Cyprus University of Technology

Faculty of Fine and Applied Arts

Department of Multimedia and Graphic Arts

Language Centre

MA Dissertation

ROBOTICS IN LANGUAGE LEARNING: A SYSTEMATIC REVIEW

EFTIHIA PSARA

Limassol 2020

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APPROVAL FORM

MA Dissertation

Robotics in Language Learning: A Systematic Review

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Cyprus University of Technology

May, 2020

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I would like to thank Dr. Antigoni Parmaxi and Dr. Androulla Athanasiou for their constant support and assistance in the completion of this dissertation. I am truly grateful for their continuous motivation, inspiration and encouragement since this study would not be completed without their help.

Abstract

In this paper, scientific literature of the use of robotics in language learning from 2010 to 2020 is being reviewed to answer specific questions regarding: a) the type(s) of robots that have been used in language learning, b) the benefits and challenges in the use of robotics in language classrooms, c) the skills that have been targeted with the use of robotics, d) future research directions recommended in the literature related to the use of robotics in language learning, e) the evaluation methods of learning and knowledge of students when robotics are used in language classrooms and f) the languages that have been explored through Robotic Assisted Language Learning (RALL), g) the educational levels in which RALL has been investigated and h) the geographical distribution in countries in which RALL research has been conducted. A systematic online search on bibliographic databases was conducted and 60 articles were selected and included in the study. Based on the results, in most of the cases speaking and vocabulary skills of English as a second or a foreign language were explored. In addition, most of the studies followed an experimental research design creating a pre-test and a post-test for student learning and knowledge evaluation. The results also suggest possible benefits and challenges of the use of robotics in the language classroom. Some of the major benefits concluded in the review are the positive effects on motivation and engagement when the implementation of a robot is used to learn a language as well as the decrease of embarrassment and discomfort and the provision of authentic communicative practice.Challenges include the distraction caused in classrooms when robots are used, technical issues and the individual differences of learners. The analysis of the papers showed that most of the research has been carried out in Asia which holds the highest percentage with 61.8% while the most explored educational level is primary education. Based on the results of the review future directions and recommendations are also pointed out for researchers interested in robotic assisted language learning.

Keywords: robot-assisted-language-learning, RALL, systematic review, language learning