

BOOK REVIEW



Review of *Digital games and language learning: Theory, development and implementation*

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Digital games and language learning: Theory, development and implementation

Peterson, M., Yamazaki, K., & Thomas, M. (Eds.)

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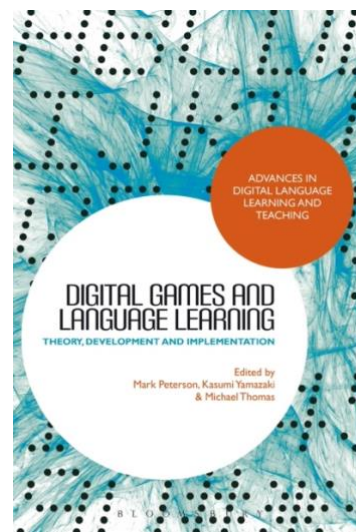
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Over the last two decades, the number of publications exploring the topic of digital games in computer-assisted language learning (CALL) has increased dramatically, which can partly be attributed to the rapid development of technology. To increase our understanding of the impact of digital games on CALL, a book titled *Digital Games and Language Learning: Theory, Development and Implementation* presents an array of wide-ranging perspectives on utilizing digital games in language education. In this book, the editors Mark Peterson, Kasumi Yamazaki, and Michael Thomas state that there is a pressing need to conceptualize digital games in the context of CALL and legitimize game-based language teaching (GBLT) at various levels of educational institutions (e.g., post-secondary schools) and for out-of-school learning. To address this need, this edited volume provides critical reviews, empirical research studies, and ongoing research projects with findings from pilot studies.

What makes this edited volume different from other recent books on digital games (e.g., Reinhardt, 2019) is that, overall, it presents a collection of research projects that investigate the use of cutting-edge digital games in contemporary language education and their pedagogical implications. The scope of this book is far-reaching. It encompasses theories of CALL and second language acquisition (SLA), discusses the development and application of digital games in language education and, more importantly, offers novel insights into future directions for this line of research. Consequently, the intended purpose of this book is to demonstrate how the appropriate use of digital games enhances language learning and to encourage more classroom-based research on this topic for language learning purposes both in and outside language classrooms.

The book consists of twelve chapters divided into three parts. In Chapter 1, the editors offer a brief overview of each book chapter and explain three motivations for writing and publishing this edited volume. The first motivation is the need to provide a comprehensive review of research exploring the use of digital games in and outside of language classrooms. By presenting the theory-led research in CALL and SLA, the editors

identify the theoretical issues that arise during the application of digital game-based language teaching and learning methods in language classrooms. The second motivation is to make readers who might not be familiar with cutting-edge work in GBLT aware of some recent learner-based research projects that incorporate state-of-the-art digital games. Those projects also utilize various genres of digital games, such as commercial off-the-shelf (COTS) games and other serious games which are specifically designed for the sake of second and foreign language teaching and learning (L2TL). The last motivation is to provide pedagogical implications in this area and shed light on future collaborations between researchers and practitioners to promote language learning in the game-based context. These three motivations are reflected in the following parts of this edited volume.

Part 1 comprises four chapters (i.e., Chapters 2–5) that delve into the theoretical perspectives in research on digital games in L2TL. In Chapter 2, Benini and Thomas critically review the literature (e.g., empirical research and conceptual discussions) published from 2014 to 2020 that focuses on gamification and language education. Despite inconsistent terminology and different definitions of gamification used in the area, Benini and Thomas also find that some components of gamification, such as badges, avatars, and competition among players, seem to be ubiquitous in designing learning-oriented games, and those components are widely used in digital games-based language education settings. The authors think it is important for researchers and developers to consider how gamified learning systems can contain certain game elements which are at the higher conceptual level (e.g., social interactions) during the design of these systems. Based on their review of prior studies on 3D virtual learning environments (3DVLEs) and language learning, Benini and Thomas indicate that virtual worlds provide opportunities for social interactions and enable interactive learning in authentic contexts, which leads to learner autonomy in learning languages. They also mention several challenges (e.g., cultural and identity issues) associated with language learning in 3DVLEs, such as different standards for interaction with individuals from different game communities in the virtual world.

The next two chapters (i.e., Chapters 3 and 4) focus on massively multiplayer online games (MMOGs) and language education. Specifically, in Chapter 3, Jabbari points out the lack of rigorous theoretical frameworks in the literature on language learning in the context of MMOGs. He explains how to fit three perspectives on second language acquisition (SLA), namely *sociocultural perspective*, *interactionist perspective*, and *Lave and Wenger's situated learning model*, into the MMOGs context. Jabbari offers a compelling rationale for conducting research on second language development in the context of MMOGs. Similarly, Reinhardt in Chapter 4 expresses his concern about people neglecting “how games are designed, in particular, how game mechanics, titles and genres differ and relate to one another” (p. 69). From an ecological perspective, he suggests using a design-informed approach, which emphasizes the mechanics of game design and the interaction of game players with game mechanics, to inform the research on language learning in MMOGs.

The last chapter (Chapter 5) in this part addresses the issues related to the analysis and evaluation of simulation-gaming for learning languages. In this chapter, Coleman states that it is not realistic to assess the effectiveness of simulation-gaming with scientific methods as the nature of language is non-physical. Therefore, research using current theories to investigate this topic faces many obstacles and sometimes has problematic outcomes. To this end, the author proposes to use *Human Linguistics*, a theory studying how people communicate at individual and social levels, as the theoretical framework for research in simulation-gaming. This theory lays a solid foundation for future research exploring the use of simulation-gaming in language education and provides new perspectives in this line of research.

The second part of this book, comprised of five chapters (i.e., Chapters 6–10), shifts its focus to the application of digital games in and outside of language classrooms. Bacalja and Clark in Chapter 6 offer two case studies that employ different methodologies and pedagogies related to the use of digital games as texts in the English L2TL classroom. The first case study demonstrates how the teacher's role dominates the language learning progress of learners through digital games. The study shows that teachers tend to utilize digital games by combining them with other traditional learning activities in language classrooms

and situate digital games in social interactions where teachers instruct learners to work together. In contrast to this teacher-centered pedagogy, the second case study explores language learning guided by the learners' emotional reactions to digital games. As stated by the authors, digital games in present-day language education not only serve as learning tools for students, but also "become a learning experience, where the role of play is central to their classroom experiences" (p. 131).

In Chapter 7, Harbord, Dempster, and Jayemanne explore the literature about the role of avatars in role-playing games (RPGs) and introduce an intriguing pilot project examining the relationship between the learners' choices of avatars and their desire to communicate in the target language during their learning processes. The results of the pilot phase show that learners chose to interact more with the avatars whose appearance bears more resemblance to the native speakers of the target language. What the authors find surprising is that the reasons for the learners' choices have nothing to do with learners' cultural backgrounds. As a result, this pilot study provides innovative insights into the design of avatars in RPGs and research on how to motivate learners in a digital game-based language learning environment. Yonemoto in Chapter 8 examines whether learners' language skills can be enhanced by gamification that utilizes augmented reality (AR) technology. He conducted this study in an immersive and intensive Japanese learning course about natural disasters, in which learners had to attend lectures on related topics and conduct fieldwork using AR technology on and off campus. This study illustrates the feasibility of combining language learning and gamification realized by using AR technology. At the end of this study, learners were able to produce more words related to natural disasters in the real world and showed a significant increase in their knowledge of vocabulary about disaster preparedness.

While Chapters 6–8 in Part 2 scrutinize the development and implementation of various digital games in language classrooms, Chapters 9 and 10 concentrate on the use of digital games in an out-of-school context. Mills and Thanyawatpokin (Chapter 9) investigate the relationship between extramural gameplay and undergraduates' perceptions of the 21st-century literacy skills. One of the interesting findings is that most participants recognized digital games as a potential learning tool even though they did not play digital games frequently outside of school. This study is timely and contributes to this growing area of research on extramural gameplay. In Chapter 10, Sylven describes a longitudinal study with an L1 Swedish adolescent examining whether out-of-school activities (i.e., playing digital games and watching game commentary videos) could promote L2 development. This study shows the success in L2 vocabulary and reading skills development of the learner. The author dissects these results by explaining psychosociological learning principles associated with gaming and L2 learning and characteristics of digital games (i.e., language use in digital games is repetitive and transferable). In this study, the author is particularly interested in adolescent language education, which differs from other studies on the topic of digital games and language learning in this book. More importantly, this study provides a new direction for research on the use of digital games in out-of-school educational contexts and a valid testimony to confront stereotypes about digital games (e.g., that the games perform a merely entertaining function) in adolescent education.

The last two chapters comprise the final part of this volume and offer concluding remarks and reflective monologues from researchers and teachers who have been using digital games in language classrooms for years. In Chapter 11, Thanyawatpokin and York outline the important issues in the literature on digital games and L2TL. One of the valuable outcomes of this chapter is a succinct taxonomy of games that includes game-based language learning (GBLL), game-based language teaching (GBLT), and gamification. The authors also reveal that there is an abundance of exploratory studies due to the wide variety of digital games. Similarly, deHaan in Chapter 12 critiques prior studies on GBLT by analyzing their theoretical frameworks, teaching contexts, teachers' roles and actions, and learning outcomes. The author concludes that future research should aim at providing professional training to language teachers in the use of digital games. This chapter emphasizes the importance of creating opportunities for future collaborations between researchers and practitioners.

This book highlights the crucial role of teachers in game-based language education as the ever-advancing technology and ever-changing world make GBLT notably challenging. With the burgeoning use of

advanced technology in CALL, this book evokes timely, critical, and thoughtful questions: Are our teachers ready for using digital games in their teaching practice? Does it suffice to be an expert on digital games in order to embrace digital games in teaching? One of the book chapters mentions that those teachers who do not possess knowledge of digital games tend to use conventional teaching strategies in order to avoid the learning difficulties of learners in GBLT, whereas other teachers are able to control the extent to which digital games are used in language classrooms. The comparison between these two types of language teachers shows the difference in their ability to use digital games in their teaching. This book demonstrates that there is a plethora of research that examines the design of serious games and the effectiveness of existing COTS in language education. It also points out that some research studies on GBLT eschew the issues related to teachers' game literacy, suggesting that professional education on GBLT for language teachers is also of importance.

This edited book is an ideal choice for readers willing to learn about the status quo of digital games in language education. It is particularly informative and valuable for language teachers who attempt to use digital games in their instructional practices. While this book covers a wide spectrum of topics, some of the presented research studies seem to be exploratory, thus necessitating further empirical evidence to support the argument for using digital games in language education. Despite the lack of robust research designs in some of the studies, this book makes a timely contribution to this research area as it demonstrates the breadth of topics for investigation and the pedagogical potential of digital games for language education.

References

Reinhardt, J. (2019). *Gameful second and foreign language teaching and learning: Theory, research, and practice*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-04729-0>

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