



Call for papers for a special issue on Extended Reality (XR) in Language Learning

About This Special Issue

Guest Editors: Mark Pegrum and Yu-Ju Lan

Recent years have seen growing interest in extended reality (XR) in education, covering the spectrum from virtual reality (VR) to augmented reality (AR). VR offers potential for contextualized, interactive learning embedded in fully digitally simulated environments (Lan, 2020a). AR offers similar learning potential but embedded in real-world environments overlaid with digital data. In a broad definition, AR refers to the dynamic presentation of contextually relevant information and communication channels in a real-world setting, while in a narrow definition, it refers to the direct superimposition of these channels on our perceptions of the real-world setting, with the broad and narrow definitions increasingly merging as the technology advances (Pegrum, 2021). Depending on the hardware used, XR interfaces may currently be experienced less immersively (e.g., on the screen of a smartphone) or more immersively (e.g., through a headset), with an apparent move towards greater immersiveness. Today's discussions of XR may well connect in time with technology industry proposals for a worldwide metaverse.

Evidence has already begun to emerge of the language learning value of VR (e.g., Alfadil, 2020; Lan, 2020b; Lan et al., 2015), with research suggesting that social interaction in immersive VR is particularly effective in improving learning outcomes (e.g., Li & Lan, 2021). Evidence has also begun to emerge of the language learning value of AR (e.g., Parmaxi & Demetriou, 2020), with one notable early trend being towards the deployment of AR language learning trails grounded in digitally supported real-world immersion (e.g., Pegrum, 2019a, 2019b). However, with a number of studies suggesting that XR benefits some aspects of language learning more than others (e.g., Reinders et al., 2015; Wang, 2017; Wang et al., 2020), much more research is needed into what kinds of content and tasks lend themselves to XR approaches, as well as which learners stand to benefit most (Hockly, 2019; Lan, 2020a). One area of particular interest is the applications of XR for learners with special educational needs (e.g., Lan, 2020b; Lan et al., 2018). Another important research area is students' own creation of XR content or contexts to develop their autonomy and support their own and others' learning (e.g., Pegrum, 2019b; Yeh & Lan, 2018; Yeh et al., 2018).

Some benefits may vary as we move along the XR spectrum. VR may have a role to play in supporting telecollaboration or COIL (collaborative online international learning) projects, such as enriching digital storytelling exchanges between distant students; it may help to build intercultural awareness and empathy for diverse others; and it may also have practical advantages over AR in an era of remote teaching and learning such as during the COVID-19 pandemic (Kukulska-Hulme, 2021). AR, conversely, may help students leverage the linguistic richness of everyday urban landscapes where multiple languages and dialects are in play, and where translanguaging may come to the fore. Other benefits, perhaps intertwined with challenges, may be common to the whole XR spectrum: 3-dimensional *multimodal immersive texts* add considerable complexity to the interpretation, creation and exchange of meaning we are used to in 2-dimensional multimodal texts, thereby both fostering and necessitating students' development of new literacies such as *immersive literacy* or, more specifically, *XR literacy* (Pegrum et al., in press).

This special issue of *Language Learning & Technology* seeks to provide a variety of perspectives on language learning with XR. We particularly welcome empirical studies of VR, AR, or related language

learning interventions. We will also consider theoretical papers on the opportunities and challenges of XR-based language learning, and the new learning paradigms to which it might give rise.

Guidelines for Authors

Articles should be no longer than 8,500 words (including references, but not appendices). For specific guidelines, refer to the [LLT submission guidelines](#). Please note that articles containing only descriptions of software or pedagogical procedures without presenting in-depth empirical data and analysis on language learning processes or pragmatic outcomes will not be considered.

To be considered for this special issue, which will appear in Volume 27, Issue 3 in October of 2023, please submit a title and a 300-word abstract through [this online form](#) by February 1, 2022.

Publication Schedule

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| February 1, 2022: | Submission deadline for abstracts |
| February 15, 2022: | Invitation for authors to submit manuscripts |
| July 1, 2022: | Submission deadline for first drafts of manuscripts |
| March 1, 2023: | Submission deadline for revised manuscripts |
| July 1, 2023: | Submission deadline for final drafts of manuscripts |
| October 1, 2023: | Publication of special issue |

For Further Information

Please contact the Managing Editor at llt@hawaii.edu.

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