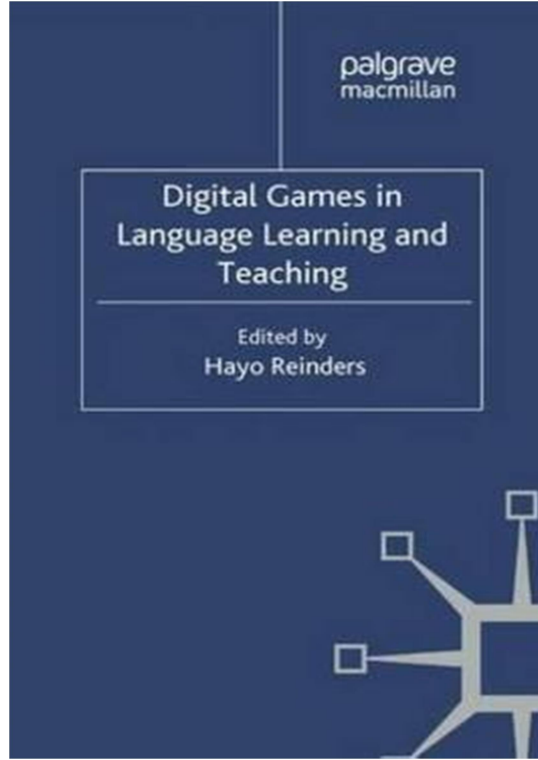


Digital Games in Language Learning and Teaching

(Book Review)

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Introduction

According to Prensky, every game has its own ingredients. These can be considered as rules, goals, objectives, outcomes, feedbacks, competitions, interactions and representations of its story. All of them can be thought as important factors in language learning process. These days, except the traditional ones, some games which have these ingredients can be found in online and digital resources. Thanks to technology, the game world has just begun to move into digital environments. The usages of digital game-based learning both inside and outside of schools have become very popular nowadays. Digital game-based learning's popularity mostly depends on the students' interests in using technology in their daily lives. For that reason, digital games seem to be one of the best options for teaching foreign languages (Gee, 2007). The benefits of digital games may be observed in long term language teaching process. These benefits are mostly about motivation and encouragement about learning target language's items. The learners who deal with language learning process are able to comprehend some certain language items better while playing both digital and video games.

However, there are still some questions about effectiveness of using these games in language learning (Haan, Reed, & Kuwada 2010; Piirainen-Marsh, 2009; Zheng, Young, Brewer, & Wagner, 2009). The questions are all about the results of using digital games in language learning in terms of its uptake and acquisition. To find those questions' answers, some information and findings need to be evaluated and enlightened properly. Therefore, the book offers lots of ideas about digital game based language learning and teaching and presents ideas about its effectiveness.

The book *Digital Game Based Language Learning and Teaching* edited by Hayo Reinders, with 2 parts and 10 chapters, aims to present both theoretical and practical information about using digital games in language learning and teaching process with its pros and cons.

Parts and chapters

Part I, "From Theory to Practice" includes 4 chapters. In chapter I, 'Contextualizing Digital Game-Based Language Learning: Transformational Paradigm Shift or Business as Usual?', Michael Thomas, says, especially in the last three decades, using digital devices has risen unexpectedly. According to him, the video games, games consoles and games on mobile phones has become very popular among the teenagers and children. By realizing this situation, in the future, digital-game based language learning may be become an 'integral part of modern language teaching methodology'. Writer mentions important subtitles in his chapter. These are presented as 'Digital Education', 'Digital Games in education', 'Digital Game Based Language Learning' and 'Future Directions. 'Digital Education' part can be summarised by saying that there are lots of digital environments that we can use both inside and outside of the classroom. From blogs to virtual worlds, there are lots of opportunities that we can use in language teaching methodology. By using this infinite sources of digital environments, a user-generated and product-oriented situations can be created. 'Digital Games in education' part deals with the wide usages of digital environments from military to medical sectors. So it can be understood that, digital games' increasing popularity have been realized from all types of fields in life. Especially as a language teaching, the digital environments such as virtual worlds like *Second Life* offer different ways of learning options for the learners. These environments offer multiplayer options that one can share his/her emotions, thoughts, etc. Except these virtual environments, also MMORPG games offer digital role playing and multiplayer game options to the players. All of these games can increase the learners' interests and make them willing about learning some items of target language even though they do not realise that. (From the perspective of incidental learning.) The third subtitle 'Digital game-based language learning' presents some ideas about the developments of digital language learning games. Also, there is a strategy that is called as 'three-point sequence' should be used for developing digital language learning games with a task-based approaches. These three points include genuine player need, linguistic support and creative feedback to be able to reflect the language learners' needs in learning languages. In those kinds

of games, the activities should be focus on communicative tasks, collaborative works and goal-oriented approaches that create interest and permanent learning for the learners. Besides the MMORPG's should include same items. Because those applications focus on building learner participation and collaboration to facilitate language learning like the digital language learning games. The last subtitle 'Future Directions' deals with the developers of digital language learning games. The game developers need to avoid 2 important situations. These are 'false optimism' and 'fatal cynicism'. Also, developers of games need to design both formal instructed and informal extra-curricular contexts that make learners play.

In chapter II, 'Conceptualizing Digital Game-Mediated L2 Learning and Pedagogy: Game Enhanced and Game-Based Research and Practice', Jonathon Reinhardt and Julie M.Skyes present some ideas about digital games' worldwide popularity. The chapter has 11 subtitles. These are, Introduction, Towards digital game-enhanced L2LP, Game-enhanced L2 learning, Game-enhanced L2 pedagogy, Future directions for game-enhanced research and practice, Towards digital game-based L2LP, Game-based learning, Game-based L2 pedagogy, Future directions for game-based research and practice, Acknowledge game-informed insights and Conclusion. In the first five parts, the importance of internet is emphasized. Because most of games are based on internet access. These games can be counted as arcade, single pc or tv console,etc. When considering, all these games have a connection with online services by means of their multiplayer options. However, most of these games have commercial purposes rather than educational ones. For that reason, learning a language from these digital games mostly happen incidentally. On the other hand, the educational games which are more comprehensive and more integrated allow each player to take a major role in his/her language learning process instead instead giving more important role fort he instructor and other forms of pedagogical mediation. The games, which have commercial purposes, are also called as 'vernacular' games, do not offer educational advantages for language learning. However, they have everyday language items and genuine cultural products which make them interesting and useful for some players. But some games have so complex contents

and linguistics that make them difficult to play. So, the learners who learn a language incidentally need to choose a vernacular game first. For example, simulation games may be a good example. 'The Sims' which is a simulation game can be considered as a vernacular game also. In the game, one can create avatars, houses, various buildings and furnitures then watch his/her creations future progress. By playing this game, a player can get lots of vocabulary knowledge from the target language and also get some grammatical points by observing the game's process. This makes L2 pedagogy game-enhanced. Briefly, game-enhanced L2 learning happens 'in the wild', because of the resource potentials or affordances, of certain contexts, player motivations and configurations, and the gameplay structures inherent in vernacular games. In the last six parts, the writers mostly deal with the consequences of playing vernacular games for language learning purposes. They present some advantages of vernacular games. These can be counted as their various types of contexts, stories, strategies, playability with multiplayer options, etc. Also these parts, give readers some examples of different research and countries who also deal with the usability of vernacular games in incidental language learning.

In chapter III, "Behaviorism, Constructivism, and Communities of Practice: How Pedagogic Theories Help Us Understand Game-Based Language Learning", Michael Filsecker and Judith Bündgens-Kosten, offers some ideas in 9 subtitles. These are Introduction, Learning theories-An overview, The associativist/ behaviorist perspective, Mingoville: Edutainment and the associationist/ behaviorist perspective, the cognitivist/ constructivist perspective and problem-based learning, Tactical Iraqi: The cognitivist/ constructivist perspective, the situated perspective and legitimate peripheral participation, Quest Atlantis: The situated perspective/ legitimate peripheral participation and Conclusions. The chapter presents some perceptions about the importance of teachers' and educational game designers' for teaching and learning. These perceptions have some significant implications. These are, informing practitioners about how they see their learners, framing how the foundations of any learning environment are operationalized and studied and suggesting key mechanism and processes related to teaching, learning and successful

transfer. All of these perceptions are mentioned in the chapter by giving lots of examples in researches and discussing them with other perceptions. When looking at the first five subtitles, we can get some ideas about the writers' points of view. They say that associationism is simple and discrete sensations coming from the environment are associated in the brain with others to generate more complex structures. This idea can be considered as the core of behaviorism which deals with human actions. According to this view, the environment can affect individual's behavior. Those behaviors may be associated with the individual's sensations, ideas or knowledge. Consequently, it can be said that learning which is also a kind of action in brain is described as a change in behavior due to experience. For that reason, by creating different environments we can make a good learning process. There are lots of games created for helping brain make permanent learning process. These games are both fun and educational. They give lots of reinforcement to the learner and make him/her happy. Those games are called as 'Edutainment' games. For example, Mingoville is a web-based platform for language learning for primary school learners, aged 9-10. The game offers children to explore lots of activities in it via mini games. Those mini games have its own content, story, vocabulary and spelling items. By playing this game, players have a chance to compare their scores with other players around the world. Another idea about learning belongs to cognitivists. They claim that human thinking and problem solving involve an information processing system similar to how computers process information. Briefly, the knowledge in our mind is never found or discovered, but is actively constructed. The computer games which are based on cognitivist theory, provide a varied and rich context where the multimedia experience of the game presents information and facts that learners can understand them and generate a hypotheses. In other words, games should provide complex contents with structured activities around an authentic problem, so that the learners can start a stimulative and creative thinking. In the last four subtitles, the writers focus on peripheral participation in games and give examples. They mention a program named as '*Tactical Iraqi*' which is designed for learning Arabic embodied in certain games environments. These environments are designed in three architectural scenerios. They are, Mission Skill

Builder, Mission Practice Environment and Arcade Game. All three environments offer a good deal of interactive lessons, 3D role-playings, and practicing activities about listening and speaking. These programs are defined as a constructivist application also. Because its content presents learners lots of problem solving situations. Even though, these kind of games and programs are effective enough to learn languages, they are too expensive to conduct in all areas. For that reason, their accessibility is less than the other games and programs. Although each approach has its own rules and ideas in gaming, their perspectives are relatively close to each other. Because gamers who have different approaches or views tend to play those kind of games in the same manner. For example, they often organise themselves into communities of practice that create social identities with distinctive ways of talking, interacting, interpreting experiences, etc. For example, there is another game named as Quest Atlantis which has 3D game world. In this 3D game world, gamers are represented by avatars, can interact with objects, non-player characters, and other players. So, gamers have different identities from journalist to scientist and make discussions or interactions with other avatars by creating their own environments in the game. Briefly, these multiplayer opportunities for interaction provide lots of proverbs, grammatical points, certain vocabulary and pronunciation features and cultural information to the learner/gamer.

In chapter IV, "Language Learner Interaction in a Massively Multiplayer Online Role-Playing Game", Mark Peterson presents a research about using MMORPG's in language learning. MMORPG's provide potentially valuable arenas for language learning. They are a genre of network-based role-playing games where lots of language learner can play both individually or with groups in 2D or 3D virtual worlds that is usually based on a fantasy theme. The purpose of those games is to achieve character development. To achieve this aim, players must successfully pass the chapters which have puzzles, combats and trades. A research on the use of MMORPG in a learner-based CALL Project, conducted by Rankin, Morrison, McNeal, Gooch, and Shute (2009), found some significant results about using those games in language learning process. According to finding, the participants who

played those games with native speakers showed higher post-test scores for game-related vocabulary than the learners who undertook classroom instruction or played the game by themselves. Also, a large-scale study conducted by Suh, Kim and Kim (2010), reported significant findings about using MMORPG's again. To sum, by considering the researchs' results the MMORPG's provides a good deal of language learning situations to the learners especially when they play these games with native speakers or other players from other areas.

Part 2, "From Practice to Theory" has 6 chapters. In chapter V, 'Digital Gameplay for Autonomous Foreign Language Learning: Gamers' and Language Teachers' perspectives', Alice Chick, discuss the ways of digital manage gaming and gaming-related activities to assume autonomy in learners language learning and conducts a research about teachers' perspectives of using MMORPGs or other types of games in their lessons. In the chapter, it is said that most of games are designed in English which is a global language for the gaming platforms. For this reason, gamers need to discover and understand some important game points to be able to play those games. So, these games afford gamers the autonomy to follow literacy and knowledge at their own paces. Even though playing games for learning languages is very common, in educational contexts, teachers need to find proper games to use in their classrooms. Because, all games do not have educational purposes in terms of their contexts, language, animations, etc. Maybe all of them cannot appropriate for the target learner groups. That brings language teachers a burden. That's why some of the teachers who are not familiar with digital games are still afraid of using these games in their classrooms. To investigate this idea, 34 teachers were questioned about using digital games in their classrooms. At the end of the research, the results are not unexpected. Only five of them were familiar with the digital games and could use these games in their lessons properly. This foundings are related to the reasons mentioned above.

In chapter VI, 'Game-Based Practice in a Reading Strategy Tutoring System: Showdown in iStart-me', G, Tanner Jackson, Kyle B. Dempsey and Danielle S.

McNamara, present the features of serious games and give information about the program iStart-me with a research study. Firstly, the writers mention about ITS-related experiments' benefits for addressing issues of skill acquisition. Because their study is shorter than the training and tutoring experiments. They both quick and effective experiments for researchers who want to address issues of skill acquisition. Another important idea that writers say is the core of entertainment process in serious games. This process may occur when three important elements are applied. These are; sensory pleasure, suspense-thrill-relief and achievement-control-self-efficacy. Except from these three elements, the serious games must engage the learner with its well-designed and appealing context or layout. Also, these games must be challenging. Because if they are too easy to play, the players will be bored and do not want to continue playing. When considering all of these elements in serious games, a game-like system may be helpful for the learners. The iStart tutoring system is a game-based learning environment which has all of those elements mentioned above. The system has three modules which are about reading strategies, demonstration and practice. In each module, the system engage learners with tasks, applications, mini-games, challenging activities against to an opponent, etc. When the learner finishes all modules, he/she can continue to practice with Merlin, which is an artificial tutor to help learners in the system, and also choose lots of other activities or task from the iStart Library. Finally, the writers conducted a study by using iStart tutoring system. Their participants were 36 university students. In the research period, the participants showed interesting results. As a result of this study, it can be said that, learning is better for the non-game environment but the engagement is better for the game based system.

In chapter VII, 'Sprites and Rules: What ERP's and Procedural Memory Can Tell Us about Video Games and Language Learning', Robert V. Reichle, mentions five subtitles. These are Introduction, Game mechanics and the development of game-playing skills, Game-related ERP findings, Meta-awareness of gameplay mechanics and recent commercial video games and Future directions. In first three subtitles, the writer talks about the game developers' design techniques that meet the audience's

expectations and enhance the gameplay experience. When considering the interaction between in-game entities and gameplay mechanics every game has these two issues. In-game entities can be considered as the player's avatar, enemies, locations, power ups, and other characters. Therefore, gameplay mechanics manage those interactions within the game, and encompass the possible behaviors of the player and other in-game entities. In other words, gameplay mechanics are rule-governed. But, in-game behaviors can be considered as a cognitive/motor skill. Another issue is the ERP technique. It provides electrophysiological data related to the brain activity indexed with linguistic and other cognitive processes. This technique have become popular among the researchers. Because most studies based on ERP results suggest that learners can get a high level of language knowledge when they encounter with nativelike brain signatures of morphosyntactic processing when the training game has L2 morphosyntax with gameplay mechanics and cooperation, competition, feedback and meta-awareness. In the last 2 subtitles, writer mentions recent commercial video games with their effective gameplay mechanics from Batman to Red Dead Redemption. Briefly, the game developers create satisfying gameplay mechanics that know the players capabilities. When comparing with educational games, the educational games' developers need to find a way to develop their gameplay mechanics like the commercial games' gameplay mechanics. In chapter VIII, 'Talk to Me! Gmes and Students' Willingness to Communicate', Hayo Reinders and Sorada Wattana, mention about educational games' inefficiency in both oral and written communication for language teaching. They claim that some games do not have any challenging factor which pushes the player to find/learn something new within the game. Besides, they say that, you do not have to know L2 if you are good at gameplay mechanics when playing some games which are designed for L2 tutoring purposes. For that reason, writers research the commercial games' effectiveness and usability for language teaching purposes. Because in these games, learners have opportunities to produce the target language with challenging and interesting scenerios. These things make learners willing to play and learn more. Because learners think that games must be fun and engaging. Also, the authentisism

in commercial games can be used for language teaching processes. Briefly, this steps may make the larners willing to participate in language learning activities.

In chapter IX, 'World of VocCraft: Computer Games and Swedish Learners' L2 English Vocabulary', Pia Sundqvist and Liss Kerstin Sylvén, focus on computer games and its related studies. The computer games can be played both online and offline. They have virtual worlds and complex graphics that engage players. If a game is played by lots of players online, one can say that this game is a *massively multiplayer online game* (MMO). Therefore, gaming may be considered as an example of naturalistic learning. Briefly, learners who play computer games are engaged in extramural English. The emprical studies based on showing the results of extramural English learning revealed that, the MMORPG gaming is highly related to L2 vocabulary acquisition rather than the other skills' acqusition. In sum, one can say that the computer games (especially MMORPG's) when played, they contribute to the players' L2 vocabulary acqusiton in an extramural way.

In chapter X, 'Collcation Games from a Language Corpus', Shaoqun Wu, Margaret Franken and Ian H. Witten, mention the teaching of collocations in digital environments. They claim that collocations are very important items in language learning. But their learning process is more difficult than others. Because they have a complex nature. When considering their teaching, we can say that there is not enough activity to teach collocations with fun. For that reason, the collocations have just started to teach with computer-based games. The chapter presents some of the games with their usages. There are 5 games in the chapter. Their names are, Collocation Dominoes, Collocation Matching, Collocation Alternatives, Related Words, and Collocation Guessing. Each game is presented with its screen shots. As a final manner, the chapter presents some clues for designing your own games by using collocations in digital environments.

Evaluation

The book gives readers some interesting ideas of digital games and environments both theoretically and practically. In the first part, it deals with the theoretical terms of digital games and their features by short studies which are investigating their effectiveness and usability in language learning and teaching processes. In the second part, it presents some certain ideas about different types of digital games and game developments then explain their ways of teaching/learning processes with different types of studies.

The chapters of the book were written mostly as an article and have research studies about different ways of digital games. This provides the book valid data which is a good quality for a book. Also the book has a mixture of different ideas which makes learner awake throughout reading the book. Each chapter has a different topic and interesting ideas, terms, studies and informations about its main theme which is quite beneficial for the reader. The whole book discuss and compares some theoretical ideas about digital game based language learning&teaching with the terminology of teaching&learning a language.

However, there are some criticism about the book. Its order of articles in chapters are too complex to follow. Because you cannot follow the ideas in each chapter one by one. You have to read one chapter to understand an idea otherwise you cannot find the same idea in other chapters. Each chapter gives different information about digital games' world. This structure of design makes reader tired to make connections about the main theme. Moreover, the studies in each chapters are given with too many details instead explaining the main theme in detail. That makes a kind of blank for the reader's comprehension. As a final idea, the book should be ended with a final explanation from the editor. He may summarise the core of articles and their written purposes to be able to combine the ideas with his own words.

Except these criticism, the book is quite useful to get some terms related to digital game- based language learning and teaching. Besides, its language pretty

understandable to read even though they have lots of terminological information. So it doesn't take a lot of time to read it. With all of these contents, the book can be considered as a good resource for investigating digital game-based language learning and teaching and it can be used for teaching some certain materials to the learners who are seeking for a good structured language teaching digital games.