Educational Engagement through Storytelling

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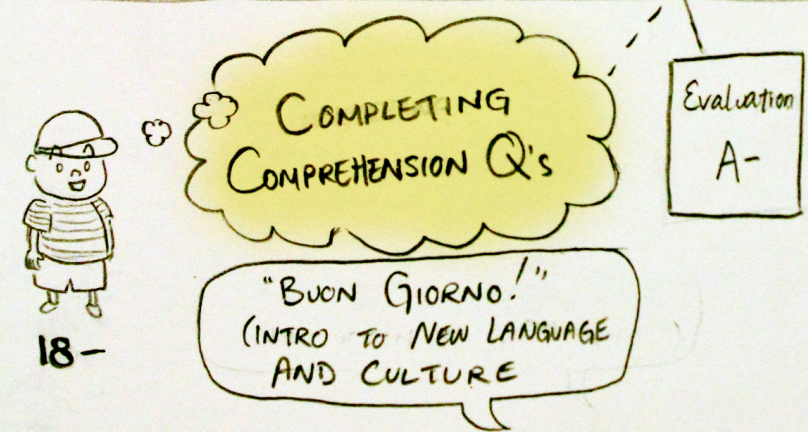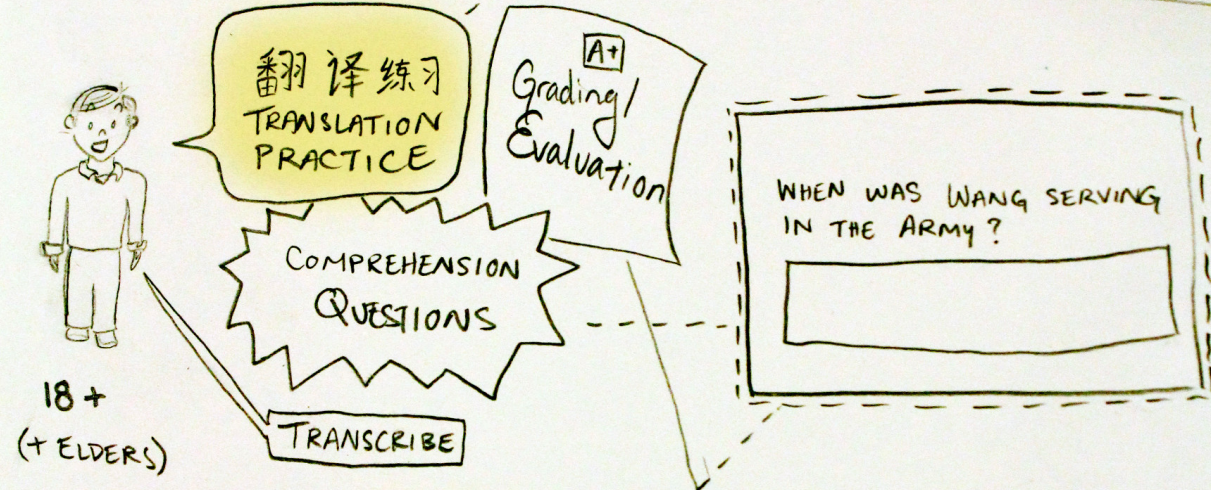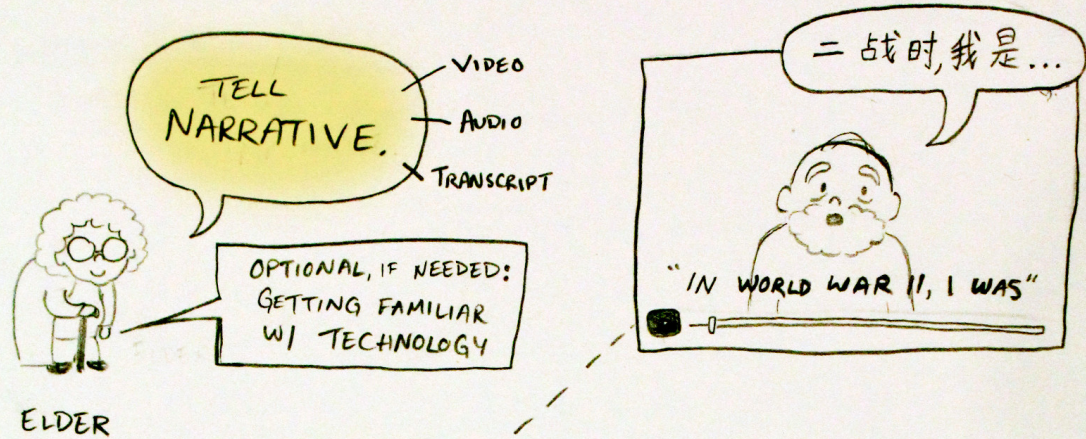
What is it?

An application that connects elders to childhood learning and assessment through storytelling.

Components

- Storytelling (video, audio, text)
  - ○ Transcription, translation

- Comprehension questions
  - ○ Question writing
  - ○ Question answering
  - ○ Question grading

- Community engagement
  - ○ Quality and difficulty ratings
  - ○ Reward mechanisms (reputation, badges)

Implementation

- Web (+ mobile?) application

- Some combination of
  - Community
  - Mechanical Turk
  - Artificial intelligence (natural language processing)

- Capabilities
  - Transcription and translation: community / Mechanical Turk
  - Question writing and grading: community
  - Quality and difficulty ratings: community
  - Text anonymization: NLP / storyteller

Strengths

- Novelty (artifact of narratives)
- Solves real problems
    - Elderly feel disconnected.
    - Elderly are disengaged with technology.
    - Students are unprepared for language comprehension tests.
    - Students have trouble relating to traditional texts.
- Multi-lingual (potential for language learning)
- Cross-cultural
- Cross-generational

Weaknesses

- Motivating elders to tell their stories on a website

- Motivating the community to write and grade comprehension questions

- Maintaining privacy of storytellers and references

- Complexity of application: World Lab timeframe
  - Also, space and bandwidth required by video

Donna Morgan USA. 75 yrs old

Retired Restaurant Owner

Donna lives in Sunnydale Retirement Center and watches TV all day because she never has any visitors. She sometimes wishes she could tell someone about her childhood stories or some of the ridiculous things she sees on TV.

Donna recently heard about this new application and uploaded a very animated movie review that will be seen by several people. She's excited to express her personality again.

Guo Li Hua China. 43 yrs old
1st Grade Teacher; Self-Taught English

Guo Li Hua is trying to get her students to practice story comprehension. She has previously viewed and selected a video narrative based on content and level-appropriate grading.

Guo Lao Shi has uploaded some comprehension questions to the application that is due for homework.

Xiao Ming China. 6 yrs old
1st Grade Student

Xiao Ming is in Guo Lao Shi's first grade class. He does not know enough Chinese characters to read a narrative. Instead he is instructed to watch a video narrative and have his mom read the question so he can answer the comprehension questions.

Cheng Wen Jun China. 85 yrs old

Retired Government Official; Served in Army; Loves Storytelling

Mr. Cheng lives with his wife and second eldest son. Though there is a computer present in his home, Mr. Cheng does not know how to use computers and has little desire to do so.

One of his favorite things to do is share his army stories with his grandchildren. Mr. Cheng is a wonderful storyteller and soon learns how to record and upload several of his own video narratives to the application to share with his family and the public.

Uploading and watching other people's video narratives has become a new favorite hobby of Cheng and his wife's.

Oliver Carmichael USA. 26 yrs old
3rd-year Student in Mandarin Chinese

Oliver has studied Chinese for 3 years and is about to embark on a 2-month internship in Shanghai. He decides to test his comprehension by attempting to translate Mr. Cheng's top-rated video narrative to English.

Guo Li Hua China. 43 yrs old
1st Grade Teacher; Self-Taught English

While looking through narratives to assign to her first graders, Mrs. Guo stumbles upon Mr. Cheng's story. She sees that an American student has attempted to translate Mr. Cheng's narrative. Mrs. Guo is also trying to learn English, mostly out of love for American film and music. Fluent in Chinese, she is able to make several corrections to Olivers' translation.

Janelle Jefferson USA. 17 yrs old

High School Student Preparing for SATs

Janelle has been studying for the SATs for the past few months. She struggles most with reading comprehension and uses the application to improve her vocabulary and comprehend more difficult text. She also finds most of the narratives to be fairly entertaining.