Examining the conditions of using an English movie with subtitles

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Research Background

Since the language itself does not cover all features of communication, we make the most use of a various kinds of information from movies when enjoying them. Using eye tracking information enables us to explore how learners interact with different interfaces or obtain information from movies.

Previous Study

Koyama & Okura (2018) investigated the differences in the point of gaze and eye movement between different levels of English proficiency when they see an English movie with English subtitles. As the results, the false beginners seemed not to make use of the information from the English subtitles to understand the story of the movie. The student with the intermediate English level appeared to gain the enough information such as body language, gestures, and eye contact by actors in addition to the subtitles and the voices of the movie, on the contrary. We assumed that multiplexed information in a movie might distract lower level learners’ attention.

Research Objective

To clarify how false beginners could utilize the given various information when watching English presentations like the TED Talks, we focused on the effect that English subtitles could contribute their comprehension of the story based on an analysis of the point of gaze and eye movement.

Study Overview

Followings Instructions and Answering a Questionnaire → Watching 4 video clips (Jessi & Kevin) → Recording their eye movements with Tobii → Answering comprehension quiz → Analyzing the eye movements

Findings and Implication

The students (Takehiro & Kanon) whose English proficiency level were intermediate attempted to read the subtitles in order to understand what the speakers were speaking, however, the false beginners (Hiromi & Masashi) seemed to give up looking at the subtitles and to try to take other information such as voices and screen images even if all the students could answer the target question correctly. Showing English subtitles do not necessarily help lower level of EFL learners to comprehend the story.

Acknowledgements

Our heartfelt appreciation goes to Mr. Arnold F. Arao of Osaka Ohtani University.

Table 1. Fixation Duration within the AOI (Area Of Interest) in Kevin_3.avi

<table>
<thead>
<tr>
<th>Students</th>
<th>Level (class)</th>
<th>N (count)</th>
<th>Mean (sec.)</th>
<th>Sum (sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takehiro</td>
<td>A</td>
<td>181</td>
<td>.16</td>
<td>29.1</td>
</tr>
<tr>
<td>Hiromi</td>
<td>B</td>
<td>44</td>
<td>.16</td>
<td>7.5</td>
</tr>
<tr>
<td>Kanon</td>
<td>A</td>
<td>268</td>
<td>.20</td>
<td>53.9</td>
</tr>
<tr>
<td>Masashi</td>
<td>C</td>
<td>50</td>
<td>.12</td>
<td>6.2</td>
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</tbody>
</table>

Tobii Eyetracker
- 17.3 in. display
- Tobii X2-60
- Tobii Studio 3.2.1
- Sampling Grade: 60Hz, 0.4°