# Enhancing FL Learners' Autonomy and Motivation through Creation and Exploration in Virtual Environments

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**Short abstract**:

In this talk, firstly, the theoretical foundation of learner autonomy, virtual reality for language learning, and learning by creation will be introduced. Next, the functions of a 3D authoring tool, Omni-immersion vision (OIV), and the methods of using it as a medium for facilitating students' creation and FL learning will be introduced. Finally, the potential applications of OIV in FL education and research will be suggested.

**Keywords**: Learner autonomy, 3D VR world, EFL, Omni-immersion vision (OIV)

**Extended abstract**:

Learner autonomy is when students take charge of their learning. It involves the skills of reflection and analysis. Autonomous learners perform their duties of learning by planning, monitoring and evaluating their learning progress. They reflectively engage in their learning and become independent and responsible. Moreover, they are usually willing to take risks during the learning process with a proactive attitude. As a result, an autonomous learner does not suffer from a lack of learning motivation.

The importance of learner autonomy has been researched for at least two decades. However, it has been critiqued that most research mainly focused on theoretical explanations and was based on anecdotal evidence. Therefore, this study aims to explore how learner autonomy is influenced by new technologies (a 3D virtual learning platform: Build & Show, B&S) through a case study with a quasi-experimental design. Twenty-nine fifth graders participated in this study for four months. Research data include the questionnaire on students' autonomy, the four-month non-participant classroom observation, the feedback of participating students and teachers, and an analysis of videos created by the students. The findings include (1) a rich description of the process of students' creations in B&S and the uses of B&S in English classes; and (2) an analysis of the students' self-assessment of learner autonomy supported by the qualitative data. Based on the results, the potential applications of 3D authoring tools in FL education and research will be suggested.

Dr. Yu-Ju Lan is a Research Chair Professor in the Department of Chinese as a Second Language at National Taiwan Normal University. She is currently the Editor-in-Chief of *Educational Technology & Society*, Associate Editor of *Language Learning & Technology*, and on the editorial board of *Ampersand*. She is the president of the Taiwan Pedagogy and Practice in TELL Association. Her research interests include technology-enhanced foreign language learning, language learning in virtual worlds, mobile learning, and online synchronous teacher training. She has published nearly 50 SSCI journal papers. Dr. Lan has proposed the principles of designing tasks and VR contexts based on empirical evidence. As the need for using VR in learning grows, her pioneering works could provide essential implications for academia, education, and industries. For her outstanding research performance, she was awarded the Outstanding Research Award by the Ministry of Science and Technology (MOST), Taiwan, in 2022.