PACES ONLINE STUDENT SURVEY COHORT A, TIME 1 November 2021, N=15

PRETEST SURVEY (T1)

1. How did you first hear about this program? (check all that apply) $(\mathtt{N=}15)$

14	(1) From a professor
	(2) From a student
1	(3) Email announcement
	(4) Club/organization
	(5) Website
	(6) Other

2. What are you hoping to get out of this program? Why did you apply?

I'm hoping to get good resources and advice

I am just taking this survey as a requirement of my course.

Learning

I am not entirely sure what I would be getting out of this program.

To learn

To learn better studying tips, and good work ethic

I'm hoping to get further guidance on what I'd like to focus on as a career, and applied to get mentors to help me in that process.

Learning more about research tactics and stem opportunities.

I actually don't know what this survey is about, but it was assigned to me.

Not sure just something new to try

I applied from a link from my professor.

- I am hoping to be able to finish school earlier than expected. I want to finish 1 year earlier which is why I applied.
- I am hoping to gather skills for my future career and get more exposure to other stem fields. I applied to further myself into different areas of science and see it for myself in the real world.
- I am hoping to get to know more about the course. I applied because it is part of my GE transfer requirement.

When we ask about "STEM," we mean "Science, Technology, Engineering, and Mathematics."

3. Please indicate how much you disagree or agree with the following statements: $(\mathtt{N=}15)$

(rotated statements	Strongly				Strongly	
in online survey)	disagree	Disagree	Neutral	Agree	Agree	Mean
	(1)	(2)	(3)	(4)	(5)	(1-5)
Science is very	7%	_/	14%	43%	36%	4.0
interesting.						
I plan to	7%	14%	7%	29%	43%	3.9
incorporate science						
into my career.						
I understand the		27%	33%	27%	13%	3.3
types of careers						
that are available						
to scientists.						
I know the steps to		27%	27%	40%	7%	3.3
take to pursue a						
career science.						
Someone like me can		13%	33%	40%	13%	3.5
succeed as a						
scientist.						
I'm aware of STEM		13%	40%	27%	20%	3.5
research and						
internship						
opportunities for						
college students.						

4. What are your career goals? (check all that apply) (N=14)

29%	(1) University-based science researcher/professor
57%	(2) Health professions/medical
	(3) Veterinary science
21%	(4) Science industry or biotechnology
7%	(5) Environmental science
	(6) Energy sector
7%	(7) Government/public policy
14%	(8) K-12 education
29%	(9) Undecided
21%	(10) Other, please specify*

^{*&}quot;Interior design," "PM in Computer Science," "Software engineer,"
"Business owner"

5. Please indicate your level of interest in doing the following: $(\mathbb{N}{=}15)$

(rotated statements in online survey)	Not at all interested (1)	A little (2)	Somewhat (3)	Very	Extremely interested (5)	Mean (1-5)
Taking STEM	7%	20%	20%	13%	40%	3.6
classes in						
college						
Having a STEM	7%	13%	27%	20%	33%	3.6
internship/resea						
rch experience						
during college						
Transferring to		7%	7%		86%	4.6
a four-year						
college						
Graduating from	20%		33%	7%	40%	3.5
a four-year						
college with a						
STEM degree						
Pursuing post-	7%	13%	40%	7%	33%	3.5
graduate work in						
STEM (Master's						
degree, Ph.D.)						
Pursuing a post-	14%	7%	36%	14%	29%	3.4
graduate degree						
in the medical						
field						
(physician,						
nurse,						
pharmacist,						
physical						
therapy, etc.)						

6. Thinking about your career plans with regards to STEM in general, where do you place your plans along this scale? In this case, "STEM" does NOT include the medical field or health professions. (N=15)

13%	(1) Definitely NOT planning to have a career in STEM
33%	(2) Probably not planning to have a career in STEM
20%	(3) Having a career outside of STEM that still
	incorporates STEM
7%	(4) Probably planning a career in STEM
27%	(5) Definitely planning to have a career in STEM

7. Thinking about your career plans with regards to the medical field or health professions, where do you place your plans along this scale? This could include a career as a physician, nurse, physical therapist, pharmacist, dentist, etc. (N=15)

13%	(1) Definitely NOT planning to have a career in the
	medical field or health professions
27%	(2) Probably not planning to have a career in the
	medical field or health professions
13%	(3) Having a career outside of the health professions
	that still incorporates the health professions
27%	(4) Probably planning a career in the medical field or
	health professions
20%	(5) Definitely planning to have a career in the medical
	field or health professions

8. How confident are you in your ability to do the following? (N=14)

(rotated statements in	Not at					
online survey)	all				Extremely	
7,	confident	A little	Somewhat	Very	confident	Mean
	(1)	(2)	(3)	(4)	(5)	(1-5)
Pursue a STEM major in	14%	7%	29%	14%	36%	3.5
college						
Succeed in college-	21%	14%	14%	36%	14%	3.1
level STEM classes						
Quantitative thinking		27%	13%	53%	7%	3.4
and problem solving						
Explain the scientific	8%		39%	23%	31%	3.7
method						
Conduct science	21%	21%	14%	29%	14%	2.9
literature searches						
Give presentations of	21%	14%	21%	29%	14%	3.0
scientific work						
Write up scientific	14%	21%	29%	14%	21%	3.1
research results						
Approach a science	23%	8%	15%	23%	31%	3.3
professor with a						
question						
Communicate scientific	14%	14%	29%	29%	14%	3.1
concepts to the general						
<pre>public (friends/family</pre>						
without a scientific						
background)						
Develop a transfer plan	7%		14%	57%	21%	3.9
to a four-year college						
Transfer to a four-year		7%	14%	36%	43%	4.1
college						
Find STEM resources for	14%	7%	43%	7%	29%	3.3
transfer students at a						
four-year college						
Participate in STEM	21%	21%	14%	21%	21%	3.0
opportunities beyond						
coursework while at a						
four-year college						

9. Please indicate how much you disagree or agree with the following statements: $(\mbox{N=}14\,)$

(rotated statements	Strongly				Strongly	
in online survey)	disagree	Disagree	Neutral	Agree	Agree	Mean
	(1)	(2)	(3)	(4)	(5)	(1-5)
I have STEM peers	14%%	14%	14%	21%	36%	3.5
who support me						
I have a STEM mentor	27%	7%	27%	20%	20%	3.0
who supports me						
I feel a part of the	7%	29%	29%		36%	3.3
STEM community at my						
college						

10. What is your gender? (N=15)

7	(1) Female
6	(2) Male
2	(3) Non-binary
	(4) Prefer to specify:

11. What is your year in college for the 2021/2022 academic year: $(\mathrm{N}{=}15)$

5	(1) First year
5	(2) Second year
4	(3) Third year
1	(4) Other, please specify*

^{*&}quot;Fourth year"

12. Which of the following best describes your ethnicity? (check all that apply) $(N\!\!=\!\!15)$

	(1) African-American/Black
4	(2) Asian-American/Asian
8	(3) Hispanic or Latino/a/x
	(4) Native American or Alaska Native
	(5) Pacific Islander
3	(6) White/Caucasian
2	(7) Prefer to specify*:

^{*&}quot;Persian," "Mixed"

13. Do you identify as a first-generation college student? (N=15)

7	(1) No
6	(2) Yes
2	(3) Not sure
	(4) Other, please specify

14. Which community college is your LACCD home institution? (N=15)

1	(1) LA Valley College
14	(2) Pierce College
	(3) Other, please specify:

15. Have you taken/are you taking STEM classes at a different college aside from your home college? (N=15)

10	(1) No
5	(2) Yes, please specify:

Cal State LA LA Valley College (2)
LA City College LA Trade Tech College

16. Have you declared a major? (N=15)

4	(1) No
11	(2) Yes, please specify:

Behavioral Science/Economics

Business Administration

Computer Science (2)

Criminal Justice

Education/Psychology

English (K-12 Education)

Microbiology (2)

Nursing

"Psychobio (UCLA), Neurobiology (UCI), Cog Sci (Oxy) and more" Psychology

Ask only if they have declared a major:

17. Have you ever changed your major? (N=11)

6	(1) No						
5	(2) Yes,	from	what	did	you	change	it?
	(please specify):						

Biology

Business Information Management

Health

Nursing (2)

18. Did you participate in the 8-week Summer Chemistry Enrichment Program at LAVC, hosted by PASO? (N=15)

15	(1) No
0	(2) Yes, 2021
0	(3) Yes, 2020

19. Please indicate if you have taken or plan to take the following college-level STEM classes:

Note that a few course numbers and offerings differ between LA Pierce College and LA Valley College. (N=15)

	Already Taken (1)	Currently Taking (2)	Definitely Plan to Take (3)	Might Take	Do Not Plan to Take (5)
Anthropology 101 (Human Biological Evolution)	2		2	1	10
Anatomy 1 (Intro to Human Anatomy)	1			8	6
Astronomy 1 (Elementary Astronomy)	2			3	10
Astronomy 5 (Fundamentals of Astronomy)			1	2	12
Biology 6 (General Biology I)	3	1	5	1	5
Biology 7 (General Biology II)	1	2		6	6
Biology 40 (The Science of Biotechnology)				4	10
Biology 110 (Genetics and Biotechnology)	1			4	10
Chemistry 51 (Fundamentals of Chemistry)			1	2	12
Chemistry 60 (Intro to General Chemistry)	5		2	3	5
Chemistry 68 (Preparation for General Chemistry)				3	11
Chemistry 101 (General Chemistry I)	4		1	2	8
Chemistry 102 (General Chemistry II)	3		1	3	8
Chemistry 211 (Organic Chemistry for Science Majors I)	1		2	3	9

					9
Chemistry 212 (Organic Chemistry for Science Majors II)		1	2	3	9
Computer Science 101 (Intro to Computer Science)	1		1	5	8
Computer Science 117 (Intermediate Programming Using C/C++)	1		2	2	10
Engineering 101 (Intro to Science, Engineering, and Technology)			2	4	9
Environmental Sci 1 (Intro to Environmental Science)			2	5	8
Geography 1 (Physical Geography)			2	3	10
Geology 1 (Physical Geology)			1	3	10
Oceanography 1 (Intro to Oceanography)	2			3	10
Physiology 1 (Intro to Human Physiology)	2		1	5	7
Physics 6&7 (General Physics I & II)			2	3	10
Physics 37,38,39 or 101,102,103 (Physics for Engineers and Scientists I, II, & III)				4	11
Physics 66 & 67 (Physics with Calculus for Life Science Majors I & II)		2	1	4	8
Math 261/262 (Calculus 1 & 2)	4	3	1	2	4
Math 227 (Statistics)	2	1	7	2	3
Other STEM class (please specify)*	1	1	1	1	8
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^{*}Anthropology 118, Anthropology 119, Psychology, Statistics 101, Biology 3.