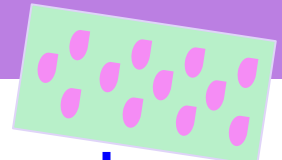# Defining and Ideating

Preserving Language

BY: JEN, DRIA, ARJUN, & DANIEL

Our Team

What is one language you've lost in touch with?

Dria Lee
Spanish

Jennifer Fung
Twi

Arjun Sharma

Daniel Trejo
Italian

PROBLEM DOMAIN

ASL Speakers ⇨ ASL LEARNERS

More Interviews!

Sean Collins

Dee Collins

Husband and wife, have worked as ASL interpreters for Bible translation since 2007.

Sean Collins

Context:
Built AI software Chameleon, allowing deaf to create anonymous content for other deaf people through video avatars.

Key Findings:
- A barrier to deaf having a public voice is video
- Affordable and accessible to deaf populations
- 386 sign languages in the world, utilizes features that target expression / sign accuracy for each language

Dee Collins

Context:

ASL interpreter since 2007. Travels around the world for bible translation.

Key Findings:

- Most of the time the translator is deaf, despite having hearing people on both teams
- Important for sign language users to be involved in the work
- Storytelling is part of deaf culture

POV #1: Melanie

We met... Melanie, an ASL student and influencer but not currently enrolled in ASL classes in her college.

We were surprised to realize that... Despite being an ASL tik tok influencer, it's been hard for her to retain her ASL communication skills.

We wonder if this means... whether there is a lack of ASL speakers in her community or lack of integration between them.

It would be game changing to... help learners connect and learn with one another.

How Might We...

Increase everyday exposure to learning languages?

Foster a post-course community where speakers can practice their language together?

POV #2: Dee

We met... Dee, an ASL interpreter for Wycliffe Bible Translators who helps deaf communities around the world.

We were surprised to realize that... when meeting with international teams, the common language is often ASL, despite having hearing people on both teams.

We wonder if this means... ASL has the most potential to connect people across different languages.

It would be game changing to... utilize teaching ASL for people to communicate across different parts of the world.

How Might We...

Empower ASL speakers to speak on a global scale?

Our Solutions

1

Language Speaking Event

2

Videos without sound

3

Language Karaoke

Solution: Organize "hang outs" where post-learners can spontaneously meet up and practice their targeted language together

Assumption: The spontaneous meet-up would provide the perfect opportunity for students wanting for opportunities to practice

Prototype 1

We wanted to see if post-language learners would be interested in meeting up with people they didn't know who share similar goals.

Participants: 6 Stanford students who have all taken a Spanish course in the past.

The Task: Sending them each a text at 10 am inviting them to come to Coupa and speak in Spanish together.
- Following up if they couldn't come and asking them what would make them more interested.

Hey! I'm planning a meet-up at Coupa Cafe at 2pm for people who want to get together and practice speaking in Spanish! Let me know if you're interested.

Key Insights:

What worked?

- One student responded enthusiastically to go, but then didn't show up

What didn't work?

- No one was free at the scheduled time
- 3/6 participants didn't see the message or didn't respond until after the meet
- When asked why they couldn't come, participants said they were all busy

Key Learnings:

Spontaneous, same-day events are difficult for people to commit to. Even if students have interest, language practice is oftentimes less of a priority than other, more pressing matters.

In order to motivate people to prioritize language learning, we must either present it in a way that seems like less of a commitment and has a lower barrier to entry, or simply give them more notice ahead of time.

"I would have gone if I was free, but only because it was you and not a stranger"

Solution: Create a video platform that relies solely on image and eliminates sound.

Assumption: Viewers would receive the same quality of experience without audio as with audio.

Prototype 2

We wanted to understand to what extent does audio affect a person's social media experience.

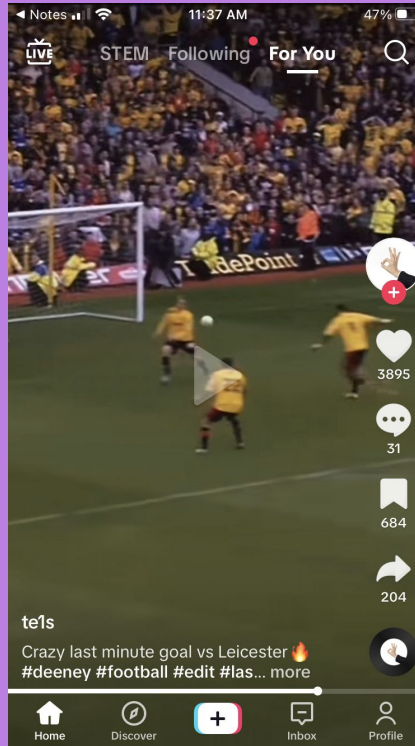**Participants:** Two students with full hearing abilities

The Task: Listening to three different TikToks once without audio and once with audio and rate their experiences.

- **1. Monologue-style video**
- **2. Sports Highlight video**
- **3. Dance video**

TikTok Videos
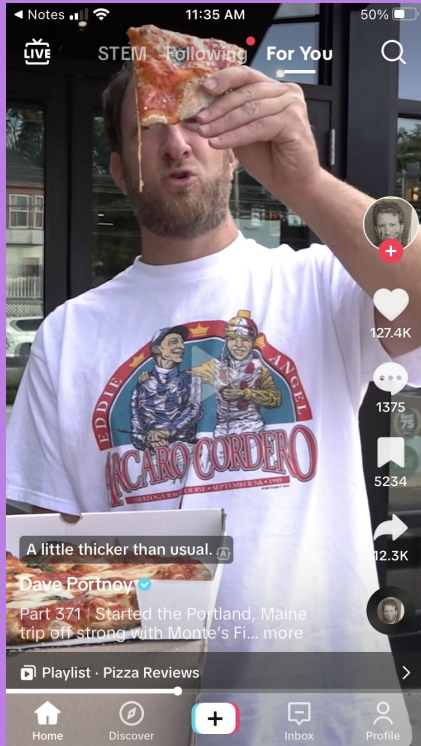
1: Pizza Review

2: Last minute goal in soccer
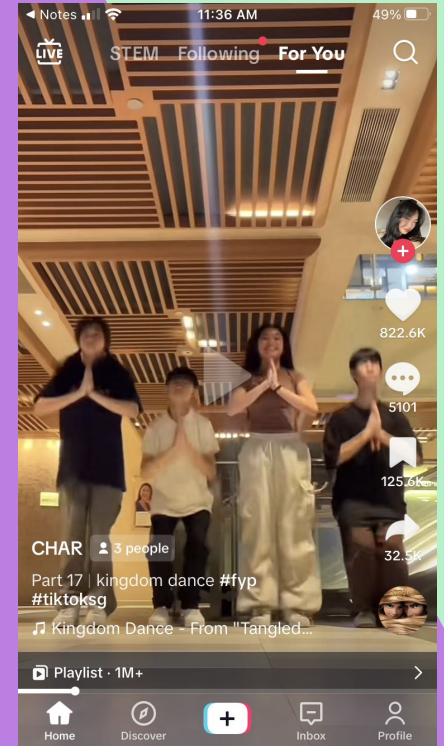
3. Dance Video

Key Insights:

What worked?

- Monologue (1): Understanding of content was the same with and without audio
- Sports Highlight (2): Without audio was still exciting to watch

What didn't work?

- Monologue (1): Easier to focus with the audio
- Sports Highlight (2): The audio vastly improved the experience by eliciting more emotion from participants. Both reported getting goosebumps after watching the video with audio
- Dance (3): The sound is needed to provide a rhythm for the dance and to help participants understand why the dancers were moving in such a way. Without the audio, the video looked "silly"

Key Learnings:

- Audio in social media elevates the learning experience because it activates two senses and styles of learning (audio, visual) for the viewer.
- We learned that we can improve social media experience through other senses as well. However, since audio has proven to be the most effective medium of learning, it would be beneficial to mold the other sense-based learning to be as similar to audio as possible. This could be through visual cues or haptics that mimic the sound of a video.

Prototype 3

We wanted to see if singing in another language and receiving feedback (e.g. on pronunciation) would positively influence the language learning process.

Participants: One student learning Spanish.

The Task: Watching two different Spanish karaoke videos on YouTube and singing along to them.

- 1. Despacito – Luis Fonsi
- 2. Bailando – Enrique Iglesias

Key Insights:

What worked?
- Both songs selected were popular Spanish songs that the student had heard before.

What didn't work?
- Having a live person 'judging' the participant (e.g. pronunciation) to simulate the app's feedback mechanism.

"I didn't feel very confident singing in Spanish because it felt like I was being judged"

Key Learnings:
- People who are still learning new languages do not feel comfortable singing in front of an audience
- It seems a language karaoke application would work best for those who are already comfortable singing, as well as proficient in the language they are learning.

Key Learnings

1. Even if students have interest in continuing their practice of a language, committing to a social practice is like another class.

2. Audio in video drives emotions in viewers.

3. Deaf speakers want to have a voice in society, but the main barriers to this are showing face and lack of audio.

Our Final Solution

A visual-prioritized video platform that enables deaf speakers to tell their stories.

Uses physical features (phone vibrating) and emoji icons so that deaf creators, activists, teachers, etc can tell their stories without the fear of being judged.

Solution Brainstorm

Visual video creation platform for ASL speakers that relies on visuals not sounds

Create social media with collaborative features that are more accessible for deaf people

Create resources that help streamline the ASL learning process

App that provides ASL-spoken videos with subtitles for every language

Communication for places/events to meet up and practice language

Establish a mentorship program where native speakers meet with learners

Twitter but through video for deaf speakers

Create tiktok-like social media for deaf speakers

Use AI for ASL speakers to be able to communicate

Social media platform where only sign language can be used

Global platform that translates any typed language into ASL visuals

Language karaoke: offer songs in target language

Create a social media app where ASL speakers can meet each other

Foster a community for speakers to practice a language after finishing school

Empower deaf speakers to become content creators on a global scale

Provide resources that help deaf creators engage with people outside of deaf community

Use AI to help people not in the deaf community better engage with deaf creators

Encourage workers to be able to accommodate people that don't speak the language

Platform for rating accessibility of venues, websites, products

Social media app posting daily life activities

Interactive games with other speakers to compete and learn with one another

Brainstorming Session

Increase awareness of deaf content creators and their perspectives

Social media platform that is inclusive to deaf and hearing communities

Create a learning platform where people can engage in games and exercises to learn ASL

Increase everyday exposure to different targeted languages

Resources for local/online classes

Find meetup groups of people who speak target language

Discuss/review media in target language

Find tutors or native speakers to practice with

Visualize words, through drawings or pictures

Listening and speaking practice activities

Daily language challenges

Find fellow learners to practice with

Skill/fluency tracking

BeReal-like social media that translates objects to vocab words