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## **Captioning and Subtitling Benefit All Students for Increased Literacy**

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For many years, teachers of deaf/hard of hearing have advocated for teachers and administrators in the schools to turn on captions in order to make captions available to students. Often captioning resources were unavailable, a hassle, or simply not a priority for classroom staff. Within our schools, the benefits of closed captioning has primarily focused on the 0.1% of students who are deaf and hard of hearing and their need captions to understand spoken language on videos and tv programs. There has been limited consideration for the larger population of students who benefit from seeing words on screens.

In addition, the issue of access has become more apparent as more schools are using teacher-produced videos for flipped classroom instruction or are showing online videos resources from YouTube. The CCs are simply not turned on - and if they are, the captions may be auto-generated (more distracting than helpful). Closed captioning is a simple tool that improves the literacy scores for all students.

This article will focus on the benefits of captioning for all students and people of all ages. Multiple research sources indicate that captions and subtitles offer advantages for increased literacy for close to 100% students, including those in kindergarten through twelfth grade, as well as college students. With that foundational knowledge, more people might be inclined to seek out and encourage captioning or subtitling use, both at home and in schools.

The United States is not the only country that has same-language subtitling or closed captions available for people to watch. In Finland and India, closed captions and same-language subtitles have long been used to promote literacy. Although Finnish children do not begin formal schooling until they are seven years old, they consistently earn top reading scores compared to other countries. Interestingly, they are also some of the highest users of same-language subtitling in homes. In India, researchers studied the impact of children learning to read by watching Bollywood films that were subtitled. They found that exposure to same-language subtitles increased literacy skills as students watched subtitles and even wrote down lyrics that they listened to and read. ("Can Closed Captioning Improve Literacy?", 2016)

There is significant concern about literacy rates throughout the United States. Various curricula, strategies, methods have been vetted and applied. It appears two pieces of equipment have been overlooked as literacy vehicles. Ninety-seven percent of schools and homes in the United States have televisions and computers. Therefore, a simple solution to increasing printed word exposure would be to turn on the CC1 setting on televisions and filter educational YouTube videos for subtitled media. Dana Suskind, author of "Thirty Million Words: Building a Child's Brain," provides research that when children have exposure to 30 million words through parent-child interaction they are better prepared for academic achievement when entering school. This principle could also be applied to the concept of printed literacy. When children have more words pass before their eyes, the exposure to the words creates more proficient readers by increasing background knowledge, vocabulary and literacy skills.

Using closed captioning has potential to close the divide, for not only students who are deaf and hard of hearing, but also those who struggle with reading, those who are learning English as a second language and people who need to increase their literacy skills.

"The specific areas that captioning can improve include: word recognition, word comprehension, vocabulary, identifying the main idea of a story, phoneme recognition, listening comprehension, and oral reading skills. Captioning also helps students understand and retain more of the concepts presented in the video, remember more of the dialogue of a film, take better notes, and participate more in class discussions of video content, making it a great tool for teachers of any subject at any level." ("Captions for Literacy", 2013)

The benefits of closed captioning are evident for students in public schools. For high school students who deaf/hard of hearing and placed in a general education flipped classroom learning environment, closed captioning is essential to learning and academic achievement. Providing closed captioning is also best practice for visual learners through the Universal Design for Learning method. "The potential benefits to all learners when instructors employ these methods should be a standard feature in online courses. (Kmetz Morris & Brodosi, 2015)

Increased understanding is also evident for college students who use closed captions. There are qualitative benefits for students taking online college courses. In a study conducted in 2015 by the University of South Florida St. Petersburg (USFSP) Distance Learning Accessibility Committee, results indicated that 99% of all students reported that they found closed captions to be helpful when taking online classes. Only 7% of those students surveyed were deaf or hard of hearing. The breakdown of the 99% = 5 % of students responded that captions were slightly helpful, 10% moderately helpful, 35% very, and 49% extremely. (Kmetz Morris & Brodosi, 2015) The results of this study were very similar to the findings from the National Research Study: "Student Uses and Perceptions of Captions & Transcripts". Conducted by Oregon State University's (OSU) Ecampus Research Unit, the national study found that "98.6% of students reported finding captions helpful." In particular, students noted the following benefits: increased clarification when there was poor audio in classes, better understanding of difficult

academic vocabulary including spelling of jargon, and improved note-taking that helped students to identify key terms and phrases when creating references.

Literacy continues to be a priority initiative for the United States Department of Education. As such, a literacy campaign should include closed captioning and subtitling access for all students, of all ages. Students who see more words are inclined to read more, and those who read more become more educated and literate citizens. The National Reading Panel 2000 concluded, "There is ample evidence that one of the major differences between poor and good readers is the difference in the quantity of total time they spend reading." The benefits of using captions and subtitles on televisions and when streaming instructional content on computers is evident. Since access is the legal right for all students, let's make literacy through same-language subtitling or closed captioned media a priority for all students.

References:

Can Closed Captioning Improve Literacy? 2016. Retrieved from <a href="http://blog.cminyla.com/blog/can-closed-captioning-improve-literacy">http://blog.cminyla.com/blog/can-closed-captioning-improve-literacy</a>

Edelberg, Elisa. (2018, January 4). Study Shows Adding Captions Improves Faculty Evaluations + Helps Students Learn. Retrieved from <a href="https://www.3playmedia.com/2017/07/28/captions-improves-faculty-evaluations-and-helps-students-learn/">https://www.3playmedia.com/2017/07/28/captions-improves-faculty-evaluations-and-helps-students-learn/</a>

Kmetz Morris, Karla and Brodosi, David. (2015, November 5). Closed Captioning Matters: Enhancing Accessibility and Improving Learner Experience in Online Learning. Retrieved from <a href="https://www.qualitymatters.org/qa-resources/resource-center/conference-presentations/closed-captioning-matters-enhancing-0">https://www.qualitymatters.org/qa-resources/resource-center/conference-presentations/closed-captioning-matters-enhancing-0</a>

Thirty Million Words: Building a Child's Brain. Dana Suskind - Dutton - 2016

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