

Learning most with least effort: subtitles and cognitive load

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As exposure to foreign language (FL) media has been found to be beneficial for developing foreign language proficiency in the case of both younger and older learners (e.g. Enever 2011, d'Ydewalle 2002), foreign language videos are frequently used in contemporary EFL classrooms. In order to determine how FL films should be viewed to bring most benefits to learners, much experimental research has been done on the impact of subtitling on FL language development. Previous research reveals that subtitles contribute mostly to the development of foreign language vocabulary (e.g. Neuman and Koskinen 1992, Lekkai 2014) and listening comprehension (e.g. Luo 2004). There is, however, no consensus on which subtitling condition is the most effective. Some found intralingual subtitles (L1 subtitles) to be more beneficial in terms of vocabulary acquisition (Frumuselu et al. 2015), others argue that it is interlingual subtitles that help learners more in incidental vocabulary learning (e.g. Koolstra and de Beentjes 1999, Gorijan 2014). Furthermore, different subtitling conditions may differ in terms of the cognitive load they generate, which in turn exerts an influence on comprehension and learning that takes place while watching FL videos. For example, in their experiment Kruger et al. (2013) found that the group exposed to interlingual subtitles reported lower levels of cognitive load than the group exposed to intralingual subtitles.

The aim of my study was to investigate the effects of subtitling conditions on the level of cognitive load experienced as well as comprehension and vocabulary acquisition achieved by Polish learners while viewing English language videos. The participants of the study were 63 Polish learners of English selected by means of convenience sampling from a high school in Słupca, Greater Poland Voivodship. They were divided into three experimental groups: one group watched a video clip without subtitles, one with Polish subtitles, and one with English subtitles. The results obtained from a pre- and post-test, which consisted of comprehension questions and a Revised Vocabulary Knowledge Scale test adapted from Zhao and Macaro (2016: 86), show that interlingual subtitles result in greater comprehension, while, when it comes to vocabulary acquisition, it is intralingual subtitles that boost incidental learning more than interlingual subtitles. Additionally, after the experiment, the participants were asked to fill in a self-reported questionnaire concerning the level of cognitive load. The analysis revealed that subtitles regardless of their type do not result in cognitive overload. Moreover, interlingual subtitles lower cognitive load more than intralingual subtitles, which in turn leads to better comprehension of the video material presented, as evidenced by the results of the post-test.

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