

## **Abstract**

### **Co-Creative Online Language Learning**

During the COVID-19 pandemic, Information and Communication Technology (ICT)-based online cross-border international education attracted significant attention. Determining how educators can best provide communication-driven language education online is an urgent issue. Given this context, this study first examines how language acquisition involving physicality and materiality can be effectively achieved online within a multimodal learning environment that combines asynchronous interaction through participants' video production and synchronous interaction online. Second, this study explores how artificial intelligence (AI) translation can be used at different levels of language proficiency, how such technology scaffolds learners' language learning, and how it is beneficial to their task performance. Approximately 100 Japanese college students learning English and approximately 100 Singaporean college students learning Japanese participated in this project. The students were required to make short videos or presentations as their research assignment in their project-based learning classes. They were encouraged to use AI translation software in the process of doing research with their group members who spoke their target languages. Their attitudes towards online language learning and technology were analysed from the data extracted through questionnaires, observation of synchronous interaction online, and qualitative interviews. The results show that rather than solely relying on primarily verbal information to communicate, it is important to set up a variety of nonverbal multimodal learning situations that necessarily involve physical and material interaction. The results also imply that technology and language education have a high affinity.

231 words