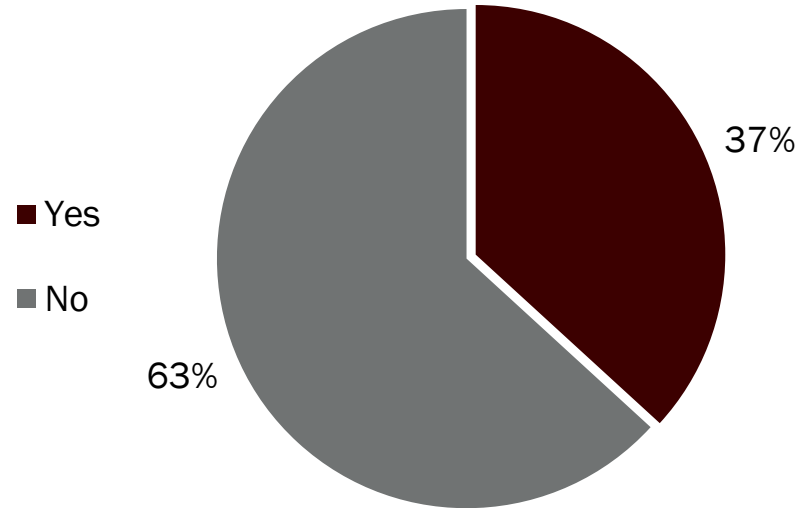


# Career Fair Questions

Asked to all students

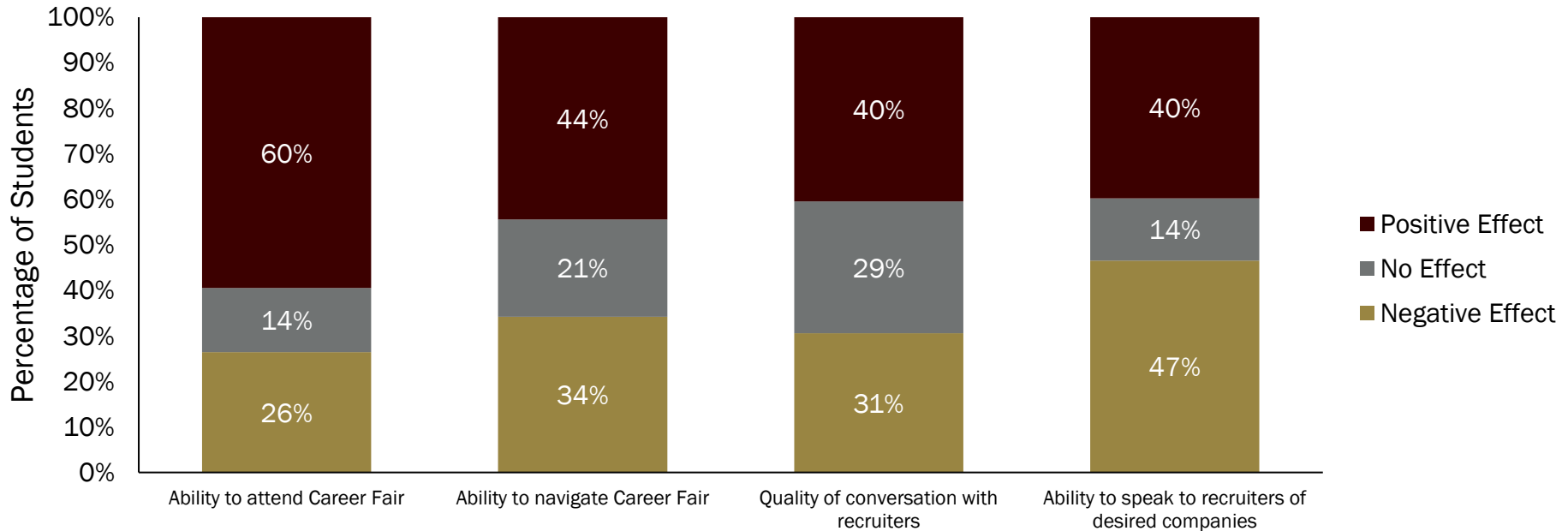
Responses: 2690

Did you attend the Fall 2020 SEC Engineering Career Fair?



Responses: 988

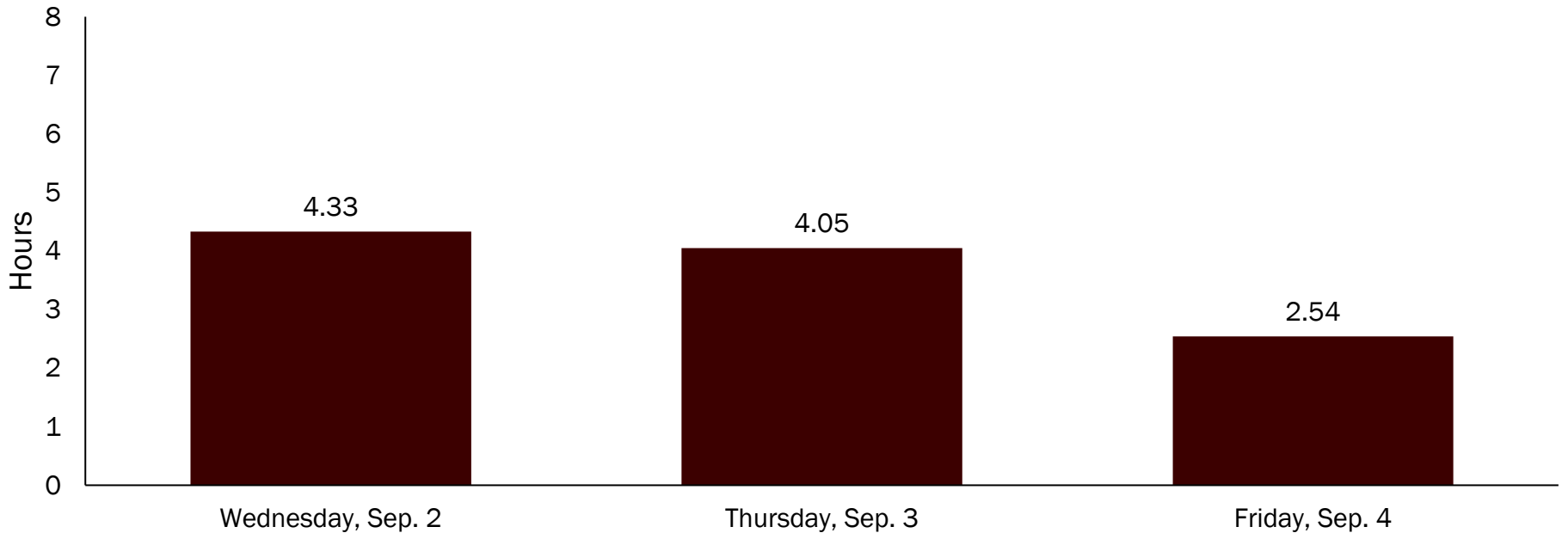
Please rate the extent to which a virtual platform affected each of the following aspects of your Career Fair experience.





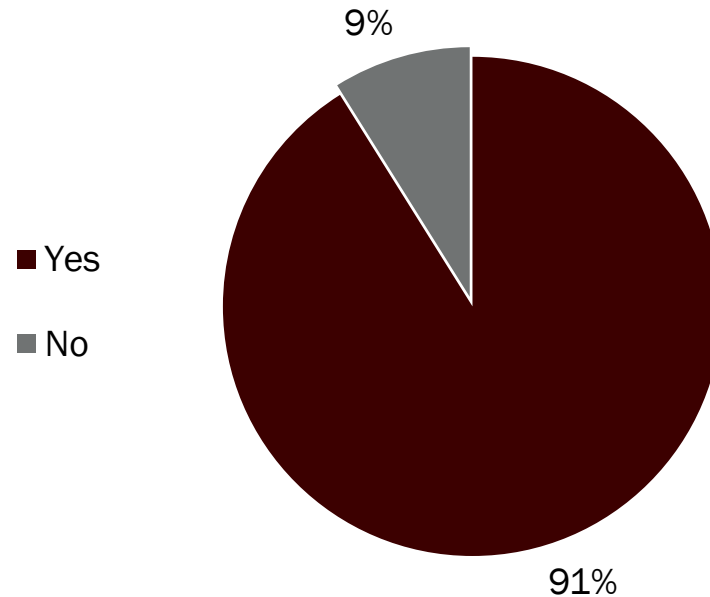
g0æ1/2 əpəu<sup>o</sup>1/2æθflɪp 3æ1/2<sup>o</sup> ə1/2 | 0Eykɪ i 3β1/β1 3jβ  
Responses: 988

Please indicate the total number of hours you spent at each day of the Career Fair (round to the nearest hour).



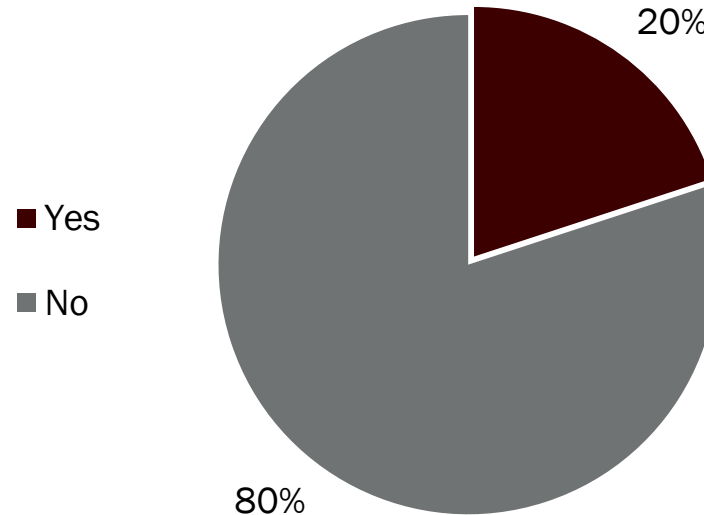
Asked to students who attended the Fall SEC Career Fair  
Responses: 988

Did you use the Career Fair website to prepare for the fair and search for companies?



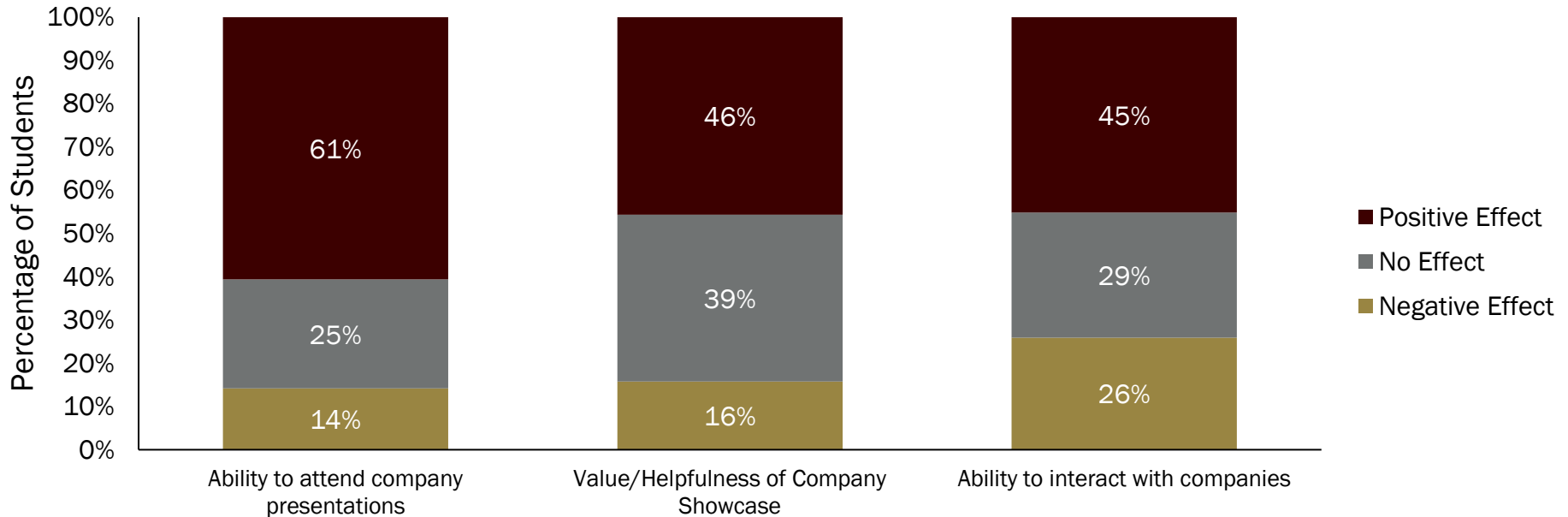
g0æ1/2 əpəu<sup>o</sup>1/2æθflɪp 3æ1/2<sup>o</sup>ə1/2 | 0Eykɪ i 3β1/2βɪ 3jβ  
Responses: 988

Did you attend the Company Showcase on Tuesday, September 1st?



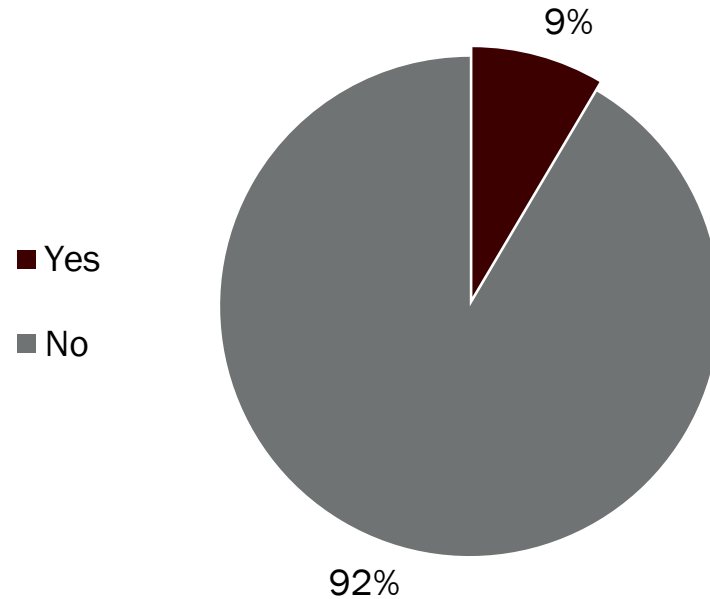
Asked to students who attended the Company Showcase  
Responses: 988

Please rate the extent to which a virtual platform affected each of the following aspects of the Company Showcase.



Responses: 988

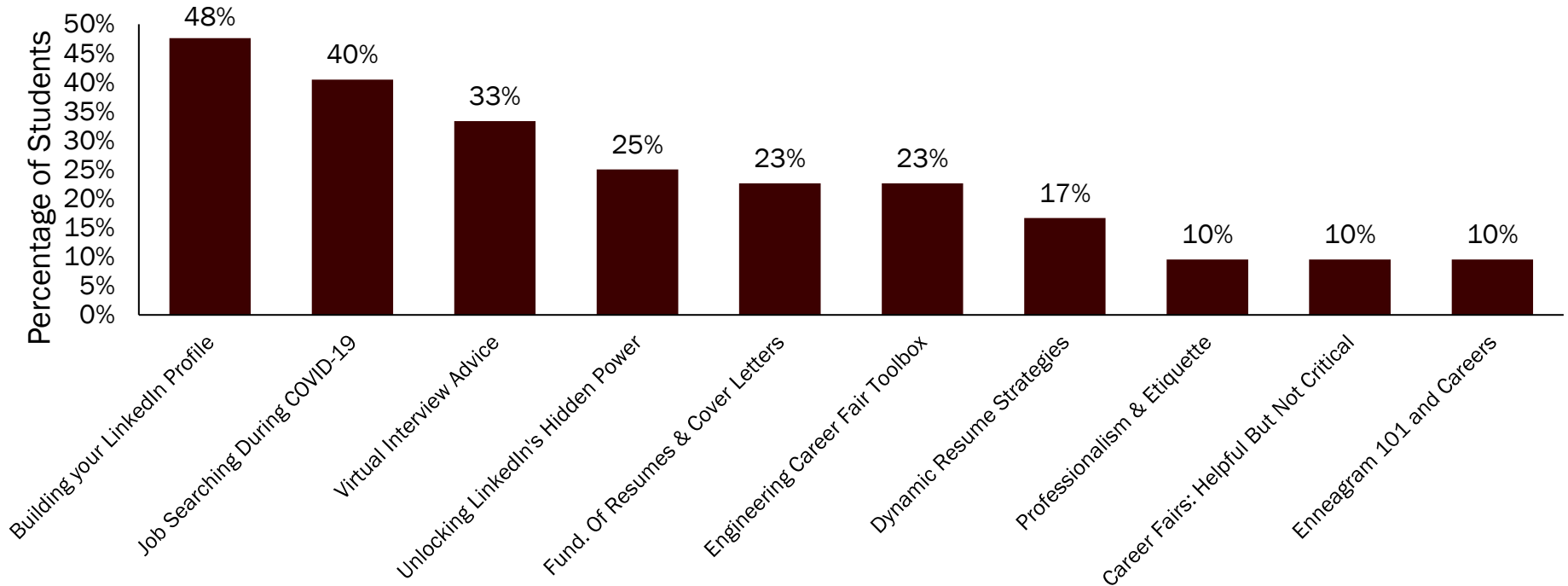
Did you attend any part of the Summer Webinar Series hosted by the Texas A&M Career Center?

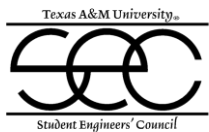


Asked to students who attended the Summer Webinar Series  
Responses: 84

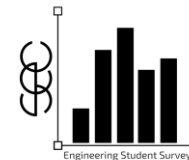


Check all that apply: Which parts of the series did you attend?





# 2020-2021 Legislation Committee



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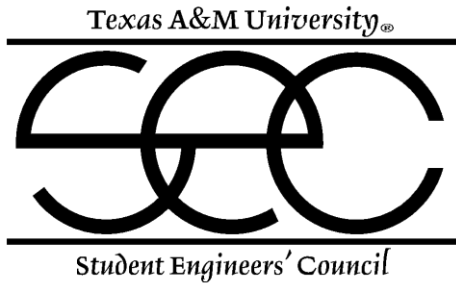
Vijay Joshi

Drew Pare

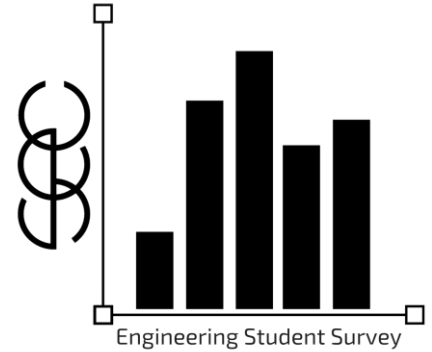
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# ENGINEERING STUDENT SURVEY



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