CS 147 - Inclusive Design Studio

ASSIGNMENT 2

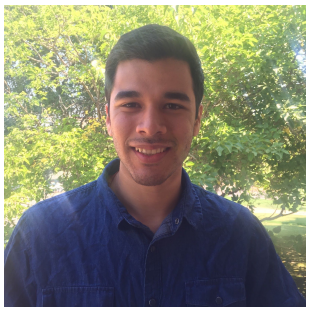
POVS and Experience Prototypes

INTRODUCTION

Meet the Team

Lindsey Redd

Samuel Hinshelwood Jr.



Mark Orozco

Nicole Hardson-Hurley

Problem Domain

Our problem domain is **making the education system more equitable and sustainable.** We began our needfinding journey focused on equitable learning experiences for marginalized communities. In our search we found several needs in this area. However, we also found immense needs in improving the teacher experience and assuring that it is more sustainable. We discovered that there is an exodus away from teaching and thus, attempting to make an equitable learning environment seemed to demand interacting with the problem that teachers don't want to stay. Thus, we are also exploring making teaching a more sustainable and fulfilling profession.

We are attempting to bring the design process to communities we feel are often not included- marginalized communities and, in some ways, teachers as humans rather than as simply tools within the education system. We plan to use this lens moving forward in the **Inclusive Design Studio.**

INITIAL POV

We met Diedre, the 1st principal at a math & science elementary school in San Diego. We were amazed to realize the extent of her suffering as a school administrator. She needs support and incentive from within the school and the school district.
It would be game changing if Diedre felt healthy, loved, and supported in her job as a school administrator.

ADDITIONAL NEEDFINDING RESULTS

Angela

Three Revised POVs

Krishelle

We met.. Krishelle a former high school math teacher who taught in San Diego and Oakland for 6 years. She recently took a three month software bootcamp and accepted an offer at Dropbox.

It was surprising to learn that…

- Ipads were used as a textbook replacement not to enhance learning
- Teaching is constantly reinventing the wheel
- Teachers can't prepare students for industry or the real world because they have never experienced industry.
- No amount of teacher training can prepare someone to actually be in the classroom.
    - You must learn and grow through your own self-reflection
- Motivated teachers don't feel like they have enough influence or that they can succeed.
- No way for teachers to navigate the existing tech resources
- Teachers felt like if there was a single way to streamline all tasks, they would earn back more time

Needs…

- A way for enhancing teacher's effectiveness in the classroom
- A way for teachers to learn from other teacher's work and best practices.
- Enhancing a teacher's **sense** of fulfillment and success with their jobs
- A way to **truly** understand the needs of industry today and how to teach students in a way that prepares them
- Something to streamline her daily tasks, email, attendance, grading,etc.

It would be game changing if…

- Teachers were building something better together rather than building the same things separately

- Teachers had a sense of their impact on their students
- Tech enhanced the education experience instead of meaninglessly digitizing it
- If there was a one-stop shop for everything teachers had to do.

HMW

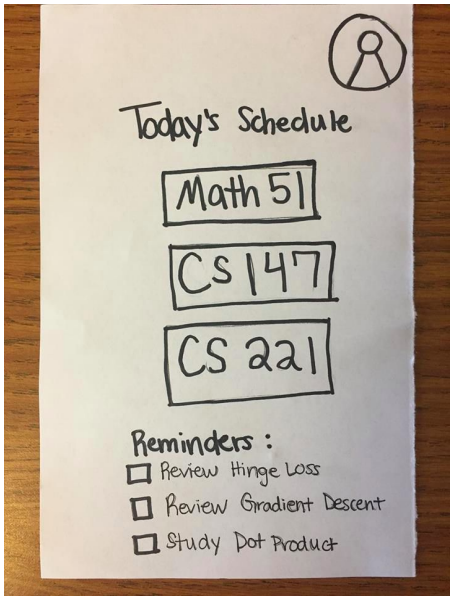
Three Best HMWs

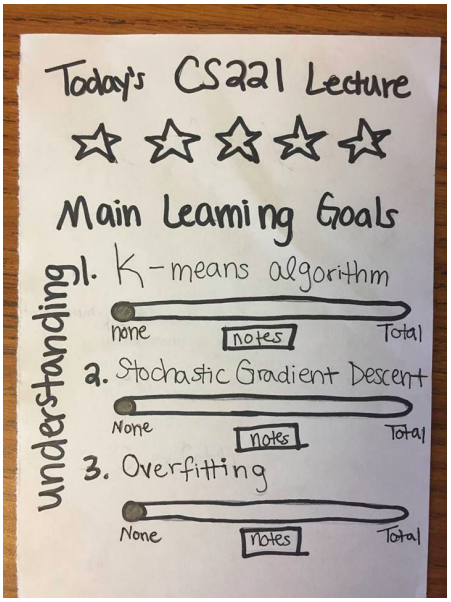
Three Experience Prototypes

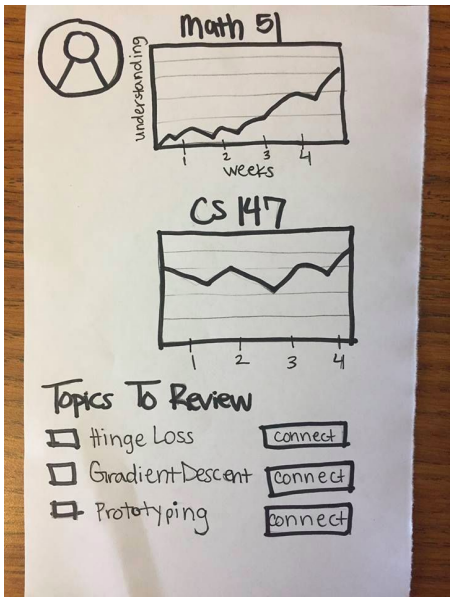
a. Explain the assumptions you were making with each prototype.
b. How did you make the prototype? (include images)
c. How did you test the prototype? (include images)
d. What worked? What didn't? What did you learn?
e. Was the assumption valid? Why or why not? Any new assumptions that emerged?

Selected Prototype

Student Progress Tracking Tool







Our assumption was that students would appreciate a platform to review and manage their learning.

We made the prototype on 3 sheets of printer paper. We drew a sample user interface, and “clickable” buttons and checkboxes.

We tested the prototype on DV, a FLI senior from Stanford. We set him in front of the prototype and asked him to interact with it while stating aloud what he thought while using it.

What worked:

- It was quick and clear
- Would translate well to a digital platform

What didn't work:

- If it weren't part of his grade, he would have skipped it altogether.

What did we learn:

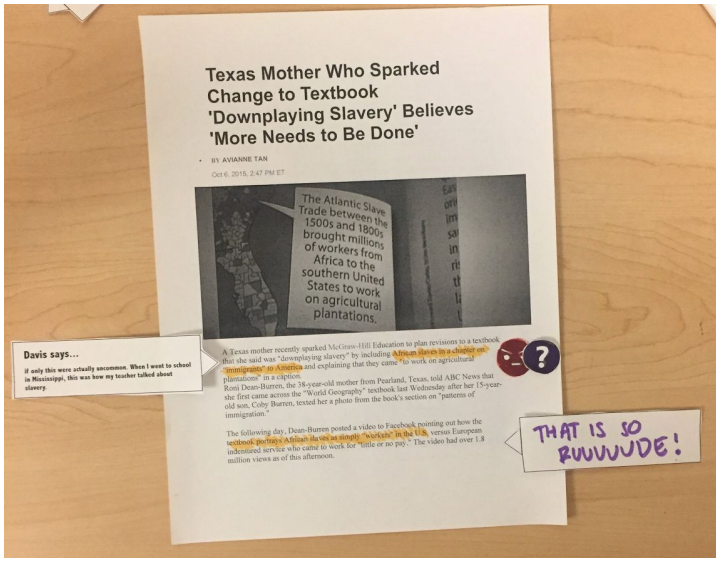
- Not as engaging when done after lecture, would be more engaging if completed during lecture.

Was the assumption valid. Why or why not:

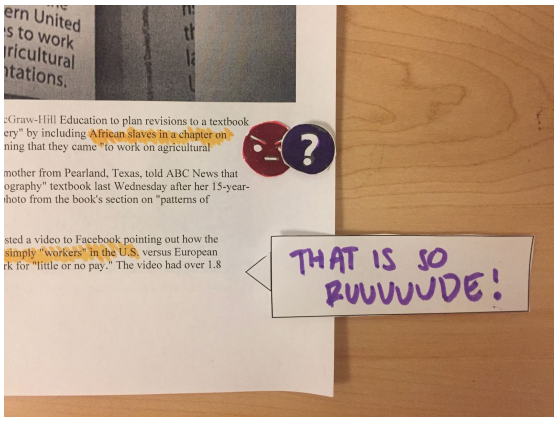
- Our assumption was incorrect -- the survey-like interface felt boring to DV. Also, after lecture, DV would have wanted to just leave and not fill out a survey.

Collaborative annotation aggregator

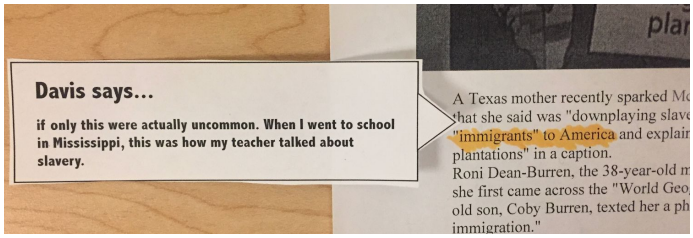
Annotation feed



Reactions and comment



Comment



Our assumption was that collaborative annotating was intuitive, would add meaning to the article, and it would make the reading process more engaging

We made reaction icons and text boxes. Then we printed out an article and placed some icons and prefilled text boxes throughout the article. Then we gave the tester a number of icons and text boxes of her own to use.

We tested the prototype on Elizabeth Davis. Elizabeth is a FLI senior from Stanford. We set her in front of the prototype, gave her the icons, empty comment boxes, a marker, and asked her to read through the article.

What worked:

- Stock reactions were highly usable
- Commenting was useful

What didn't work:

- Not being able to highlight lines
- Reading was boring, lacked engagement

What did we learn:

- Elizabeth wanted more nuance to the anger reaction. Wanted to "disagree without being angry"

Was the assumption valid. Why or why not:

- Our assumption was incorrect -- the survey-like interface felt boring to DV. Also, after lecture, DV would have wanted to just leave and not fill out a survey.