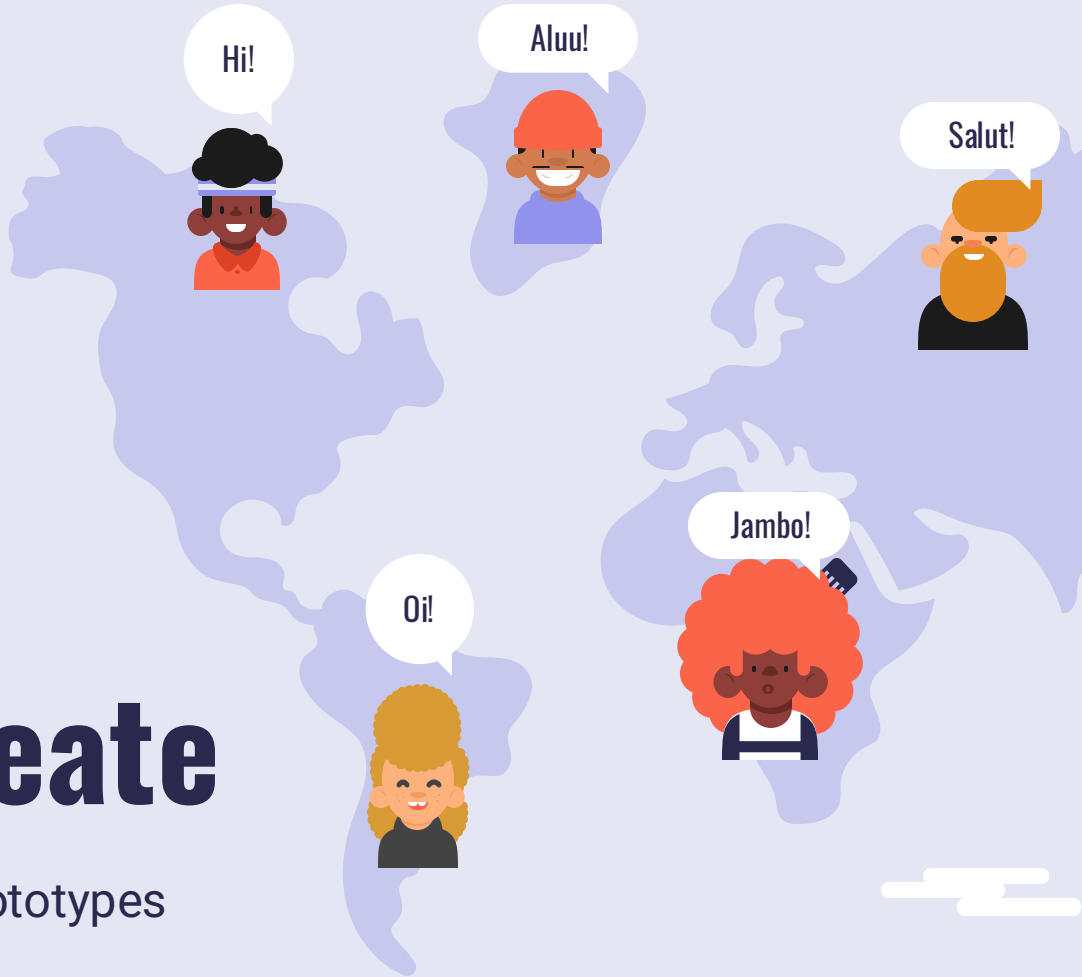


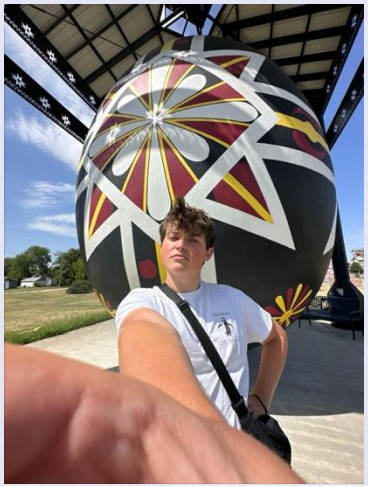
Define & Ideate

POVs, HMWs, Experience Prototypes

Team Limitless

Bryant

CS



Tommy

Undeclared...

Lulu

CS

Candy

Urban Studies!

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01

Interviews

SCOPE: Language learning as cultural learning

- Language learning to facilitate cultural exchange
- Incorporating cultural context into language learning
- Language as an artifact of culture

Other considerations in picking interviewees: age, education, residence

Nora

“I feel like I’m just talking about my fangirl story”

— Nora

23 years old
Biology co-term at Stanford
Half-Chinese
Speaks...

- English — first language
- Spanish — high school
- Mandarin — family, pop-culture, Stanford

Nora

Insights

- Surprise: Nora turned TV into an *effortful* activity, screenshotting subtitles to translate
- Nora’s learning is motivated by cultural *not* linguistic interests
- Nora grieves her disconnect from Chinese culture
- Nora feels proud speaking Mandarin with her family

Richard

“Living in Germany is learning by osmosis… through stories, through people”

— Richard

28 years old
Startup founder
First-gen American living in Berlin
Has learned German through ...

- Classes
- Private tutor
- Anki cards
- German roommate

Richard

Insights

- Tension: Seems embarrassed to have failed in Silicon Valley but feels *rebellious* for moving to Berlin
- Richard's interest in Germany sprang from dissatisfaction with America
- Richard experiences isolation because he doesn't speak German
- Richard is tired of contextless language learning

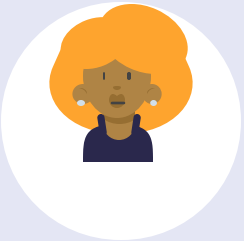
02

POVs and HMWs

Remember ...

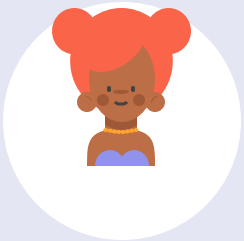
Nora

- “I feel like I’m just talking about my fangirl story”
- 23 years old
- Learned Mandarin through pop-culture



Rebecca

- “Oh God this is so awful, please just make it stop”
- 44 years old
- Rabbi who’s faced life-long struggle with Hebrew



Anna

- “Wait…are you guys doing a project on AI”
- 55 years old
- Mother
- Gender scholar
- Speaks five languages

Nora

We met...

- Nora, a biology co-term at Stanford who is **Chinese-American** and has frequently used **pop culture** to learn Mandarin.

We were surprised to notice that...

- before knowing Mandarin, Nora watched Chinese TV shows without English subtitles and paused to take pictures of Mandarin text and put them into Google translate, turning a **restful activity** into an intentional and **effortful learning experience**.

We wonder if this means...

- even **tedious** aspects of language learning can be made enjoyable with a personal and **cultural connection** to the content.

It would be game-changing to...

- enable Nora to **learn** more varied content while continuing to **have fun**.

How might we ...

integrate various forms of entertainment into Nora’s language learning?

Rebecca

We met...

- Rebecca, a rabbi who works at a university that characterizes herself as a lifelong struggler of learning Hebrew and regularly feels **inadequate** as a rabbi and Jew.[SEP]

We were surprised to notice that...

- she **spoke** as **little Hebrew** as possible during her immersion program in Israel despite her peers constantly practicing and despite her long interest in becoming a rabbi.[SEP]

We wonder if this means...

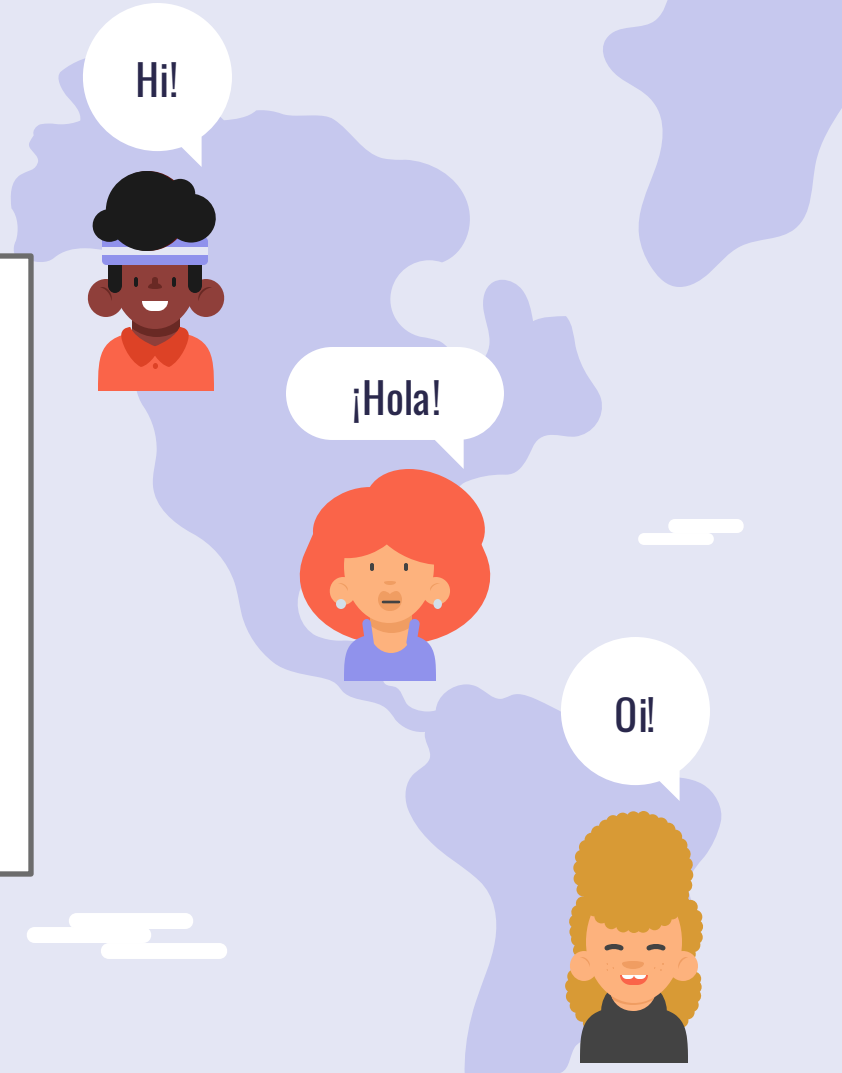
- she felt **helpless** to ever achieve her **lofty** goal of being a rabbi.

It would be game-changing to...

- **remove** Rebecca's internal **expectations** from the language learning process.

How might we ...

make language learning a form of self expression for Rebecca?



Anna

We met...

- Anna, a mother and feminist studies PhD student who **speaks five languages** and enjoys directly **connecting with different cultures**.

We were surprised to notice that...

- despite having a **good experience** with a conversational language learning app, Anna is strongly **opposed to using technology** for language learning because she believes it is devoid of emotional intelligence and can't capture the cultural elements of language learning.

We wonder if this means...

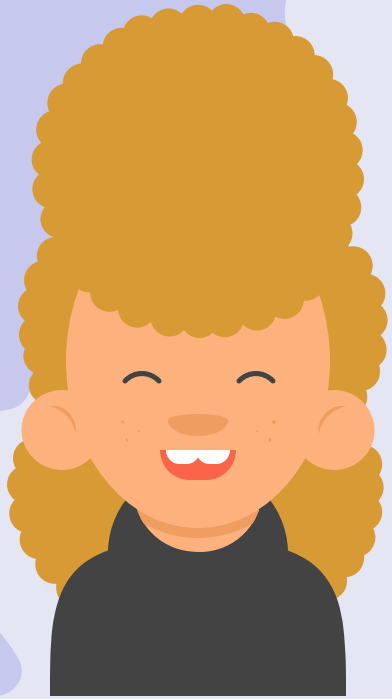
- Anna is **shaken** by rapid innovation in technology and is **clinging** to what she knows.

It would be game-changing to...

- help Anna **reap the benefits** of technology while feeling comfortable and **connected**.

How might we ...

insert Anna into the life of a native speaker?



03

Solutions & Experience Prototypes

Virtual Homestay

From “HMW insert Anna into the life of a native speaker?”

Users curate a **digital “home,”** which showcases **artifacts of their culture** and personal interests

- Others “homestay” in their virtual environment
- Facilitates conversation and **cultural exchange** with host and with fellow visitors
- Allows exploration of culture in a **personal**, non-monolithic way

Ethical implications:

- Danger of a **single story**
- People who have time to curate this represent a certain slice of people

Assumption

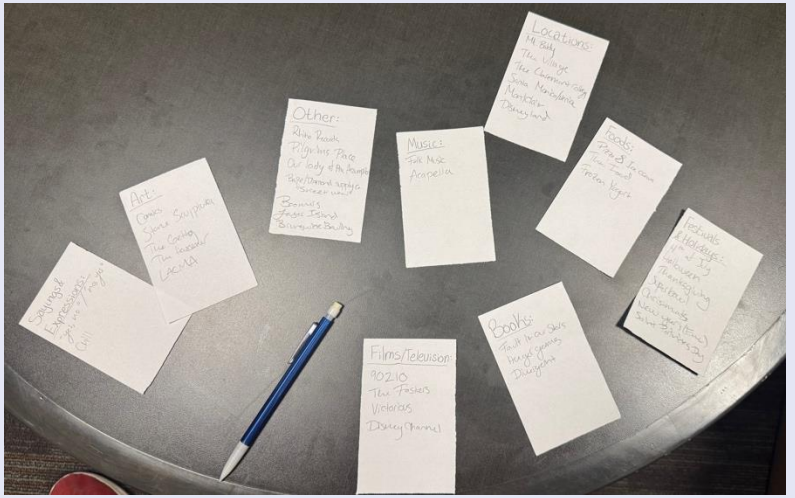
Users are willing to curate and share an environment that's supposed to represent them.

Experience Prototype

A team member introduces herself to the participant as an international student who knows little about American culture. The participant is then asked to brainstorm (pencil, paper) things across nine categories (including food, places, music, expressions, etc.) which represent who she is and where she comes from.

The participant is then left alone for 10 minutes to think.

The "international student" returns and discusses the participant's responses with her for 10 minutes.



Participant

Ursula

- 21 years old
- Stanford comp-lit student
- Did homestay in Berlin

*recruited via GroupMe

Results

What worked:

- Assumption = correct — responses **detailed and vulnerable**
- Participant was **excited and having fun** (the discussion part was *supposed* to be five minutes)

What didn't work:

- Some of the **categories** were **not generative** (i.e. expressions)
- Wished she could provide **pictures**, other references
- Over indexed on location

Insights:

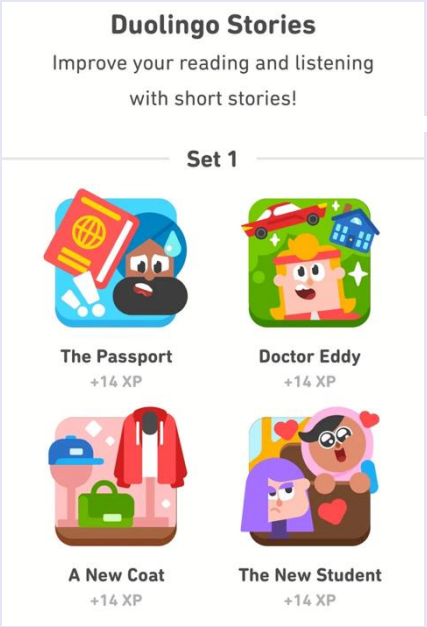
- Ursula felt nostalgic
- "I would have said less if there were more people"

Episode

From “HMW insert Anna into the life of a native speaker?”

Users experience **interactive narratives** in their **target language**, making decisions for a character situated in a story of choice

- Simulates both the agency and the spontaneity of authentic conversation
- Could be **personalized** to user’s **ability** and/or **interests**
- **Immersive** — literally maneuvering a character in an imagined world



Ethical implications:

- Whose stories are told/experienced

Assumption

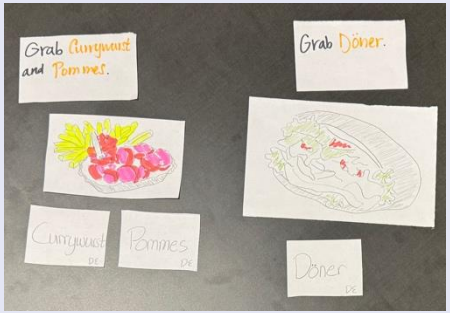
People *enjoy* learning in self-insert ways.

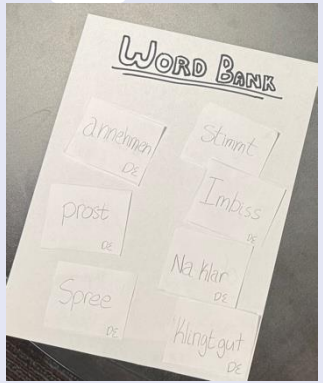
Experience Prototype

An interactive semi-scripted “conversation” in English, with German words sprinkled in, is carried out between a participant and a team member. The participant is given a script, which ends with a fill-in-the-blank.

The user responds to the blank by picking between two papers with different options featuring German vocabulary. The conversation then veers based on the participant’s choice.

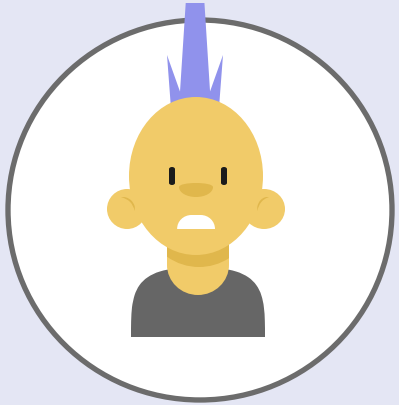
The participant also has access to a paper German word bank throughout and was shown relevant illustrated pictures.





Participant

Drew



- 21 years old
- Stanford CS student
- Enjoys learning languages, but no German exposure

*recruited via GroupMe

Results

What worked:

- Our assumption = correct! — had fun and **enjoyed "immersive nature"**
- The story as a learning device (used **story to reference learning**)
  - Translated 7/10 words
- **Non-text element**s were engaging

What didn't work:

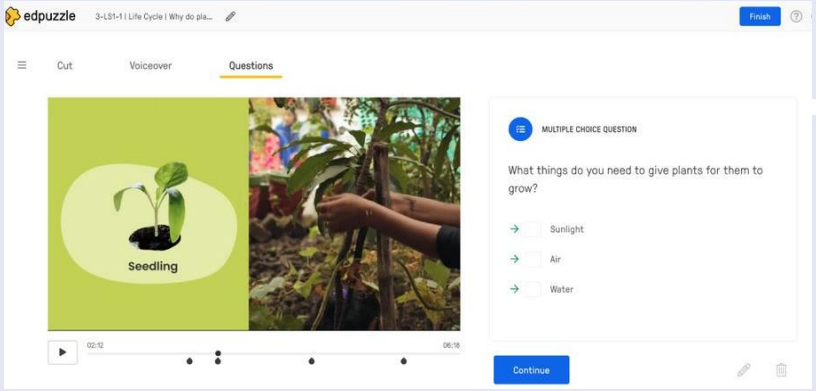
- **Transitions** between scenes, done when participant made a choice, were slow and took him out
- Wanted other **sensory engagement** (i.e. music)

Insights:

- Drew expressed having **learned cultural details** too!
- Comfortable incorporating vocab into personal speech (used one of the vocab words on his way out the door)

Entertainment Intervention

From “HMW integrate various forms of entertainment into Nora’s language learning”



An extension/add-on for your **entertainment** of choice—music, TV/movies, YouTube—which intermittently **interrupts with mini language lessons** related to the content

- Reduces activation energy
- **Leverages your interests** to activate your attention and memory

Ethical implications:

- Distorting media/art without creator’s permission
- **Affordability** (streaming services)

Assumption

People are interested in their relaxation being interrupted for learning.

Experience Prototype

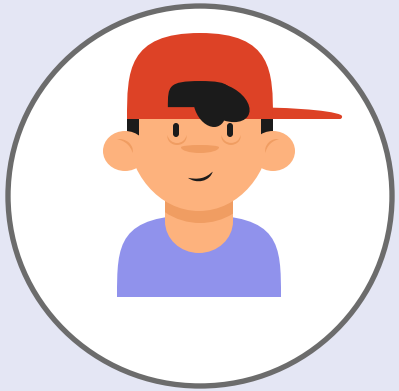
The participant watched a show of his choice in a comfortable environment. Intermittently throughout, a team member would pause the show, translate a word that was just said into Mandarin, have the participant repeat it, then resume.

In the meantime, we watched the show and interjected like a normal group watching experience.

Halfway through and after the episode, the participant was “quizzed” on the vocab — given a Mandarin word and asked for it in English.

Participant

Patrick



- 22 years old
- Stanford stats student
- Enjoys learning language but doesn't regularly practice

*recruited via GroupMe

Results

What worked:

- Our assumption = correct?
  - "a little **unnatural but not undesirable**"
  - Still visibly **enjoyed** the show
  - We interacted naturally + interruptions → expected

What didn't work:

- After first quiz, changed his mindset and **made activity effortful**
- Without concerted effort, didn't learn

Insights:

- A day later, Patrick **remembered** the word which was **personally relevant** to him
- Might be difficult for "media multi-taskers"

Final Solution: Virtual Homestay

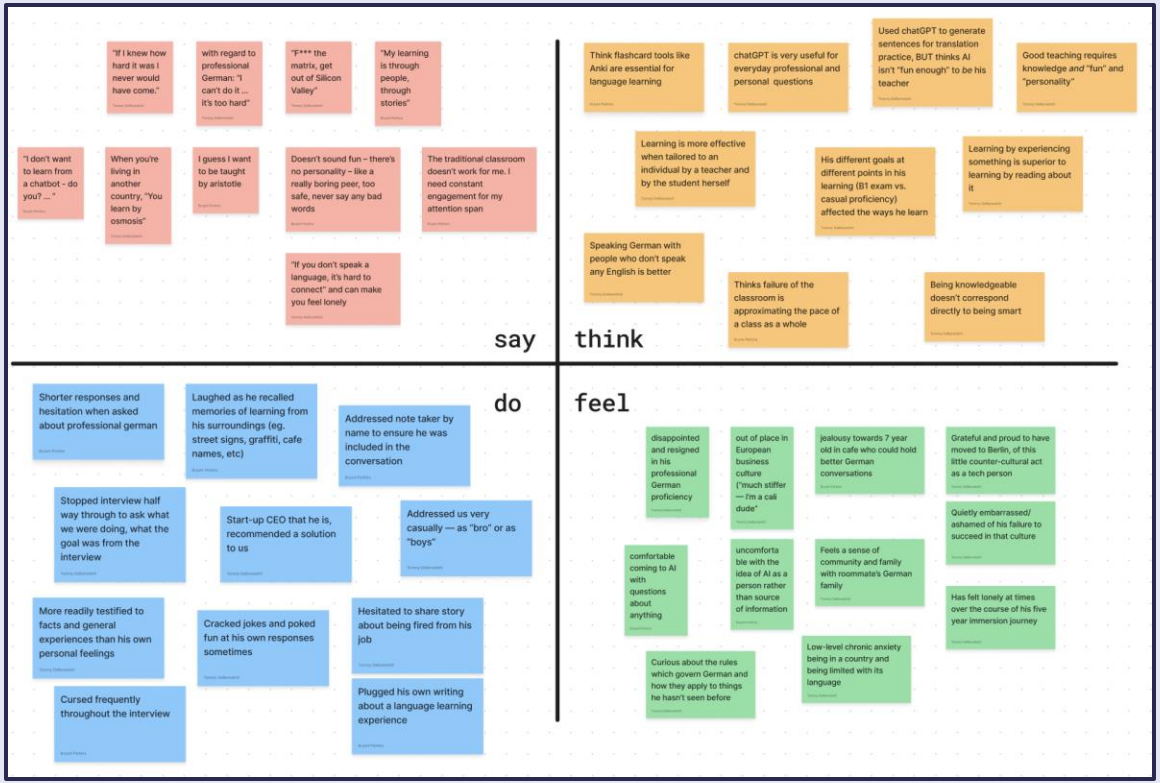
Why?

- Could incorporate entertainment (games, media, etc.) into home
  - For Nora!
- Fosters authentic social interaction in target language
  - For Anna!
- Team enthusiasm

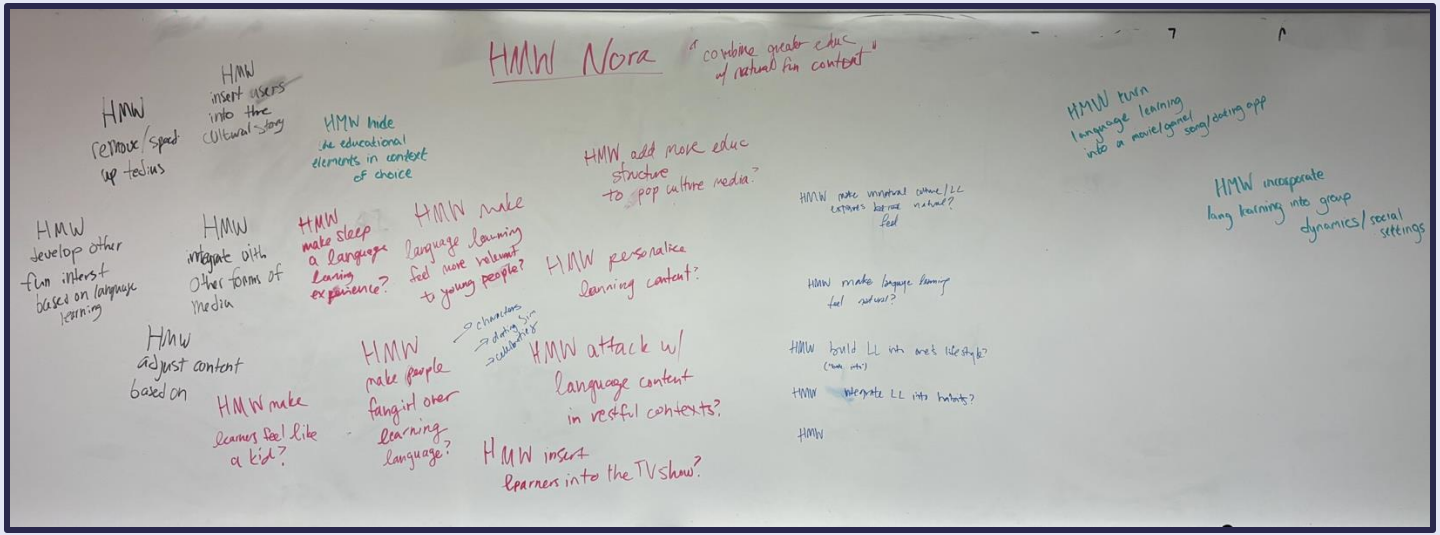
Appendix

Full Empathy Map — Nora

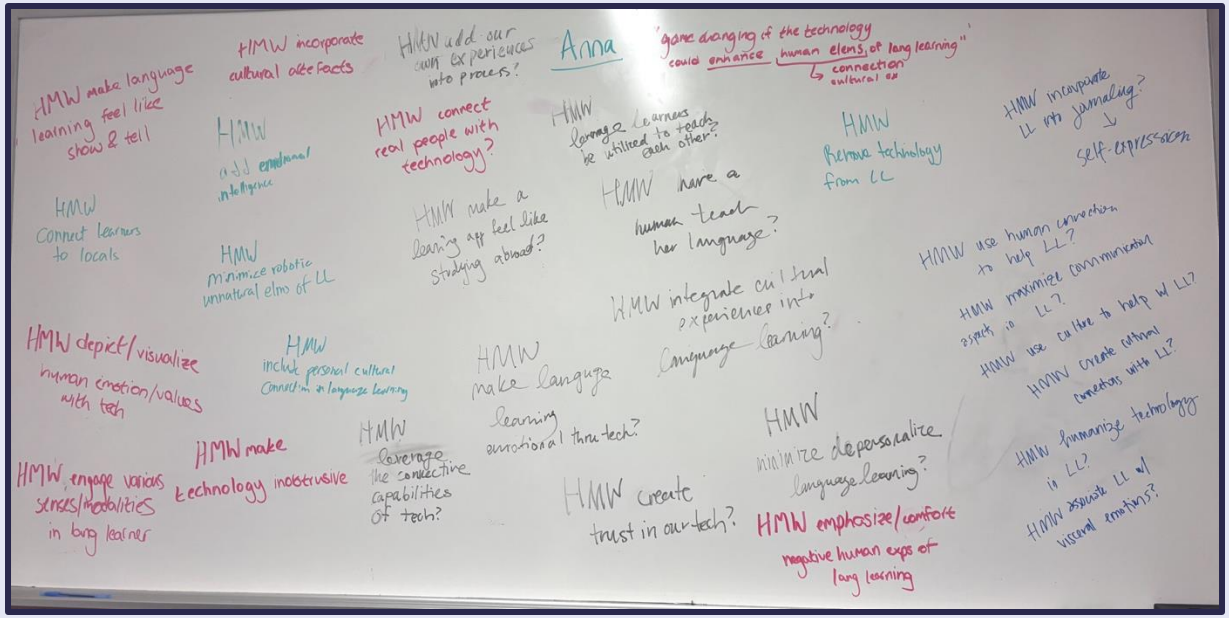
Full Empathy Map — Richard



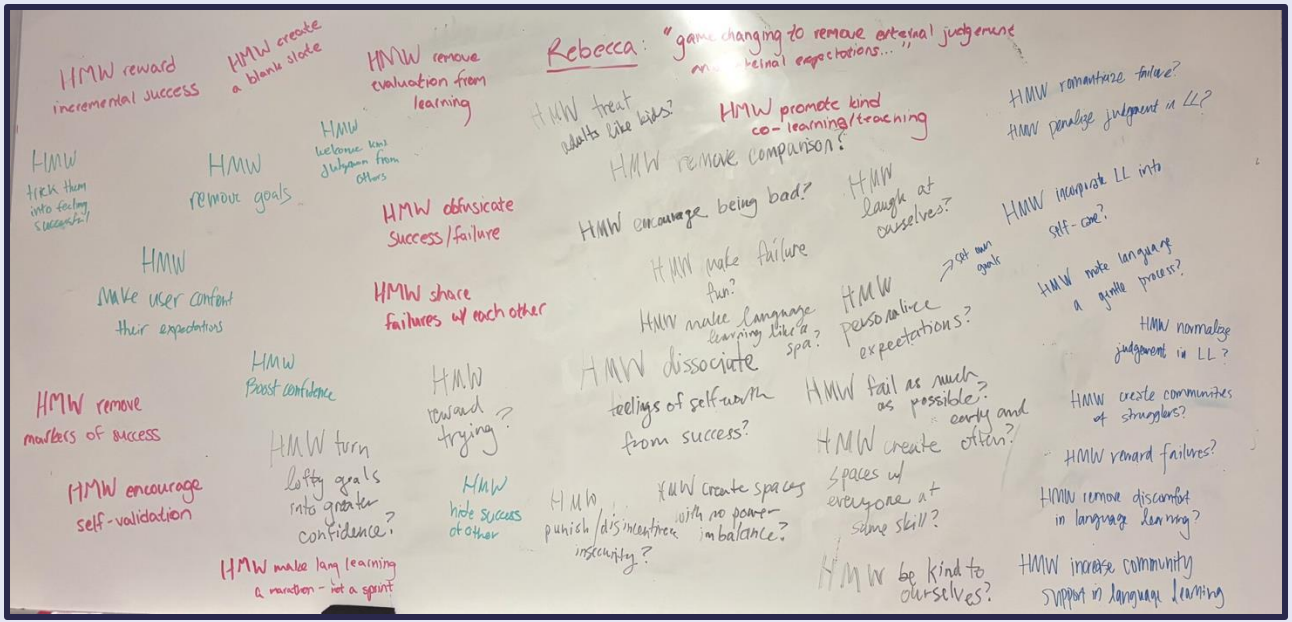
HMW Brainstorm (POV #1)



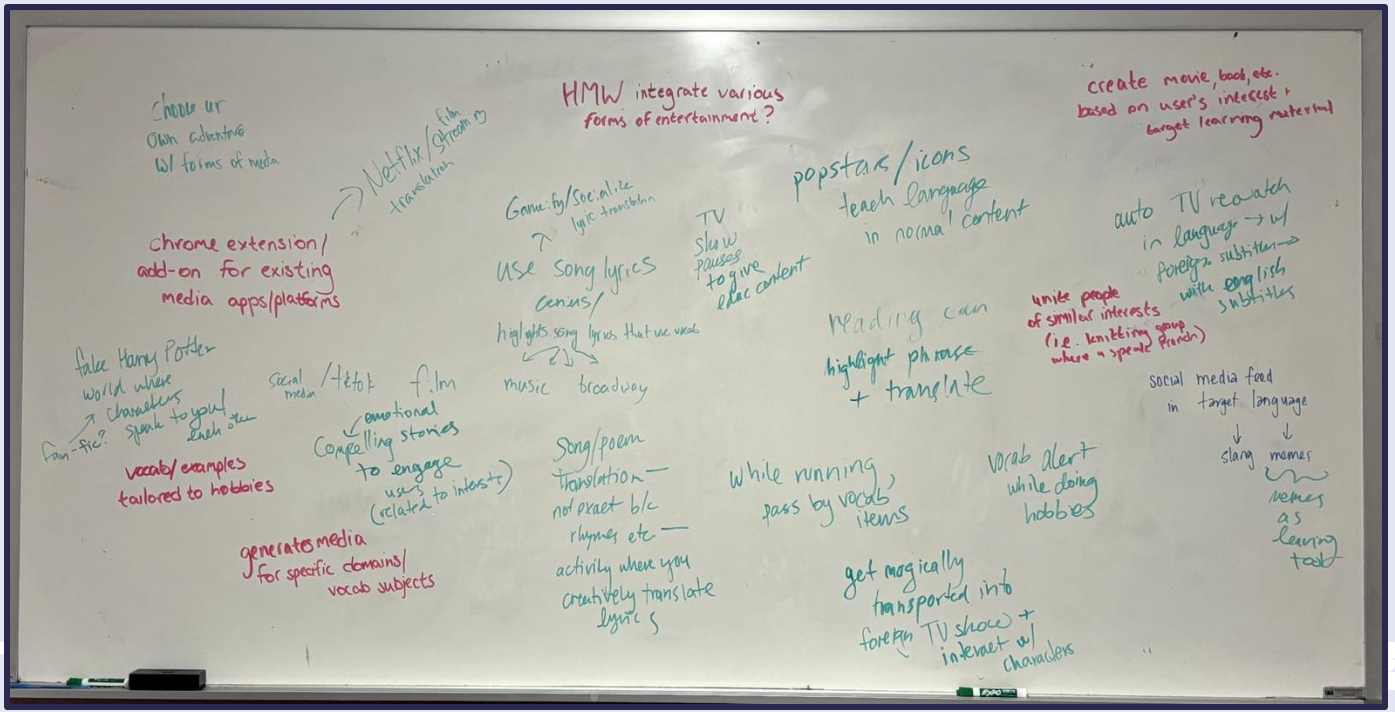
HMW Brainstorm (POV #2)



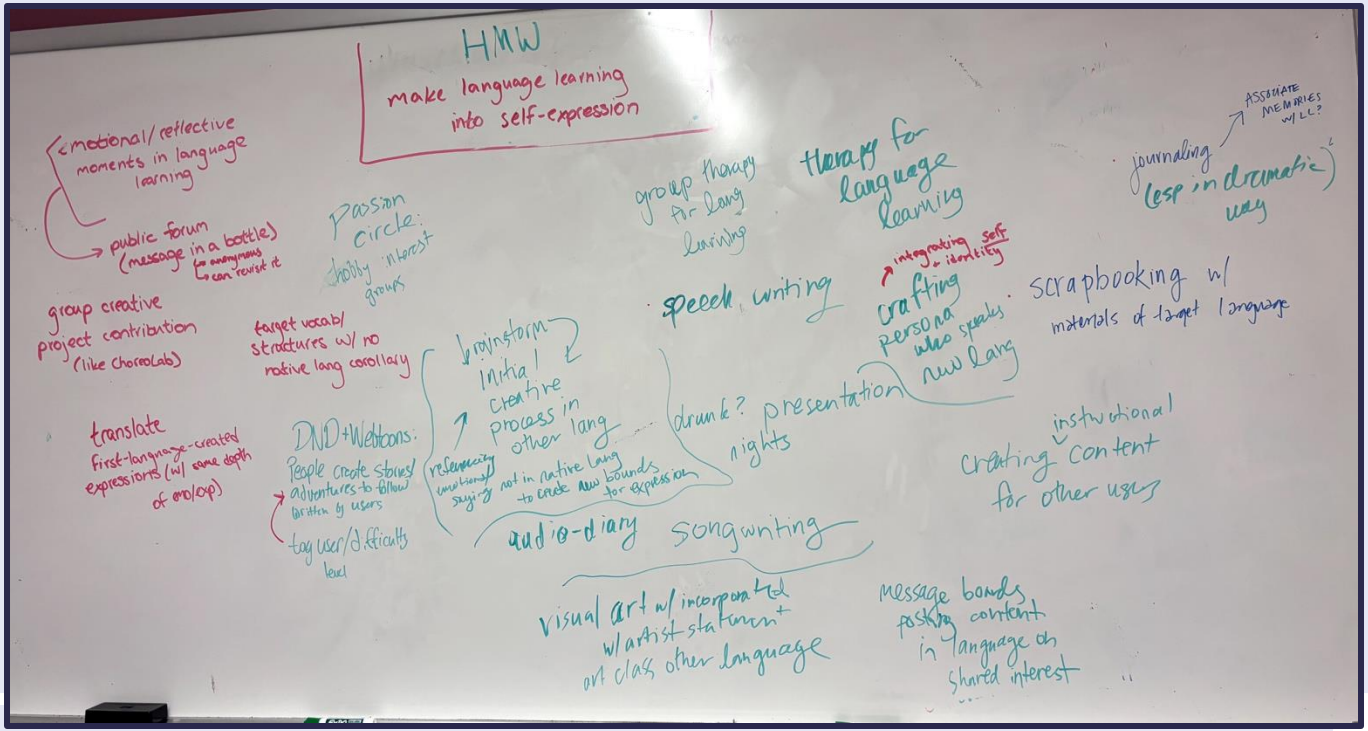
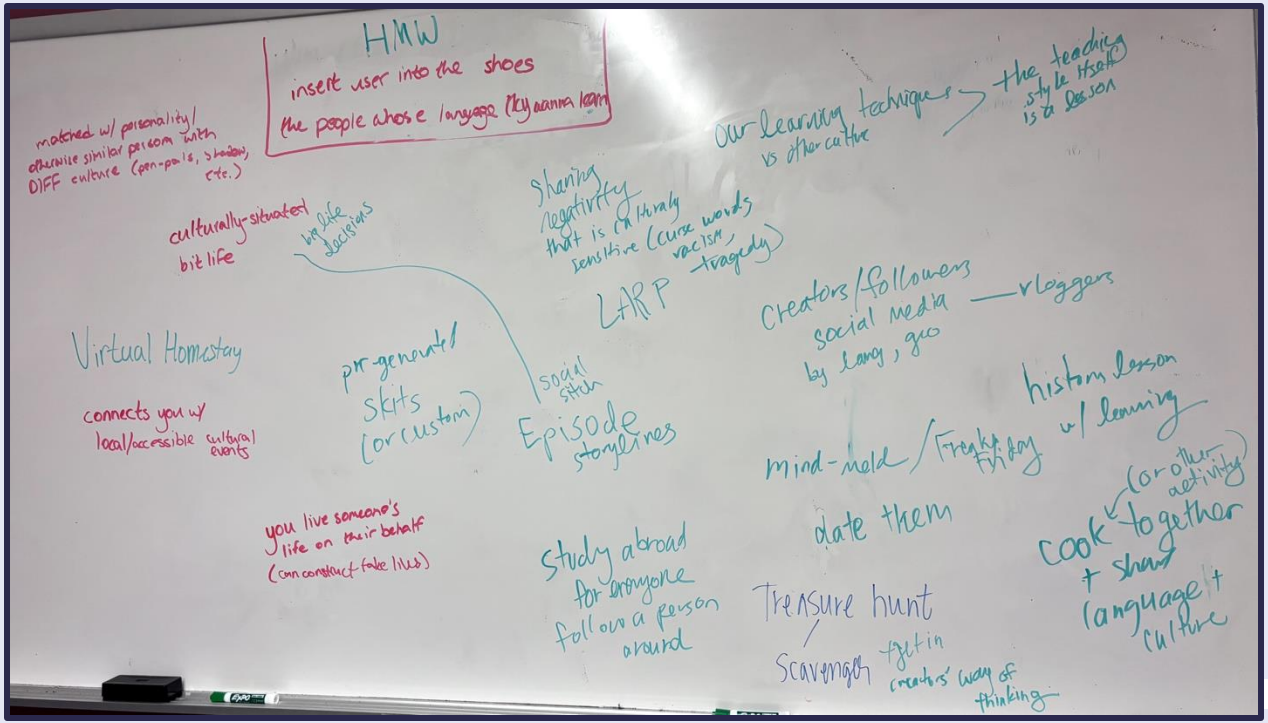
HMW Brainstorm (POV #3)



Solution Brainstorming (HMW #1)



Solution Brainstorming (HMW #2)



Solution Brainstorming (HMW #3)