

What Reading Gains Really Mean: Vocabulary Growth Through Digital Reading While Listening in L2 Contexts

Carol M Johnson¹ & Chris McKenzie²
^{1,2} Renaissance Learning

Abstract

This study re-examines reading growth data from two earlier studies conducted in Turkey (2019) and Hungary (2020). Both involved Grades 2–8 English foreign language learners who received regular classroom instruction supplemented by digital books with audio narration. While the original evaluations reported reading-level gains, this secondary analysis addresses a key question: *What do those gains represent in practical, linguistic terms—particularly in vocabulary development?* In both studies, students read authentic native-speaker texts selected through pre-test-based recommendations (ATOS or Lexile), with audio narration. Despite limited reading time—averaging just six hours per student—learners showed notable growth: +70 Scaled Score points on STAR Reading (~0.6–0.7 GE) and +37L Lexile, suggesting strong learning impact for the time invested. To interpret these gains more meaningfully, findings were reviewed through the lens of vocabulary acquisition research linking reading progress to estimated word learning. Based on established correlations between reading progress and word learning, students are estimated to have acquired approximately 250–500 new word families. While the initial design emphasized comprehensible input through matched text difficulty and audio support, additional gains may have been reinforced by interleaved text exposure and distributed reading—both consistent with learning science principles. These results emerged from conventional classrooms, with digital reading added as a supplemental resource. By translating reading-level gains into estimated vocabulary growth, this study offers educators a practical lens for interpreting digital reading outcomes—particularly the potential of reading while listening to support vocabulary development among lower-proficiency second-language learners.

Keywords: comprehensible input, distributed practice, educational technology, foreign language learners, interleaved texts