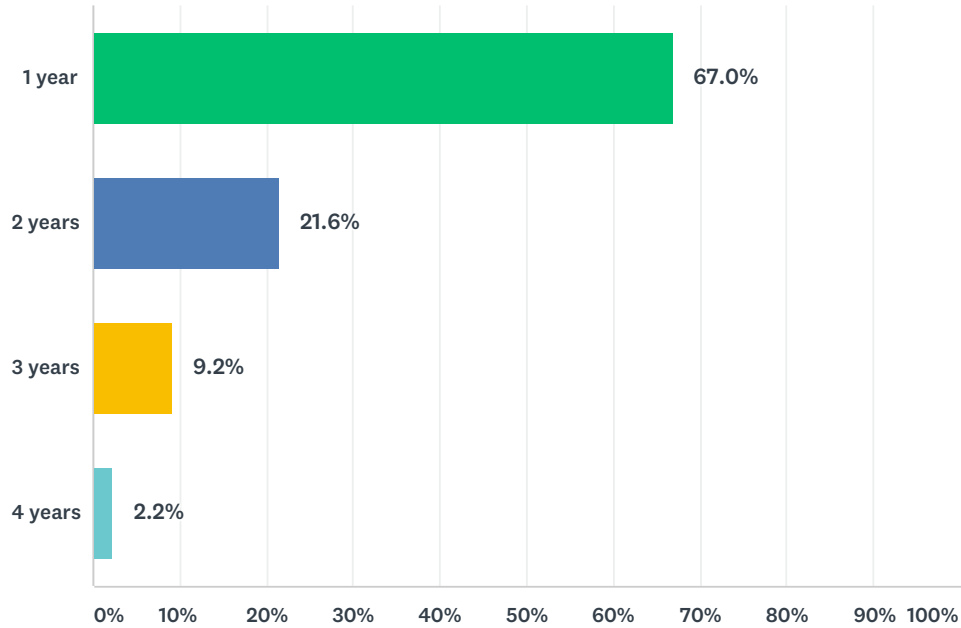


2019 ACE Mentor Program Survey

n = 9,654, response rate 35.4%, 1.8% margin of error, 99% confidence level

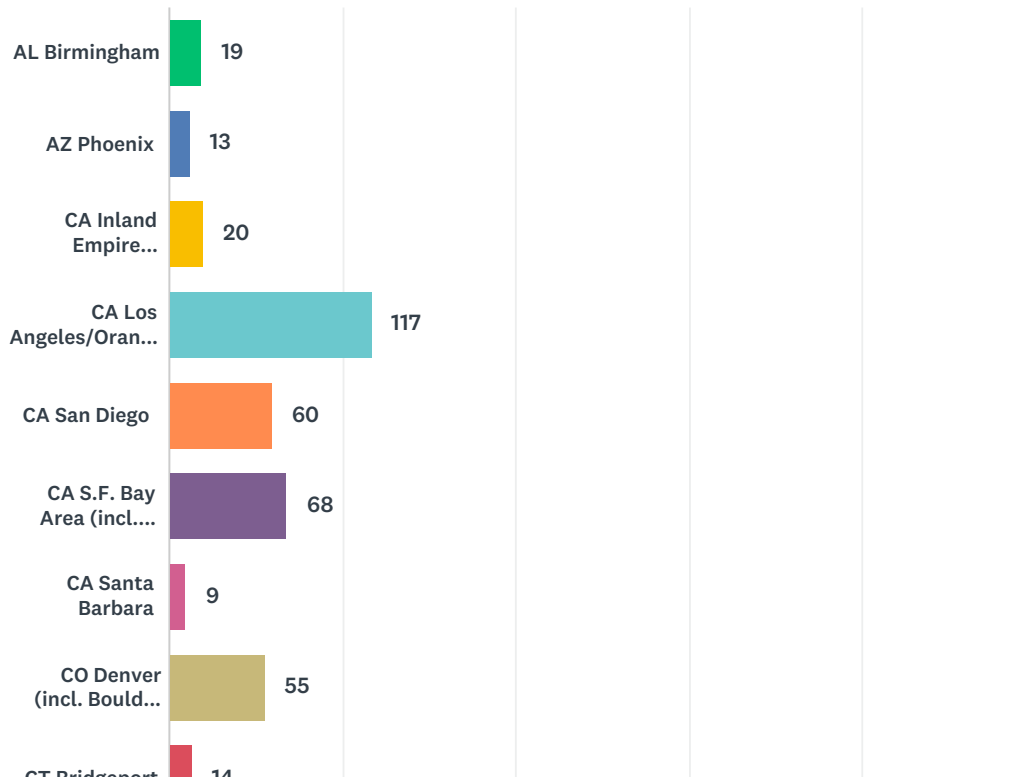
Q15 How many years have you participated in ACE?

Answered: 2,609 Skipped: 816

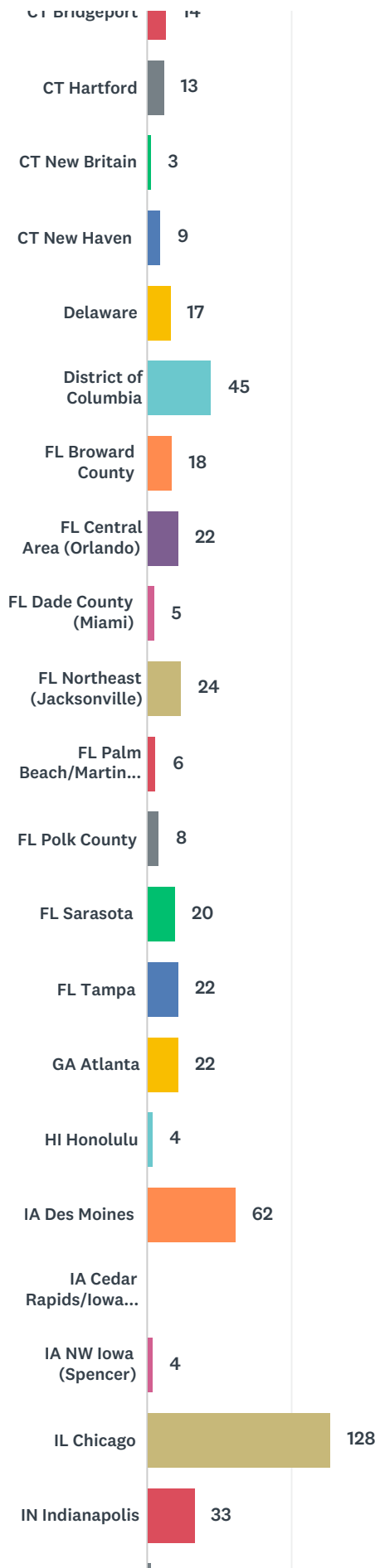


Q16 My high school is nearest to which of the following ACE affiliates (chapters)?

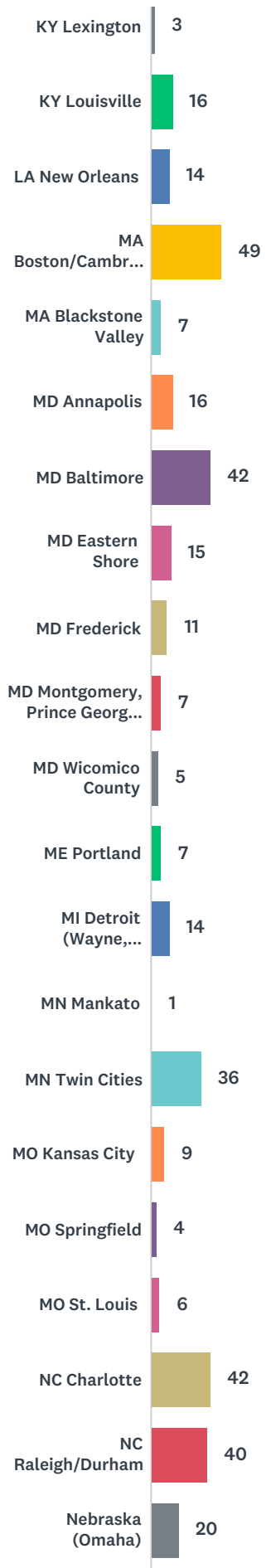
Answered: 2,622 Skipped: 803



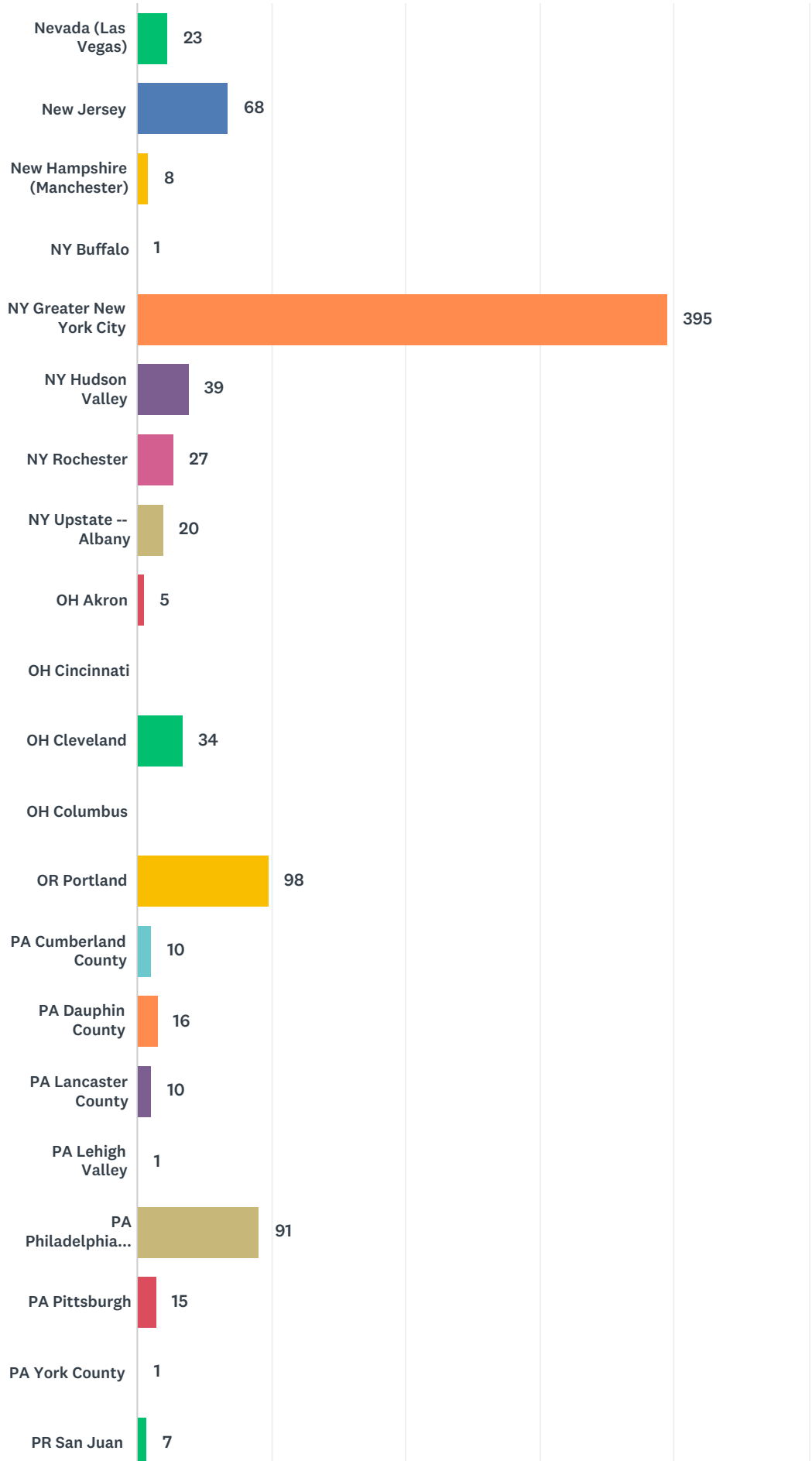
2019 ACE Mentor Program Survey



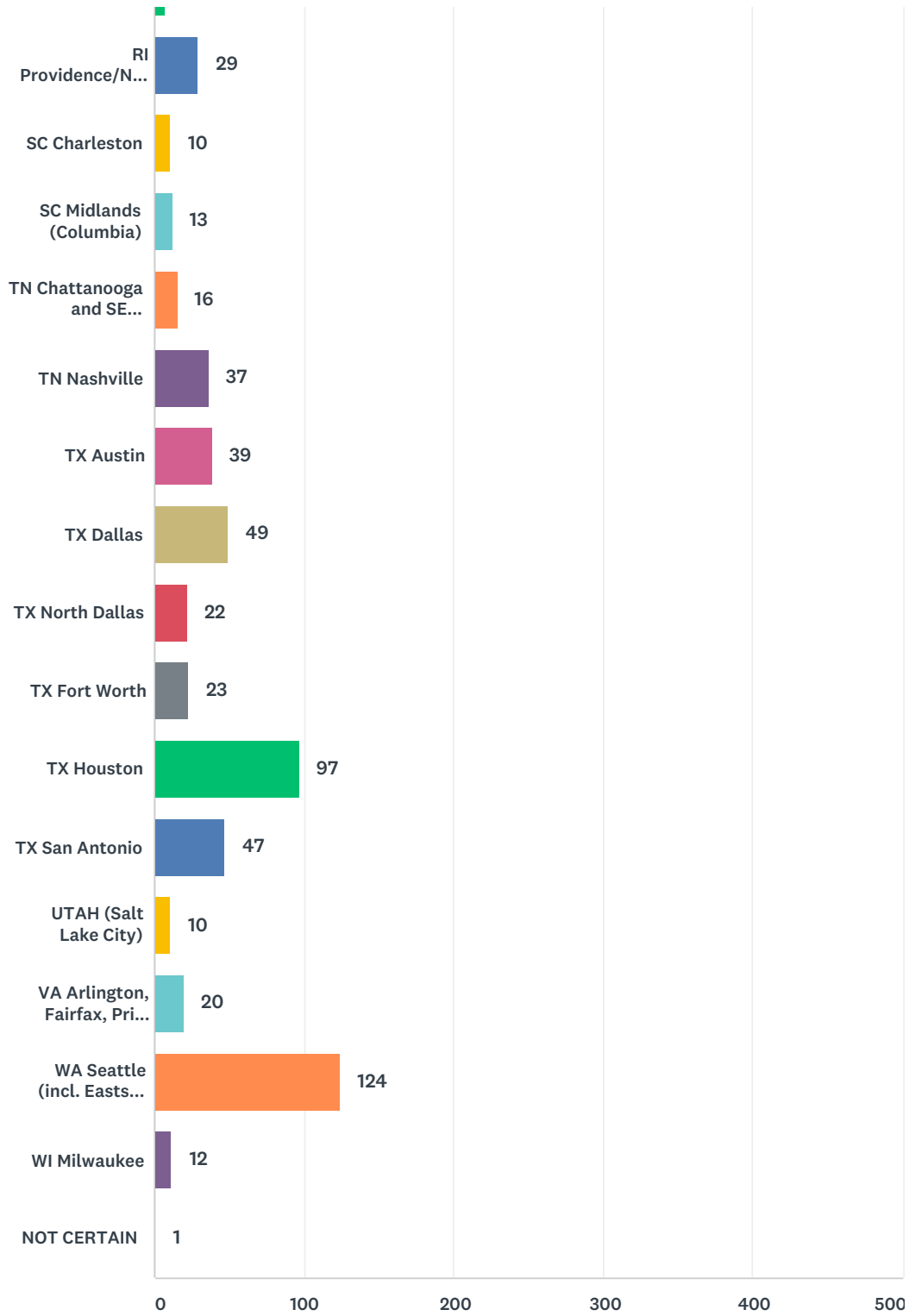
2019 ACE Mentor Program Survey



2019 ACE Mentor Program Survey



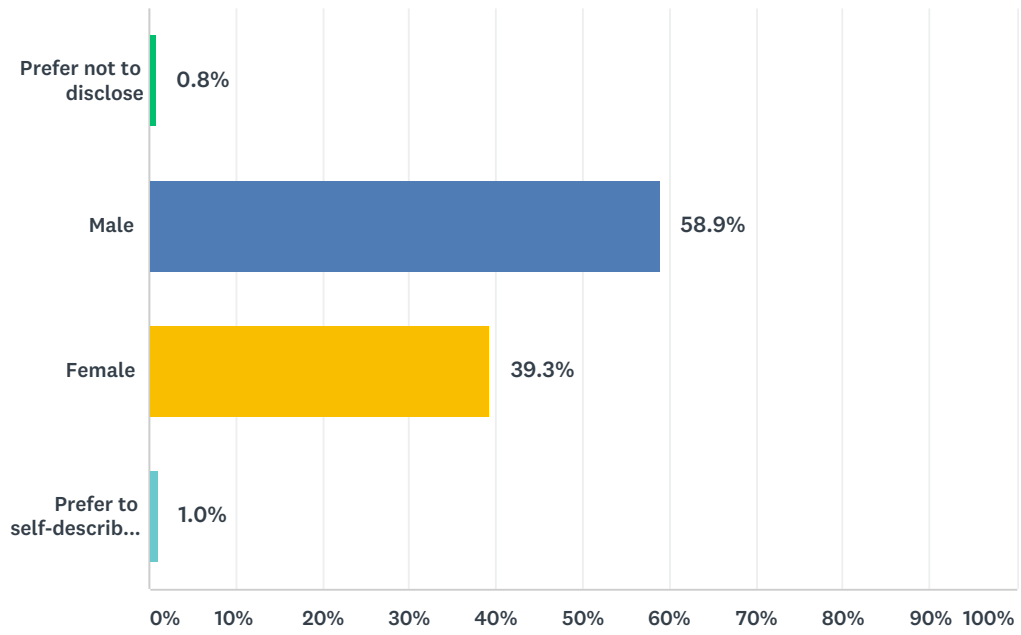
2019 ACE Mentor Program Survey



Q17 Indicate your gender.

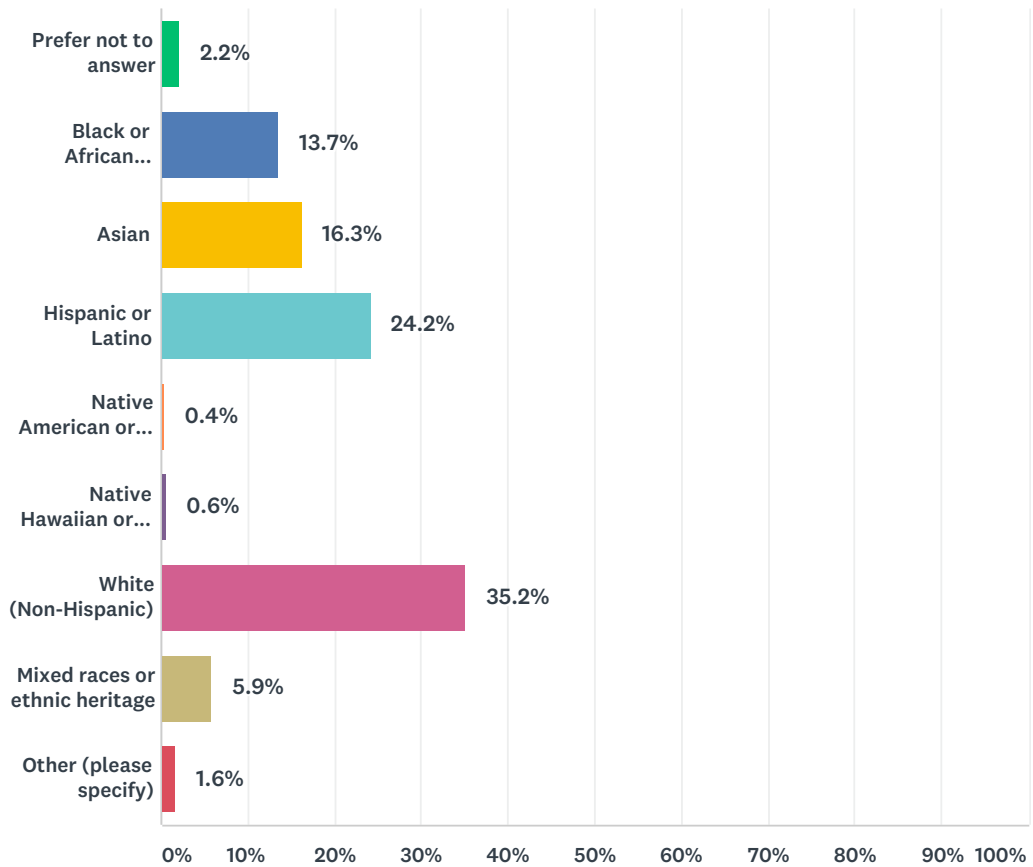
Answered: 2,606 Skipped: 819

2019 ACE Mentor Program Survey



Q18 Which of the following best describes your race or ethnic heritage? (select only one)

Answered: 2,603 Skipped: 822



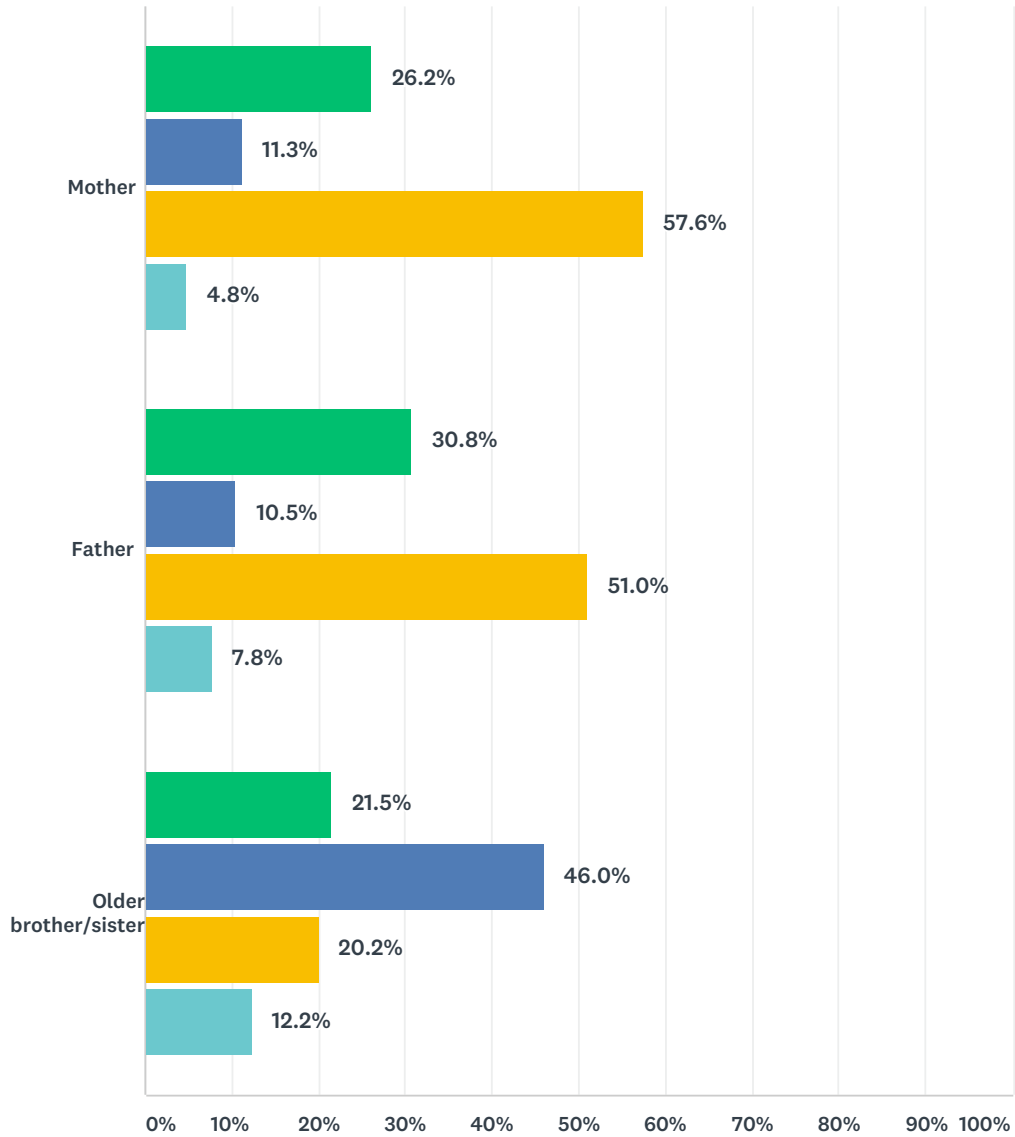
2019 ACE Mentor Program Survey

ANSWER CHOICES	RESPONSES	
Prefer not to answer	2.2%	56
Black or African American	13.7%	356
Asian	16.3%	425
Hispanic or Latino	24.2%	629
Native American or Alaska Native	0.4%	10
Native Hawaiian or other Pacific Islander	0.6%	16
White (Non-Hispanic)	35.2%	916
Mixed races or ethnic heritage	5.9%	154
Other (please specify)	1.6%	41
TOTAL		2,603

Q19 What is your family's educational background? (If you do not have an older sibling, ignore that line.)

Answered: 2,595 Skipped: 830

2019 ACE Mentor Program Survey



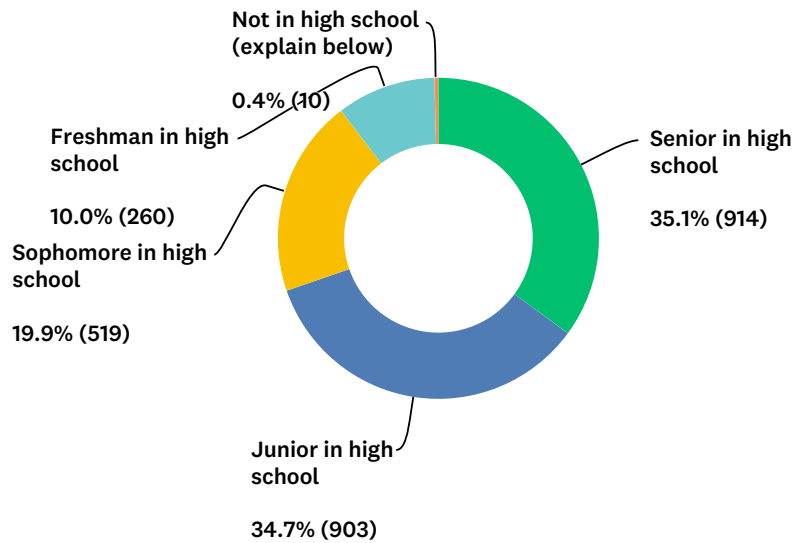
■ Did not attend college
 ■ Attended/attending college
■ Graduated from college
 ■ Don't know

	DID NOT ATTEND COLLEGE	ATTENDED/ATTENDING COLLEGE	GRADUATED FROM COLLEGE	DON'T KNOW	TOTAL
Mother	26.2% 680	11.3% 294	57.6% 1,493	4.8% 124	2,591
Father	30.8% 792	10.5% 269	51.0% 1,311	7.8% 200	2,572
Older brother/sister	21.5% 343	46.0% 733	20.2% 321	12.2% 195	1,592

Q20 Currently I am a ...

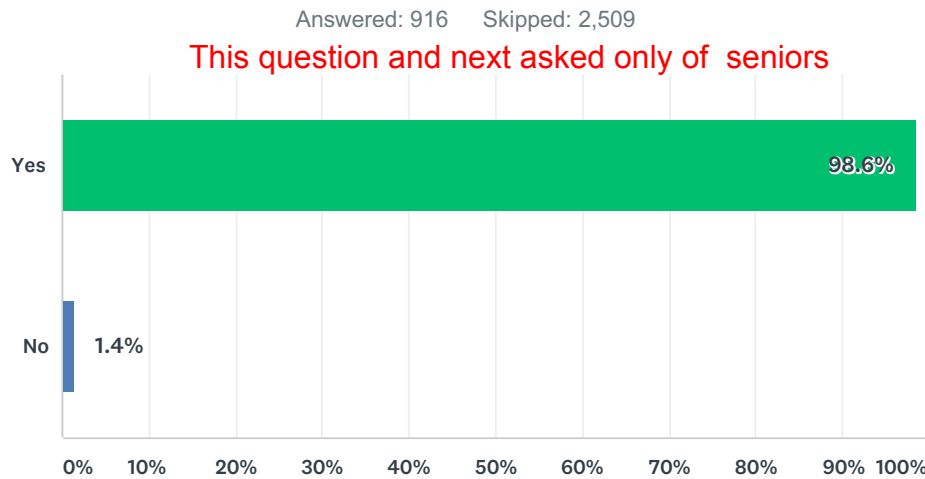
Answered: 2,606 Skipped: 819

2019 ACE Mentor Program Survey



ANSWER CHOICES	RESPONSES	
Senior in high school	35.1%	914
Junior in high school	34.7%	903
Sophomore in high school	19.9%	519
Freshman in high school	10.0%	260
Not in high school (explain below)	0.4%	10
TOTAL		2,606

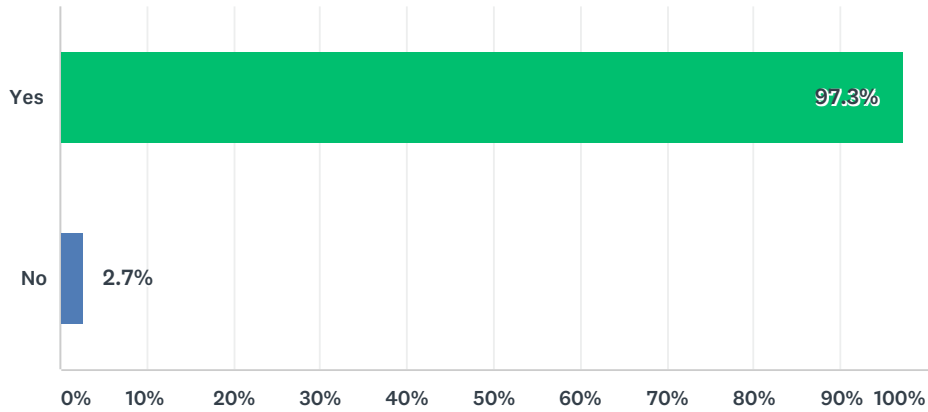
Q21 Will you graduate from high school this spring?



Q22 Will you graduate within 4 years after you began high school?

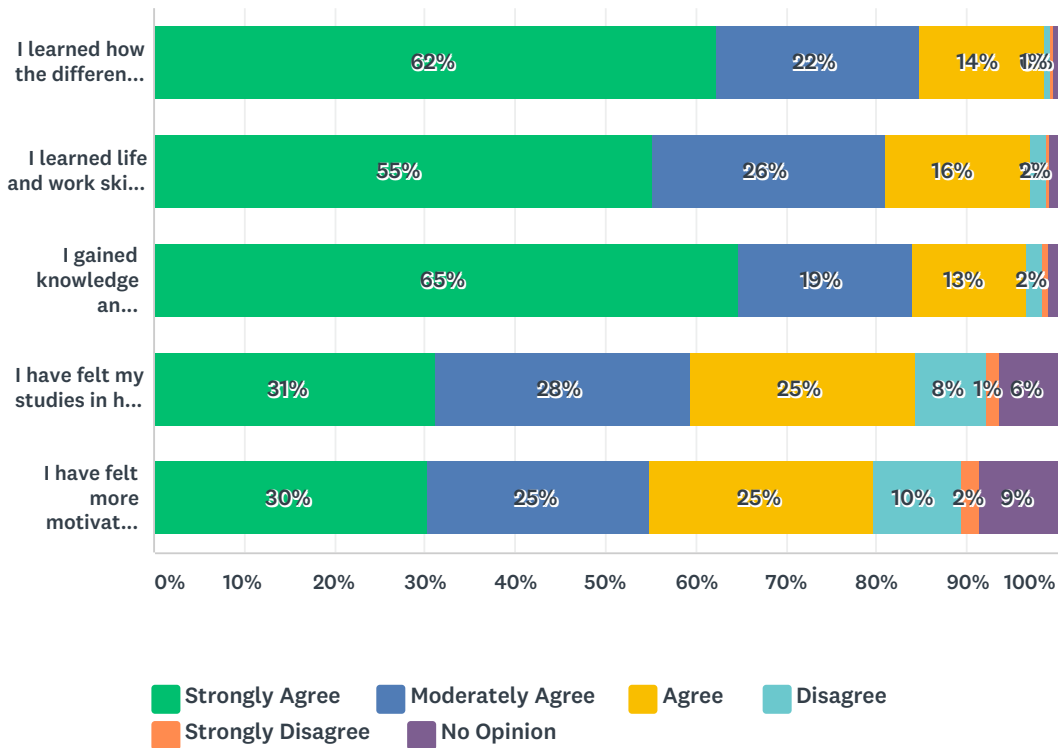
Answered: 892 Skipped: 2,533

2019 ACE Mentor Program Survey



Q23 By participating in ACE, I . . . (all statements must be answered)

Answered: 2,463 Skipped: 962



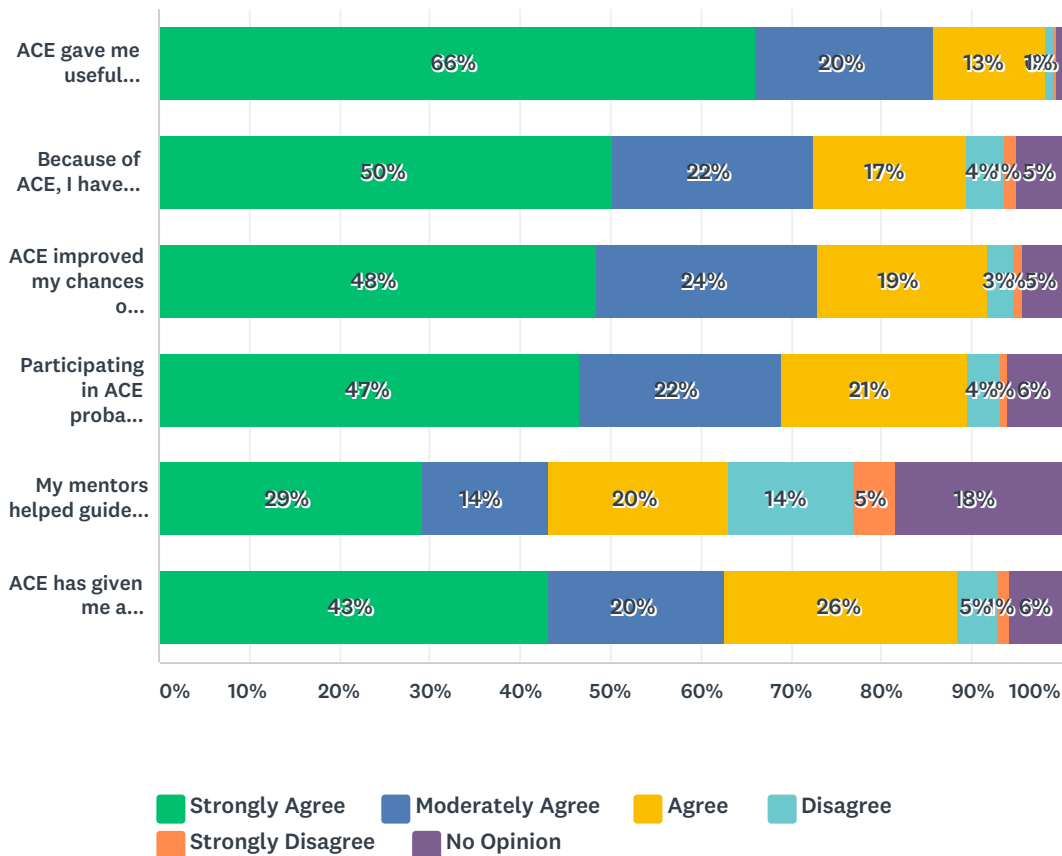
	STRONGLY AGREE	MODERATELY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
I learned how the different disciplines in the design/construction industry work together to create and build a structure.	62% 1,532	22% 553	14% 342	1% 16	0% 12	0% 8	2,463	4.46
I learned life and work skills that will help me in any career (e.g., teamwork, problem solving).	55% 1,358	26% 635	16% 396	2% 43	1% 13	1% 18	2,463	4.34

2019 ACE Mentor Program Survey

I gained knowledge and skills not taught in my high school.	65%	19%	13%	2%	1%	1%	2,463	4.47
I have felt my studies in high school became more meaningful.	31%	28%	25%	8%	1%	6%	2,463	3.85
I have felt more motivated to study in high school.	30%	25%	25%	10%	2%	9%	2,463	3.78

Q24 To what extent to you agree or disagree with the following statements? (all statements must be answered)

Answered: 2,463 Skipped: 962



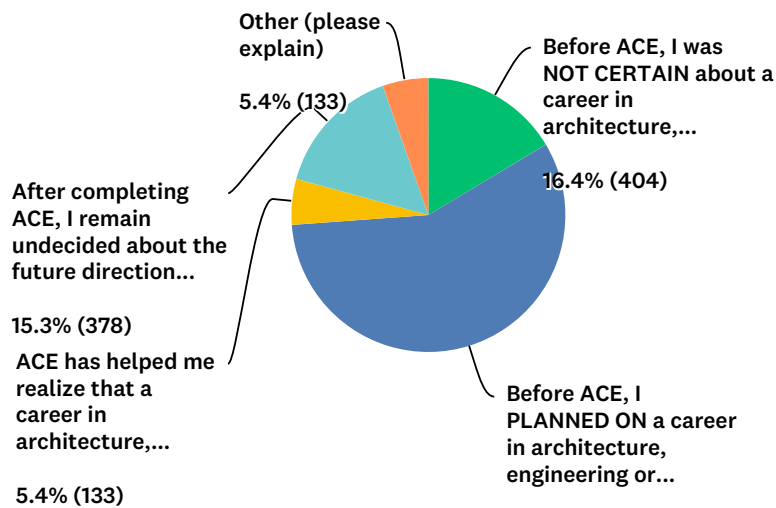
	STRONGLY AGREE	MODERATELY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
ACE gave me useful information about careers in the design/construction industry.	66%	20%	13%	1%	0%	1%	2,463	4.51
Because of ACE, I have felt more motivated to go to college (in any field) or enter a skilled trades training program.	50%	22%	17%	4%	1%	5%	2,463	4.22

2019 ACE Mentor Program Survey

ACE improved my chances of being successful in college or a skilled trades training program.	48%	24%	19%	3%	1%	5%	2,463	4.22
Participating in ACE probably improved my chances of being admitted to college or a skilled trades training program.	47%	22%	21%	4%	1%	6%	2,463	4.17
My mentors helped guide and assist me in applying to college and/or deciding on the best college for me.	29%	14%	20%	14%	5%	18%	2,463	3.60
ACE has given me a professional network (i.e., my mentors) that will help me advance my career.	43%	20%	26%	5%	1%	6%	2,463	4.05

Q25 How has ACE influenced your choice of careers? (select one answer)

Answered: 2,463 Skipped: 962



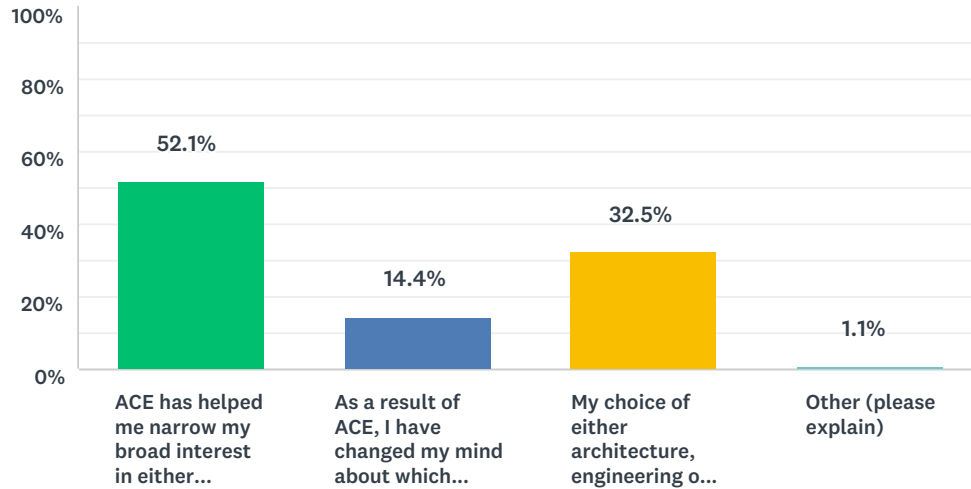
ANSWER CHOICES	RESPONSES
Before ACE, I was NOT CERTAIN about a career in architecture, engineering or construction, but now I know this is the career for me.	16.4% 404
Before ACE, I PLANNED ON a career in architecture, engineering or construction, and now I am even more convinced this is right for me. respondents directed to question 26	57.5% 1,415
ACE has helped me realize that a career in architecture, engineering, or construction is NOT for me.	5.4% 133
After completing ACE, I remain undecided about the future direction of my career.	15.3% 378
Other (please explain)	5.4% 133

TOTAL

2,463

Q26 Please check one of the boxes below.

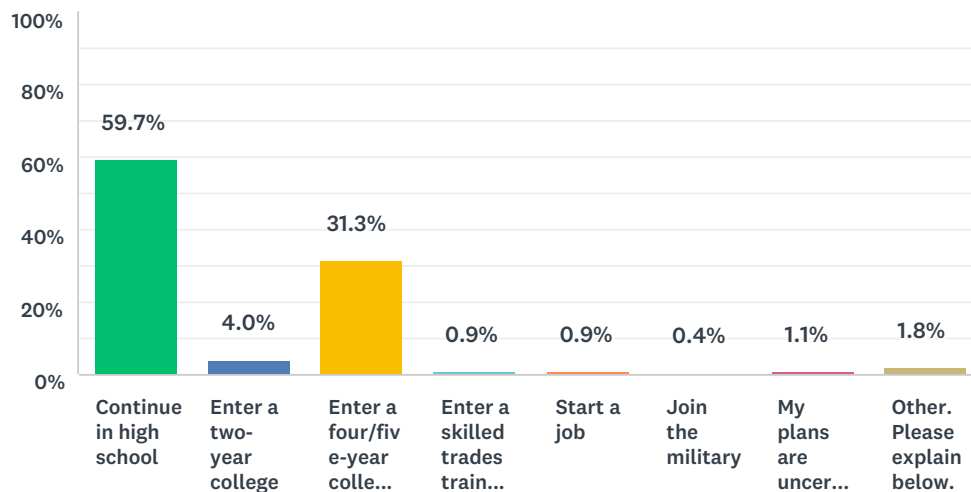
Answered: 1,408 Skipped: 2,017



ANSWER CHOICES	RESPONSES	
ACE has helped me narrow my broad interest in either architecture, engineering or construction down to a specific field (e.g., mechanical or civil engineering; architecture or interior design).	52.1%	733
As a result of ACE, I have changed my mind about which broad area -- architecture, engineering, or construction -- I want to pursue. For example, I started out interested in construction but became more interested in engineering.	14.4%	203
My choice of either architecture, engineering or construction has not changed since I started ACE.	32.5%	457
Other (please explain)	1.1%	15
TOTAL		1,408

Q27 What are your plans for this coming fall? (select only one)

Answered: 2,447 Skipped: 978

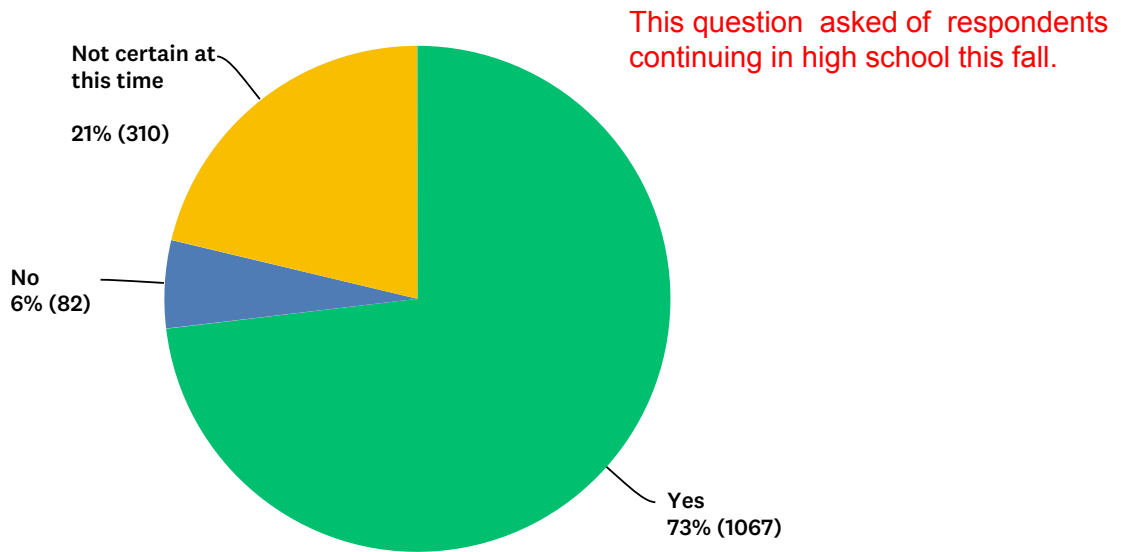


2019 ACE Mentor Program Survey

ANSWER CHOICES	RESPONSES
Continue in high school respondents directed to questions 28 and 29	59.7% 1,460
Enter a two-year college respondents directed to Q. 30	4.0% 98
Enter a four/five-year college or university program respondents directed to Q.30	31.3% 765
Enter a skilled trades training program	0.9% 21
Start a job	0.9% 23
Join the military	0.4% 10
My plans are uncertain for now.	1.1% 27
Other. Please explain below.	1.8% 43
TOTAL	2,447

Q28 Do you intend to continue in ACE this fall?

Answered: 1,459 Skipped: 1,966

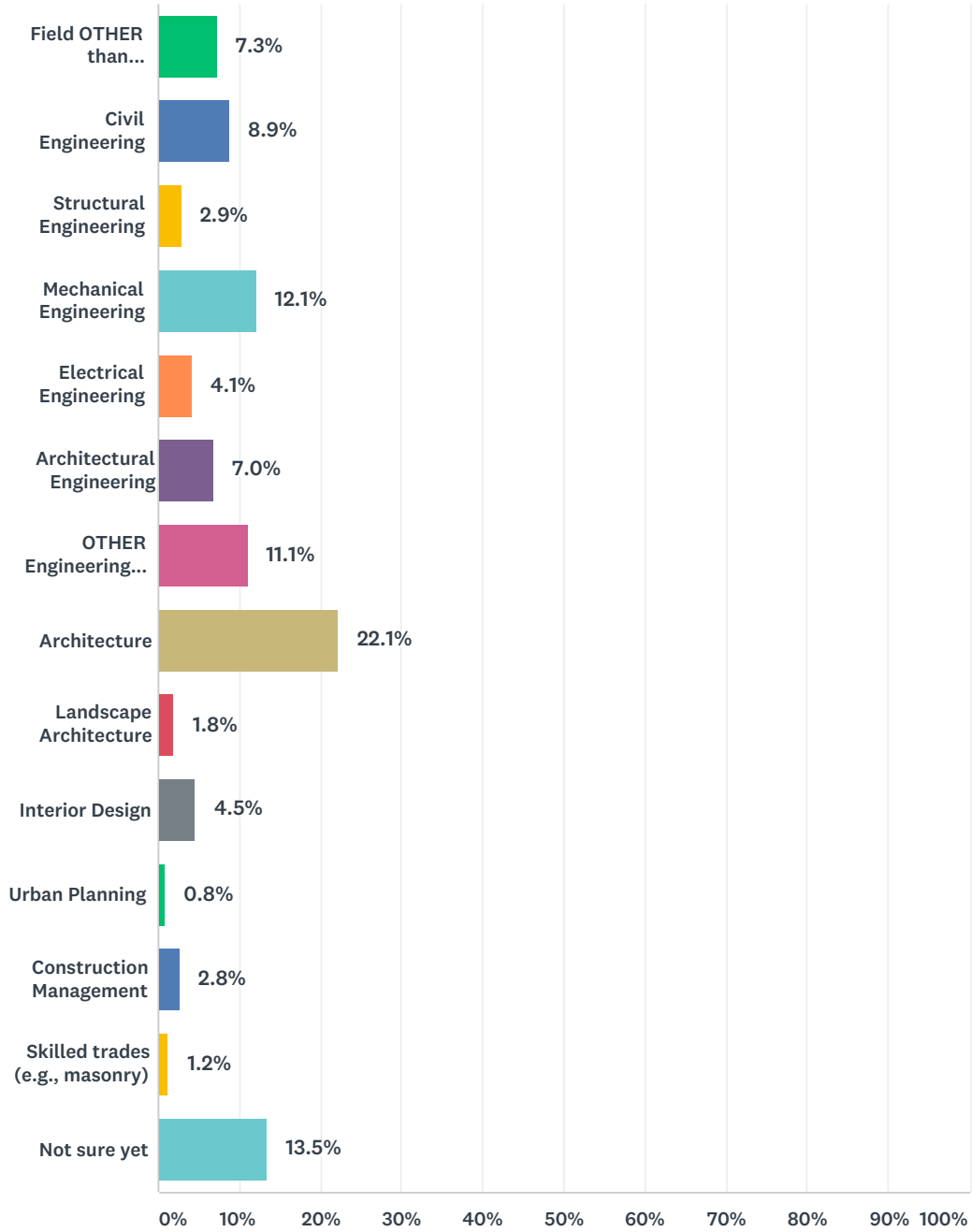


Q29 At present I am interested in a career in: (check one)

Answered: 1,453 Skipped: 1,972

see comment in Q. 28

2019 ACE Mentor Program Survey



ANSWER CHOICES	RESPONSES	
Field OTHER than architecture, engineering or construction.	7.3%	106
Civil Engineering	8.9%	129
Structural Engineering	2.9%	42
Mechanical Engineering	12.1%	176
Electrical Engineering	4.1%	60
Architectural Engineering	7.0%	101
OTHER Engineering (e.g., chemical)	11.1%	161
Architecture	22.1%	321

2019 ACE Mentor Program Survey

Landscape Architecture	1.8%	26
Interior Design	4.5%	66
Urban Planning	0.8%	12
Construction Management	2.8%	40
Skilled trades (e.g., masonry)	1.2%	17
Not sure yet	13.5%	196
TOTAL		1,453

Q30 Please name the college you will attend (give full name and specify campus if your college has multiple campuses).

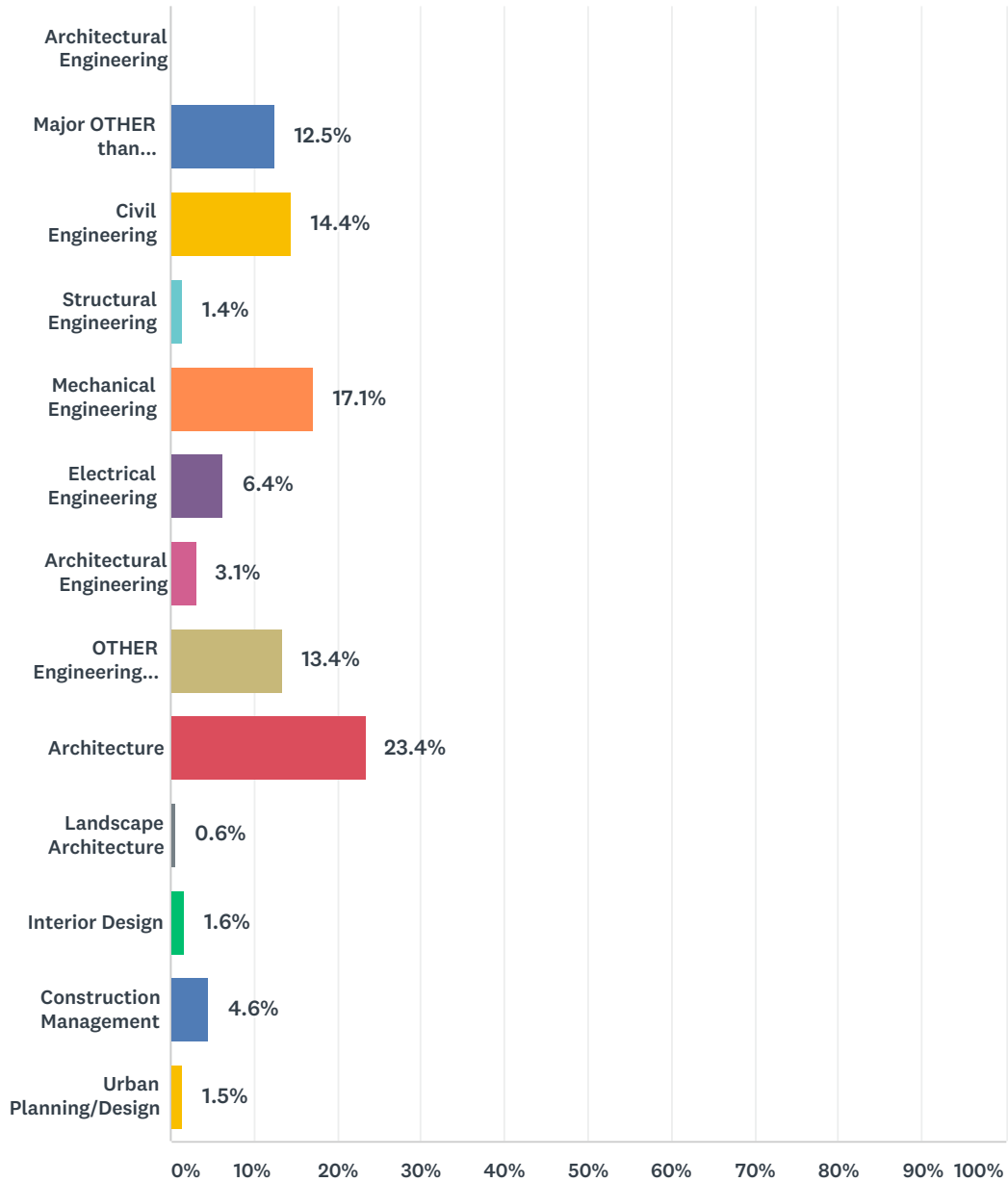
Answered: 822 Skipped: 2,603

names of colleges listed in full report

Q32 In which field do you expect to major?

Answered: 849 Skipped: 2,576

2019 ACE Mentor Program Survey



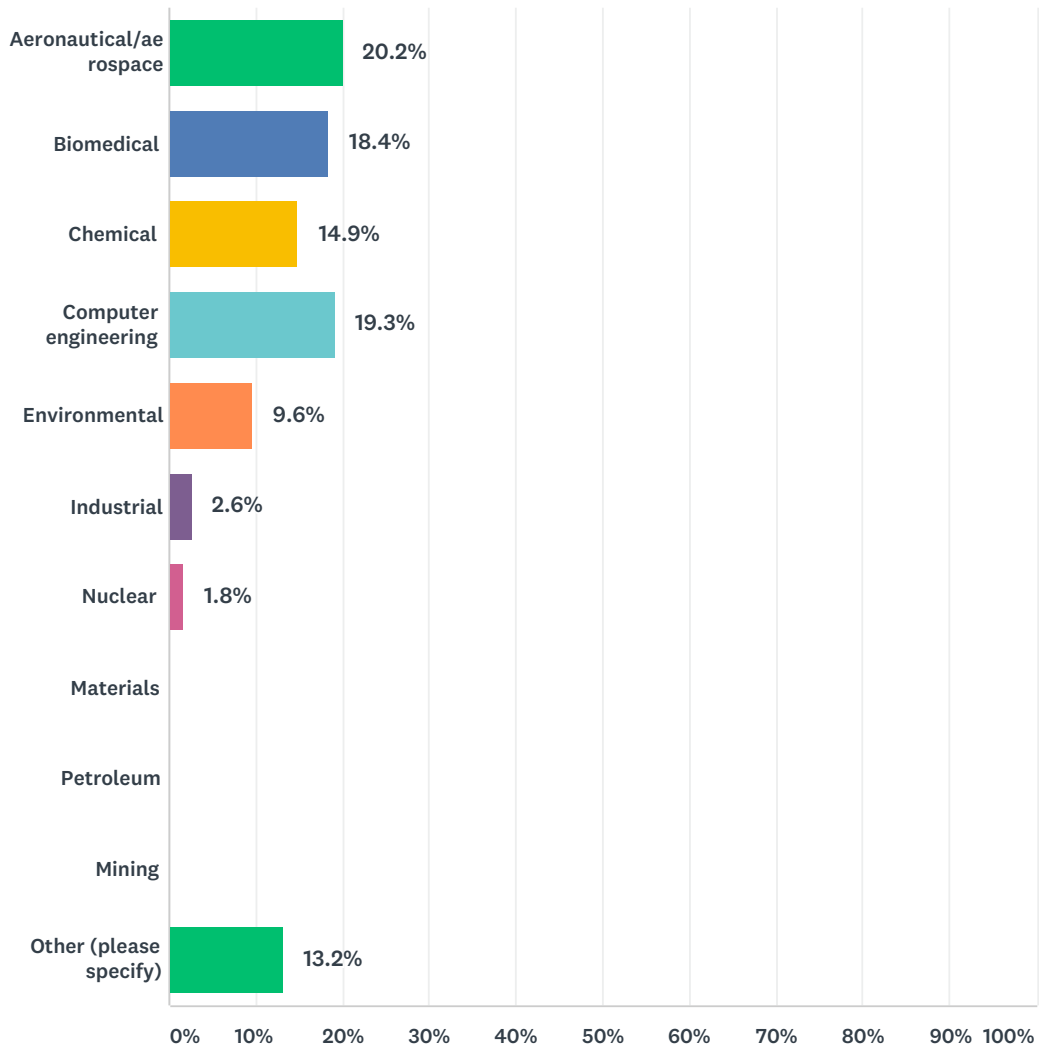
ANSWER CHOICES	RESPONSES	
Architectural Engineering	0.0%	0
Major OTHER than architecture, engineering or construction.	respondents directed to Q. 34	12.5%
Civil Engineering		122
Structural Engineering		12
Mechanical Engineering		145
Electrical Engineering		54
Architectural Engineering		26
OTHER Engineering (e.g., chemical, biomedical)	respondents directed to Q. 33	13.4%
Architecture		199
Landscape Architecture		5

2019 ACE Mentor Program Survey

Interior Design	1.6%	14
Construction Management	4.6%	39
Urban Planning/Design	1.5%	13
TOTAL		849

Q33 Which engineering field?

Answered: 114 Skipped: 3,311



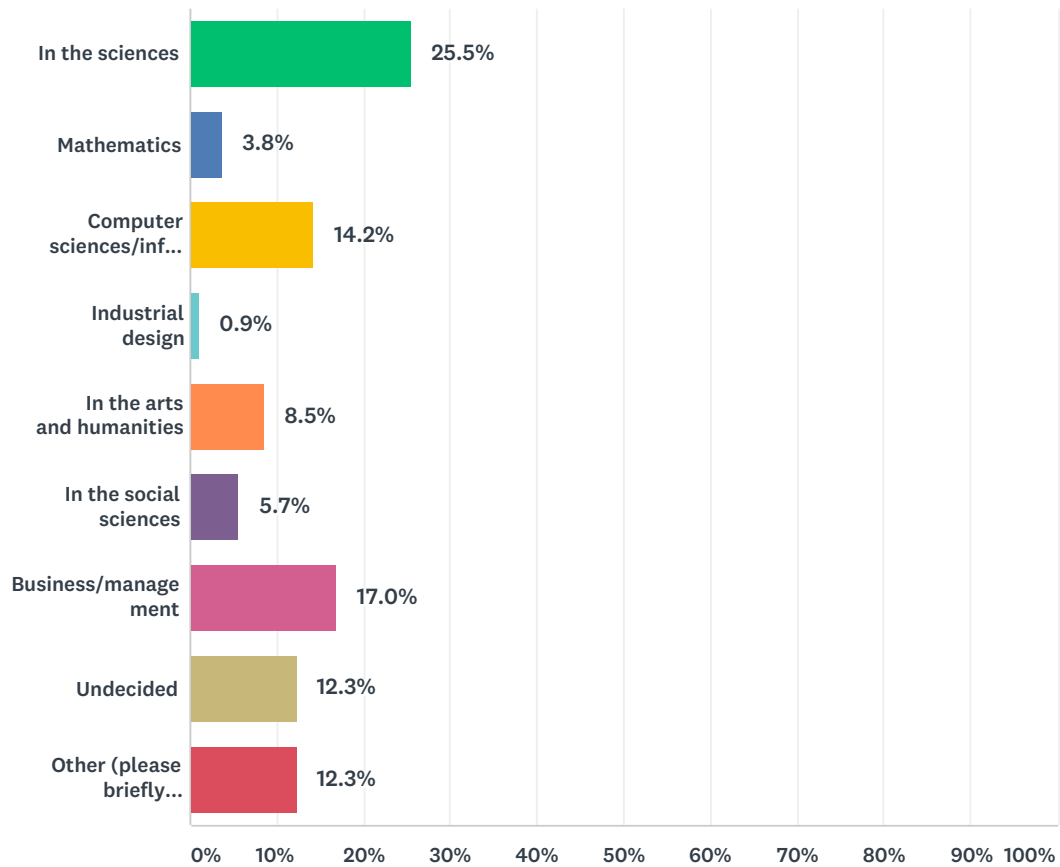
ANSWER CHOICES	RESPONSES	
Aeronautical/aerospace	20.2%	23
Biomedical	18.4%	21
Chemical	14.9%	17
Computer engineering	19.3%	22
Environmental	9.6%	11
Industrial	2.6%	3

2019 ACE Mentor Program Survey

Nuclear	1.8%	2
Materials	0.0%	0
Petroleum	0.0%	0
Mining	0.0%	0
Other (please specify)	13.2%	15
TOTAL		114

Q34 What is your intended major?

Answered: 106 Skipped: 3,319

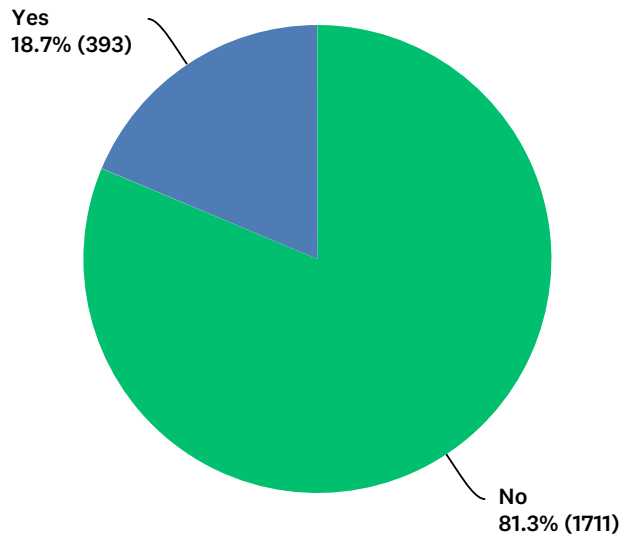


ANSWER CHOICES	RESPONSES
In the sciences	25.5% 27
Mathematics	3.8% 4
Computer sciences/information technology	14.2% 15
Industrial design	0.9% 1
In the arts and humanities	8.5% 9
In the social sciences	5.7% 6
Business/management	17.0% 18

Undecided	12.3%	13
Other (please briefly explain)	12.3%	13
TOTAL		106

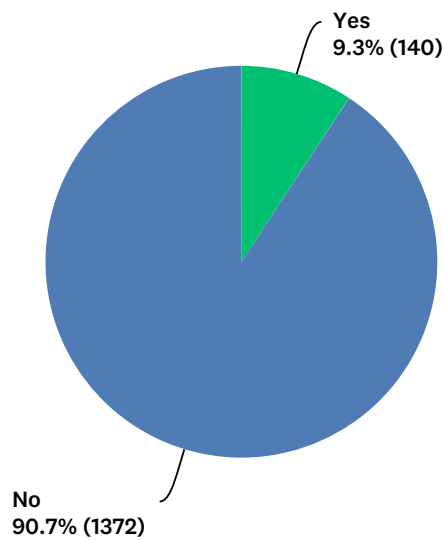
Q35 Have you previously had an internship or summer job in the design and construction industry?

Answered: 2,104 Skipped: 1,321



Q36 Was this internship or summer job the result of ACE connections?

Answered: 1,512 Skipped: 1,913



Q37 Name of company or firm

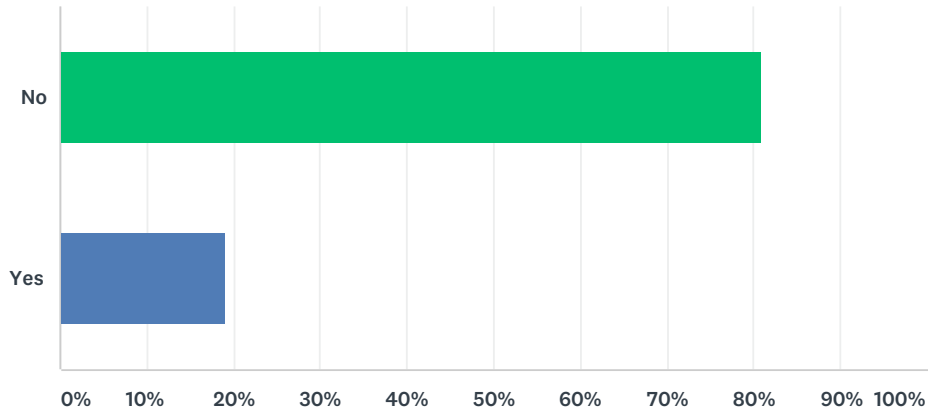
Names of companies can be found in full report

2019 ACE Mentor Program Survey

Answered: 259 Skipped: 3,166

Q38 This summer do you have an internship or summer job in the design and construction industry?

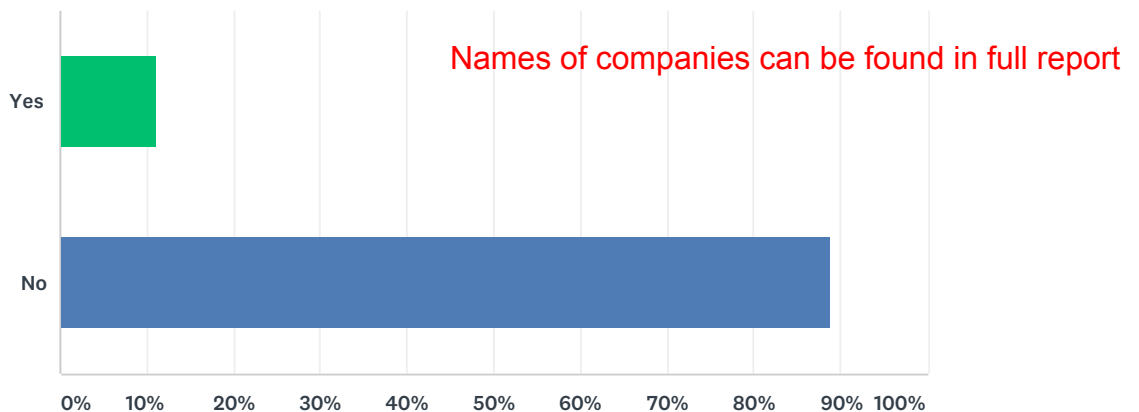
Answered: 2,096 Skipped: 1,329



ANSWER CHOICES	RESPONSES	
No	80.96%	1,697
Yes	19.04%	399
TOTAL		2,096

Q39 Is this internship or job the result of an ACE connection? If so, please briefly describe the internship.

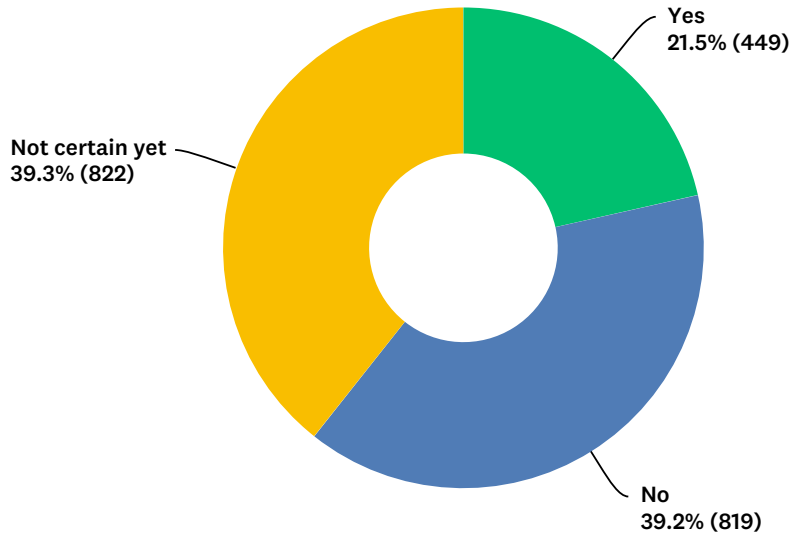
Answered: 1,426 Skipped: 1,999



ANSWER CHOICES	RESPONSES	
Yes	11.1%	158
No	88.9%	1,268
TOTAL		1,426

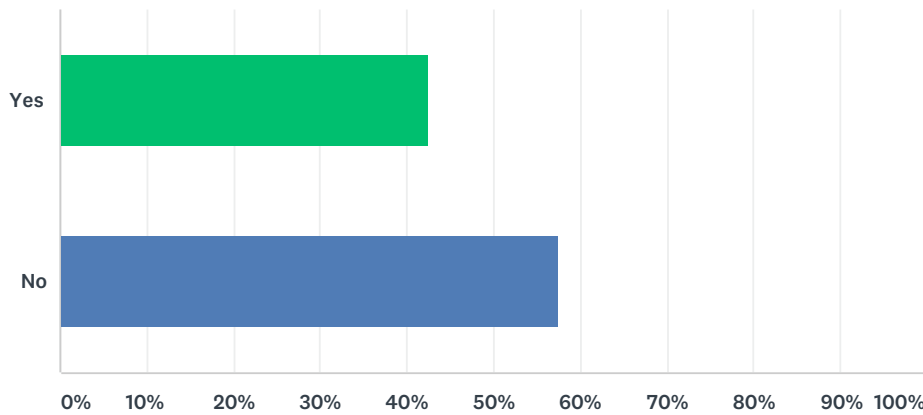
Q40 This summer do expect to participate in a camp or university session related to architecture, engineering, or construction?

Answered: 2,090 Skipped: 1,335



Q41 Will ACE help support your participation in this activity?

Answered: 1,518 Skipped: 1,907

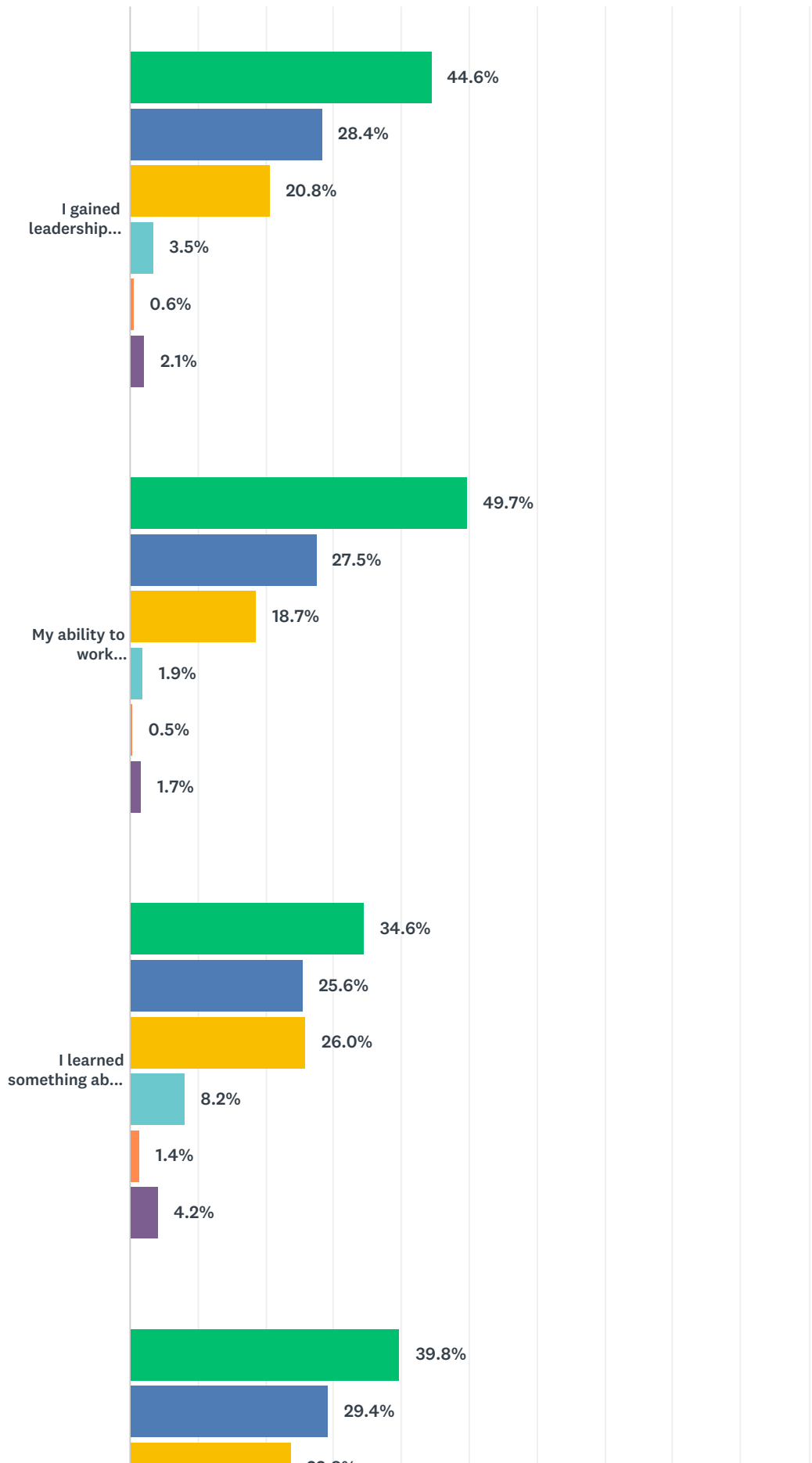


ANSWER CHOICES	RESPONSES	
Yes	42.42%	644
No	57.58%	874
TOTAL		1,518

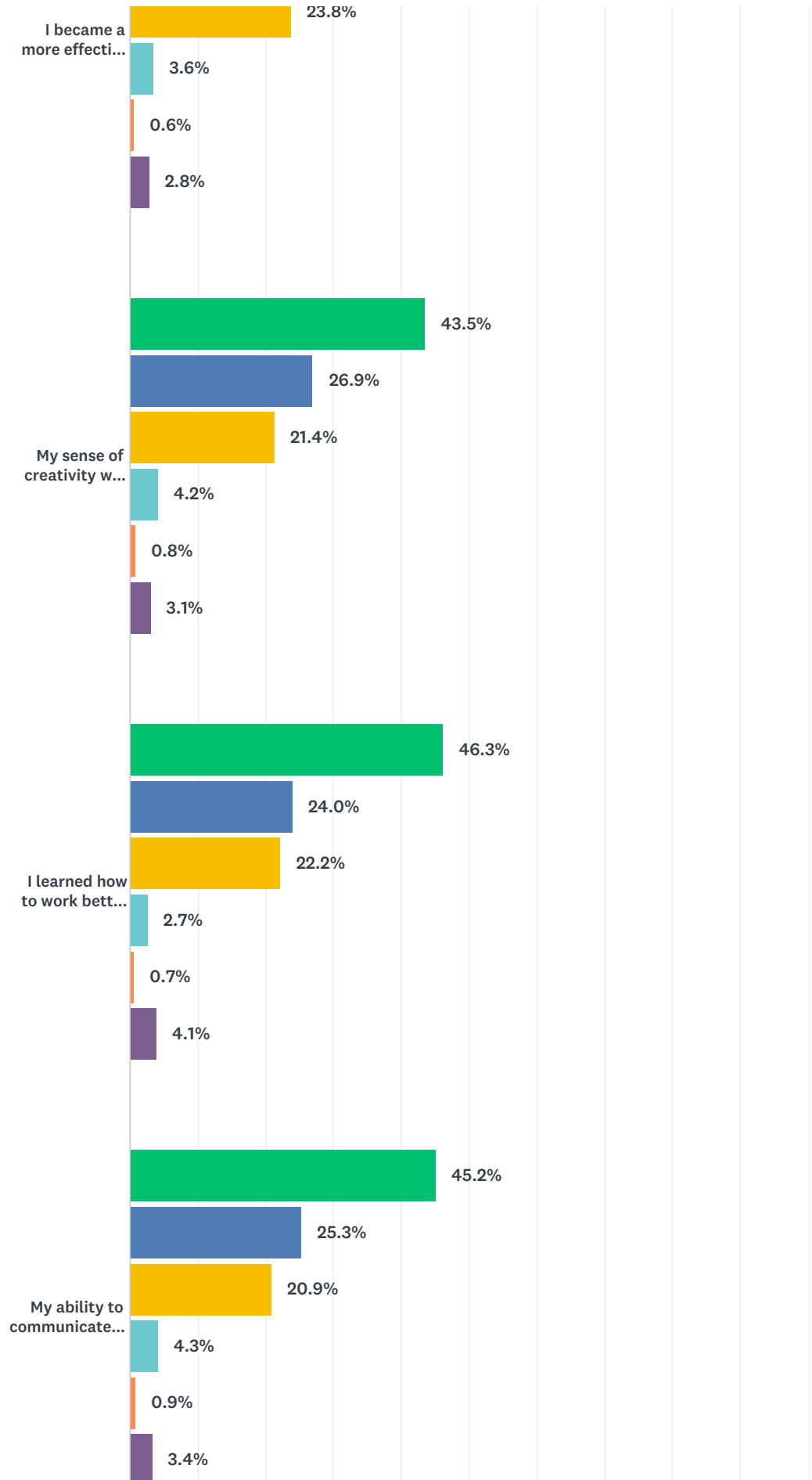
Q42 To what extent do you agree or disagree with the following statements about your participation in ACE? (please respond to all parts)

Answered: 2,360 Skipped: 1,065

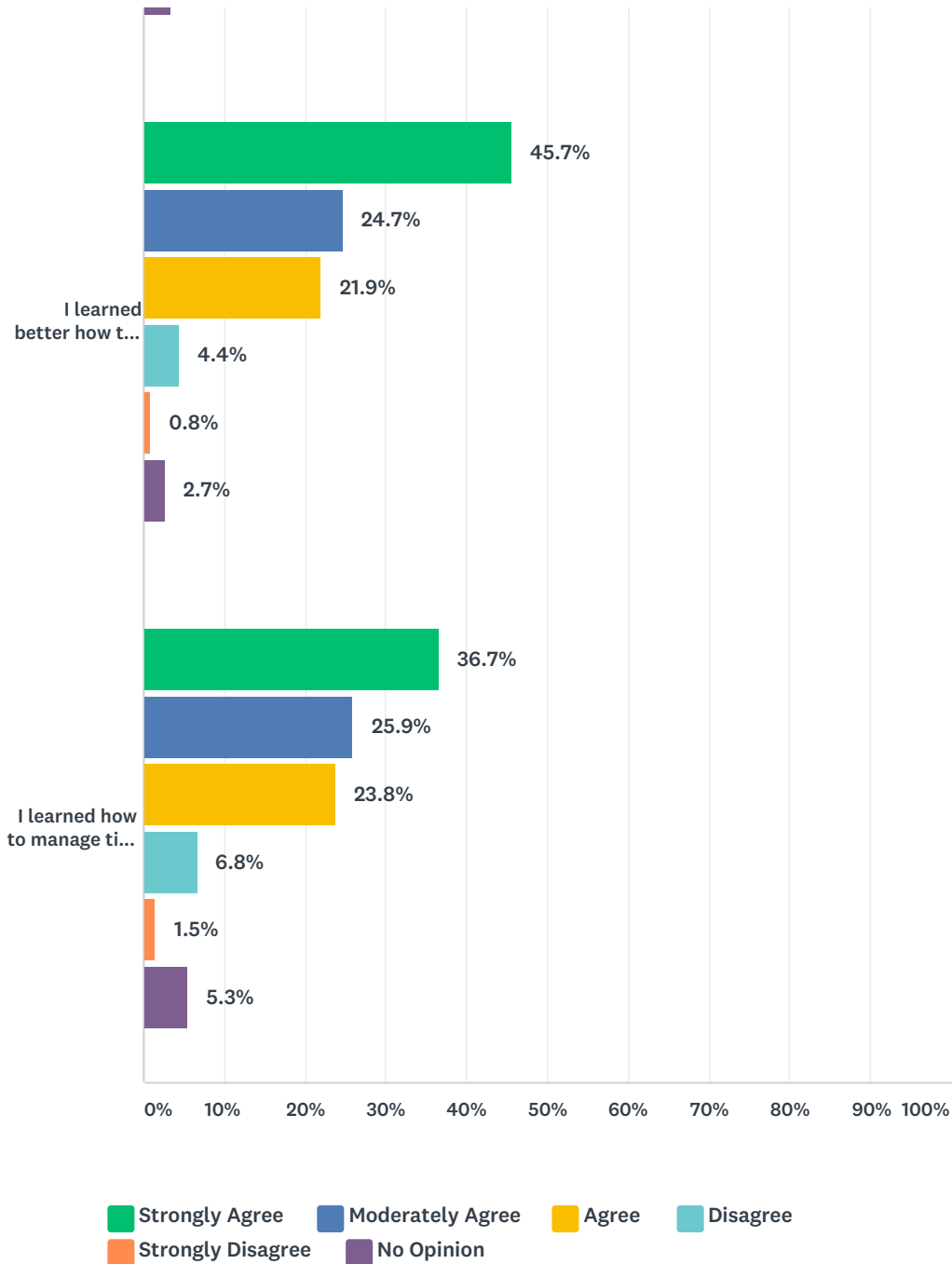
2019 ACE Mentor Program Survey



2019 ACE Mentor Program Survey



2019 ACE Mentor Program Survey



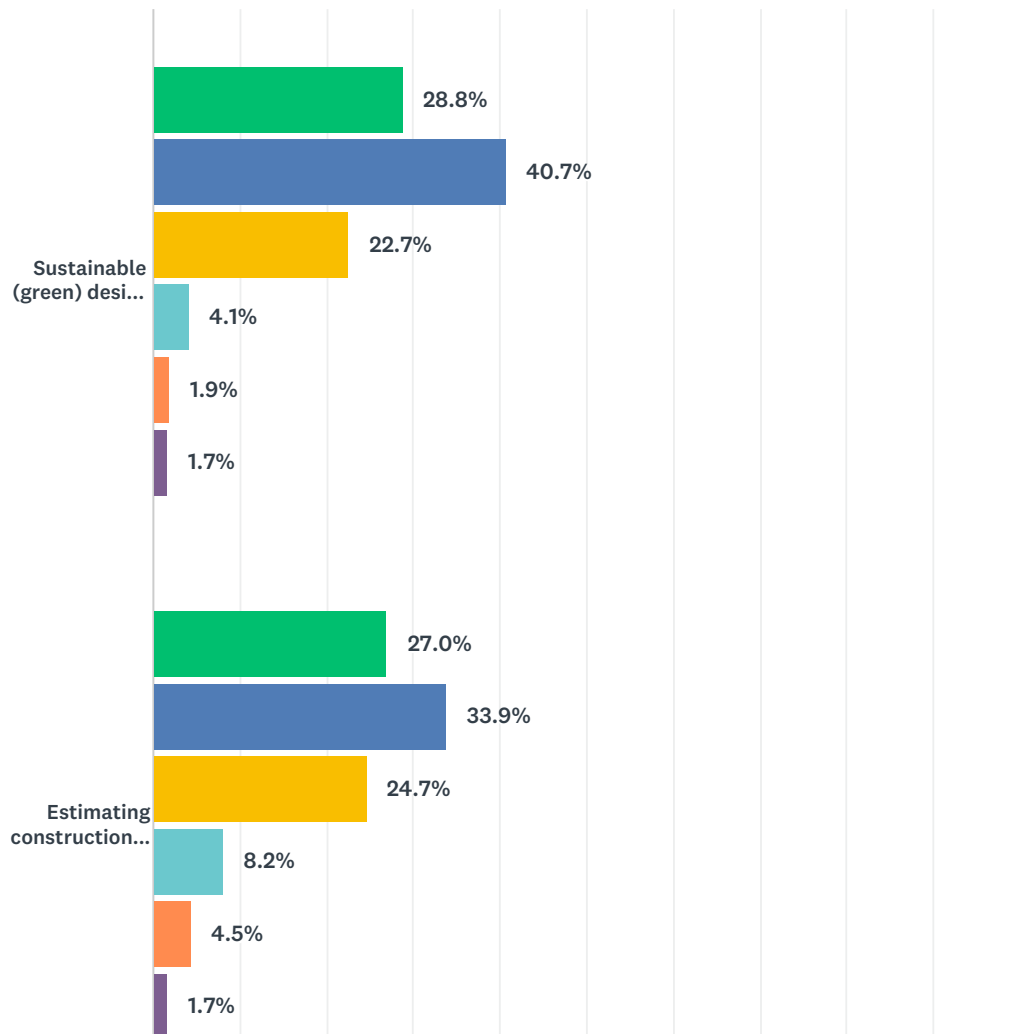
	STRONGLY AGREE	MODERATELY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
I gained leadership experience and skills.	44.6% 1,052	28.4% 671	20.8% 490	3.5% 82	0.6% 15	2.1% 50	2,360	4.15
My ability to work collaboratively as part of a team improved.	49.7% 1,174	27.5% 650	18.7% 441	1.9% 45	0.5% 11	1.7% 39	2,360	4.26
I learned something about how to negotiate.	34.6% 817	25.6% 604	26.0% 614	8.2% 193	1.4% 33	4.2% 99	2,360	3.88
I became a more effective problem-solver.	39.8% 940	29.4% 693	23.8% 561	3.6% 85	0.6% 14	2.8% 67	2,360	4.07
My sense of creativity was strengthened.	43.5% 1,027	26.9% 636	21.4% 505	4.2% 100	0.8% 20	3.1% 72	2,360	4.11

2019 ACE Mentor Program Survey

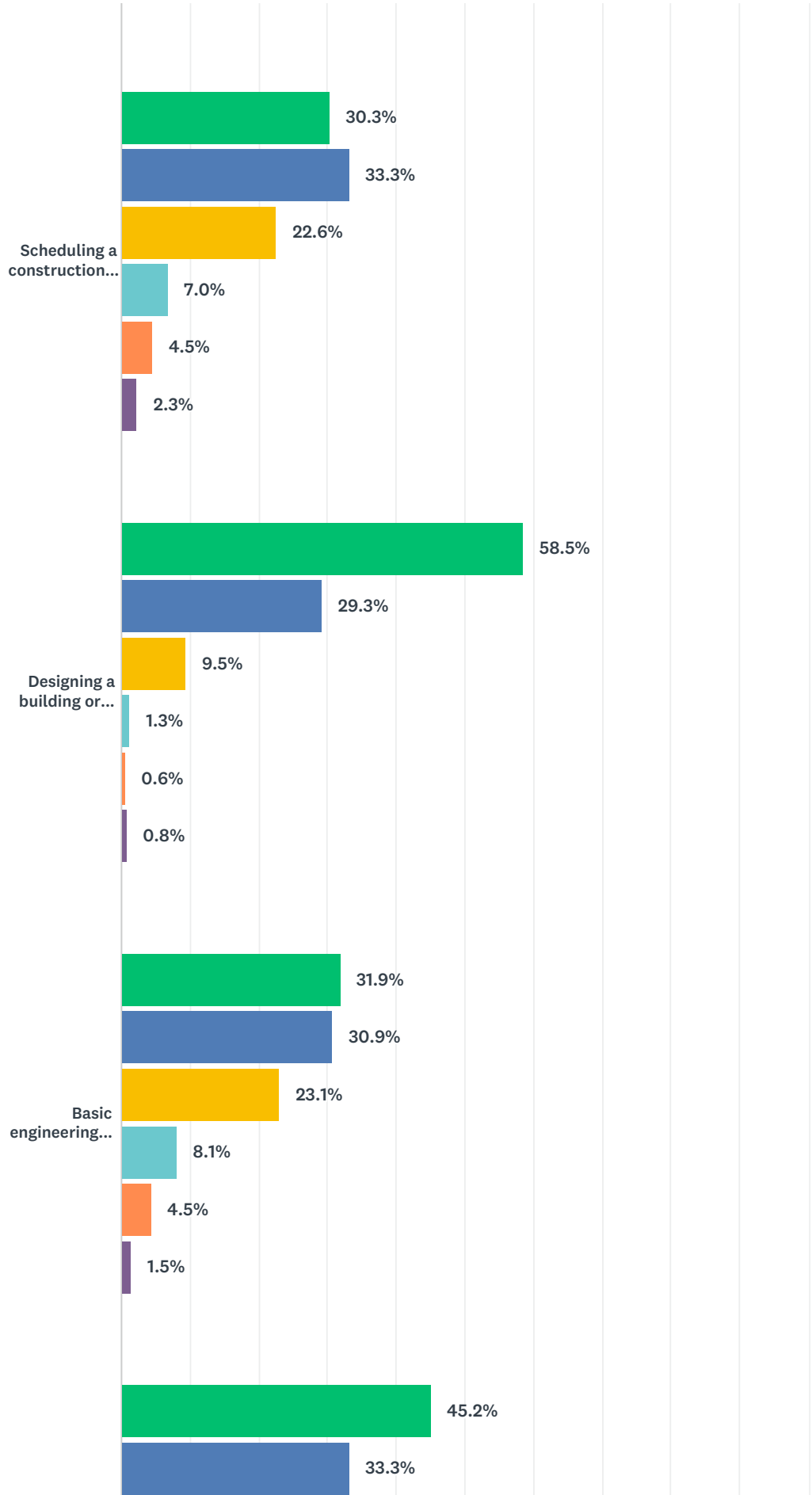
I learned how to work better with people whose backgrounds and ideas are different from mine.	46.3% 1,093	24.0% 567	22.2% 523	2.7% 64	0.7% 17	4.1% 96	2,360	4.17
My ability to communicate orally in small groups and before large audiences improved.	45.2% 1,066	25.3% 597	20.9% 494	4.3% 101	0.9% 22	3.4% 80	2,360	4.13
I learned better how to communicate graphically (using, for example, sketches, diagrams, renderings).	45.7% 1,078	24.7% 582	21.9% 516	4.4% 103	0.8% 18	2.7% 63	2,360	4.13
I learned how to manage time more effectively (e.g., meet deadlines, make and follow work plan).	36.7% 865	25.9% 612	23.8% 562	6.8% 160	1.5% 35	5.3% 126	2,360	3.95

Q43 Participation in ACE taught me about... (answer all parts)

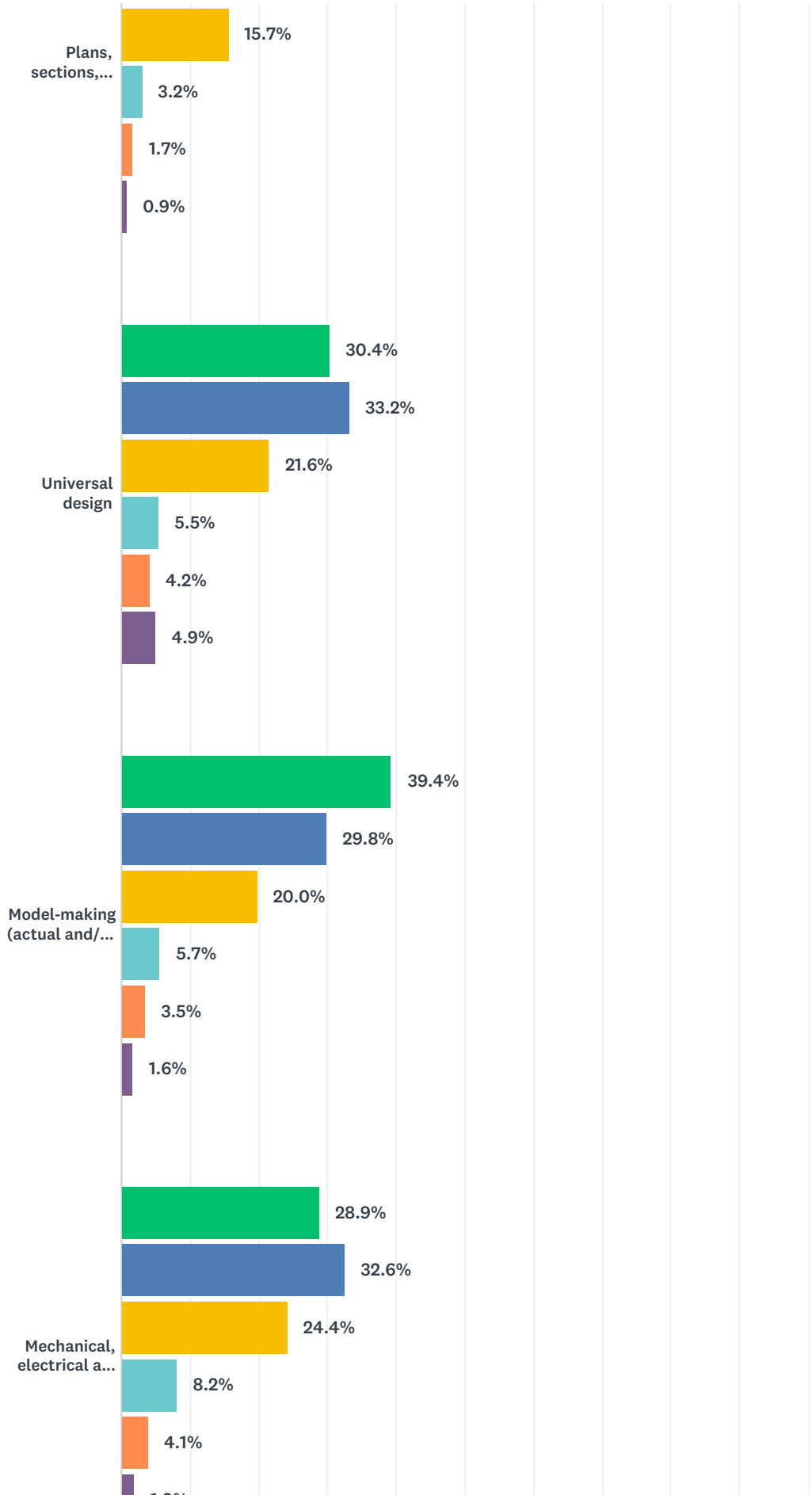
Answered: 2,302 Skipped: 1,123



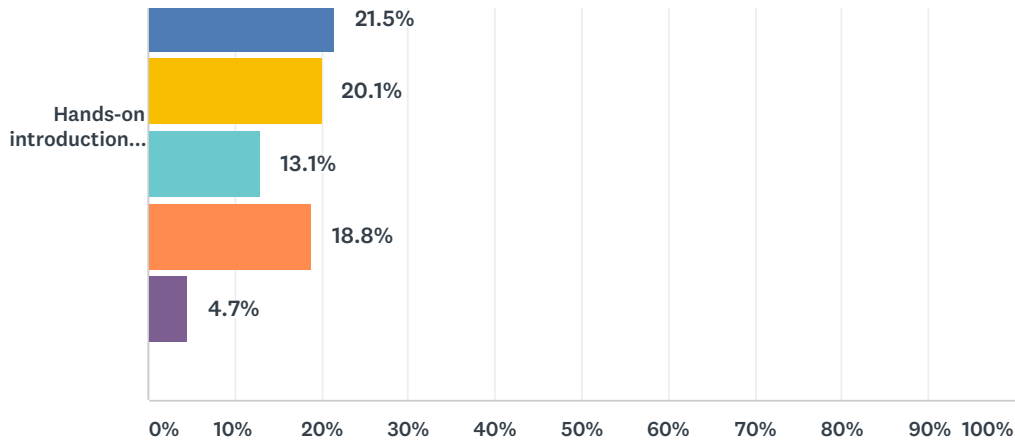
2019 ACE Mentor Program Survey



2019 ACE Mentor Program Survey



2019 ACE Mentor Program Survey



■ A Lot
 ■ Fair Amount
 ■ A Little Bit
 ■ Hardly at all
 ■ Not at all
 ■ No Opinion

	A LOT	FAIR AMOUNT	A LITTLE BIT	HARDLY AT ALL	NOT AT ALL	NO OPINION	TOTAL	WEIGHTED AVERAGE
Sustainable (green) design and construction	28.8% 662	40.7% 935	22.7% 521	4.1% 95	1.9% 43	1.7% 40	2,296	3.92
Estimating construction costs	27.0% 620	33.9% 777	24.7% 567	8.2% 187	4.5% 103	1.7% 39	2,293	3.72
Scheduling a construction project	30.3% 691	33.3% 758	22.6% 515	7.0% 159	4.5% 103	2.3% 52	2,278	3.80
Designing a building or structure	58.5% 1,340	29.3% 672	9.5% 218	1.3% 29	0.6% 14	0.8% 18	2,291	4.45
Basic engineering principles (e.g., tension and compression, loads)	31.9% 734	30.9% 709	23.1% 531	8.1% 186	4.5% 103	1.5% 35	2,298	3.79
Plans, sections, elevations, and perspectives	45.2% 1,038	33.3% 766	15.7% 362	3.2% 74	1.7% 39	0.9% 20	2,299	4.18
Universal design	30.4% 697	33.2% 761	21.6% 496	5.5% 127	4.2% 97	4.9% 113	2,291	3.84
Model-making (actual and/or virtual)	39.4% 904	29.8% 684	20.0% 458	5.7% 131	3.5% 80	1.6% 37	2,294	3.98
Mechanical, electrical and plumbing infrastructure of a building	28.9% 663	32.6% 747	24.4% 558	8.2% 187	4.1% 93	1.9% 43	2,291	3.76
Ability to read drawings/blueprints	36.5% 835	34.1% 781	20.2% 462	4.7% 108	3.0% 69	1.4% 33	2,288	3.98
Using a scale to measure dimensions from a drawing and to draw objects to scale	39.1% 893	31.8% 728	18.9% 432	5.3% 121	3.0% 69	1.9% 43	2,286	4.01
Computer-aided design (Revit, Google Sketchup, AutoCAD, etc.)	34.5% 792	23.5% 539	19.9% 456	9.8% 225	9.5% 217	2.8% 64	2,293	3.66
Hands-on introduction to one or more of the skilled trades (e.g., bricklaying, carpentry)	22.0% 506	21.5% 493	20.1% 461	13.1% 300	18.8% 431	4.7% 107	2,298	3.16

Q44 Please share any reactions to the ACE Mentor Program and explain how it has affected you, or not.

1,265 responses, running 60 pages ,can be read in full report