

Subtitles and asynchronous, online education: The impact on the student and what to consider as a lecturer

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The recent pandemic caused higher education institutions around the world to explore remote lecturing. This remote teaching can happen live, but can also be done through pre-recorded lectures. While recorded lectures are undoubtedly limited in a number of ways, they still have some advantages. One of these advantages is that they can be subtitled in advance, increasing accessibility to multicultural and multilingual student audiences. Research on subtitles in education, however, tends to be mainly focused on the benefits of subtitles for language learning and accessibility for the hearing impaired. The number of studies investigating the effects of subtitles on cognitive processing is limited.

This presentation will discuss two large-scale eye-tracking studies that investigate how subtitles in different styles of online lectures affect the learner. The first study was conducted with L2 English speakers in Belgium and examined how the presence and language of subtitles influences the learner's comprehension, perceived cognitive load and eye movements in two styles of online lectures, namely a talking head style and a voiceover PowerPoint style. The second study recruited L1 English speakers in Australia and examined how the style of the lecture influenced the learner's comprehension, cognitive load and overall cognitive processing explored in more detail with eye tracking. Together they shed light on the potential benefits of subtitles in online education and what the lecturer should consider when producing online recorded lectures. A short survey also explored the students' preferences with regards to the lectures, providing us with an answer to a question that some of us that are teaching online may have asked themselves before: "Do we have to turn our camera on or can we leave it turned off?"