



Searchable Captions™ Improve Learning Outcomes

The rapid growth in online educational offerings has necessitated the demand for improved solutions to meet the needs of the digital classroom environment. The benefits of providing captioned and subtitled video to dramatically improve learning outcomes, has been proven through significant research conducted over the past 30 years by Dr. Brij Kothari, Greg McCall, Susan Homan, the late Dr. Alice Killackey and many others.

Research has demonstrated that captioned course content has been shown to improve comprehension, increase engagement and remove language barriers for second language learners. Captioned video transcript access provides learners the ability to search on demand within video content in the same way as with a traditional textual database. In a survey conducted through MIT's OpenCourseWare, 94% of students surveyed found transcript data for search to be extremely useful.

In a recent University of California San Francisco captioning study, instructional materials were randomly delivered to students- 50% included captioned videos, 50% did not. Students who watched the captioned video, were more engaged and responsive to retrospective questions about the video. Even more impressive, the students who received captioned video averaged 1 GPA point increase over students not exposed to captioned video.

Equally important to communication and retention in today's classroom environment is the need to adequately teach students with cognitive or hearing impairment. At present, approximately 20% of Americans have a disability. The Library of Philosophy and Practice at the University of Nebraska-Lincoln conducted a comprehensive study on face-to-face instruction enhanced with captioned video in library instruction for secondary school students with hearing impairment. The study found that the learning outcomes of subjects exposed to the two instructional strategies; including subtitles and captions, improved significantly over students that were not exposed to dual instruction.








In addition to captioned video improving accessibility and discoverability, captions also increase the amount of time that a user spends watching a video by almost 40%. In fact, where captions appeared, 80% more people watched the entire video to its completion. According to recent trials conducted by PLYmedia (a provider of closed-caption solutions), revealed that videos containing captions were watched 91% to completion compared with 66% completion for videos without captions. That is a 38% increase in duration of media consumption.

The benefits of using captioned video within the learning environment have clearly been shown to improve learning outcomes. However until now, traditional captioning solutions have been expensive and labor intensive, making them unattainable for



most organizations. cielo24 has built a flexible captioning platform leveraging automation and on demand labor sourcing that solves accessibility and search requirements for today's digital media needs. cielo24 low-priced searchable captions™ bridge the gap for students, the hearing impaired as well as second language learners to extend content reach and value.

Benefits of captions in education:

-  Help with word identification, meaning and retention.
-  Content search and discovery.
-  Higher comprehension skills when compared to viewers watching the same media without them.
-  Captions provide missing information for individuals who have difficulty processing speech and auditory components in media.
-  Essential and government mandated for deaf and hard of hearing.
-  Beneficial to those learning in a second language.
-  Assist those with reading and literacy problems.

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