Student Use and Perceptions of Closed Captions in the Fully Online Classroom

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Abstract

This brief summarizes research conducted by the Oregon State University Ecampus Research Unit regarding closed captioning, or the practice of providing a text version of spoken words and sounds for video or other multimedia. This research investigates college students’ experiences with and perceptions of closed captions in fully online environments.

Introduction

Closed captioning is a central component of making courses accessible for students with disabilities. Although higher education institutions are required to caption their videos out of legal obligation, some research and anecdotal evidence suggests that captions are also impactful for learning across a wide range of student populations. However, little empirical research supports the benefits of closed captioning for a wide variety of college-level learners, particularly in fully online environments. This research is among the first to explore how students in a fully online environment use and perceive closed captions.

Methods

This study addressed three research questions through an exploratory survey.

Research questions guiding the exploratory survey included:

1. How do students use video and multimedia captions to support their learning?

2. To what extent do various student populations use video and multimedia captions?

3. To what extent do various student populations perceive the use of video and multimedia captions as potentially valuable to their learning?

In the survey study, approximately 12,000 Ecampus students who have taken a fully online course at Oregon State University over two terms (summer and fall 2015) were asked to complete a survey on their experience with closed captions in the fully online environment. A descriptive analysis was conducted for quantitative survey data. Content analysis and induction were used to interpret qualitative survey data.

Results

Of the original 11,932 students contacted to participate in the survey component of this study, 793 complete and partial responses were collected over a two-week period. Of those 793 responses, 624 were acceptable for data analysis after data cleaning procedures were completed, resulting in an approximately 5% response rate.

The average number of online courses that respondents reported taking was 7.9 (SD: 7.0). 53% of respondents indicated that “all” or “most” of their online courses included video lessons, and of those whose online courses included video lessons, 65% indicated that it was either “very” or “extremely” helpful for the courses to include video lessons. The percentage indicating the same degree of helpfulness of videos was even higher for the following
subgroups: students with a diagnosed learning disability (81%), those registered with Student Disability Services (72%), and those requiring special accommodations in class (75%).

When asked how many video lessons offered the option to use closed captions while viewing videos, 12% indicated “all” or “most,” another 12% indicated “none,” and 47% indicated that they were “unsure.” The percentages indicating uncertainty regarding the availability of closed captions for videos was even larger for the following subgroups: students with a diagnosed learning disability (50%), those registered with Student Disability Services (57%), and those requiring special accommodations in class (50%). The rate was lower for those for whom English was not their first language, with only 31% unaware.

When asked how often they used closed captioning when they knew that videos included the option, 18% of all respondents indicated they “always” used it, 12% indicated they “often” used it, and 44% indicated they “never” used it. Of those who used closed captioning, 59% indicated the closed captions were either “very” or “extremely” helpful; 2% indicated they were either “very” or “extremely” much a hindrance.

When asked to share more about when and how closed captions are a hindrance, respondents offered comments that fell primarily into three categories: (1) closed captions sometimes blocked important information, (2) closed captions sometimes included incorrect information such as typos or were incorrectly synced with the audio, and (3) closed captions could be distracting.

Respondents also noted several ways in which closed captioning are beneficial or helpful to them. For example, respondents noted using closed captions to watch videos in environments where they could not use the audio setting, using closed captions when the audio was unclear or poor quality, and using closed captions when the instructor was difficult to understand. Several respondents also commented on how they utilized closed captions as a learning tool to ensure accuracy of information, assist them with focusing on the material covered in the video, aid in comprehension of course topics and materials, and as a support for exam review and note-taking.

**Conclusion**

While the sample size of this survey is too small to produce any generalizable findings, the limited data suggest that large proportions of students find videos helpful and students that are aware of the existence of closed captions also find closed captions helpful. However, while viewing videos, there are many students who may not know if closed captioning is available.

Respondents reported using closed captions in a range of environments and for a range of purposes related to their learning, but additional research is needed to further explore how students use and perceive closed captions in a range of learning environments, including fully online classrooms. Importantly, many of the factors identified by respondents as hindrances caused by closed captions are fixable through quality assurance.