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2018

Studying Underlying Characteristics of Computing and Engineering Student Success (SUCCESS) Survey

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Recommended Citation

Berger, Edward J.; Godwin, Allison; Chen, John; Widmann, James M.; Self, Brian P.; Gates, Ann Q.; Scheidt, Matthew; Senkpeil, Ryan R.; and Ge, Julianna Sun, "Studying Underlying Characteristics of Computing and Engineering Student Success (SUCCESS) Survey" (2018). *School of Engineering Education Working Papers*. Paper 4. https://docs.lib.purdue.edu/enewp/4

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College of Engineering





ENGINEERING EDUCATION

a partnership between California Polytechnic University, Purdue University, and University of Texas at El Paso

SUCCESS

Studying Underlying Characteristics of Computing and Engineering Student Success

Information about this survey

We are interested in your attitudes, mindsets, beliefs, and belongingness in engineering and computing majors. Please select the best choice for each item and answer as many questions as possible. There are no right or wrong answers; just do your best.

Instructions

- · You must be 18 years or older to participate.
- The survey will take approximately 25 minutes to complete.
- Completion of this survey will NOT affect your grade in any course in any way.
- We will ask for contact information (email) to enter your name in a raffle (details on back of this sheet) for an Amazon gift card as a thank you for completing this survey. This information is voluntary and will not be shared with any third party.
- If you have questions or concerns, please contact Professor Ed Berger (success-project@purdue.edu).
- You can contact the Purdue University Human Research Protection Program at (765) 494-5942 if you have any questions regarding your rights as a participant.

In this survey, you should interpret statements like "I feel comfortable in engineering" to be inclusive of all engineering and computing majors.



Please continue to next page

What is the purpose of this study?

Purdue, Cal Poly, and UTEP are collaborating to understand how non-cognitive and affective factors (defined as personality and other innate characteristics and behaviors) impact academic performance of undergraduate engineering students. Understanding this is important, as it will allow the community of educators to better understand the mechanisms of success and failure among their students.

What will I do if I choose to be in this study?

You will be asked to complete a short survey by someone at your institution, no longer than 25 minutes, in which we ask you questions that probe your learning preferences, background information, study habits in different contexts, attitudes, behaviors, personality, and activities during the school year. The survey will be completed on paper.

How long will I be in the study?

Your participation in the study includes completing this survey.

What are the possible risks or discomforts?

The risks of this study are minimal and no greater than any risks you would encounter in daily life. Breach of confidentiality is a risk associated in participating in this study. Safeguards are in place to protect your information. All information will be de-identified prior to sharing across institutions.

Are there any potential benefits?

There are no direct benefits to participating in this study. You may enjoy reflecting about your attitudes about your college experience.

Will I receive payment or other incentive?

All participants who fully complete the survey before the survey closure date will automatically be entered into a drawing to receive one of three \$50 Amazon gift cards at each school. This random drawing will take place promptly after the closure date of the survey, and winners will be notified by email with instructions of how to claim their payment. The odds of winning depends upon how many people complete the survey, but we estimate the odds to be no greater than 2.5%.

Are there costs to me for participation?

There are no costs to you for participating in this study.

Will information about me and my participation be kept confidential?

All digital data files will be stored on the Purdue Data Depot, a digital repository with a level of security appropriate for storage of personal information such as that collected in this study. Only the PI and co-investigators named on this protocol will have access to the data files in de-identified form. Research results will be presented in aggregate form, and all data analysis will be performed on the de-identified dataset. The project's research records may be reviewed by the National Science Foundation and all collaborating institutions' oversight regulatory boards.

What are my rights if I take part in this study?

Your participation in this study is voluntary. You may choose not to participate. Because the data is collected anonymously, after you complete the survey there is no way to remove your data from the data set.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions (if any) have been answered. By completing the survey, I am expressing my consent to participate in this study. If I desire, I will print a copy of this information form for my records.

ii.

dependent on your institutional context. Choose the option that BEST describes your major.												63 62
		-										61
\bigcirc	Aero/Astronautical Engineering	\bigcirc	Environmen			ical Eı	nginee	ering				60 59 58 57
0	Agricultural and Biological / Biosystems Engineering		Industrial En									59
\bigcirc	Architectural Engineering	Ο	Information	Techno	logy	y						58
Ο	Bioengineering / Biomedical Engineering	Ο	Manufacturi	ing Engi	inee	ring						57
\bigcirc	Chemical Engineering	Ο	Materials En	ngineeri	ng /	Mater	ial Sc	ience a	and Ei	nginee	ring	56
Ο	Civil Engineering	0	Mechanical	Engine	ering	y.				-	-	55
\bigcirc	Computer Engineering	0	Multidiscipl	inary / 1	Inter	discip	linary	/ Gen	eral E	Engine	ering	54
Ō	Computer Science		Nuclear Eng							U	C	53
$\overline{\bigcirc}$	Construction Management Engineering		Other STEN			egree						52
Õ	Electrical Engineering		Other non-S			0	ree					51
õ	Engineering Physics	Õ	Software En									50
\bigcirc	2	\cup	Solonia e Eli	8	-0							49
Q2.	What year are you in college?	Q3.	. Are you a t	ransfer	stu	dent?						56 55 54 53 52 51 50 49 48 47
\bigcirc	1st Year 2nd Year	\bigcirc	Yes	O N	0							46
õ	3rd Year O 4th Year or Higher	\smile		<u> </u>								46 45
\cup				V	ery						Very	44
04	How accurately do the following describe you now?			inacc	-						curately	
ν - γ	now accuracily to the following describe you now.			mace	1 1	2	3	4	5	6	7	42
a.	Often forget to put things back in their proper places					\bigcirc	0	0	0	0	\bigcirc	41
a. b.	Have a kind heart				0	Ŏ	0	0	0	0		40
					0	0	0	0	0	$\overline{\mathbf{O}}$	0	
C.	Make a mess of things				$\overline{\bigcirc}$		\mathbf{O}	\mathbf{O}	\mathbf{O}	\mathbf{O}	\mathbf{O}	20
d.	Am quiet around strangers				0	0	0	0	0	\mathbf{O}	0	30
e.	Keep in the background				\bigcirc	0	0	0	0	\mathbf{O}	0	37
f.	Sympathize with others' feelings				0	0	0	0	0	0	0	36
g.	Leave my belongings around				\bigcirc	0	0	0	0	000000000000000000000000000000000000000	0	39 38 37 36 35 34 33 32 31
h.	Feel others' emotions				0	0	0	0	0	0	0	34
i.	Don't talk a lot				\bigcirc	0	0	0	0	0	0	33
j.	Have frequent mood swings				0	0		0	0	0	0	32
k.	Have excellent ideas				0	0	0		0	0	0	
1.	Have a vivid imagination				0	0	0	0	0	0	0	30
m.	Change my mood a lot				Ο	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	29
n.	Am full of ideas				0	0	0	0	000	0	0	30 29 28 27
о.	Get upset easily				Ο	0	0	0	0	0	\bigcirc	27
												26
												25
				Str	ong	ly				St	trongly	24
Q5.	To what extent do you agree or disagree with the following	ng sta	atements:	dis	agre	e					agree	23
		-			1	2	3	4	5	6	7	22
a.	I feel comfortable asking a faculty member for help with a pe	erson	al problem		Ο	0	0	0	0	0	0	21
b.	Faculty connect relevant topics to my major				Ο	0	0	0	0	0	0	20
c.	I feel that a faculty member would be sensitive to my difficu	lties i	if I shared the	em	Ο	0	0	0	0	0	0	19
d.	I see faculty members as role models				Õ	Ó	Ó	Ō	Ó	Ó	Ō	18
e.	I feel comfortable socializing with a faculty member outside	of cl	ass		Õ	Õ	Õ	Õ	Õ	Õ	Ŏ	17
f.	I feel comfortable asking a faculty member for help if I do not				õ	Õ	Õ	Õ	Õ	Õ	Õ	16
	course-related material				<u> </u>	Ŭ	Ŭ	Ŭ	Ŭ	\sim	Ŭ	15
g.	I feel comfortable seeking help from a faculty member befor	e or a	after class		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	14
	I feel comfortable talking about a problem with faculty	0 01 0			ŏ	Ŏ	Ŏ	Õ	Ŏ	ŏ	Õ	13
i.	I feel that a faculty member would take the time to talk to me	if I	needed heln		ŏ	Õ	Õ	$\overline{\bigcirc}$	Õ	$\tilde{\mathbf{O}}$	$\tilde{\mathbf{O}}$	12
	If I had a reason, I would feel comfortable seeking help from				$\overset{\circ}{\frown}$	$\overline{0}$	Õ	$\overline{0}$	$\overline{0}$	$\overline{0}$	$\tilde{\mathbf{O}}$	11
J.	outside of class time (i.e., during office hours, etc.)	1 a 1 a	carry memoer	•	\cup	\cup	\cup	\cup	\cup	\cup	\cup	10
1-	I know faculty who are like me				\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\cap	\bigcirc	9
-	I feel that a faculty member would be sympathetic if I was up	neat										8
l. m			when I tall-	ad a	$\overline{0}$	0	0				0	7
m.	I feel that a faculty member really tried to understand my pro-	blem	i when i talke	eu	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
	about it											6
		- •										5
	PLEASE DO NOT WRITE IN THIS ARE								IC		רואו	4
	<u>0</u> 00000000000000000000000000000000000								[S]	ΓK	IAL]	3
		- 	Please co		4-	novi -						1
		1	riedse CO	ทาเทานย	ιU	ΙΙΖΧΪΙ	Jaye					

63 62 61]] Q6	. To what extent do you agree or disagree with the following statements:	Strongl disagre 1	-	4	Strongly agree 5 6 7					
60] <mark>a.</mark>	I do certain things that are bad for me, if they are fun	\bigcirc	0	3	0	0	0	\bigcirc		
59] b.	Pleasure and fun sometimes keep me from getting work done	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc		
58] c.	Sometimes I can't stop myself from doing something, even if I know it is wrong	\bigcirc	\bigcirc	0	0	0	\bigcirc	\bigcirc		
57] d.	I often act without thinking through all the alternatives	0	\bigcirc	0	0	0	0	0		
56] <mark>e</mark> .	I am good at resisting temptation	\bigcirc	0	0	0	0	\bigcirc	0		
55] f.	I have a hard time breaking bad habits	0	\bigcirc	0	0	0	0	0		
54] <mark>g.</mark>	I wish I had more self-discipline	0	\bigcirc	0	0	0	0	\bigcirc		
53] h.	People would say that I have very strong self-discipline	0	0	0	0	0	0	0		
52]										
51]										
50]		Not at					Ver	y much		
49] Q7	. As a student:	all						SO		
48]		1	2	3	4	5	6	7		
47] <mark>a.</mark>	I have experienced frustrations due to delays in reaching my goals	\bigcirc	0	0	0	0	0	\bigcirc		
46] b.	I have experienced daily hassles which affected me in reaching my goals	0	0	0	0	0	0	0		
45] c.	I have experienced lack of resources (money for auto, books, etc.)	0	0	0	0	0	0	0		
44] d.	I have experienced failures in accomplishing the goals that I set	0	0	0	0	0	0	0		
43] e.	I have not been accepted socially (became a social outcast)	0	0	0	0	0	0	0		
42] f.	I have experienced dating frustrations	0	0	0	0	0	0	0		
41] g.	I feel I was denied opportunities in spite of my qualifications	0	0	0	0	0	0	0		
40]										
39]										
38]		Not at					Ver	y much		
37] Q8	. I have experienced conflicts which were:	all						SO		
36]		1	2	3	4	5	6	7		
35	a.	Produced by two or more positive options	0	0	0	0	0	0	\bigcirc		
34] b.	Produced by two or more negative options	0	0	0	0	0	0	0		
33] c.	Produced when a goal had both positive and negative options	0	0	0	0	0	0	0		
32]										
31]										
	1							.	-		

5 9 Q	V. As a student:	Not at all					Ver	y much so
3		1	2	3	4	5	6	7
7 <mark>a.</mark>	I have experienced frustrations due to delays in reaching my goals	0	0	0	\bigcirc	0	\bigcirc	\bigcirc
b.	I have experienced daily hassles which affected me in reaching my goals	\bigcirc	Ο	0	0	0	0	0
5 c.	I have experienced lack of resources (money for auto, books, etc.)	\bigcirc	\bigcirc	0	0	0	\bigcirc	\bigcirc
4 d.	I have experienced failures in accomplishing the goals that I set	\bigcirc	Ο	0	0	0	0	0
3 e.	I have not been accepted socially (became a social outcast)	\bigcirc	\bigcirc	0	0	0	\bigcirc	\bigcirc
2 f.	I have experienced dating frustrations	\bigcirc	Ο	0	0	0	0	0
l g.	I feel I was denied opportunities in spite of my qualifications	0	\bigcirc	0	0	0	\bigcirc	\bigcirc

В			Not at	,				Ver	y much
7 (Q8	. I have experienced conflicts which were:	all						SO
6			1	2	3	4	5	6	7
5	a.	Produced by two or more positive options	0	0	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
4 1	b.	Produced by two or more negative options	0	0	0	0	0	0	0
3 (c.	Produced when a goal had both positive and negative options	\bigcirc						

30 29 28	Q9	. I have experienced pressures:	Not at all 1	2	3	4	5	Vei 6	ry much so 7
27 26	a.	As a result of competition (on grades, work, relationships with spouse and/or friends)	0	0	0	0	0	0	0
25	b.	Due to deadlines (papers due, payments to be made, etc.)	0	0	0	0	0	0	0
24	c.	Due to an overload (attempting too many things at one time)	0	\bigcirc	\bigcirc	0	0	0	0
23 22 21 20 19	d.	Due to interpersonal relationships (family and/or friends, expectations, work responsibilities)	○ Not at	0	0	0	0) Vei	Ory much
18	Q1	0. I have experienced:	all						so
17	-	•	1	2	3	4	5	6	7
16	a.	Rapid unpleasant changes	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	0	0
15	b.	Too many changes occurring at the same time	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
14	c.	Change which disrupted my life and/or goals	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
13 12 11			Not at					Vei	ry much

) }	Q1	0. I have experienced:	Not at all		Very much so						
7		-	1	2	3	4	5	6	7		
5	a.	Rapid unpleasant changes	0	0	0	0	0	0	\bigcirc		
5	b.	Too many changes occurring at the same time	0	0	0	0	0	0	0		
1	c.	Change which disrupted my life and/or goals	0	0	0	0	0	0	\bigcirc		
_											

11 10 9	Q1	1. As a person:	Not at all 1	2	3	1	5	Vei 6	y much so 7
8	a.	I like to compete and win		\bigcirc	\mathbf{O}	•	\mathbf{O}	Ö	\mathbf{O}
7	b.	I like to be noticed and be loved by all	Õ	Õ	Õ	Õ	Õ	Õ	Õ
6	c.	I worry a lot about everything and everybody	0	0	0	0	0	0	0
5	d.	I have a tendency to procrastinate (put off things that have to be done)	0	0	0	0	0	0	0
4	e.	I feel I must find a perfect solution to the problems I undertake	0	0	0	0	0	0	\bigcirc
3	f.	I worry and get anxious about taking tests	0	Ο	Ο	0	Ο	0	0
2									
1									

		Not at					Ver	ry much	63
Q1	2. With reference to stressful situations, I have:	all						SO	62
		1	2	3	4	5	6	7	61
a.	Experienced physical reactions (sweating, biting fingernails, headaches, etc.)	0	\bigcirc	0	0	0	0	0	60
b.	Experienced fear, anxiety, worry, frustration, etc.	0	0	0	0	0	Ο	0	59
c.	Cried, was irritable towards others, separated myself from others, indulged	0	\bigcirc	0	0	0	0	0	58
	excessively, etc.								57
d.	Thought about and analyzed how stressful the situations were	0	0	0	0	0	Ο	0	56
e.	Thought and analyzed whether the strategies I used were most effective	0	0	0	0	0	0	0	55
f.	Engaged in personal support (exercised, meditated, etc.)	0	0	0	0	0	0	0	54
g.	Sought family support (talked to parents, siblings, etc.)	0	0	0	0	0	0	0	53
h.	Sought peer support (talked to friends, classmates, etc.)	Ō	Ó	Ō	Ō	Ō	Ō	Ō	52
i.	Sought institutional support (attended support groups, visited counseling services,	Ō	0	0	Ó	0	Ó	0	51
	talked with an advisor, visited Dean of Students, etc.)								50
									49

Q13. Indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

Almost									43 42
		1	2	2	4	_	1	lways	41
a.	It seems that I am "running on automatic," without much awareness of what I'm doi	ing 🔿		3	4	5	0		40
b.	I rush through activities without being really attentive to them	0	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	39
c.	I do jobs or tasks automatically, without being aware of what I'm doing	Ō	0	0	0	0	Ó	0	38
d.	I find myself doing things without paying attention	Ō	Ó	Ó	Ó	Ó	Ó	Ō	37
									36
									35
		Not at	,				Ver	y much	34
Q14	4. How important are the following factors for your future career satisfaction?	all						SO	33
		1	2	3	4	5	6	7	32
a.	Making money	\bigcirc	31						

a.	Making money	\bigcirc							
b.	Becoming well known	0	Ο	0	Ο	0	0	0	
c.	Helping others	0	0	0	0	0	0	\bigcirc	
d.	Supervising others	0	0	0	0	0	0	0	
e.	Working with people	0	0	0	0	0	0	\bigcirc	
f.	Inventing / designing things	0	0	0	0	0	0	0	
g.	Developing new knowledge and skills	0	0	0	0	0	0	0	

Q1 fiel	5. Please rate the likelihood of you choosing a career in each of the following ds.	Not at a likely	11					tremely ikely	22 21 20
		1	2	3	4	5	6	7	19
a.	Academia (higher education)	0	0	0	0	0	0	\bigcirc	18
b.	Engineering/Computer Science (industry)	0	0	0	0	0	0	0	17
c.	Entrepreneurship / Start a company	0	0	0	0	0	0	\bigcirc	16
d.	Government / Policy	0	0	0	0	0	0	0	15
e.	K-12 Education	0	0	0	0	0	0	\bigcirc	14
f.	Law	0	0	0	0	0	0	0	13
g.	Medicine / Health	0	0	0	0	0	0	0	12
h.	Non-profit / NGO	0	0	0	0	0	0	0	11
i.	Other	0	0	0	0	0	0	0	10
									9

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[SERIAL]

63	-	6. Please respond to each of the following statements to the best of your	Strong	•					trongly
62 61	ab	ility.	disagre 1	e 2	3	4	5	6	agree 7
60	a.	New ideas and projects sometimes distract me from previous ones		\bigcirc	0		\mathbf{O}	Ö	\mathbf{O}
59	b.	Setbacks don't discourage me. I don't give up easily	Õ	Õ	Õ	Õ	Õ	Õ	Õ
58	c.	I have been obsessed with a certain idea or project for a short time but later	0	0	0	0	0	0	\bigcirc
57		lost interest							
56	d.	I am a hard worker	0	0	0	0	0	0	\bigcirc
55	e.	I often set a goal but later choose to pursue a different one	0	0	0	0	0	0	\bigcirc
54	f.	I have difficulty maintaining my focus on projects that take more than a few	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
53		months to complete							
52	g.	I finish whatever I begin	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
51	h.	I am diligent; I never give up	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
50									
49									
48			Not at a	ıll				V	ery true
47	Q1	7. Please respond to the following items to the best of your ability.	true of 1	ne					of me
46			1	2	3	4	5	6	7

48 47	Q1	7. Please respond to the following items to the best of your ability.	Not at a true of 1			Very tru of me				
46			1	2	3	4	5	6	7	
45	a.	When I take a test I think about how poorly I am doing compared to other student	is 🔘	0	0	\bigcirc	0	\bigcirc	0	
44	b.	When I take a test I think about items on other parts of the test I can't answer	0	0	0	0	0	0	0	
43	c.	When I take tests I think of the consequences of failing	0	0	0	0	0	0	0	
42	d.	I feel my heart beating fast when I take an exam	0	0	0	0	0	0	0	
41	e.	I have an uneasy, upset feeling when I take an exam	0	0	0	0	0	0	0	
40										

38 37 36	37Not at all36Q18. Please respond to the following items to the best of your ability.true of me													
35			1	2	3	4	5	6	7					
34	a.	I rarely find time to review my notes or readings before exams	0	0	0	0	0	\bigcirc	\bigcirc					
33	b.	I usually study in a place where I can concentrate on my course work	0	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc					
32	c.	I make good use of my study time for my courses	0	0	0	0	0	0	0					
31	d.	I make sure I keep up with the weekly readings and assignments for my courses	0	0	0	0	0	\bigcirc	0					
30	e.	I find it hard to stick to a study schedule	0	0	0	0	0	0	\bigcirc					
29 28	f.	I often find that I don't spend very much time on my courses because of other activities	0	0	0	0	0	0	0					
27	g.	I attend class regularly	0	0	0	0	0	0	0					
26 25 24	h.	I have a regular place set aside for studying	0	0	0	0	0	0	0					

Q19. How are you funding your education (select all that apply)?

Help from parents \bigcirc

39

23 22

21 20 19

18

17

16

15 14

- 0 0 Private student loans
- Federal student loans
- Ο Scholarships and/or grants

- Working (part time or full time) Ο
- Ο Other (Please describe)
- O Prefer not to answer

14 13 12 11	Q2	0. Please answer the following with the answer that best describes you.	Strongly disagree 1		3	4		trongly agree 7	
10	a.	I feel thankful for the opportunity to learn so many new things	0	Ο	0	0	0	0	\bigcirc
9	b.	I appreciate the things I have learned in my college classes	\bigcirc	Ο	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
8	c.	I am grateful to the professors and other students who have helped me in class	0	Ο	0	0	0	0	\bigcirc
7	d.	I am so thankful that I'm getting a college education	\bigcirc	Ο	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
6	e.	I am grateful for the people who have helped me succeed in college	\bigcirc	0	0	\bigcirc	0	\bigcirc	\bigcirc
5	f.	If I had to list everything I felt grateful for about my academic experience at my	0	Ο	0	0	0	0	0
4		university, it would be a very long list							
3									
2									
1									

	Q21. Please answer the following with the answer that best describes you. disagree Strongly 63 agree 62													
Q2	1. Please answer the following with the answer that bes	t desc	ribes you.			-	`	-		62				
0	I don't think I nonconally can do much to increase my inte	11:000	22				3 4	5 6		60				
<mark>a.</mark> b.	I don't think I personally can do much to increase my inter Regardless of my current intelligence level, I think I have			hange	0				$) \bigcirc \\) \bigcirc \\ $	59				
	it quite a bit				<u> </u>	0		<u> </u>		58				
c.	I can learn new things, but I don't have the ability to chan				0	\bigcirc	$\sum_{i=1}^{n} O_{i}$	\bigcirc	$)$ \bigcirc	57				
d.	With enough time and effort I think I could significantly i	improv	ve my intel	ligence	0	O)	O	$)$ \bigcirc	56				
	level				\sim			<u> </u>		55				
e.	My intelligence is something about me that I personally c		nange very	much	0	\bigcirc	$\sum_{i=1}^{n} O_{i}$	\bigcirc \bigcirc	$)$ \bigcirc	54				
f.	I believe I can always substantially improve on my intelli	\bigcirc		\mathbf{O}		53								
g.	I believe I have the ability to change my basic intelligence		O		52 51									
1.	over time		\circ		50									
h.	To be honest, I don't think I can really change how intelli	igent I	am		0	\mathbf{O}		00		49				
02	2. How many hours per week do you spend on each of t				48									
Hours per week Mo														
			25-30	than 30	47									
a.	Working for pay on campus	Ô	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	45				
	a complete hay on our has	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	44				
b.	Working for pay off campus	\bigcirc	0	0	0	0	0	0	0	43				
		Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	42				
c.	Commuting to class (driving, walking, etc.)	0	0	0	0	0	0	0	0	41				
		Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	40				
d.	Relaxing and socializing (watching TV, partying, etc.)	0	0	0	0	0	0	0	0	39				
										38				
e.	Providing care for dependents living with you (parents,	0	0	0	0	0	0	0	0	37				
	children, spouse, etc.)									36				
f.	Preparing for class (studying, reading, writing, doing	0	0	0	0	0	0	0	0	35				
	homework or lab work, analyzing data, rehearsing, and									34				
	other academic activities)									33				
g.	Participating in academic co-curricular activities	0	0	\bigcirc	0	0	0	0	0	32				
	(engineering/computing competitions such as hackathon									31				
	and Baja, engineering/computing societies such as ASME	Ξ								30				
	or ACM, etc.)									29				
h.	Participating in non-academic co-curricular activities	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	28				
	(organizations, campus publications, student government,	,								27				
	fraternity or sorority, intercollegiate or intramural sports,									26				
	etc.)									25				
										24				
	3. We would like to know about how you perceive your				<i>a</i>				a	23				
	ceived experiences. Please indicate your agreement or	disagr	eement wi	ith	Strong				Strongly	22				
eac	h of the following statements using the scale below:				disagre				agree	21				
					1	2 3	3 4 • •	5 6	7	20				
a.	My life has a clear sense of purpose				0	0		0 0		19				
b.	I have found a satisfactory meaning in life				0	0 (0 0		18 17				
c.	I know what gives meaning to my life				0	0 (\mathbf{O}		17				
01	A We would like to be one obout how won fool that you f	24 .			No4 o4			T						
	4. We would like to know about how you feel that you f	it in e	ngineering	g and	Not at all			v	ery much	14				
bei	ong in your engineering community.					<u>م</u>	7 4	= (SO 7	13				
0	I feel comfortable in angineering				1	$\begin{array}{c} 2 \\ \hline \end{array}$	3 4	5 6	7	12				
a. b.	I feel comfortable in engineering I feel I belong in engineering				0)			11				
о. с.	I enjoy being in engineering					0 0		0 0		10				
d.	I feel comfortable in my engineering classes				$\tilde{\mathbf{O}}$					9				
e.	I feel supported in my engineering classes				Ŏ	0 (8				
с. f.	I feel that I am part of my engineering classes				\widetilde{O}	\tilde{O}	$\tilde{\mathbf{o}}$	0 0		7				
g.	I feel that my engineering classes are large				õ		$\tilde{\mathbf{D}}$	ÕČ	\tilde{O}	6				
0	, , , , , , , , , , , , , , , , , , , ,								Ŭ	5				
	PLEASE DO NOT WRITE IN THIS A	AREA								4				
	000000000000000000000000000000000000000							ISEF	RIAL]	3				
									···· · —]	2				
										1				

63		5. The following questions relate to your attitudes and beliefs about your	C.					G	
62 61	_	eriences in engineering classes and in your engineering major. Please rate Ir agreement for each item.	Strong disagr	-					trongly agree
60			1	2	3	4	5	6	7
59 58	a.	I will use the information I learn in my engineering classes in other classes I will take in the future	0	0	0	0	0	0	0
57	b.	I am confident about my choice of major	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
56	с.	Engineering is the most rewarding future career I can imagine for myself	Ŏ	Õ	Õ	Õ	Õ	Õ	Õ
55	d.	My interest in an engineering major outweighs any disadvantages I can think of	Õ	Õ	$\tilde{\circ}$	Ŏ	Õ	Õ	Ŏ
54	e.	I want to be an engineer	ŏ	Ŏ	Õ	Ŏ	Õ	Õ	Ŏ
53	f.	I will use the information I learn in engineering classes in the future	ŏ	ŏ	Õ	ŏ	ŏ	Õ	Õ
52 51	g.	What I learn in my engineering classes will be important for my future occupational success	Õ	Õ	Õ	Õ	Õ	Õ	Õ
50	h.	I do not connect my future career to what I am learning in my engineering classes	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
49	i.	My future career determines what is important in my engineering classes	Õ	0	Õ	0	Õ	Õ	Õ
48	ı. j.	I expect to do well in my engineering classes	$\overline{\mathbf{O}}$	0	$\overline{\bigcirc}$	Õ	Õ	Õ	Ŏ
47	j. k.	I am certain I can master the skills being taught in my engineering classes	0	Õ	Õ	0	0	Õ	0
46	к. 1.	I believe I will receive an excellent grade in my engineering classes	$\overline{\mathbf{O}}$	0	$\overline{\bigcirc}$	Õ	Õ	$\widetilde{\mathbf{O}}$	$\tilde{\mathbf{O}}$
45	m.	I am confident I can do an excellent job on the assignments in my engineering		0	$\overline{\mathbf{O}}$	Õ	0	$\overline{\mathbf{O}}$	0
44		classes	0	0	0	0	0	0	0
43	n.	Considering the difficulty of my engineering classes, the teacher, and my skills, I think I will do well in my engineering classes	0	0	0	0	0	0	0
41	0.	It is better to be considered a success at the end of one's life than to be considered	\circ	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
40		a success today			Ŭ	Ŭ	Ŭ		Ŭ
39	p.	The most important thing in life is how one feels in the long run	0	0	0	0	0	0	0
38	q.	It is more important to save for the future than to buy what one wants today	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
37	r.	Long range goals are more important than short range goals	0	0	0	0	0	0	0
36	s.	What happens in the long run is more important than how one feels right now	\bigcirc	\bigcirc	\bigcirc	0	0	0	\bigcirc
35	t.	I don't think much about the future	0	0	0	0	0	0	0
34	u.	I don't like to plan for the future	\bigcirc	0	0	\bigcirc	0	0	0
33 32	v.	It's not really important to have future goals for where one wants to be in five to ten years	0	0	0	0	0	0	0
02		ten years							
31	w		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
31	w. x	One shouldn't think too much about the future	0	0	0	0	0	0	0
30	w. x.		0	0	0	0	0	0	0
30 29		One shouldn't think too much about the future	0	0	0	0	0	0	0
30		One shouldn't think too much about the future	Strong)) lv	0	0	0	S	O O trongly
30 29 28 27	x.	One shouldn't think too much about the future Planning for the future is a waste of time	6		0	0	0		0.
30 29 28	x.	One shouldn't think too much about the future	disagr	ee	3	4	5		agree
30 29 28 27 26	x.	One shouldn't think too much about the future Planning for the future is a waste of time	6		○ ○ 3 ○	0 0 4	○ ○ 5 ○		0.
30 29 28 27 26 25	x. Q20	One shouldn't think too much about the future Planning for the future is a waste of time 6. To what extent do you agree or disagree with the following statements:	disagr 1	ee 2	○ ○ 3 ○	\bigcirc	0	6 0	agree 7
30 29 28 27 26 25 24	x. Q20 a.	One shouldn't think too much about the future Planning for the future is a waste of time 6. To what extent do you agree or disagree with the following statements: I see myself as a physics person	disagr 1	ee 2	0	0	0	6 0 0	agree 7 0
30 29 28 27 26 25 24 23	x. Q20 a. b.	One shouldn't think too much about the future Planning for the future is a waste of time 6. To what extent do you agree or disagree with the following statements: I see myself as a physics person I see myself as a math person I feel like an engineer now	disagr 1	ee 2 0 0	00000			6 0 0	agree 7 0
30 29 28 27 26 25 24 23 22	x. Q20 a. b. c.	One shouldn't think too much about the future Planning for the future is a waste of time 6. To what extent do you agree or disagree with the following statements: I see myself as a physics person I see myself as a math person	disagr 1	ee 2	0	0	0	6 0 0 0	agree 7 0 0 0
30 29 28 27 26 25 24 23 22 21	x. Q20 a. b. c. d.	One shouldn't think too much about the future Planning for the future is a waste of time 6. To what extent do you agree or disagree with the following statements: I see myself as a physics person I see myself as a math person I feel like an engineer now I will feel like an engineer in the future I see myself as an engineer	disagro	ee 2 0 0 0	00000		00000	6 0 0 0	agree 7 0 0 0
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eng OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	 7. In general, my gineering classes have: < 30 students 30 - 60 students 60 - 100 students > 100 students > 100 students 	-	score you	current (0 0 0 1 1 2 2 3 3 4 4 5 5 6 7 8 9 received on	(1) (2) (3) (4) (5) (6) (7) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9	or that ye	ti p h	he comm provide y nome ZIF	Did not	he size of form, please 0 0 0 0 1 1 0 2 2 0 3 3 0 4 4 0 5 5 0 6 6 0 7 7 0 8 8 0 9 9	6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				
0	Moth Subtact	200-300	310-400	-	\sim	0		0-800	SAT			4			
a. b	Math Subtest	0	0	0	0	C		0	0			4			
b. c.	Writing Subtest Critical Reading Subtes	t O	0	\bigcirc	0	C		\bigcirc				4			
С.	Critical Reading Subles		\bigcirc	\cup	\bigcirc	C		\bigcirc	\bigcirc			4			
-	1. Please indicate the ap e it.	proximate	score you	received or	n the ACT,	or that y	ou did n	ot			Did not take the	4			
			1-4	5-8 9-1	12 13-16	17-20	21-24	25-28	29-32	33-36	ACT	3			
a.	Math Subtest		0	0 C		0	0	0	0	0	0	3			
b.	English Subtest		Ŏ	Õ Č		Ŏ	Ŏ	Õ	Õ	Ŏ	Õ	3			
c.	Science Reasoning Subt	test	Õ	O C		Õ	Õ	Õ	Õ	Õ	Õ	3			
d.	Reading Subtest		0	0 C		0	0	0	0	0	0	3			
	 Q32. What was the primary language of instruction at the institution you attended before college? English A language closely related to English (Spanish, Portuguese, French, Italian, Romanian, Dutch, Swedish, Afrikaans, Norwegiar A language different than English (Hindi, Russian, Vietnamese, Turkish, Polish, Thai, Serbian, Greek, Hebrew, Finish) A language significantly different than English (Chinese, Arabic, Japanese, Korean) 														
c		U	• • • •		× ×	•						2			
0	American Indian or Ala	ska Native		<u> </u>	Middle East							2			
0	Asian				Native Hawa	aiian or O	ther Paci	fic Island	ler			2			
0	Black or African Ameri				White							1			
\bigcirc	Hispanic, Latino, or Spa	anish origin		ΟI	prefer to id	entify as						1			
Exa	4. Ethnicity. Print your ample of ethnicities inclue an, Southerner (American	de: German,	Korean, N	- Midwesterne	r (Americar			can, Nav	ajo Natio	n, Samoa	an, Puerto				
		PLEASE D		TE IN THIS A	REA										
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63	Q35. Military status. (Fill in all that apply)			
62 61	Not a votoron	O National Guard		
60	Not a veteran	National Guard Newly/Recently of	monoted wateren (within the	last 2 mans)
59	 Active duty Reservist 	Veteran (other)	eparated veteran (within the	last 5 years)
58	 Reservist ROTC 	Veterali (ouler)		
57	U ROIC			
56				
55 54	Q36. How do you describe your gender identity? (H	Fill in all that apply)		
53	○ Female	Agandar		
52	 Female Cisgender 	AgenderGenderqueer		
51	Male	 I prefer to identify 		
50	Transgender		as	
49				
48				
47	Q37. How do you describe your sexual identity? (F	ill in all that apply)		
45	O Heterosexual/ straight	O Asexual		
44	O Homosexual/ gay/ lesbian	 I prefer to identify 	as	
43	O Bisexual			
42				
41				
40	Q38. How do you describe your disability / ability s	status? We are interested	l in this identification rega	rdless of whether vou
39	typically request accomodations for this disability.			
38		(if it if if j)		
37	• A sensory impairment (vision or hearing)	○ A long-term media	cal illness (e.g., epilepsy, cys	stic fibrosis)
36	• A learning disability (e.g., ADHD, dyslexia)	• A mobility impair		,
35	• A mental health disorder		with a disability or impairmer	ıt
34	• A temporary impairment due to illness or injury	• A disability or imp	• •	
33	(e.g., broken ankle, surgery)			
32				
31				
30	Q39. How would your parent(s)/ guardian(s) descri	ibe their gender identitie	es? (Fill in all that apply)	
29	Parent/Guardian #1	0		
28				
27	○ Female	O Agender		
26	O Cisgender	O Genderqueer		
25	O Male	O They prefer to idea	ntify as	
25 24 23 22 21	O Transgender			
23				
22				
21				
	Q40. How would your parent(s)/ guardian(s) descri	ibe their gender identitie	es? (Fill in all that apply)	
20	Q40. How would your parent(s)/ guardian(s) description Parent/Guardian #2	ibe their gender identitie	es? (Fill in all that apply)	
20 19	Parent/Guardian #2		es? (Fill in all that apply)	
20 19 18	Parent/Guardian #2 Female	Agender	es? (Fill in all that apply)	
20 19 18 17	Parent/Guardian #2 Female Cisgender 	AgenderGenderqueer		
20 19 18 17 16	Parent/Guardian #2 Female Cisgender Male	Agender		
20 19 18 17 16 15	Parent/Guardian #2 Female Cisgender 	AgenderGenderqueer		
20 19 18 17 16 15	Parent/Guardian #2 Female Cisgender Male	AgenderGenderqueer		
20 19 18 17 16 15 14 13	Parent/Guardian #2 Female Cisgender Male Transgender	 Agender Genderqueer They prefer to identify the second seco		
20 19 18 17 16 15 14 13 12	Parent/Guardian #2 Female Cisgender Male	 Agender Genderqueer They prefer to identify the second seco	ntify as	
20 19 18 17 16 15 14 13 12 11	Parent/Guardian #2 Female Cisgender Male Transgender	 Agender Genderqueer They prefer to identify the second seco		Parent/Guardian #2
20 19 18 17 16 15 14 13 12 11 10	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for your less than high school diploma	 Agender Genderqueer They prefer to identify the second seco	ntify as	Parent/Guardian #2
20 19 18 17 16 15 14 13 12 11 10 9	 Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years than high school diploma High school diploma/GED	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	Parent/Guardian #2
20 19 18 17 16 15 14 13 12 11 10 9 8	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for year Less than high school diploma High school diploma/GED Some college or associate/trade degree	 Agender Genderqueer They prefer to identify the second seco	ntify as	0
20 19 18 17 16 15 14 13 12 11 10 9 8 7	 Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	Parent/Guardian #2
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years Less than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree Master's degree or higher	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	0
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5	 Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	0
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years Less than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree Master's degree or higher	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	0
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years Less than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree Master's degree or higher	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	0
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	Parent/Guardian #2 Female Cisgender Male Transgender Q41. What was the highest level of education for years Less than high school diploma High school diploma/GED Some college or associate/trade degree Bachelor's degree Master's degree or higher	 Agender Genderqueer They prefer to identify the second seco	ntify as Parent/Guardian #1	0

Q42. Would you describe the occupation of any of your family members as any of the following professions? (Fill in all that apply)

that apply)	Engineering	Computer Science	Other STEM	Non-STEM
Parent/Guardian #1	0	0	0	0
Parent/Guardian #2	0	\bigcirc	0	0
Siblings	0	0	0	0
Other Relative(s)	0	0	0	0

Q43. What category best fits you and your parent(s)' or guardian(s)' background? You can choose not to answer and skip to the next question.

	Born in the United States	Not born in the United States
Parent/Guardian #1	\bigcirc	0
Parent/Guardian #2	\bigcirc	0
Me	0	0

Q44. If you are interested in being entered into a raffle for a \$50 Amazon gift card, please provide your email below.

Your email address:

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_	_	 	 -	 	 	 	 	 -	 	-	 	 	 						

You have reached the end of the survey. Thank you for your time. The insights you have provided here will help the community of engineering and computing educators support their students' success!





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PLEASE DO NOT WRITE IN THIS AREA

Thank you for completing the survey