EXPERIMENT PLANNING WORKSHEET

Top 3 HMW [Details: POV + HMW]

MISTAKES ARE GOOD [G] [A] [J] [N]

- 1. HMW make mistakes more like achievements?
- 2. HMW make mistakes more like currency?
- 3. HMW make making mistakes fun & playful?
- 4. HMW encourage learners to make mistakes?
- 5. HMW make mistakes more like magic portals?
- 6. HMW help learners love their mistakes?
- 7. HMW make learners want to make mistakes?

PSYCHOLOGICAL SAFETY (NOT EMBARRASSED) [G] [J]

- 8. HMW provide practice opportunities that can't cause embarrassment?
- 9. HMW create a safe environment to get learners to use the language they want to learn.
- 10. HMW take the self out of language learning?
- 11. HMW remove judgment from language learning environments?
- 12. HMW eliminate the embarrassment associated with not being able to speak the local language?

ACTUALLY, WE DON'T NEED LANGUAGE [N] [G?] [A]

- 13. HMW connect people without language?
- 14. HMW help David enjoy living in a non-English speaking country without investing a lot of time and effort to learn the language (e.g., order the food he might enjoy)?
- 15. HMW help David form strong social bonds with people who don't speak English?
- 16. HMW create connection opportunities that transcend language?
- 17. HMW make cultural immersion language agnostic?

Top Solutions [Details: SOLUTION]

- Mistake Comedy Club
- Language Cultural Checker
- Virtual Cultural Environment

ASSUMPTION TO TEST

- Mistake Comedy Club
 - Assumption: if people see others mistakes, would that make them willing to share their mistakes?
- Language Cultural Checker
 - Assumption:
 - [tested] 1) Not knowing unspoken rules can be a source of embarrassment and a cultural checker can be helpful
 - 2) does the checker prepare them for the real world situation; 3) do travelers feel the need to follow local customs and would they see something other than Google, i.e., is there a need for cultural checker system; 4) would users follow the suggestions or items given by the checker; 5) would they feel comfortable using the checker?
- Virtual Cultural Environment (all other solutions can be implemented in this environment)
 - Assumption: By playing the game as a team, does it make it easier for them to use the language and feel less embarrassed to make mistakes? (i.e., is there confidence gain)

EXPERIMENT OVERVIEW

Mistake Comedy Club

- Everyone makes mistakes while learning languages
- Often this leads to embarrassment and demotivation
- How can we use comedy to decrease or remove the embarrassment associated with making mistakes while learning a language?
- Make a supportive community
- Eventually thinking of something like Reddit
- Process
 - Task
 - You're trying to learn a language and are naturally making mistakes along the way. You're starting to feel demotivated and look at the funny ways that other people have made similar mistakes in the past. Are you more willing to share your own experiences in a similar, light-hearted manner?
 - Tool/artifact
 - Messaging platform (Slack)
 - Two versions: anonymous and not anonymous
 - Roles
 - Language learner
 - Multiple actors
 - Interviewer+notetaker

- Script
 - "We would like to study how people are affected by mistakes while learning languages."
 - We all sit in a circle and start sharing stories about our own personal experiences
 - Frame the stories in either a very positive light (this happened, but I came over it and succeeded in the end) with laughter vs. negative light (this happened, I freaked out and panicked, and left) with more embarrassment
 - Positive:
 - I was traveling in China a few years ago and the first day I wanted to go to a local restaurant to see what kind of typical breakfasts people eat there. I went inside and everything was in Chinese, with no English at all and no pictures on the menu! I tried to order something by using some phrases from my phrasebook and they didn't really understand me, but we managed to communicate by mixing phrases and body language and eventually I ended up getting something. To this day I still don't know what was in that breakfast but it was certainly a memorable experience that I won't forget!
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 - Negative:
 - I was traveling in China a few years ago and the first day I wanted to go to a local restaurant to see what kind of typical breakfasts people eat there. I went inside and everything was in Chinese, with no English at all and no pictures on the menu! I tried to order something by using some phrases from my phrasebook but they didn't understand me at all so I just left and went back to the hotel for breakfast.
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 - At the end, we get to the actual language learner and see what kind of a story they give and how they are feeling about it

Cultural Checker

- Assumption:
 - [tested] 1) Not knowing unspoken rules can be a source of embarrassment and a cultural checker can be helpful
 - 2) does the checker prepare them for the real world situation; 3) do travelers feel the need to follow local customs and would they see something other than Google, i.e., is there a need for cultural checker system; 4) would users follow the suggestions or items given by the checker; 5) would they feel comfortable using the checker?
- What is a cultural checker Instead of just do a grammar check, it checks for cultural relevance & appropriateness

- Process simulate experience through role-play
 - An actor that acts as an intelligent system that gives cultural checks upon request
 - One actor as the local in the imaginary culture; interact with the user
 - Two observers
 - the user tells the system what they plan to do, and the system gives them the checkers, i.e., a list of Dos and Don'ts
 - The users check before saying and do certain things
 - The users can also go back to the system anytime to check if what they want to say or do is appropriate
 - The actor needs to improvise based on the interactions with the user with the goal to probe users needs in a foreign culture and if they find the cultural checks useful
- Artifacts: passport, money made out of post-its; Chairs to simulate taxi ride
- Script:
 - Just landed in Chailand, need to take a taxi to the hotel and check in. Interact with taxi driver and interact with hotel receptionist.
- Unspoken rules:
 - When handling money or passing over anything, must pass left hand to left hand while holding hands right hand to right hand
 - Smiling at strangers is very rude
 - Looking at strangers is very rude
 - It's rude to talk to a taxi driver, just sit in silence and look out the window
 - When flagging a taxi, use two hands and "pull upwards"
 - Always tip around 10% for everything, but if you tip more than that it means you think the service was really bad and you're suggesting they use the money to sustain themselves after quitting the job
 - When you give money, you have to ask for how much change you want or else it's just assumed that you're tipping the remainder

• Virtual Language Immersion:

- A virtual game multi-layer environment
- Learners (maybe with different level of proficiency) choose the world they want to learn
- Learners are all players and the feedback comes from the system and the other players
- Learners can learn the culture they choose and the language of that culture.
- Assumption: acting out non-typical situations will challenge learners in unique ways.
- What is more embarrassing: attempting to accomplish a task on your own, in another language, or doing it as a team to build confidence?
- Process:
 - Two participants are asked to accomplish a task that involves speaking a language that they are trying to learn. At first, each participant is asked to

solve the challenge on their own. Next, they are brought in together and asked to work together to complete a second task. We gauge the confidence level of each person and survey them on the two experiences.

- Tasks:
 - Task 1: Spanish learner is visiting Puerto Rico and comes across a souvenir shop and wants to buy something. The problem is, everything in the shop costs more money than you have to spend. The task is to bargain with the shopkeeper to get the souvenir by ANY reasonable means necessary.
 - You have just been bitten by a snake, and you and your friend need to describe what the snake looked like, where it bit you, if it hurts and anything else the doctor needs to determine if the snake was poisonous or not.
 - Roles
 - Notetaker
 - Shop keeper/doctor(must speak fluent Spanish)
 - Two study participants
 - Tool/Artifact
 - Fake money
 - "Souvenirs"
 - Phone to look up translations
- Script:
 - "We would like to study interactions language learners might encounter."
 - To the shopkeeper actor: be friendly, but challenge the learner, then need to be convincing in their bargaining strategy. For example: Bring up making a trade for their cellphone, playfully keep asking for the phone, ask them why they don't have any more money, ask them where they are from, then finally, offer them a deal where if they watch your shop while you get lunch, you will let them have the souvenir for free. Correct them when they make language mistakes?
 - **Doctor:** make up questions to ask the patient about the bite, (i.e. when it was, if it hurts, what the snake looked like)
 - To the taxi driver actor (backup): Two passengers want you to know where the best place is to hike. There are many different locations to choose from and the goal is to help the travelers find the location that is best for them. Ask how much time they have to spend, how much money they want to spend getting there. If they want to a beach hike or a mountain hike.

DETAILED EXPERIMENT DESIGN

- 1. Participants (target participants, how many, recruiting strategy, compensation)
 - Mistake Comedy Club
 - People who have tried learning a language (successfully or unsuccessfully); convenient sampling with no compensation
 - Recruited Participants 1: Current MA student; native Chinese speaker
 - Recruited Participants 2: Visiting scholar; native Chinese speaker
 - Cultural Checker
 - People with prior international traveling experience; convenient sampling with no compensation
 - Recruited Participants 1: Current MA student; native Chinese speaker with multiple international travel experience
 - Recruited Participants 2: Current MA student; native English speaker with international travel experience
 - Virtual Language Immersion:
 - 2 People learning to speak Spanish, 1 expert spanish speaker; convenient sampling with no compensation
 - Recruited Participants 1: Visiting scholar; native Chinese speaker
 - Recruited Participants 2: Current MA student; native English speaker, Spanish language learner (studied in high school and college) with international travel experience

2. Preparing for study & prototype creation (including any required software, supplies, additional people, etc.)

- Mistake Comedy Club
 - Actors that share stories before the user
 - Observers
- Cultural Checker
 - Two actors
 - Artifacts: passport, money made out of post-its; Chairs to simulate taxi ride
 - An observer to observe the interaction between the user and the actors

• Virtual Language Immersion:

- An actor whom the language learner need to communicate with
- Observers
- \circ $\,$ We need to brief the actor beforehand on the roles
- **3. Running study** (length, plan for mgmt during study if needed)
 - Mistake Comedy Club
 - 5 minutes for intro of the task, 5 minutes to do the two versions, and 5 minutes for buffer/discussion/debrief (15 minutes in total)

- Cultural Checker
 - <10 mins and leave time for debrief and follow up questions
- Virtual Language Immersion:
 - 5 minutes for intro of the task, 10 minutes to accomplish the task. 30 minutes in total

4. Analysis plan

- Mistake Comedy Club, Cultural Checker, & Virtual Language Immersion
 - To note and discuss surprising responses right after the session with the observer. What went as planned and what didn't
 - To discuss if the assumption is right or wrong, and how
 - To analyze additional insights
 - Post experience debrief with participants

OPEN ISSUES

- 1.
- 2.
- 3.

Archive

Cultural checker [PILOT; NOT USED]

- Suggested Scenes & messages (typed or given on a card)
 - Get a ride from the airport
 - Check in at the hotel
 - Be hungry and find something to eat
 - Order food at a food market
 - Walking around in the night market. Suddenly, you felt stomachache (possibly because something you just had).
 - Find a public restroom
 - Go to a pharmacy to get some help.
 - Lost; Get direction to get back to the hotel
- Tool/Artifact a list of dos and don'ts (made-up list + improvisation)
 - Do when you try to get a ride, raise your left hand and not your right hand!
 - \circ $\,$ Don't raise your right hand when waving to people
 - When handling money, must pass left hand to left hand while holding hands right hand to right hand
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 - Don'ts smile to strangers
 - $\circ~$ Do whenever you say thank you, bow at the same time
 - Don'ts look at your phone or multi-task when eating
 - Don'ts walk in the middle of the road
 - Don'ts eat with your hand
 - Dos tip taxi drivers
 - Dos sit yourself in the restaurant to signal you're going to eat there
 - Dos wear the backpack in front (tell the user it is to prevent thief or not tell them and see if it makes a difference)
- Script for role-playing (piloted with J to get some possible responses)
 - It seems that the language barrier introduces another assumption & variable, so we may run the experience with English but a foreign country.
 - Ask: which country is next on your list to visit?

- Imagine that you're on a solo trip to an Asian country, Chiland of which you know little about.
- Imagine that you will land in the morning, and you made a plan for the rest of the day, from leaving the airport to going back to the hotel. What does your plan look like?
 - J I would go to the airport visitor center and see if they have information pamphlet; figure out transportation and where I want to go, and how would I talk to people there - would I need a translator and would I speak English
- J was told the locals there can't speak English, and was asked how to get to his next stop
 - J I would show pictures to the taxi driver and say take me there
- "Imagine there is an app where you can input your plan and it gives a list of Dos and Don'ts and you read it while you're in the taxi. One of the Dos says 'tip the taxi driver'. What would you do"
- J I would tip the taxi driver if it is the custom
 - "I would research this probably" "if I were to use a taxi, I would ask google"
- "Imagine you arrived and you are getting hungry. What would you do?
 - J Go to a restaurant I guess.
- "You were given a menu without any English. How would you order food"
 - J I will point to something
- "After you finish eating, you went back to the street to explore. Suddenly, you experienced stomach aches and want to find a restroom. What would you do?"

■ J - I would go to a restaurant

- What if the app reminded you that "you can't use the restrooms in restaurants unless you're patron". What would you do?
 - I would buy something first