



Adapting Academic Videos for Students with Disabilities with ACTIV 1.0 Tool

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Adapted Captions through Interactive Videos (ACTIV 1.0) Tool Features

- Upload any existing video (.wmv; .avi; etc.)
- Automatically create video transcript (speech-to-text; time stamps to each word)
- Edit text in the transcript (improve accuracy; make key word captions)
- Automatically highlight each word in the captions as it is spoken out loud
- Automatically add picture symbols from Symbolstix to each word in the captions
- Add graphics to the video (as the overlay) to focus user's attention
- Mute the video and use text-to-speech feature
- Create multiple-choice quizzes built into the video
- Tag each question in the video, so that the user can review/watch a segment containing the correct answer
- Hear quiz questions and answer options read out loud
- Collect students' responses data



Iterative Design and Development Process

- Meta-analyses of video format and various adaptations
- Single-subject pilot study with 11 postsecondary students with intellectual disabilities
- Expert panel review of ACTIV functionalities and its interface
- Usability testing of ACTIV 1.0 with students with intellectual disabilities in middle school science (4 participants), middle school social studies (4 participants), and high school transition (4 participants) classrooms