VIDEO GAME BASED LEARNING AS A FRAMEWORK FOR EFL/ ESL SECONDARY SCHOOL STUDENTS

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Abstract

Teaching theories have contended that the learning-teaching process witnesses a wide gap between digital natives, "students who were born in a digital world", and digital immigrants "teachers who … are struggling to teach a population that speaks an entirely new language" (Prensky 2001). The widespread of globalization and digital technology make the world a tightly connected social network where the virtual space has almost become an alternative for the real one in all dimensions of the social sphere. The Moroccan educational system has also been influenced by such a digital ongoing evolution such as the reshuffling of programs, the implementation of ICT in teaching methods adding to the modest efforts to make schools as representative of learners' technological needs as possible. However, learners' expectations of the learning environment and content go beyond teachers' practices, as stated by Melouk (2018) "the majority of teachers… cling to a certain vision of their profession largely marked by a traditional view of education and teaching" (P.9). Drawing on the researchers' and students' reflection of a practical experience, this paper aims to highlight the merits of game based learning (GBL) as a framework for EFL and ESL teaching that motivates learners, responds to their interest, and promotes their learning process. The study comes under the tenets of experiential learning models; it follows, namely, the four stage-experiential learning cycle of Kolb & Fryer (1975). The experience takes part in a private school in Rabat with the participation of 32 first baccalaureate and second baccalaureate students. Accordingly, significant findings are displayed; firstly, as far as students' reflection on their own learning is concerned, they attest that the learning environment is fun-motivating, attracts more their attention, facilitates their learning process and enhances grades. Secondly, the teacher's reflection on the use of video game quizzes reveals that students become more interested in content and task based activities, and their language performance improves as well.

Keywords: Digital Natives and Digital Immigrants; Video Game Based Learning

1 INTRODUCTION

Teaching and learning foreign languages impose a series of difficulties not only for learners who are supposed to interact in a language different from their mother tongue but also for teachers who are fluctuating in all directions to attract students' interest and incarnate a successful teaching method. Moroccan EFL secondary teachers experience a challenging crisis to create a meaningful learning environment that can engage learners seriously in classroom activities and tasks. What is noticeable is that Moroccan schools at large and secondary ones, in particular, do not represent the technological growth the society has been witnessing; they are far from being equipped with spaces and materials that respond to learners' digital intelligences. There is a wide discrepancy between, at least, two contrasting social spheres;

the school context which is characterized by a total absence of technological facilities and the house context where the latest trends in technology can be found. Such a situation creates a sort of frustration for students who cannot cope with classical teaching methods based on “talk & chalk” and abide by school rules, most of which forbid the use of technology inside classrooms. Accordingly, the learning process becomes a war between “digital natives” who feel the necessity to remain virtually connected while learning and “digital immigrants” who believe in the board and paper based activities. Prensky (2001) refers to this situation as Immigrant-Native digital divide presented under the taxonomy “smart adult immigrants accept that they don’t know about their new world and take advantage of their kids to help them learn and integrate. Not-so-smart immigrants spend most of their time grousing about how good things were in the “old country.” (p. 3)

1.1 Statement of the Problem

Teaching teenagers appears to be the most difficult stage to manipulate and engage emotionally and physically in classroom activities; nowadays, schools witness regular misbehaviors on the part of absent-minded learners who show little or no interest in teachers’ knowledge and teaching theories. Teaching staff conceive such learners as irresponsible, rebellious and rude and most of the time they are not welcomed inside the classroom. Teaching teenagers appears to be the most difficult stage to manipulate and engage emotionally and physically in classroom activities; nowadays, schools witness regular misbehaviors on the part of absent-minded learners who pay little or no interest in teachers’ knowledge and teaching theories. However, research attests that, recently, schools have been receiving “new crop” of learners who were born and have literally grown up “digital”, therefore, new digital teaching methods and teaching tools are compulsory to respond to their needs (Beck & Wade, 2004, Deubel, 2006; Glasser, 1998; Prensky, 2001). Many scholars confirm that the learning principles embodied in networked simulations, or video games reflect the best theories of cognition, yet they are underutilized as an educational medium in Moroccan secondary schools. The digital power technology has, shapes contemporary theories of learning and instruction and creates new mechanisms for supporting learning and teaching in a way to harvest what Covey (2004) refers to as win-win outcomes (Barab& Roth, 2006; Gee, 2003; Steinkuehler, 2008).

1.2 Research Objective and Question

In line with this argument, this paper aims to present the findings of a study that highlights the merits of game based learning as a digital framework for EFL/ ESL teaching and learning. Such a study also purports to confirm that schools dominate most of learners’ social life; therefore, they should be places where students feel motivated, accepted, and loved. In a sense, it is believed that good learning environment enhances performance and creates a tight kinship between learners and school instructors. For instance, Prensky (2001) assumes that “digital Natives function best when networked…They prefer games to serious work” (p. 2). For this reason, the classroom context and the teaching medium should be tailored to fit learners’ needs and interests. The main question this research paper investigates is:

To what extent does the use of video game based learning for academic tasks promote students’ learning process and generate good results?

2 BACKGROUND LITERATURE

2.1 Digital Natives Versus Digital Immigrants

Education scholars and practitioners refer to the new generation of learners as “digital natives” or as “native speakers of the digital language of computers, video games and the Internet” (Prensky 2001, p. 2). These students were born and have grown up in a digital world differently from their predecessors; the difference lies not only in their inclinations, ways of living but also in their lived experiences which generate two distinct modes of thinking as Dr. Bruce D. Perry of Baylor College of Medicine puts it “Different kinds of experiences lead to different brain structures“(cited in Prensky ibid, p. 1). Similarly, some researchers claim that the excessive exposure to online virtual environments shape users’ cognitive processes into bio-technological and hybrid or hypertext processors. The second end of the continuum presents those who were not born into the digital world but have , later on, learnt some or most aspects of the new technology; they are referred to as “Digital Immigrants”. These “immigrants” stride to adapt to the new digital environment but at the same time they remain nostalgic to their past experiences (Prensky, ibid). In education, Digital Immigrant teachers think that learners are the same as they have always been, and they insist on implementing the same methods that worked for them when they were students. In short, a vast amount of research attests that the new generation of learners represents a new crop of students significantly different from previous generations mainly in their cognitive processors (Beck & Wade, 2004, Deubel, 2006; Glasser, 1998; Prensky, 2001). They process information at "twitch speed” unlike “conventional speed where information is given, reflected upon, and stored for use at a later date”. Digital learners also relate to graphics first, versus

traditional information text first, and they learn better through trial and error versus sequential-direct instruction.

2.2 Video Game Based Learning

With the ever-increasing development of digital education, the contemporary educator strives to update their teaching theories and practices to not lag behind the times. The significant communicative power of technological tools inside classrooms creates new supports for learning, and from the vast amount of digital mediums, video game based learning or interactive networked simulations have gained tremendous interest as effective tools for learning (Gee 2003; Squire 2008). Accordingly, video game based learning makes use of specific computer technologies to present learners with interactive networked simulations through which they can play and learn. In this regard, students have fun while learning by creating dynamic and motivating environments for learning (Gee 2003). Indeed, video game based learning has been reported to have a number of benefits in education at large and in language acquisition in particular. Research confirms that such a type of learning enhances visualization and creativity in learners to find new ways to deal with complex situations and problems. Learners become more focused by getting deeply engaged in game environments and learn substantive processes and content easily. (Gee, 2003; Shaffer 2006a, Connolly, et al., 2012; Wouters, et al., 2013; Sánchez & Olivares, 2011; Yang, 2015; Akcaoglu& Koehler, 2014; Annetta, L, et al., 2009). The striking point about games is that the learner is the decision maker; for example, the player has the authority to adjust the level of difficulty of the play to their own levels. Video games also teach learners how to become autonomous; they learn through trial and error by getting immediate feedback which creates an atmosphere for exploration and experimentation, discovery learning, and perseverance (Kirriemuir, 2002).

3 METHOD

3.1 Research Design

Teacher's experiential knowledge is part of a revolutionary learning process that educators should take advantage of to correct and modify some of their irrelevant practices in classrooms (Kolb, 1988; Boud et al., 1985; Schön, 1983, 1987; Moon, 2004; Bolton, 2010; Rolfe et al., 2011). Teaching theories contend that teachers' reflection of practical experiences can be beneficial for improving their own teaching method, on the one hand, and enhancing learners' competence and performance, on the other hand. In line with this argument, the present study comes under the principles of reflective practice research which is conducted through the teaching experience as a perpetual and ongoing aspect of professional development. Literature presents numerous models of reflective practice research; the present study advocates that of Kolb and Fryer (1975): "Experiential Learning" cycle which consists of four stages; the Concrete experience, the Reflective observation, the Abstract conceptualization and the Active experimentation. Consequently, the data have been collected through the four dynamic stages of Experiential Learning cycle.

3.2 Experience

The concrete experience

The experience took part in a private school in Rabat with the participation of 32 learners that were put under two groups. The first one contained 15 first year baccalaureate students who came from the Spanish school system where English was taught as a second language. The second group consisted of 17 second year baccalaureate students coming from a Moroccan public school where English is taught as a foreign language. In the private school under study, those students were enrolled to get extra classes in the English language and to be assisted in their academic lessons and exams. The compelling point about the Spanish system is that English is evaluated equally as important as other school subjects; thus, learners are supposed to get grades starting from 5/10 in each subject to pass to the other level. Students had been initiated to English since elementary school; therefore, at the level of high schools, they are supposed to be fluent; however, this is not always the case. For the Moroccan system, baccalaureate students were exposed to English for three years; at this level, English is a very significant variable for their success in the national exam. Both groups under study exhibited serious problems in the English language: in structures, vocabulary, writing, reading, etc.

The reflective observation

The role of the teachers was very challenging; not only did they have to improve students' levels in English to catch up with their sophisticated school-lessons and exams, but also to deal with a highly active group of teenagers who "prefer games to serious work" (Prensky, 2001, p. 2). The syllabus was so demanding and overloaded with lessons of grammar, vocabulary, reading and writing that students feel exhausted and

frustrated to attentively attend, the three hour session. Most of them would be caught playing games on their mobile phones, texting or emailing friends. Such a situation stood as a burden on the teachers' shoulders whose role was to overcome the difficulties students were facing in English as a school subject and to bring back absent-minded ones to classroom activities.

The abstract conceptualization

To create a good learning environment and enhance students' learning process, the focal question was concerned with what the teacher and learners should do to improve the situation. Either the observation process or the interview with students confirmed that the latter were real "Digital natives"; they understand easily the language of the computer and mobile phones; therefore the learning experience should integrate some of these activities.

The active experimentation

At the beginning of the experimentation, students were invited to participate in 10 or 15 minute games dividing the classroom into groups. We tried to create a contest atmosphere by shouting, moving and finally rewarding the winners by symbolic gifts. The second step was to use some learning-teaching video games by allowing students to use their mobile phones to interact with the game that appeared in the large screen. The mostly used game was "kahoot"; accordingly, different platforms were used by this game to integrate students in different activities such as tenses, forms, prepositions, vocabulary, etc. Video game based learning and teaching yielded very significant findings for both students and teachers.

4 RESULTS AND DISCUSSION

4.1 Teacher's and Students' Reflection on Game Based Learning Experience

Teaching secondary school students in the light of video game based learning approach displays a number of benefits for both the teacher and the learners. The teachers claim that students show more interest in content and task based activities; their regular complaints decrease and their motivation increases even if the same course content is taught. They become more active and interactive with the video games and they abide seriously by classroom rules. The striking element about video game based learning is that even shy students interact by giving answers in groups or using their mobile phones. Such an approach facilitates the teaching experience since the teacher becomes a member of the group who is speaking their language and understanding their mindset. As far as students' reflection on their own learning experience is concerned, participants from both groups attest that the learning environment is fun-motivating, attracts more their attention, facilitates their learning process and enhances grades. Students are invited to self-evaluation processes, comparing their English proficiency before and after the implementation of the new teaching method; they also run an ongoing evaluation of their grades which they assume to increase.

4.2 Discussion

Such findings confirm those revealed in other studies in the literature, for instance Squire, et al. (2008) conduct a study using video game based learning approach for history subject. Accordingly, results reveal that gaming is a leading activity for academic practices that "aid greatly in developing, motivating, and sustaining multiple, overlapping forms of expertise within a common domain"; it also "increased participants' interest in social studies and, in turn, steered them into more academically valued practices such as reading or watching documentaries" (pp. 246-249). Simply put, video game based learning is proven to incarnate expertise in students within a specific domain through frequent repetition of the game and it increases students' interest and motivation in other social studies using the same digital tool. Chen, et al. (2012) in their turn investigate the effect of game-based learning in promoting students' science learning and motivation; the findings display that gaming enhances students' overall learning, encourages exploration of implicit science knowledge and enriches learning experience and collective problem solving (pp. 241-244). In the Moroccan context, a vast amount of research advocates the use of ICT at large and mobile phones in particular in classrooms; for example Halim (2017) in her study that investigates the use of mobile phone devices in classroom, finds out that "appropriate use of mobile phones in the classroom… improves students' engagement and supports teaching and learning" (p. 109). The merits of ICT in education are largely known in literature; however it remains underutilized in the Moroccan schools especially in secondary ones, let alone the use of video game based learning which is a totally an unaddressed and marginalized element in practitioners' agendas.

5 CONCLUSION AND PEDAGOGICAL IMPLICATIONS

This study is a modest contribution that adds to the existing literature and reinforces prior research that displays the numerous merits of game based learning approach as a framework in an EFL/ ESL teaching

environment. It has been found that using video games in teaching English for academic purposes for first year baccalaureate and second year baccalaureate students promotes the learning process in general. Students become more motivated and interested in classroom activities and lessons; their interest extends even to other social studies such as reading and writing. In brief, the use of video games facilitates the learning of English and enhances students' grades. The findings of this study and those reported in previous ones yield very significant pedagogical implications that instructors, practitioners and policy makers should take into account. First of all, it is high time that textbooks should be adjusted to fit the digital needs of "Digital native" learners; Moroccan secondary school textbooks witness a total absence of ICT tasks in general and interactive networked simulations more specifically. The classroom context should also be equipped with ICT tools to make it easier for teachers to implement them in their teaching practices. Another important implication is related to teachers' training; it is evident that using video game based learning approach necessitates assistance and a pre-training that all teachers should be initiated to before meeting students. The last and the most important one concerns teenagers' ICT education inside schools; in Morocco the most significant association teenagers form with the technological device inside the classroom is a means of distraction to get away from the teacher's long lectures or as a tool to cheat. Recently, there has been a national campaign all over Moroccan schools to forbid the use of technological devices in exams; at first glance, this appears to be educative but the strong message, herein, is the implicit negative connotations technology embeds, a means of cheating. By adopting the video game based learning approach, instructors and practitioners will correct such a negative image about technology to make students construct and develop other positive associations, such as a supportive tool, an aid mechanism, a facilitator device and so on.

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