

Chapter 12

Affordances and Pedagogical Implications of Augmented Reality (AR)–Integrated Language Learning

Babak Khoshnevisan

University of South Florida, USA

Sanghoon Park

 <https://orcid.org/0000-0001-9459-8880>

University of South Florida, USA

ABSTRACT

Technologies have permeated the field of language education in recent decades. Language education has been informed by the technology-enhanced practices. Researchers have exhausted a variety of technologies and technological tools in the field of language education. Augmented reality (AR) is one of the emerging technologies that has been exploited in both education and language education. However, it is reported that educators' lack of knowledge and confidence in employing emerging technologies such as AR are limiting the use of these technologies in language education. To dive into the employed AR-related practices in language education, this chapter will (1) introduce the definition of AR, (2) discuss the underlying theories undergirding AR-integrated language learning, (3) present both the affordances and thorny issues accompanied with AR, and lastly, (4) share pedagogical implications of AR-integrated language learning to inform and usher the practices of language educators.

INTRODUCTION

Technology plays a vital role in our daily life from doing errands to heavy industrial works. In recent years, technology has been an indispensable part of our life. Technologies and technological devices have plagued almost every aspect of our life. Consistent with this mainstream, language educators and

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researchers have conducted technology-related studies in the field of language/teacher education: literacy and augmented reality (Park & Khoshnevisan, 2019); augmented reality and teacher education (Khoshnevisan, 2019b); automatic writing evaluation (AWE) tools to enhance writing skills (Khoshnevisan, 2019f); animated pedagogical agents (Khoshnevisan, 2018a); augmented reality and language learning (Khoshnevisan & Le, 2018); audiotaped dialogue journals (Rashtchi & Khoshnevisan, 2008); AR-infused apps (Hadid, Mannion, Khoshnevisan, 2019); material development (Khoshnevisan, 2020) to name but a few. Aligned with this research backdrop, many researchers have widely examined the impact of technology on the participants' cognitive attainment and explored their perceptions about different types of technologies and technological tools (Trushell, Maitland, & Burrell, 2003; Specht, Ternier, & Greller, 2011; Yang, 2011; Smeets & Bus, 2012; Wojciechowski & Cellary, 2013; Di Serio, Ibáñez & Kloos, 2013; Wu, Chang, & Liang, 2013; Reinders & Lakarnehua, 2014; Küçük, Yılmaz, & Göktas, 2014; Amer, 2014; Cheng & Tsai, 2016).

Khoshnevisan (2019b) portrays a rather comprehensive picture of the technologies being used in the field of language education. He takes an array of technologies into account to make a judicious inclusion for the incorporation of technologies in language education. Having chronologically considered different types of technologies, Khoshnevisan presents the results of technology-infused studies to showcase the conducive nature of technologies in education and its ramifications alike. The abundant pedagogical implications of technologies coupled with educators' lack of knowledge give rise to fewer practices interspersed with technologies (Khoshnevisan & Le, 2018).

Khoshnevisan (2019d) reported that the use of technology has widely been exploited to the extent that a myriad of foreign language education in the United States have harnessed an array of technologies to facilitate the process of language education. Geisler (2016) explains that many language schools such as Middlebury language schools integrated different technologies in their curriculum to develop blended language courses. Another example is how technology-mediated contexts became prominent in the language education domain in the United States. Alden (2016) posits that after World War Two, language education was extensively informed by technologies and technological tools. This technology education amounted to more cooperation and collaboration between teacher and language learners and among language learners, too.

On this account, we—researchers and language educators—are bound to enhance our understanding and create novel ways to employ technology in our Monday morning practice in classrooms. To achieve that, the present chapter aims to detail prior technology-infused studies in the pertinent literature. To gain an in-depth understanding about and deep insight into the promises that technology offers, language educators must focus on one type of technology. To achieve this, this chapter will center on augmented reality (AR) as an emerging technology. The impact of using AR technology in education has already been examined in different studies. However, the use of AR technology in the field of language education has yet to be investigated (Khoshnevisan & Le, 2018). The following sections, thus, will showcase AR and its role in language education.

DEFINITION OF AUGMENTED REALITY (AR)

There are plentiful definitions of AR in the pertinent field, however, the widely cited definition of AR is presented by Azuma (1997) emphasizing that AR is the seamless integration of the virtual objects and the real world. He explains that AR can superimpose a layer of digital information on the physical world

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