



A1 – Needfinding

Team 2: JAIDED

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- Alexander Yue
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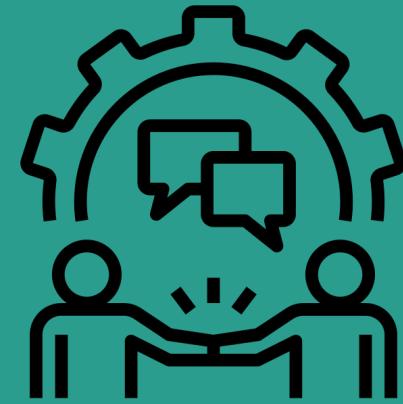
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INTROS



Meet The Team!

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Ecem Yilmazhaliloglu

BS CS
Istanbul, Turkey

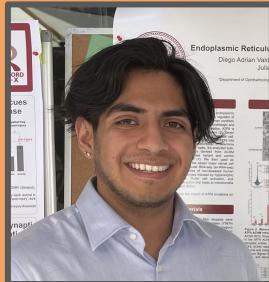
Alexander Yue

BS Physics
Sacramento, CA



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Diego Valdez Duran

Coterm CS
Aspen, CO

Evan Hsu

Coterm

Rancho Cucamonga, CA



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02

PROBLEM DOMAIN



With the studio theme of *AI in the Classroom* in mind, we chose the following domain of interest:

People who use the US undergraduate education system



03

NEEDFINDING METHODS



Participants



Interviewee 1

Person taking a gap year after high school



Interviewee 2

Current student at UC Berkeley



Interviewee 3

Current student at UC Berkeley



Interviewee 4

A recent graduate from UC Davis

Usage of college education



Less extreme

More extreme

Missing Populations

Although we tried to interview a representative sample of US undergraduate student, some important groups were **missing** from our participant list:

- Students with a documented disability
- Students outside of California
- Students enrolled in private universities

In addition, we did not survey demographic information, and so we cannot conclude that we have representative sample in terms of:

- Ethnicity
 - Gender Identity
 - FLI status
-

Example Interview Process

Interviewee 3

- Contacted through friend of friend
- Met in person at favorite restaurant in Berkeley
- Built rapport while talking over dinner
- Conducted interview after the meal, with Alex as interviewer and Evan as the note taker
- Consented to audio recording only, was recorded by phone placed on table
- Interview was 55 minutes long
- Participant was compensated by paying for his dinner (as agreed upon prior)
- Snowball Sampling—got a second interview with participant's friend afterward



Starting Questions

- How is this year at school different from your last?
- What was your favorite class and why?
- What was your least favorite class and why?
- What are the most challenging parts of classes? How do you prepare for it?
- How did you pick your major / concentration?



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RESULTS



Interviewee 3

- Sophomore at UC Berkeley
- Hometown is Seattle
- Public Health major
- Is a pre-med student
- Works in the Essig Museum of Entomology



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Berkeley
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Key Quotes

- “My friends and I apply for the same classes together... we try to stick together because the study group goes really well. We tend to do better working together”
- “I don't know anyone in one of my classes, so it's very hard to talk to people, maybe because I feel like they just already talk to other people.”
- “Sometimes I see the same people around sitting nearby us. And, sometimes when our professor tells us to talk to each other, sometimes we engage with them as well, because they don't have anyone nearby to talk to”
- “One person in our study group got, A+ ... It's one of those people that is naturally smart. Like, get it. I think because their prior experiences, they took, like, linear algebra in high school, they took discrete math”



Professors are not a good resource to ask for help, undergrad TAs are much more effective

First year of school was a big adjustment

Friends mostly same as I

Study groups gather in libraries

Prefers hands-on learning to abstract learning

Stuck with the same group in discussion section against recommendations

Picks classes so that he can take them with his friends

Going into a class without knowing anyone is really hard

His study group turned into a friend group after midterms when one friend invited everyone to boba

Favorite professor was for chemistry, as he understood chemistry well in that class

There are lots of students who attend classes where they do not have friends

Professors are not a good resource to ask for help, undergrad TAs are much more effective

The optimal size of study group is 4-5 people

Exams ought to be similar to the released practice exams

People who succeed in hard classes have prior experience in the subject

That he is naturally gifted at math

Good professors make classes engaging

You can identify future friends from a first impression

and groups don't compete with each other are toxic

You can identify future friends from a first impression

People establish a study group within their first year of college

Does not try to make friends in class where he does not know anyone

Does not make friends in class where he does not know anyone

Stuck with the same group in discussion section against recommendations

Picks classes so that he can take them with his friends

Travels to San Francisco to do medical research

Applying to be an unpaid undergraduate TA for a chemistry lab class

Made most friends during orientation week

Lives in housing far away from friend group and study group

Excited about volunteering to teach a chemistry lab

Anger about unfair math class

Indebtedness to a particular friend for helping the others in the difficult math class

Indebtedness to a particular friend for helping the others in the difficult math class

Regret about not studying more

Loneliness in classes where he does not have a study group

Thankfulness for his friend group who take classes with him and study together

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INTERVIEW ANALYSIS



Insights & Needs

A surprising contradiction:

- He believes collaboration is key to good grades, but works alone in a class where he does not know anyone

Potential needs:

- To have a study group in his classes
- To “pay forward” the help he received in a difficult class

WE MET...

"Gavin," a hardworking pre-med student at UC Berkeley who feels he has less prior academic experience than many others.

WE WERE SURPRISED TO NOTICE...

He believes collaboration is key to good grades, but works alone in classes where he does not know anyone.

WE WONDER IF THIS MEANS...

The awkwardness of meeting new people is preventing him from reaching his academic goals.

IT WOULD BE GAME CHANGING IF...

Students felt comfortable working with each other in every class.

Interviews 1, 2, & 4

Key Quotes:

"Whatever they do after, like counselors are more concerned about the people who are barely going to graduate"

"In my favorite class... I felt like I was applying lessons to real life and the community. Also, I appreciated the interaction in the class and working with my peers"

"I think more resources should be **provided** by the professors in the university, especially if we're paying all that tuition already."



Surprises:

The interviewee didn't feel like she had the writing skills required when starting high school

The interviewee sometimes couldn't find critical study materials, such as old practice tests, until late in the semester by word of mouth.

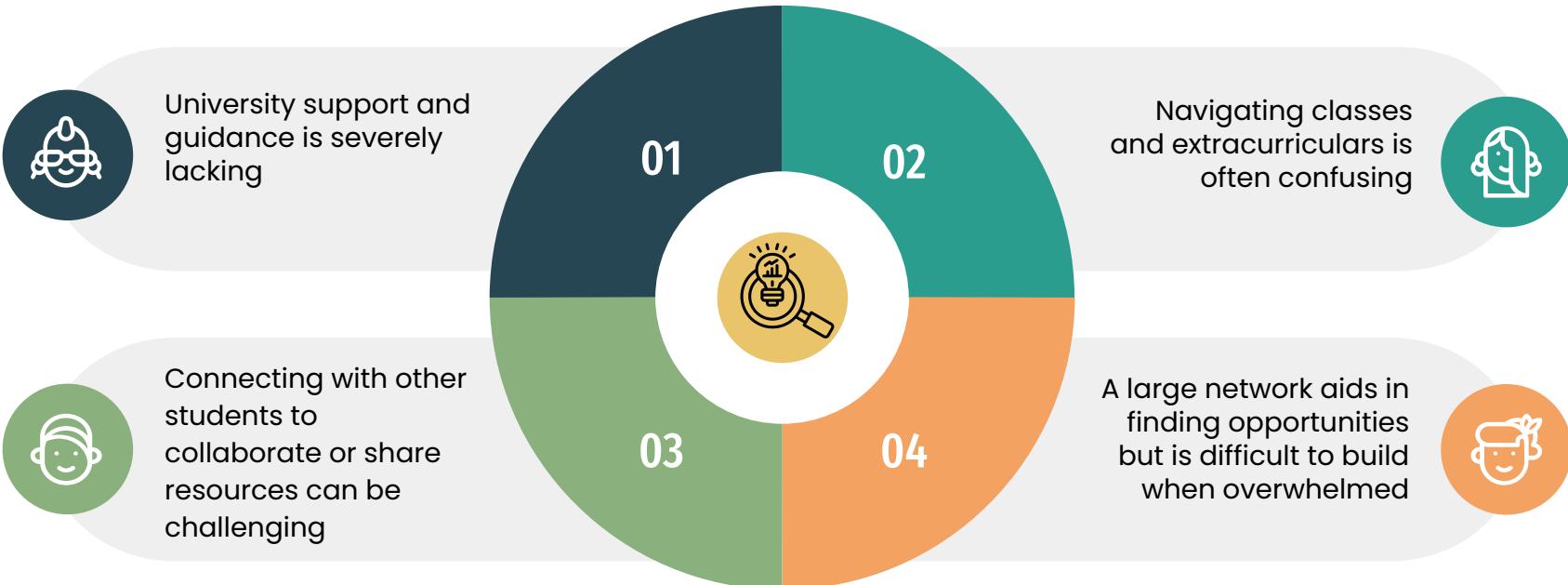
She expressed that resources for classes or internships were hard to find, but mentioned a few in the interview and was successful in using them

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SUMMARY



Interview Insights Summary



What's Next?

Assumptions to test:

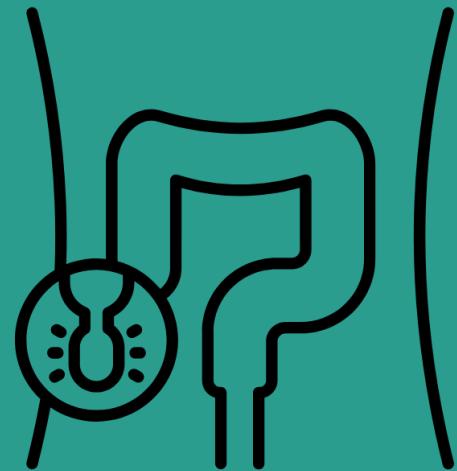
- Whether studying in groups improves grades compared to working alone
- That there are many students who wish to form class study groups but do not have one currently

Further perspectives to hear:

- Students who do consider themselves “naturally gifted”
- Students who use undergraduate education for a primary reason other than getting a degree (for social experiences, athletics, etc)

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APPENDIX



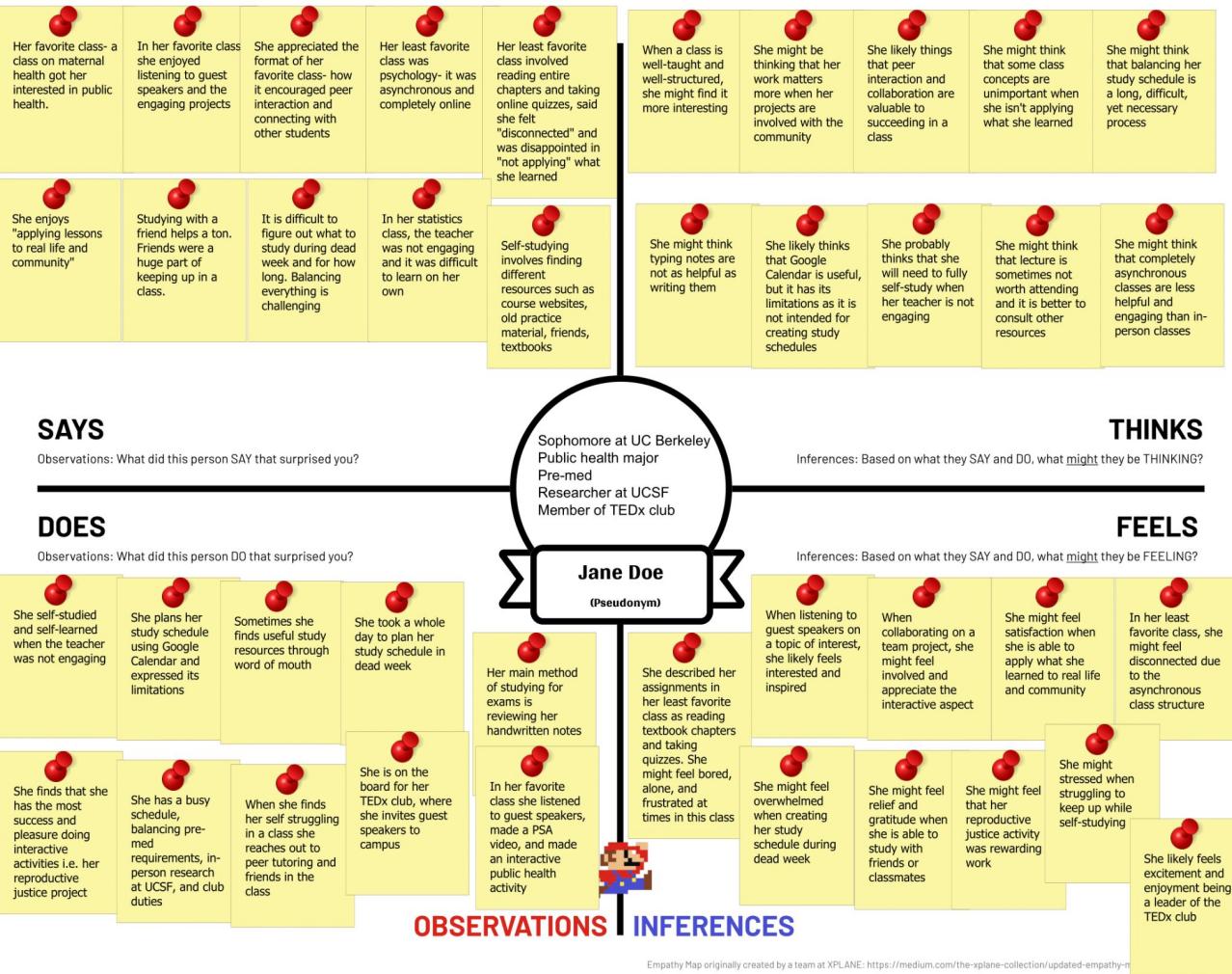
Interviewee 2

- Friend of Interviewee 3 (same interview method)
- Sophomore at **UC Berkeley**
- Public Health major
- Pre-med
- Researcher at UCSF
- Board member of TEDx club

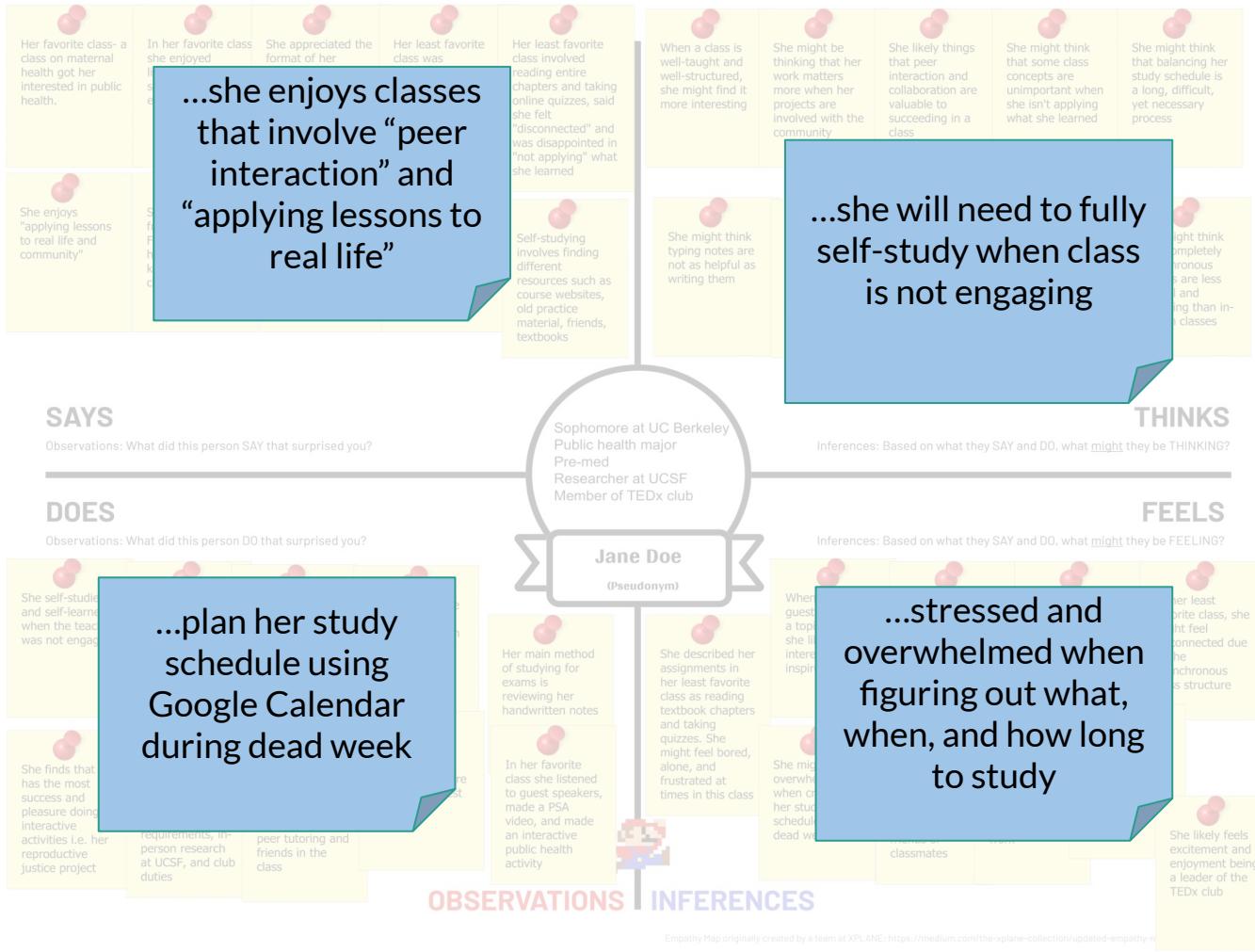


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Empathy Map 2



Key Insights



Interviewee 1

- **Gap year student** (reapplying)
- Major undecided
- 2 years of public high school
- 2 years of IB
- She's our extreme user (non-user)



Interviewee 1 Details

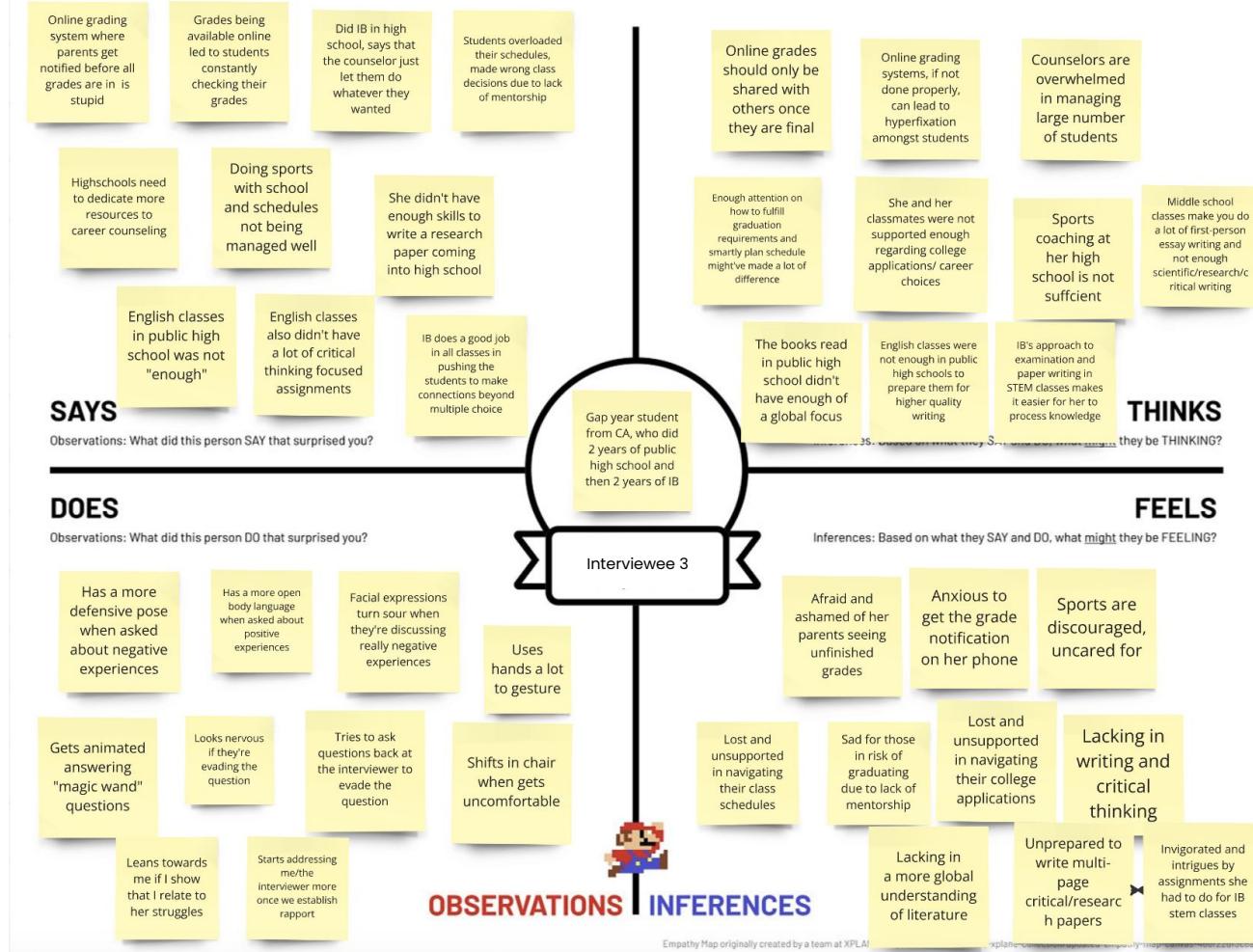
- A friend's sister from the Bay
- Met on **Stanford's campus**, at EVGR lobby
- AJ as interviewer and Diego as the note taker
- Consented to audio recording only
- Interview was 52 minutes long
- Participant was compensated with a candy bar
- Asked questions about their experiences from high school and what they believe affected their success in getting into college
- Otter.ai used for transcribing into text



"whatever they do after, like counselors are more concerned about the people who are barely going to graduate" - interview #1

Surprise from interview #1: the interviewee didn't feel like she had the writing skills required when starting high school

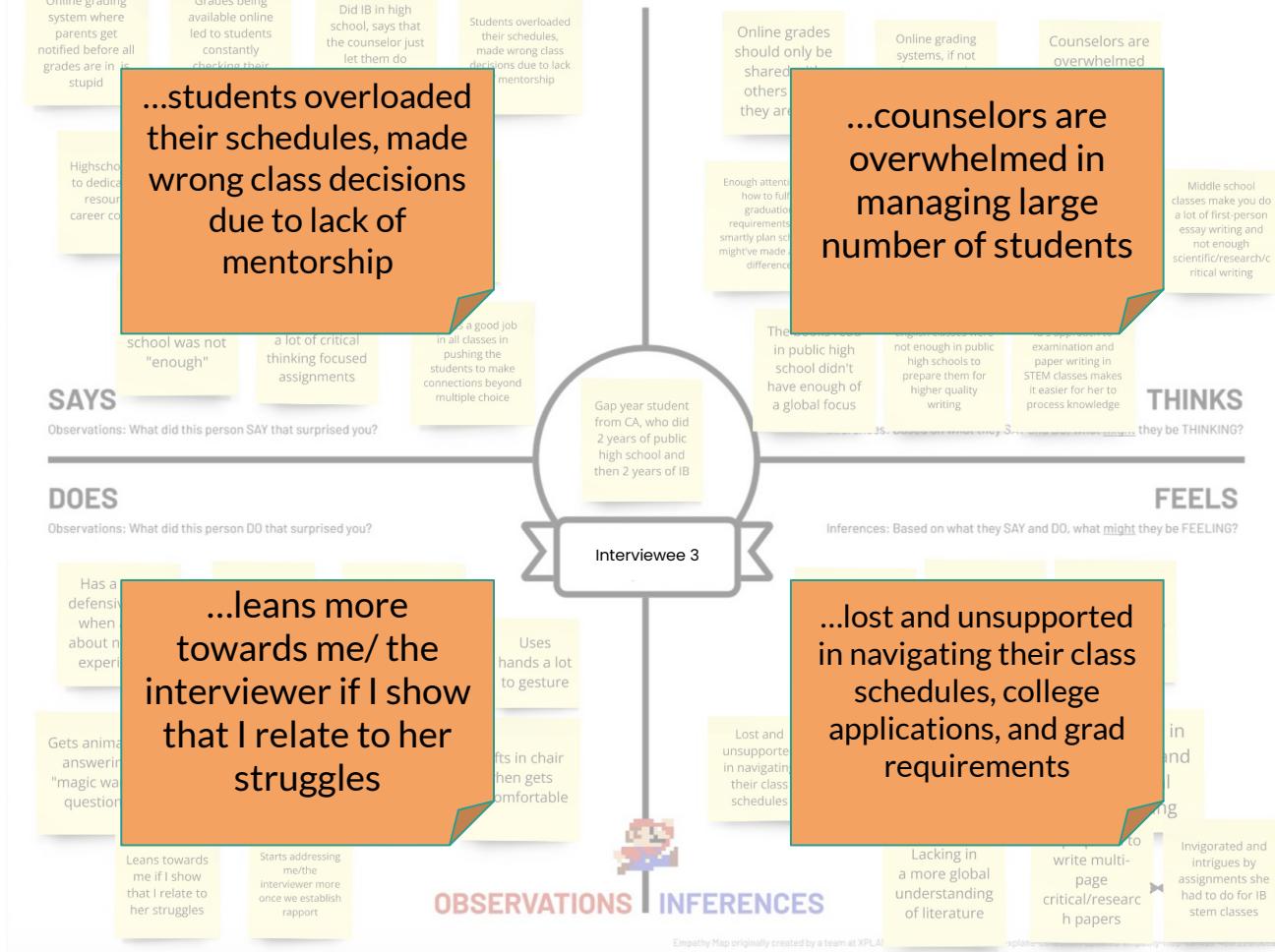
Empathy Map 1



Empathy Map originally created by a team at XP/LAI

xplatelabs.com/empathy-map/

Key Insights



Interviewee 4

- Recent 2024 Graduate from **UC Davis**
- Bay Area Resident
- BS in Environmental Science and Management and a minor in Environmental Policy Analysis and Planning
- Works for National Zoning Atlas, related to Urban Planning



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UCDAVIS
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Interviewee 4 Details

- Friend of a friend from the Bay
- Met at a **park nearby** their residence
- Built rapport over lunch first and came back to part to do the interview
- Diego as interviewer and AJ as the note taker
- Consented to audio and video recording, but only recorded audio on bench
- Interview was 48 minutes long
- Participant was compensated by paying for their lunch (as agreed upon)
- Asked questions about their experiences from the start of college through graduation and into their job search and employment
- Otter.ai used for transcribing into text

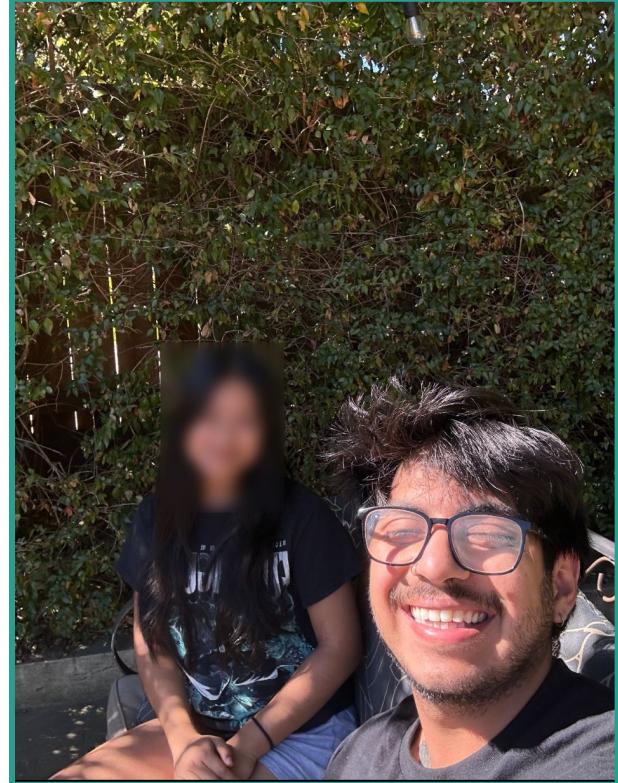
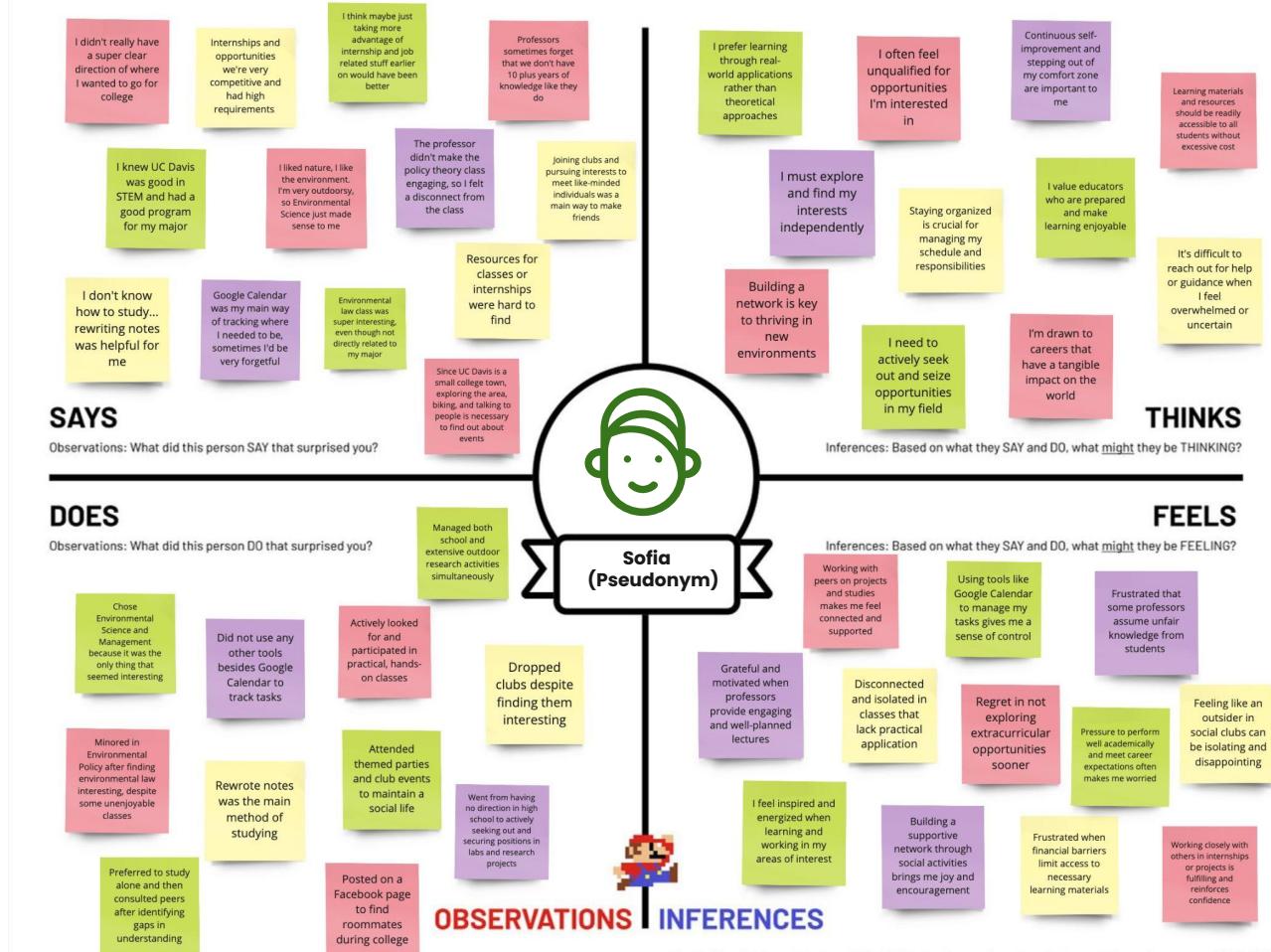


Image of us at restaurant with faces blurred

Empathy Map 4



Key Insights

