Designing features to improve captioning for deaf and hard of hearing students

Opportunity

Current real-time captioning solutions present a variety of user experience shortcomings, limit students’ autonomy and are costly.

Process

To understand the needs and perspectives of DHH students, we involved students, teachers, disability resource coordinators and captioners in a variety of research methods.

Methods

- Competitive Analysis
- Observations
- Interviews
- Diary Studies
- Co-Design
- Evaluation
- Skype Translator Testing

Finding:

- Every teacher has a mic that students wirelessly connect to when they get to class.
- Students can upload course content into dictionaries so domain-specific words are recognized in the captions.
- System errors are communicated and there are help and live chat options when problems happen.
- Teachers get a guide with tips to help them speak to effectively accommodate students who need captions.
- Teachers speaking too fast or not clearly is one of the top reasons for inaccurate real-time captions.
- Students are in control of their captions.
- Students need to be able to scroll back to earlier captions and customize the look and feel to suit their needs and preferences.

Finding:

- Accuracy is one of the most important factors in real-time captioning, and domain-specific words are often not recognized.
- Technology always has a chance to fail, students often don’t get the help to troubleshoot issues when they arise.
- Findings:
  - Teachers speaking too fast or not clearly is one of the top reasons for inaccurate real-time captions.
  - Students need to be able to scroll back to earlier captions and customize the look and feel to suit their needs and preferences.

Finding:

- Opportunity Process
- Competitive Analysis
- Methods
  - Diary Studies
  - Co-Design
  - Evaluation
  - Skype Translator Testing

Finding:

- To start off though, I want to focus on one question in particular. Who is the product for? Think about how
- Teachers speaking too fast or not clearly is one of the top reasons for inaccurate real-time captions.
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