


Chapter 15


The Use of Augmented Reality (AR), Virtual Reality (VR), and Artificial Intelligence (AI) in Language Education: A Systematic Literature Review

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ABSTRACT

Mastery of language skills requires integrating various technologies within the lessons along with commonly utilized traditional materials. Since technology-based education caters learners with different learning styles by satisfying the endeavors of the educators in meeting the needs of the current age, there has been a tendency towards employing technological tools in language classrooms. Thus, a growing

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number of teaching pedagogies have become entwined with the use of several technologies. Fundamentally, there are three emerging technologies that have been the foci of interest in education: augmented reality (AR), virtual reality (VR), artificial intelligence (AI). Within the scope of language teaching and learning, there is a plethora of research investigating the influences of these technologies on the effectiveness of language lessons. Concordantly, using the PRISMA systematic literature review method, this study presents the findings of the previous studies that investigate the effects of AR, VR and AI on language education.

INTRODUCTION

Using technology in language education has gained considerable attention since there is a plethora of materials and methods that can be utilized when integrating technology into the language classrooms. As humans get involved in the gradually digitalizing world, the focus of teaching and learning languages has shifted from the teacher-centered approaches to the learner-centered approaches (Kavaklı Ulutaş & Abuşka, 2022; 2023). When considering the current dispositions of language education, it is an unerring fact that in this digitalized world, those learner-centered approaches are integral parts of any practice in that they necessitate the utilization of customizable learning materials along with the appropriate pedagogies to be employed in the classrooms. In this regard, the use of technological devices (e.g., smartboards and tablets) has progressively become more popular among the English language classrooms.

Underlying this popularity is the shift in teaching and learning pedagogies which has brought about numerous benefits regarding the notion of personalized learning. In other words, the indispensable influence that the incorporation of technology has in language education stems from the flexibility of the learning conditions when applied in classrooms (Tomlinson & Allan, 2000). As for this flexibility in terms of the utilization of technology in language education in a broad sense, it can be stated that if used appropriately according to the age and level of the learners, technology-based classes pave the way for optimized learning. That is, as technology-based teaching and learning caters learners with various kinds of learning styles from visual to kinesthetic learners, it does not only offer an abundance of digital tools but also facilitates the planning phase of the lesson for language teachers.

Furthermore, technology incorporation in language classrooms also provides educators and learners with a large array of options as to how to conduct and proceed within the lesson, and thus, it enables them to meet the needs and requirements of the current age that they live in. Since the effectiveness of any practice, however, depends on the way that it is implemented, it is crucial that the educators have training

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