Title of Project
Comparing L1 and L2 Glosses in Vocabulary
Learning from Digital Reading

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TIRF Research Topic Investigated
Digital Technology in Language Education

Project Summary
The prevalence of electronic devices affords second language (L2) learners the ease of accessing diverse reading materials for their L2 learning beyond the classroom. For vocabulary, while the large number of words required to understand and use an L2 necessitates learning outside the classroom through reading and other activities, the efficiency of such learning is often low. *Glosses*, which are short definitions of words, are shown to promote vocabulary learning from reading (e.g., Abraham, 2008). However, important questions like the types of glosses to use under various circumstances and learners' engagement with different gloss types are underexplored.

In this mixed-methods study, I investigate (a) how learners' L2 proficiency affects their engagement with first language (L1) and L2 hyperlinked glosses, and (b) how the number of times a target word appears in text, learners' gloss engagement, and L2 proficiency affect the comparative effectiveness of L1 and L2 glosses in vocabulary learning. English learners at a Chinese university will be randomly assigned to read a digital graded reader with L1 or L2 hyperlinked glosses. Students' gloss clicking behaviors are logged and their abilities to recognize, recall, and retrieve word meanings in real time are measured immediately and two weeks after the first reading session. Experimental data is triangulated with questionnaires to gain further insights into learners' experiences with glosses in digital reading. Findings will illuminate factors affecting the comparison of L1 and L2 glosses in a digital reading environment, with implications for learners, teachers, and digital learning program designers.