

ClassInFocus: A Consolidated Platform to Promote Accessibility in Mainstream Classrooms

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Summary

Deaf and hard of hearing students pursuing Science, Technology, Engineering, and Math (STEM) fields at mainstream universities face challenging classroom environments. Technology in the classroom can better include deaf and hard of hearing students. **ClassInFocus** can:

Students must juggle their visual attention between instructor, slides, interpreter, and notes and may miss important content.



Reduce Visual Dispersion: Consolidate important content in one display

Skilled interpreters and captioners with specific domain knowledge may be hard to find.



Improve Language Access: Widen the pool of available accommodation by including remote interpreters and captioners

Participation is strained due to language barriers.



Enhance Classroom Interaction: The digital classroom can enhance the physical classroom with text and digital ink

Attendance is less valuable if much of the classroom content is missed.



Preserve Missed Content: The ability to record and playback class sessions will help further reduce missed content.

The Platform



a) Students can see the instructors slides (uploaded before class) in sync during the class session.

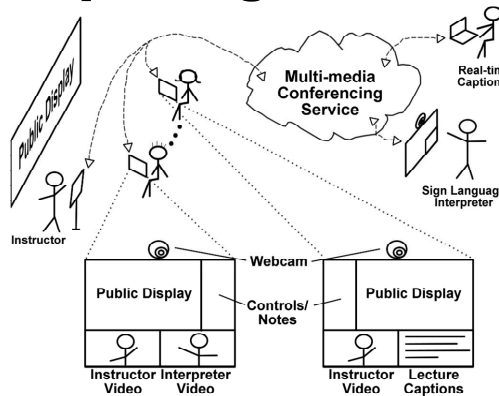
b) The students' interpreter may be remote or in-person. Either way, video within the interface brings the interpreter closer to other visually important components.

c) Students can chat and collaborate with other students in the digital classroom. They can also create break-out groups to chat with only members of student groups.

d) Because classroom components are visually closer together, the student may be able to take their own notes without missing important content.

Real-time captioning is also available within the platform.

Improving Academic Access



Multi-media conferencing services can:

- bring remote interpreters and captioners into the classroom via audio/video relay
- consolidate presentation, instructor, accommodation of choice, and student notes into one display
- allow more communication channels among students
- record class sessions for later playback

Utilizing the existing cyber-infrastructure at several universities creates more opportunity for finding the best interpreter or captioner for specific content.

A networked classroom gives students more control over their experience and better facilitates participation.

The conferencing platform could be used in any class, even if no other technology is in use.

Research Opportunities

We are currently testing the use of multi-media conferencing software for use in physical classrooms for the Summer Academy for Advancing Deaf and Hard of Hearing in Computer at the University of Washington. The platform has the potential to:

- decrease missed content during class
- increase participation during class
- increase the pool of available and content-specific accommodation
- provide a valuable post-class study tool

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