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Authors Morales-Izquierdo, Sara Feher, Olga

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A small increase in interactivity boosts language learning in a virtual environment

Sara Morales-Izquierdo

University of Warwick, Coventry, United Kingdom

Olga Feher

University of Warwick, Coventry, Warwickshire, United Kingdom

Abstract

Interaction plays an essential role in language acquisition, but the specific ways in which its underlying mechanisms contribute are unclear. To investigate this question, we conducted a study in which participants learnt an artificial language through interaction with a computer program, in a modified director-matcher paradigm. We manipulated the level of task interactivity and tracked learning progress. We found that participants who generated responses and received slightly more feedback on matcher trials learnt the language faster and retained more information when tested a day later. However, the manipulation did not affect grammatical or word form accuracy. The results suggest that small changes in interactivity can have a sustained impact on language learning, particularly on word learning. Our study also has implications for the development of digital language learning materials, and it highlights the potential of this paradigm for exploring language learning in an interactive manner in an online environment.

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