The Effects of Annotations of Illustrations and Simplified Text on College Students' Reading Comprehension in the Web-based Environment

顏怡青、倪淑芳博士
E-mail: 9601198@mail.dyu.edu.tw

ABSTRACT

Researchers of computer assisted language learning have suggested that integration of text and pictures can create an authentic and interactive environment for learning languages. However, how well non-English major college students comprehend the reading passage through multimedia annotations deserves more attention. The purpose of the present study was to investigate the effectiveness of different annotation modes in web-based learning environment. In addition, the participants' attitudes and perspectives toward different multimedia annotation modes were also examined. The participants were 120 non-English major freshmen at a university in central Taiwan. All participants were assigned into four groups. The first group was the control group, and participants in this group read a text in the web-based environment without any annotation. The participants in Group Two comprehended the reading passage with the assistance of ten simplified text annotations. The participants in Group Three comprehended the reading passage with the assistance of ten text-related pictorial annotations. The participants in the Group Four utilized the assistance of text-picture combination annotation to facilitate the reading process. A multiple-choice reading comprehension test, a recall protocol test, a questionnaire, and an interview were adopted in this study. The main findings from the present study are: (1) Participants' performance on the multiple-choice reading comprehension was better while reading with text-picture combination annotations in the web-based learning environment. (2) Participants' performance on the recall protocol test was better while reading with text-picture combination annotations in the web-based learning environment. (3) Most participants had positive attitudes and perspectives toward multimedia annotations on comprehending the reading text in the web-based environment. Results of the present study were of importance in explaining the effectiveness of different kinds of multimedia annotations. The pedagogical implications for multimedia design further discussed in the fifth chapter and some suggestions for future study were also drawn.

Keywords: multimedia annotations; reading comprehension; recall; web-based learning; second language learning


