EAL Instructors' Attitudes towards Game-based Learning Adoption in Education: Opportunities

Muhammad Yasir Babar[1], Ebrahim Panah[2], & Melor Md Yunus[3]

[1] Thompson Rivers University, Canada

[2] University College of Yayasan Pahang, Malaysia

[3] Universiti Kebangsaan Malaysia, Malaysia

Correspondence: Muhammad Yasir Babar, School of Education, Thompson Rivers University, Kamloops, BC, VEC 0C8, Canada. E-mail: yk16135@gmail.com

Abstract

The objective of the current study is to explore teachers' attitudes towards game-based learning (GBL) as well as opportunities in English as additional language (EAL) context. The study used a survey and interview to collect data. The survey data was gathered from eight university EAL teachers. Four of the survey respondents voluntarily participated in interviews to explore the opportunities of using GBL. The quantitative data was analyzed using descriptive statistics and the qualitative data was analyzed through thematic analysis and description. The findings of the survey data revealed that the factors of usefulness, attitude, and social influence contribute to the use of GBL. As a result of the interview data analysis, three themes associated with the opportunities of GBL emerged namely, communication, fun learning, and motivation. The implication of the study is that teachers acknowledge the benefits of GBL but they need support for further professional development.

Keywords: game-based learning, opportunities, teachers' attitude, gamification

1. Introduction

Since 2007, with the increase in online games for entertainment, there has been a wider use of online games in education (Sobocinski, 2018; Zarzycka-Piskorz, 2016). Games act as a catalyst in educational contexts in that they enhance students' motivation to engage in different learning and task completion activities. Consequently, the concept of gamification emerged and game-based learning (GBL) in education expanded. Gamification is defined as, "the use of game design elements in non-game contexts and it is gaining momentum in a wide range of areas including education" (Sánchez-Mena et al., 2017, p.434). In GBL students engage in active learning within a game framework to reinforce specific learning objectives as well as measurable outcomes connected to the curriculum. In GBL, the game is used as the learning experience, while in gamification, the game elements are added to the conventional method of teaching (Brude, 2014: TürkDilKurumu, 2017).

In this study, the focus was originally on gamification; however, during the data collection phase it was clear that the participating teachers use GBL rather than gamification to teach students and students experience learning through a game framework. A further definition of both terms follows.

GBL is not a new concept, but the term gamification has been implemented in education for teaching and learning different subjects since 2000 (Barab & Dede, 2007; Zarzycka-Piskorz, 2016). Santos-Villalba et al. (2020) argue that the aim of gamification is "to encourage curiosity towards learning new content; to adapt to the learning pace of the students; to motivate and generate a good climate in the classroom" (Santos-Villalba et al., 2020, p.14).

After exploring the literature on education and GBL, various factors related to the use of GBL by teachers emerged including usefulness (Sánchez-Mena et al., 2016; Teo et al., 2019 ;Yoo et al., 2017; attitude (Alabbasi, 2018; Sánchez-Mena et al., 2017; Yüksel &Durmaz, 2016), and social influence (Ssekibaamu, 2015; Yüksel & Durmaz, 2016).

Games are used not only for entertainment but also for academic purposes. GBL and gamification have attracted the attention of scholars in the field of language teaching and learning through the adoption of game design elements and

principles that are used to enhance language learning. This happens by providing an encouraging environment where students are motivated and engaged in GBL activities with enjoyment (Asiri, 2019; Yang et al., 2016). For English language teachers, GBL is used to motivate students and engage them in different and fun language learning activities.

According to Alfulaih, (2018) and Asiri (2019), a large number of English teachers are struggling to motivate and engage students in language learning tasks and activities. GBL and gamification not only enhance the learning of writing, reading, speaking, vocabulary, grammar, but also encourages collaboration. Gamifying helps improve language skills and components in a fun way (Escudero Mancebo, 2015). We need to be "gamifying the L2 classroom and interaction" (Flores, 2015). Shatz (2015) explores how risk-taking through GBL leads to language learning, particularly vocabulary enhancement. Rawendy et al. (2017) conducted an experimental study to look at the effects of GBL on learning the Chinese language and found that it positively impacts language learning. Franciosi (2017) discussed how computer-based GBL can help improve vocabulary.

There are very few studies on teachers' perspectives of GBL, particularly in the language learning context. Sánchez-Mena et al. (2017) highlight the paucity of studies on GBL use among language teachers (Asiri, 2019). Hence, we need more studies to explore teachers' perceptions of GBL in the English language learning classroom (Alabbasi, 2018). This is a gap in the literature this study hopes to fill.

This study aims at exploring EAL teachers' attitudes towards GBL in terms of opportunities in language teaching and learning. To develop a deeper understanding of the complex nature of GBL in an EAL context, a mixed method study that involved multiple sources of evidence, quantitative and qualitative data from a survey and qualitative data from interviews with EAL instructors, was undertaken.

2. Literature Review

With technology being ubiquitous, students need to be able to use it effectively. Digital literacy should, therefore, be a part of any curriculum which can lend support to learning catering to the needs of students with learning preferences. Teachers must find solutions to critical issues associated with learners' different learning styles and interests (Kiryakova et al., 2014). Teachers should employ different teaching approaches and methods that enable students to actively participate in class activities with strong motivation to engage in their learning. This is where gamifying as an educational approach and technique can play an important role by enhancing learners' motivation and engagement. Figure 1 demonstrates the components of gamifying, as an umbrella term, covering gamification and GBL.
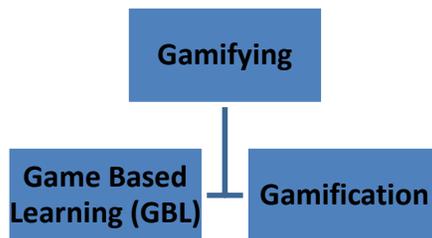

Figure 1. Gamifying: gamification and game-based learning

2.1 Defining Gamification

A wide array of definitions for gamification has been proposed. Deterding et al. (2011) define gamification as, "an informal umbrella term for the use of video game elements in non-gaming systems to improve user experience and user engagement" (p.2425). Sánchez-Mena et al. (2017) describe gamification as, "the use of game design elements in non-game contexts, and it is gaining momentum in a wide range of areas including education" (p. 434). According to Kim and Lee (2015), "the main goal of gamification is to encourage greater engagement in people and aiding in creating richer experiences in everyday life events through game mechanics and most importantly, with more enjoyment" (p.8484). Some principles such as play, challenge, control, rewards, and curiosity are commonly embedded in games which make the participation of learners in gamification more engaging and meaningful (Barab et al., 2005). In the current study, gamification is defined as an approach which adopts game elements from both traditional and web-based games to create a motivating, engaging, and interesting classroom atmosphere where language learning takes place.

2.2 Differences between Games, Gamification, and Game Based Learning (GBL)

A game is defined as an entertainment which has certain rules that users need to follow which enhances the

intelligence and talent of users while enjoying playing the games (TürkDilKurumu, 2017). In gamification, a game is used as an element or tool added to education process to achieve specific targets in education where it is not game-oriented (Bruder, 2014). In GBL, learners play games to arrive at educational targets and playing game plays a key role in the process of learning (Kim, Park & Baek, 2009). Teachers use gamification in a non-game-oriented environment to change it into a game environment through utilizing game elements and principles, while in GBL, they enhance the teaching of any subject in part by making use of games. Hence, the current study refers to GBL to explore how and why teachers use games to teach subjects.

2.3 Gamifying in the Educational Context

Gamifying in education is not a new concept; however, the terms GBL and gamification have only been around since the early 21st century (Sobocinski, 2018; Ssekibaamu, 2015). There are numerous reasons for spending significant amounts of time playing games. Whether games are played for relaxation or sheer enjoyment or to satisfy our needs to compete, they are a part of our daily life. Game concepts are being increasingly incorporated into areas other than just standard playing environments. GBL is utilized as a tool to inspire behavioral change and stimulate desired attitudes in many fields including education (AlMarshedi et al., 2017). It is widely agreed that GBL is gaining popularity in educational contexts.

2.4 Use of Gamification

Actual use of gamification provides good insights into the role of gamification related to teaching methods in higher education particularly in second or additional language learning. The use of gamification is determined by different factors. Factors such as positive attitude (Chen, 2018; Martí-Parreño et al., 2016), usefulness and ease of use of gamification (Sánchez-Mena et al., 2016), and motivation (Chen, 2018) feature dominantly here.

2.4.1 Attitude

One of the important factors that impact the use of gamification is the attitude of teachers towards gamification. The attitude of teachers is actually a deciding factor to successful implementation of any new approach in education, including technology in a learning environment (Zain et al., 2005). Another study showed that teachers' attitudes evidently help to determine their intention towards adopting educational technology (Abdel-Maksoud, 2018). Therefore, teachers are inclined to use technology in the classroom if they have a positive attitude towards gamification.

2.5 Opportunities

2.5.1 Increased Motivation

Motivation is an important factor driving human behaviors, one that should be taken into account in relation to gamification (AlMarshedi et al., 2017). Motivation is defined as a desire to carry out something. This manifests in two ways, namely intrinsic and extrinsic. Intrinsic motivation is associated with internal desire and longing to do things out of love or enjoyment (Ryan & Deci, 2000 as cited in AlMarshedi, et al., 2017), while extrinsic motivation refers to carrying out things merely for their outcome (Ryan & Deci, 2000 as cited in AlMarshedi et al., 2017). The literature indicates that gamification increases motivation. Santos-Villalba et al. (2020) conducted a survey involving 187 university students and found that the students had a positive attitude towards gamification and reported that gamification motivates both students and instructors. So though many studies have found that gamification enhanced motivation and learning, there have also been conflicting and inconclusive results with some research posting opposite findings. Overall, it is believed that gamification improves and enhances language learning, which is associated with its usefulness, but some cautions about implementation and use should be considered.

2.5.2 Perceived Usefulness

Perceived usefulness is a person's belief about a specific system that could help them to improve their performance (Davis, 1985; Ventakesh et al., 2003). Moreover, a user who uses technology such as gamified applications, will enhance their personal interaction, save time, have control over the process, and improve their performance (Gallego et al., 2008). One of the significant factors that affect the use of gamification is its perceived usefulness.

2.5.3 Perceived Social Influence

Social influence causes people to perform specific actions. Social factors have an important role in determining the implementation of gamification. AlMarshedi et al. (2017) believed that social factors compared to technological factors have a stronger influence on the use of gamification. Findings of several studies concur that social influence has an important role in affecting people's attitude towards using technology (Gallego et al., 2008; Hamari & Koivisto, 2013; Yüksel & Durmaz, 2016).

2.6 Gamifying in Language Learning

Gamifying plays a vital role in language learning as it can change the class atmosphere from passive to active. In language learning contexts, gamification promises to assist in language learning (Zarzycka-Piskorz, 2016).

Although the findings of some studies are in support of gamifying use, the results of a study by Perry (2015) indicated that a small number of students had a negative attitude toward GBL. Besides, very few studies have investigated teachers' attitudes towards gamifying in terms of opportunities and only a small amount of research has been concerned with factors contributing to opportunities of gamifying. There is limited research demonstrating the teachers' attitudes towards gamifying adoption in EAL contexts.

The present study was undertaken to bridge the gap in the literature and address the following research question:

RQ: What are the opportunities for using GBL in EAL classrooms?

3. Research Methodology

3.1 Design

The goal of the research is to investigate the opportunities of using GBL from the perspectives of EAL teachers in the English Language Learning and Teaching (ELLT) Department at Thompson Rivers University a mid-size comprehensive university located in the interior of British Columbia, Canada. The methods adopted permitted an exploration of the factors contributing to the opportunities of using GBL by teachers in the context of classroom teaching.

3.2 Justification of Method Selection

As the research questions involved deep exploration of GBL use among teachers, an exploratory design adopting both qualitative and quantitative approaches as the methods of data collection and data analysis (Creswell, 1999; Creswell, & Plano Clark, 2011) was used. This study attempted to find out the opportunities of GBL use including the main factors of using GBL in an EAL classroom.

A combination of research outcomes and research processes deepens our understanding of the phenomenon (Creswell & Plano Clark, 2011). Adopting a mixed method design helped me to keep abreast of a wide range of perspectives and views on the use of GBL. For example, the survey outcome indicated that some factors encourage teachers to use GBL, and the qualitative data from the open-ended questions and interviews helped me to develop a more comprehensive picture of opportunities of GBL use.

The survey was used to examine the effect of some factors associated with the opportunities of GBL, namely attitude, usefulness, and social influence on GBL use. However, the data obtained from a small number of teachers may not provide deep insights into GBL use. To address these issues, open-ended questions were added to the survey to obtain more comprehensive information on GBL use in order to reflect the respondents' real thoughts. Some teachers were interviewed to build a deeper understanding of advantages to GBL use. The respondents were encouraged to share their opinions and experiences freely concerning the benefits of using GBL. As a result, the qualitative component of the study added more factors to the opportunities of GBL Therefore, a combination of data obtained from both modes of study helped to build a clear picture of opportunities of GBL use in the context of a Canadian university.

The study collected quantitative data from eight EAL teachers serving in an English language department to explore the determinant factors of GBL use. Qualitative data were gathered through structured interviews involving four teachers and open-ended questions from eight teachers. The participants were invited to complete an online survey administered through SurveyMonkey including background information related to their teaching experience and the factors affecting their adoption of GBL. The survey data sought teachers' perceptions of GBL including both close-ended and open-ended questions to provide both quantitative and qualitative data. Interview participants were invited by email to take part in a detailed interview about the opportunities of using GBL. The interview data offers more qualitative details providing deeper insights into opportunities of using GBL.

The survey and interviews were conducted separately, and the data from both sources were collected and analyzed independently. Afterwards, data from both sources were integrated for interpretation of results in the discussion (see Figure 2). The quantitative data was collected and analyzed descriptively (through tabulation of Likert-scale questions) within the SurveyMonkey platform, while the qualitative data was analyzed through thematic analysis (emergent coding) manually, which will be will be discussed in the following section.
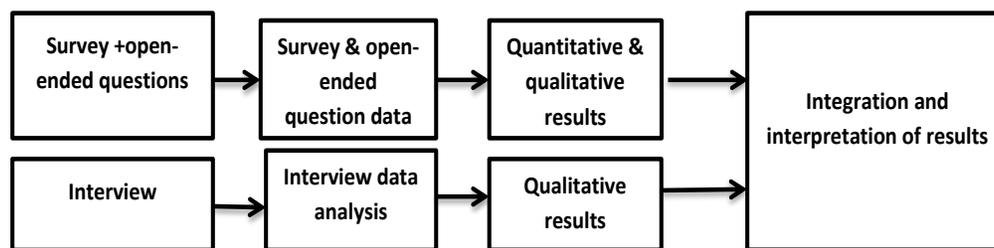
Figure 2. Research Design

The survey and interviews are strongly interconnected and significantly contribute to answering the research questions on how EAL teachers use GBL and identifying the factors contributing to their decision to use a GBL approach.

4. Data Collection Methods

Prior to data collection, the university research ethics board granted the study approval. As highlighted earlier, the research design included a combination of survey and interview methods to explore the opportunities of GBL use from EAL teachers' perspectives.

4.1 Survey

The survey comprised a 33-item questionnaire which was adopted from previous studies (Albirini, 2006; Asiri, 2019; Gallego et al., 2008; Gardner & Amoroso, 2004). The constructs were adopted from the unified theory of acceptance and use of technology (UTUAT) theory which is widely used in technology acceptance studies including GBL use. The survey questions were adapted and adopted from previous studies connected with the theoretical framework constructed based on UTAUT and TAM elements (Alabbasi, 2018; Asiri, 2019). Each question was based on a Likert Scale (strongly disagree, disagree, neutral, agree, and strongly agree), and was also accompanied by an open-ended question to elicit qualitative information to deepen the understanding of participants' attitudes and thoughts regarding the opportunities of using GBL. The questionnaire was comprised of two parts: demographics and behavioral intention. The demographics contained the teaching experiences of the teachers. The behavioral intention comprised of usefulness with four items (Gallego et al., 2008), attitudes with four items (Albirini, 2006), social influence with three items (Gardner & Amoroso, 2004), and actual use of GBL with three items (Gardner & Amoroso, 2004).

4.2 Interview

The study used a structured interview to deepen understanding of the opportunities of using GBL. Together with open-ended survey questions, the interview data provides rich information to answer the research questions.

The researchers utilized a list of questions and a guided approach to begin each interview topic and the interviewees were encouraged to express their views freely (Gall et al., 2007). We also asked for elaboration, when necessary, to gain in-depth responses.

4.3 Participant Selection

To select the research participants, the current study adopted purposive sampling. A researcher chooses a purposive sampling technique based on the qualities that participants' possess (Creswell, 2011). In purposive sampling, the researcher attempts to identify and select the information-rich cases to properly use the available resources (Bernard, 2002 cited in Tongco, 2007; Patton, 2002). This involves identification and selection of individuals or groups of individuals that are proficient and well-informed with a phenomenon of interest (Creswell, & Plano Clark, 2011). Furthermore, the other crucial factors of research participant selection included the availability, willingness, and the ability to communicate and express their opinions articulately, and reflectively (Bernard, 2002 cited in Tongco, 2007). Hence, this study adopted purposive sampling to select EAL teachers who were available to the researchers and willing to answer the questions for the purpose of data collection. Consent for using the information from the survey and interviews for the purpose of this study was received electronically or by hard copy prior to the collection of data.

4.4 Data Collection

The study involved eight English language teachers who answered both close-ended and open-ended questions of the online survey. All of the participants are employees of TRU and work in the area of English language education. Five of the participants are member of the ELLT department (English Language Learning & Teaching Department). These

tenured/tenure-track instructors work in an English for Academic Purposes program that supports MLL (multi-lingual language learners) with their transition to degree programs. The other three participants work for the TRU International Training Centre (ITC). These instructors work in short-term ESP (English for Specific Purposes) programs. There were four interview participants who were contacted via their TRU email addresses for interviews. The interview respondents participated in the interview voluntarily. Interviews were tailored to further determine the participants' attitudes towards GBL and integration into their EAL classroom teaching.

5. Analysis

In this study, I collected two types of data: quantitative and qualitative. The quantitative information was analyzed and presented in the form of percentage and frequency measures. The qualitative data obtained from open-ended questions and interviews were analyzed through thematic analysis and emergent coding

According to Creswell (2012), qualitative data analysis includes organizing and preparing the data. Initially, the researcher reads through the information, codes the data, and develops themes from the codes. Themes are categorized ideas emerging from coded data. Codes entail the process of attributing labels to text lines in order to categorize and compare similar and relevant pieces of information. Likewise, the present study adopted the descriptive and thematic analysis and emergent coding to analyze the interview data.

5.1 Emergent Coding Structure

Emergent coding refers to the categorization of data. In this coding, codes are drawn from the text (Stemler, 2000) as opposed to undertaking the data analysis with pre-determined themes. Emergent theme coding is an approach to qualitative data analysis where the text/transcript is perused several times to identify the codes and themes emerging from data (Blair, 2015). This process is commonly used when the research question is broad and exploratory. The transcribed qualitative data was coded into themes through emergent coding (Creswell, 2013) and represented as a complement to the survey data with details from each unique case. To validate the findings of the qualitative data analysis, one of the most common methods is addressing the trustworthiness of findings (Creswell, 2012), which is discussed below.

5.2 Trustworthiness

According to Creswell (2012), accuracy or credibility of research findings is crucial. Various terms are used to elaborate on accuracy or credibility namely, authenticity and trustworthiness. Also, there are several strategies used to validate qualitative data findings. In this study, trustworthiness was addressed in four ways, namely rich description of data, transparency, grounding in validated framework and coding structure, and member checking:

• Rich description of the data: I provided a rich description of the data through the use of quotes and description of the context which were used in order to support the identified trends and external validity (Braun & Clarke, 2006).

• Transparency: I have provided a 'researcher statement' including my experiences, assumptions, and biases to allow the reader to understand how they might have impacted the data interpretation. In addition, the procedures, decisions, and study data collection will be well documented in order that they can be used as an audit trial, supporting validation and evaluation criteria proposed by Creswell (2007).

• Grounding in validated framework and coding structure: This research was built on a previously validated theoretical framework, i.e., UTAUT (Venkatesh et al., 2003) and adopted the method of emergent coding as the basis for data analysis (Blair, 2015; Creswell, 2013; Stemler, 2000).

• Member checking: Researchers check the findings of their study to determine the accuracy of findings. According to Creswell (2012):

Member checking is a process in which the researcher asks one or more participants in the study to check the accuracy of the account. This check involves taking the findings back to participants and asking them (in writing or in an interview) about the accuracy of the report. You ask participants about many aspects of the study, such as whether the description is complete and realistic, if the themes are accurate to include, and if the interpretations are fair and representative. (p. 259)

Accordingly, we adopted member checking in the current study by presenting a summary of findings to the interviewees face to face and one online (following up with a video meeting) and asking them if they see their personal views represented in the reported findings. The participants were also asked to comment on the accuracy of the verbatim quotes and gained their approval to make use of their direct personal quotes in the study reports.

6. Results

The survey data was analyzed through descriptive statistics (i.e. percentages) and was supplemented with qualitative data when applicable in order to address the research question.

6.1 Usefulness

One of the important factors of using GBL is usefulness. Figure 3 demonstrates the percentage of teachers' perceptions of the usefulness of GBL. Among the eight participants who reported their views of the usefulness of GBL, 87% percent acknowledged that GBL is useful, while one teacher (12.7%) disagreed. This is consistent with Yoo et al. (2017) who found perceived usefulness affects users' intentions to use GBL.
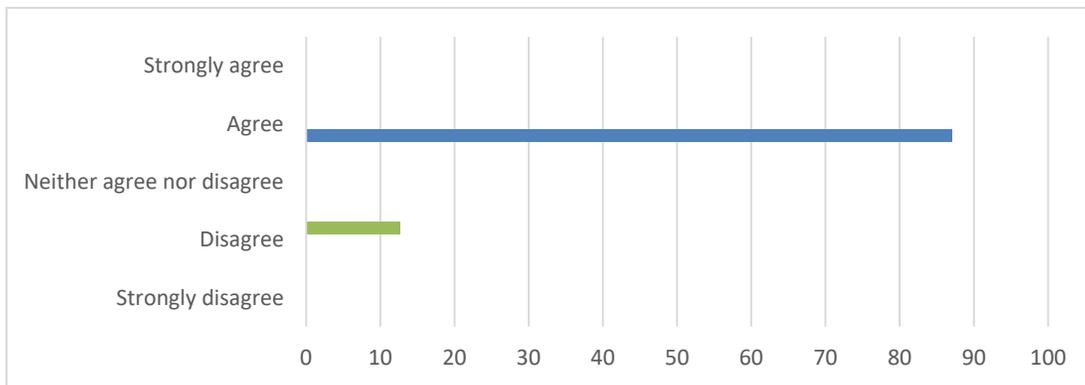
Figure 3. Usefulness Percentage

The study examined usefulness of GBL including the sub-factors such as control over teaching, reducing the time for task, improving the quality of work, and increasing motivation. However, the motivation factor emerged from the qualitative data which will be discussed subsequently.

6.2 Control over Teaching

Control over teaching means that GBL aids teachers in determining the best sequence to teach something to students (S ánchez-Mena et al., 2016). GBL helps diversify lesson activities and increase student interest. GBL creates novel ways to have the students interact with and respond to the content. According to the survey, three teachers (37.5%) agreed that GBL helps with control over teaching while three (37.5%) held neutral views, one (12.5%) disagreed and one (12.5%) completely disagreed as demonstrated in Figure 4.

The findings of the survey data complemented by comments indicate that some teachers accept that GBL is useful in helping control the teaching sequence though others have neutral or opposing views.
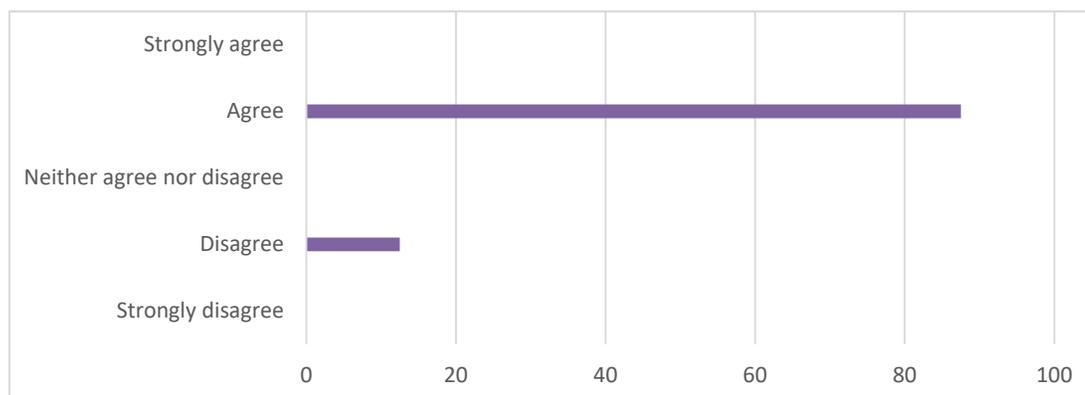

Figure 4. Control over Teaching

6.3 Improving the Quality of Work

GBL improves the quality of the work of teachers by enhancing student engagement and involvement in different

activities. Figure 5 demonstrates the teachers' perceptions of GBL use to improve the quality of work. According to the survey, seven respondents (87.5%) agreed that GBL improves the quality of teaching work while one participant (12.5%) disagreed.
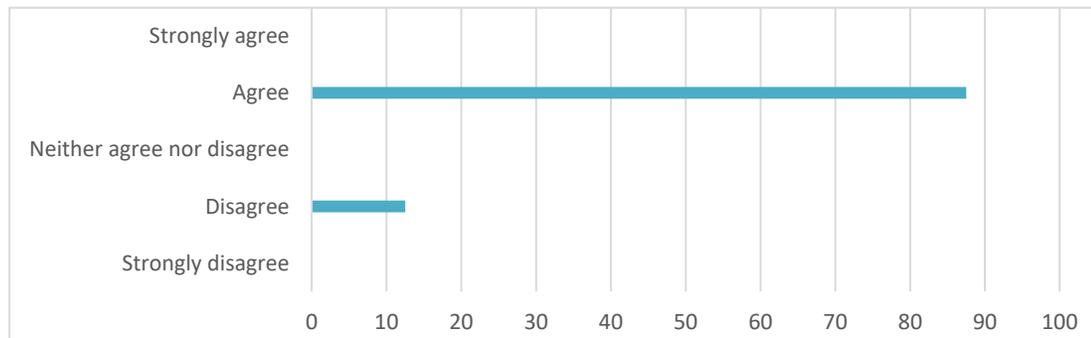

Figure 5. Improving the Quality of Work

Overall, the data show that most of the participants in this study felt GBL can enhance the quality of teaching through increasing student involvement, enhancing lesson activities, improving class dynamism, increasing student satisfaction, engagement, and retention.

6.4 Communication and Interaction

GBL enhances communication and interactions among students. Though this theme was not explicitly covered in the survey questions, many participants indicated that GBL gets students to communicate and interact as they are positively competing to win in a fun way in which the affective filter is lowered and the classroom environment becomes stress free.

6.5 Increasing Motivation

Another relevant factor is 'motivation'. Motivation can be a driving force to engage students' in language learning activities through GBL (Alabbasi, 2018; Hamzah, et al., 2015; Sobocinski, 2018). While the survey results indicated an uncertain attitude towards the importance of motivation, the interview results along with qualitative survey comments happen to show that motivation is actually an influential factor in using GBL by teachers. Teachers highlight the importance of GBL use in increasing students' motivation.

6.6 Attitudes towards GBL

The attitude of teachers towards GBL has an important role in using it (Alabbasi, 2018; S ánchez-Mena et al., 2017; Yüksel & Durmaz, 2016). Figure 6 demonstrates teachers' attitude towards using GBL and shows that they are in favor of using GBL in the language classroom.
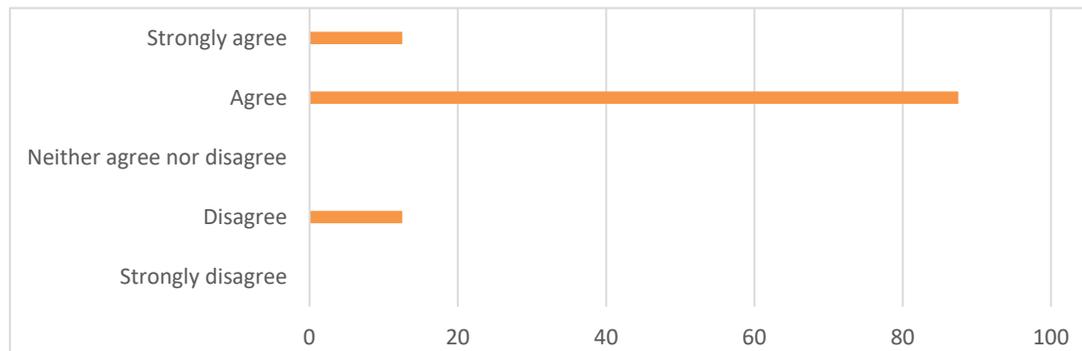

Figure 6. Attitude towards Using GBL

According to the survey data, it was found that seven participants (87.5%) agreed and one participant also (12.5%) strongly agreed with using GBL in teaching language, while one (12.5%) disagreed.

According to the interviews and qualitative comments on the survey, the teachers express their attitudes towards GBL by highlighting its function in bringing change, supporting collaboration, pair work and group work, motivating,

students' positive attitudes, reducing teacher talk, facilitating learning, enhancing engagement, creating community, curiosity, creativity, and enlivening classroom.

6.7 Fun and Enjoyment in GBL

Enjoyment and fun in using GBL encourages teachers to use it (Asiri, 2019; Escudero-Mancebo, 2015; Zarzycka-Piskorz, 2016). Figure 7 illustrates teachers' attitudes towards fun and enjoyment in GBL use.

According to the survey data, 87.5% of teachers agreed that GBL increases fun and engagement. This is consistent with Asiri (2019) who found that teachers had positive attitudes towards the use of GBL in terms of fun and enjoyment. Only one participant (12.5%) disagreed whereas one participant (12.5%) strongly agreed.
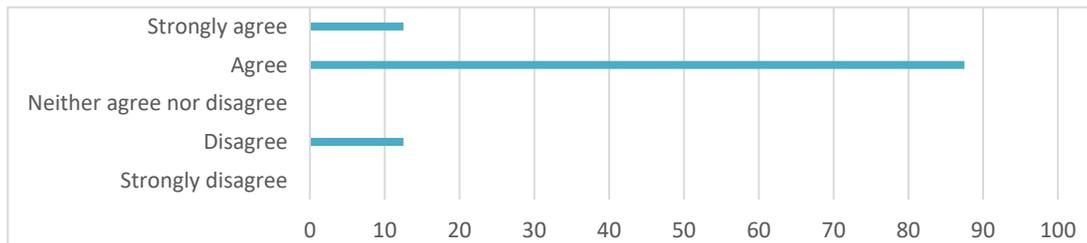

Figure 7. Teachers' Attitudes towards GBL as Fun and Enjoyment

The interview data show that the participants felt that GBL results in fun and enjoyment for students by bringing life and happiness to the classroom while reviewing and practicing materials. Overall, the participants felt that GBL can bring fun and enjoyment to classrooms by improving class dynamism, laughter, relaxation, happiness and reducing stress. GBL leads to positive competition through GBL apps and provides immediate feedback while students are exploring the content and learning the language.

6.8 Comfort Level in Using GBL

The comfort level of using new approaches in class is an essential factor that can affect teachers' use of GBL (Asiri, 2019; Flores, 2015). According to the survey, teachers indicated that they did not experience a lack of comfort in using GBL. The findings of the survey data show that four teachers (50%) strongly disagreed and four (50%) disagreed that GBL causes a lack of comfort (Figure 8). This indicates that all teachers acknowledged that GBL use leads to comfort. This is because GBL by nature is fun and motivates teachers to use the activities more comfortably and eagerly in a "sustaining relaxed atmosphere" (Flores, 2015, p.32).
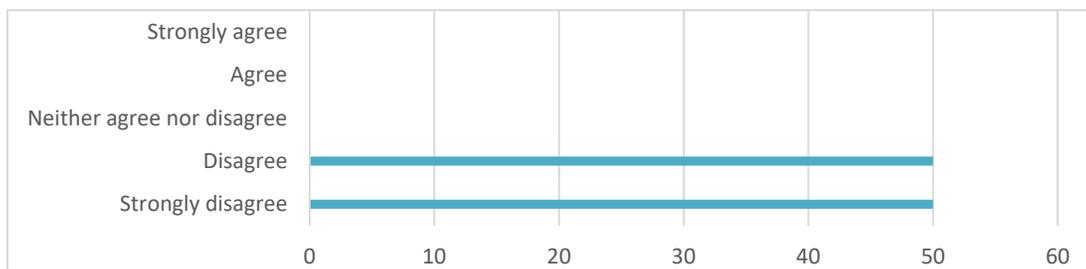

Figure 8. Comfort level in Using GBL

To sum up, data shows that all teachers agreed that using GBL is comfortable for both teachers and students in the context of the classroom. This is because GBL changes the classroom atmosphere and creates a fun, interesting, and pleasant environment.

6.9 Social Influence

The survey data indicates that social influence impacts the use of GBL which is consistent with the findings of Asiri (2019) and Ssekibaamu (2015) who found a strong relationship between social influence and teachers' use of GBL. The study examined social influence as an overall factor with four sub-factors: respectful people encouragement, peer/coworker influence, effect of influential people.

6.10 Encouragement from Respected People

The survey data indicates that five participants (50%) agreed, while one (12.5%) held a neutral view and two (25%) disagreed with the influence of reverential people in their implementation of GBL, and one participant (12.5%) strongly agreed. (Figure 9). The finding is partially consistent with Asiri (2019) who found that respected people significantly affect the use of GBL by teachers. It is noted that one person in the study is not sure about the influence of people who they think of as respected, and two teachers are not affected by reverential people.
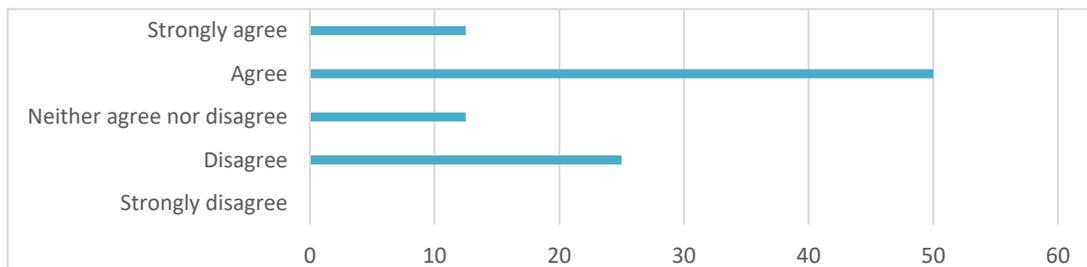

Figure 9. Encouragement from Respected People

To sum up, teachers are influenced by the respected people surrounding them on their use of GBL especially when they admire their work. However, some oppose this idea and believe that they examine the objectives of the lesson, and accordingly decide whether to implement GBL or not, regardless of the views of others.

6.11 Peer/coworker Influence

Studies have argued that peer/coworkers influence the use of GBL (Asiri, 2019; Hao, 2017; Ssekibaamu, 2015). Figure 10 illustrates the influence of peer/coworker on GBL use in this study.

The results of the survey data indicate that five teachers (62.5%) agreed that their peers or colleagues influence them in using GBL while 37.5% had a neutral point of view. The finding is partially consistent with the data in the literature (Asiri, 2019; Ssekibaamu, 2015) which indicates that peers and colleagues have a significant role in using GBL by teachers.
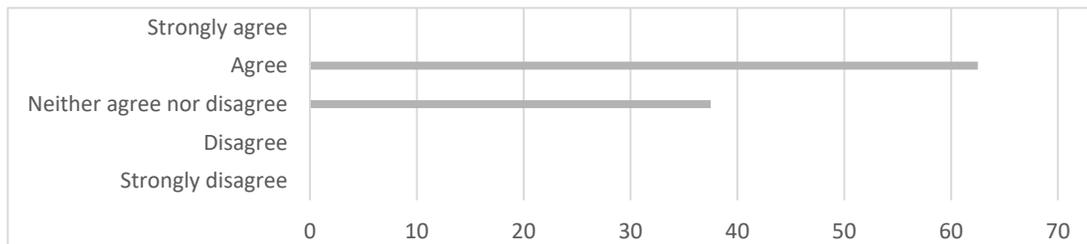

Figure 10. Peer/coworker Influence

Overall, teachers have shared their success stories of GBL, emulation, professional development, use of different approaches, respecting others, and innovation in teaching with their colleagues. However, two out of eight survey respondents were not encouraged to emulate others in terms of using GBL.

6.12 Effect of Influential People

Influential people encourage the use of GBL by teachers (Asiri, 2019; Hamari and Koivisto, 2013). Figure 11 demonstrates the effect of influential people on the use of GBL by teachers. The findings of the survey data shows that five participants (62.5%) agreed that influential people can impact their application of GBL, 25% were not sure if they have an important role or not, while one (12.5%) disagreed with this idea. The findings of the survey partially confirms the findings of Asiri (2019) and Hamari and Koivisto (2013) who found that influential and powerful people strongly impact the use of GBL by teachers. It means that although most teachers agree that influential people influence their use of GBL, there are some who are not sure or disagree about the effect of influential people.
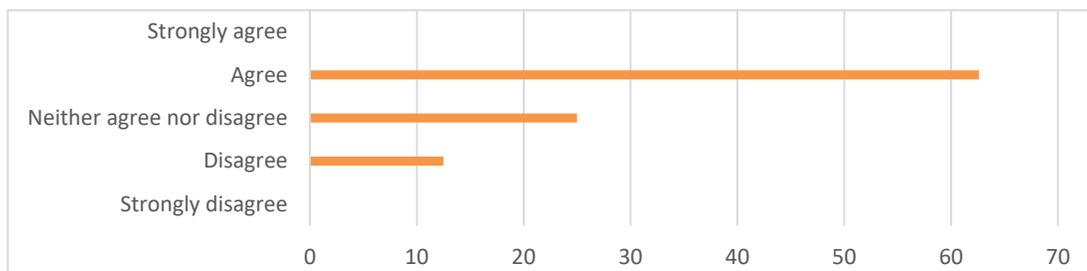
Figure 11. Effect of Influential People

In sum, it was found that overall respected people, colleagues, peers, and influential people influence teachers' use of GBL; however, some respondents held opposite views and claimed that they decide on the use of GBL purposefully regardless of the opinions of others.

6.13 Sharing with Colleagues

Sharing with colleagues can encourage teachers' use of GBL (Asiri, 2019; Hamari & Koivisto, 2013). Figure 12 illustrates teachers' sharing GBL with colleagues.

The findings of the survey indicate that 50% of participants agreed that they will share the application of GBL for language teaching and learning with colleagues while one (12.5%) disagreed with this idea and 38% of participants strongly agreed. This finding is consistent with the Asiri, (2019) and Hamari and Koivisto (2013) who indicate that sharing GBL with others can significantly influence their use.
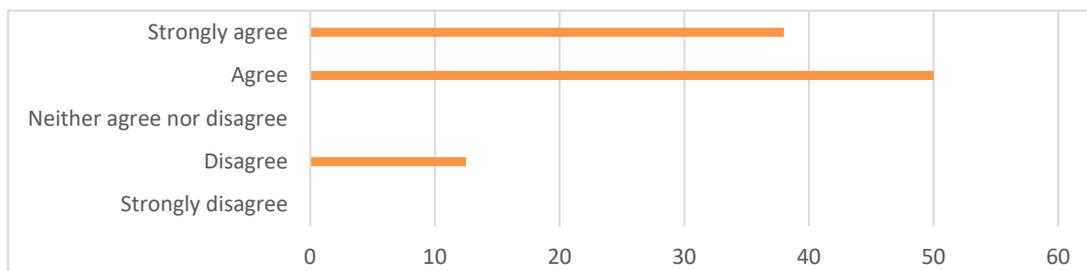

Figure 12. Sharing with Colleagues

In summary, teachers share their ideas about GBL and exchange ideas, success stories, and games through different modes of communication, such as conferences and workshops.

7. Discussion

The current study looked at GBL for language teaching and learning and found several advantages of this approach to language teaching. Teachers held positive attitudes towards GBL use and accepted that it helps teachers to deepen students' understanding of the content by specifically focusing on a particular language skill such as listening, speaking, reading, and writing (Alfulaih, 2018; Asiri, 2019; Franciosi, 2017) and components (pronunciation, grammar, vocabulary) (Franciosi, 2017; Rawendy et al., 2017; Shatz, 2015), which happens through presenting and reviewing the materials creatively. It allows the teachers to decide on the best teaching sequence in teaching the content (Sánchez-Mena et al., 2016). This can happen in a stress-free environment where the affective filter is low. The instructors in this study also indicated that GBL helps them in determining efficient teaching sequences. Teachers acknowledged that GBL enhances the quality of teaching which happens through engaging students in diverse activities which happens in a dynamic classroom setting and leads to the remembering and retention of language content in a relaxed collaborative environment.

Usefulness has been observed as an important factor in the data to impact the users' performance which is consistent with data on literature (Yoo et al., 2017). GBL allows control over teaching and teach language skills in a logical manner. GBL also enables teachers improve the quality of teaching by involving students in multiple activities. Based on sequence-controlled classroom, teachers could also particularly introduce language-based exercises to students to enhance their skills such as pronunciation, grammar, and vocabulary (Franciosi, 2017). Participants mentioned that they often offer dictation-based games to students within limited time frame to improve their listening

and writing skills amicably.

Attitude towards GBL is a determinant factor in using GBL. GBL augments engagement, students' positive attitude, and collaboration consistent with literature (Abdel-Maksoud, 2018; Boyinbode & Tiamiyu, 2020). Concerning positive attitude, one of teachers mentioned that games really help to improve their language skills especially in those places like Japan where students don't have liberty to use language in their own way. Teachers believe that GBL leads to comfort. Moreover, using GBL is reliable for both teachers and students in the classroom. GBL helps students learn in a comfortable environment (Santos-Villalba et al., 2020). One of the participants occasionally involves his students into games such as 'flashcards' with pictures to make them feel comfortable without knowing a wide range of vocabulary and grammar. Eventually it helps to reduce the anxiety among students.

Social influence is one of those factors which impact the use of GBL which is consistent with the findings of past studies (Asiri, 2019; Ssekibaamu, 2015). Both peers and superiors can influence the teachers in using GBL. They can also help each other in professional development. Social influence entails encouragement from respected people, peer/coworker influence, peer/coworker influence, and sharing with colleagues. Teachers are influenced by respected people surrounding (Asiri, 2019) whereas some oppose the idea. Respected people and encourage and motivate teachers in using a new approach such as GBL (Booney et al., 2008). Moreover, it has been acknowledged that only motivated learners seem to extend their efforts which strategy application requires. Peer/coworker Influence teachers in using GBL. This finding is partially consistent with the data (Asiri, 2019; Ssekibaamu, 2015). One of the participants shared his experience of using games such as 'guess the ending' with colleagues with successful stories which could be influencing using such games by others. Most of teachers agreed that influential people influence the use of GBL by teachers. This finding is partially consistent with the data of (Asiri, 2019; Hamari & Koivisto, 2013). This kind of influence could be motivating the teachers in the use of a new approach such as GBL. Teachers agreed that sharing with colleagues encourage teachers' use of GBL which is consistent with the (Asiri, 2019; Hamari & Koivisto, 2013). One of participants involves his students in games such as 'settlers of catan', 'code names', and 'taboo' to allow them to have interactive experience with their partners.

Communication and interaction are enhanced by GBL with different activities in a stress-free environment. This is consistent with the literature (De-Marcos et al., 2017; Gallego et al., 2008; Garland, 2015) and it can be enhanced through pair work and group work.

Fun and enjoyment is another important emergent factor in using GBL (Escudero Mancebo, 2015). GBL brings fun and enjoyment to the classroom by improving class dynamism, laughter, relaxation, happiness, reducing stress and engagement and sense of belonging to a team and identification with team's goal (Asiri 2019; Yang et al., 2016). Teachers should benefit from this feature of GBL and provide a stress-free environment for students where each student takes an active role in learning while exploring the language content collaboratively and cooperatively (Alfulaih, 2018; Asiri, 2019). One of the participants mentioned that games help students to gain confidence and stop getting nervous thereby involving in multiple fun games.

Motivation was another theme that emerged from data. Consistent with literature GBL enhances motivation for language (Chen, 2018; Hamzah, et al., 2015; Bovermann et al., 2018; Iaremenko, 2017). GBL increases engagement (Korkealehto & Siklander, 2018) and motivates to learn language skill and grammar (Zarzycka-Piskorz, 2016). One of participants offers board games such as 'balloon questions' and 'minute to win it' to help students to enhance their motivation level.

In sum, the findings of the study have been brought to attention the elements of GBL which would be beneficial for teachers, students, and administrators. Teachers in this study unanimously agreed that GBL is a game changer in teaching language, and they will use it in future; however, very few of them were using it on a regular basis. However, the education background, learning styles and culture of students need to be taken into account (Kiryakova et al., 2014). Nevertheless, few teachers had negative attitudes towards GBL (Perry, 2015) which might be associated with some factors such as time or resource which need further exploration.

8. Conclusion

The purpose of the current study was to explore the attitudes of teachers towards and opportunities of using GBL in EAL learning context. Overall, teachers accepted that GBL is a trending methodology with impressive results although it is underused by teachers. This is consistent with the literature (Martí Parreño et al., 2016). As has been found in other studies (Hanus & Fox, 2015), some participants in this study were cautious in using GBL as they believed that the result might be counterproductive in terms of the teaching and learning environment.

To conclude, this study was an attempt to explore opportunities, particularly from the point of view of EAL teachers.

It is important to note that our findings are limited to the data obtained from eight EAL teachers serving at Thompson Rivers University, Canada. Hence, the interpretation of the findings of this study should be done in the light of the limitations of the study.

References

Abdel-Maksoud, N. F. (2018). The Relationship between Students' Satisfaction in the LMS" Acadox" and Their Perceptions of Its Usefulness, and Ease of Use. *Journal of Education and Learning*, *7*(2), 184-190. https://doi.org/10.5539/jel.v7n2p184

Alabbasi, D. (2018). Exploring Teachers' Perspectives towards Using Gamification Techniques in Online Learning. *Turkish Online Journal of Educational Technology-TOJET*, *17*(2), 34-45.

Albirini, A. (2006a). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers and Education*, *47*(4), 373-398. https://doi.org/10.1016/j.compedu.2004.10.013

Albirini, A. (2006b). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers [Pergamon]. In *Computers and Education* (Vol. 47, Issue 4). https://doi.org/10.1016/j.compedu.2004.10.013

Alfulaih, W. K. (2018). The impact of using games on developing Saudi female EFL students' speaking skills. *British Journal of Humanities and Social Sciences*, *19*(2), 14-23.

AlMarshedi, A., Wanick, V., Wills, G. B., & Ranchhod, A. (2017). Gamification and behaviour. In *Gamification* (pp. 19-29). Springer. https://doi.org/10.1007/978-3-319-45557-0_2

Andrade, F. R., Mizoguchi, R., & Isotani, S. (2016). The bright and dark sides of gamification.*In International conference on intelligent tutoring systems* (pp. 176-186).Springer, Cham. https://doi.org/10.1007/978-3-319-39583-8_17

Asiri, M. J. (2019). Do teachers' attitudes, perception of usefulness, and perceived social influences predict their behavioral intentions to use gamification in EFL classrooms? Evidence from the middle east. *International Journal of Education and Practice*, *7*(3), 112-122. https://doi.org/10.18488/journal.61.2019.73.112.122

Barab, S., & Dede, C. (2007). Games and immersive participatory simulations for science education: An emerging type of curricula. *Journal of Science Education and Technology*, *16*(1), 1-3. https://doi.org/10.1007/s10956-007-9043-9

Barab, S., Thomas, M., Dodge, T., Carteaux, R., & Tuzun, H. (2005). Making learning fun: Quest Atlantis, a game without guns. *Educational Technology Research and Development*, *53*(1), 86-107. https://doi.org/10.1007/BF02504859

Bernard, H. R. (2002). *Research Methods in Anthropology* (3rd ed.) AltaMira Press.

Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal of Methods and Measurement in the Social Sciences*, *6*(1), 14. https://doi.org/10.2458/v6i1.18772

Booney, C. R., Cortina, K. S., Smith-Darden, J. P., & Fiori, K. L. (2008). Understanding strategies in foreign language learning: Are integrative and intrinsic motives distinct predictors? *Learning and Individual Differences, 18,* 1e10.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Bruder, P. (2014). *Game on: gamification in the classroom*. Retrieved January 15, 2017, from https://www.njea.org/news-and-publications/njea-review/may-2014/gamification-in-the-classroom

Buckley, P., & Doyle, E. (2017). Individualising gamification: An investigation of the impact of learning styles and personality traits on the efficacy of gamification using a prediction market. *Computers & Education*, *106*, 43-55. https://doi.org/10.1016/j.compedu.2016.11.009

Chen, Y. (2018). Understanding how educational gamification impacts users' behavior: a theoretical analysis. *Proceedings of the 6th International Conference on Information and Education Technology*, 154-159. https://doi.org/10.1145/3178158.3178188

Cornillie, F., Thorne, S. L., & Desmet, P. (2012). *Digital games for language learning: from hype to insight?*

Creswell, J. W. (1999). Mixed-method research: Introduction and application. In *Handbook of educational policy* (pp.

455-472). Elsevier. https://doi.org/10.1016/B978-012174698-8/50045-X

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, *35*(2), 236-264. https://doi.org/10.1177/0011000006287390

Cresswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed method research* (2nd Sage).

Cresswell, J. W. (2012). Planning, conducting, and evaluating quantitative and qualitative research. *Educational Research.* https://Doi. Org/10.4135/9781483349435

Creswell, J. W. (2013). *Steps in conducting a scholarly mixed methods study*. DBER Speaker Series.

Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. Massachusetts Institute of Technology.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: defining" gamification". *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9-15. https://doi.org/10.1145/2181037.2181040

Escudero Mancebo, D., Cámara Arenas, E., Tejedor García, C., González Ferreras, C., & Cardeñoso Payo, V. (2015). *Implementation and test of a serious game based on minimal pairs for pronunciation training*. ISCA Workshop on Speech and Language Technology in Education.

Fan, K. K., Xiao, P. W., & Su, C. H. (2015). The effects of learning styles and meaningful learning on the learning achievement of gamification health education curriculum. *Eurasia Journal of Mathematics, Science and Technology Education*, *11*(5), 1211-1229. https://doi.org/10.12973/eurasia.2015.1413a

Fernandez-Rio, J., de las Heras, E., González, T., Trillo, V., & Palomares, J. (2020). Gamification and physical education.Viability and preliminary views from students and teachers. *Physical Education and Sport Pedagogy*, *25*(5), 509-524. https://doi.org/10.1080/17408989.2020.1743253

Franciosi, S. J. (2017). The effect of computer game-based learning on FL vocabulary transferability. *Educational Technology & Society*, *20*(1), 123-133.

Galbis-Córdoba, A., Martí-Parreño, J., & Currás-Pérez, R. (2017). Education Students' Attitude towards the Use of Gamification for Competencies Development. *Journal of E-Learning and Knowledge Society*, *13*(1).

Gall, M. D., Gall, J. P., Borg, W. R., & Mendel, P. C. (2007). *A guide for preparing a thesis or dissertation proposal in education, for Gall, Gall, and Borg'Educational research: an introduction'and'Applying Educational Research'*. Pearson Education.

Gallego, M. D., Luna, P., & Bueno, S. (2008). User acceptance model of open source software. *Computers in Human Behavior*, *24*(5), 2199-2216. https://doi.org/10.1016/j.chb.2007.10.006

Gardner, C., & Amoroso, D. L. (2004). Development of an instrument to measure the acceptance of internet technology by consumers. In *37th Annual Hawaii International Conference on System Sciences, 2004. Proceedings of the* (pp. 10-pp). IEEE. https://doi.org/10.1109/HICSS.2004.1265623

Garland, C. M. (2015). *Gamification and implications for second language education*: *A meta analysis.*[Unpublished Master dissertation]. St. Cloud State University.

Hamari, J., & Koivisto, J. (2013). Social motivations to use gamification: An empirical study of gamifying exercise. *ECIS 2013 - Proceedings of the 21st European Conference on Information Systems*.

Hamzah, W. M. A. F. W., Ali, N. H., Saman, M. Y. M., Yusoff, M. H., & Yacob, A. (2015). Influence of gamification on students' motivation in using E-learning applications based on the motivational design model. *International Journal of Emerging Technologies in Learning*, *10*(2), 30-34. https://doi.org/10.3991/ijet.v10i1.4355

Hanus, M. D., & Fox, J. (2015). Assessing the effects of gamification in the classroom: A longitudinal study on intrinsic motivation, social comparison, satisfaction, effort, and academic performance. *Computers & Education*, *80*, 152-161. https://doi.org/10.1016/j.compedu.2014.08.019

Kim, J. T., & Lee, W. H. (2015). Dynamical model for gamification of learning (DMGL). *Multimedia Tools and Applications*, *74*(19), 8483-8493. https://doi.org/10.1007/s11042-013-1612-8

Kim, B., Park, H., & Baek, Y. (2009).*Not just fun, but serious strategies: Using meta-cognitive strategies in game-based learning*. Computers & Education, *52*(4), 800-810. https://doi.org/10.1016/j.compedu.2008.12.004

Kiryakova, G., Angelova, N., & Yordanova, L. (2014). *Gamification in education*.Proceedings of 9th International

Balkan Education and Science Conference.

Landers, R. N., Auer, E. M., Helms, A. B., Marin, S., & Armstrong, M. B. (2019). Gamification of adult learning: Gamifying employee training and development. *The Cambridge Handbook of Technology and Employee Behavior*, 271-295. https://doi.org/10.1017/9781108649636.012

Lifanova, A., Ngan, H. Y., Okunewitsch, A., Rahman, S., Guzmán, S., Desai, N., Özsari, M., Rosemeyer, J., Pleshkanovska, R., & Fehler, A. (2016). New locals: Overcoming integration barriers with mobile informal and gamified learning. *Proceedings of the International Conference on Information Communication Technologies in Education (ICICTE), Rhodes, Greece*, 7-9.

Martí-Parreño, J., Seguí-Mas, D., & Seguí-Mas, E. (2016). Teachers' Attitude towards and Actual Use of Gamification. *Procedia - Social and Behavioral Sciences*, *228*(June), 682-688. https://doi.org/10.1016/j.sbspro.2016.07.104

Patton, M. Q. (2002). *Qualitative research and evaluation methods.*Sage Publications.

Perry, B. (2015). Gamifying French Language Learning: A Case Study Examining a Quest-based, Augmented Reality Mobile Learning-tool. *Procedia - Social and Behavioral Sciences*, *174*, 2308-2315. https://doi.org/10.1016/j.sbspro.2015.01.892

Rawendy, D., Ying, Y., Arifin, Y., & Rosalin, K. (2017). Design and development game Chinese language learning with gamification and using mnemonic method. *Procedia Computer Science*, *116*, 61-67. https://doi.org/10.1016/j.procs.2017.10.009

Sánchez-Mena, A. A., & Martí-Parreño, J. (2017). Drivers and barriers to adopting gamification: Teachers' perspectives. *The Electronic Journal of e-Learning*, *15*(5), 434-443.

Sánchez-Mena, A., Queiro-Ameijeiras, C., Galbis-Córdova, A., Martí-Parreño, J., & Álvarez-Jareño, J. (2016). Student teachers' intention to use gamification. *Proceedings of ICERI2016 Conference, Seville, Spain*. https://doi.org/10.21125/iceri.2016.0206

Santos-Villalba, M. J., Leiva Olivencia, J. J., Navas-Parejo, M. R., & Benítez-Márquez, M. D. (2020). Higher Education Students' Assessments towards Gamification and Sustainability: A Case Study. *Sustainability*, *12*(20), 8513. https://doi.org/10.3390/su12208513

Šćepanović, S., Žarić, N., & Matijević, T. (2015). Gamification in higher education learning–state of the art, challenges and opportunities. *Proc. 6th Int. Conf. e-Learn.*, 128-134.

Shatz, I. (2015). Using gamification and gaming in order to promote risk taking in the language learning process. *Proceedings of the 13th Annual MEITAL National Conference. Haifa, Israel: Technion*, 227-232.

Siemon, D., & Eckardt, L. (2017).Gamification of teaching in higher education. *In Gamification*(pp. 153-164). Springer. https://doi.org/10.1007/978-3-319-45557-0_11

Sobocinski, M. (2018). *Necessary definitions for understanding gamification in education a short guide for teachers and educators*. Working paper. Retrieved from https://www.researchgate. net/publication/319646230

Ssekibaamu, J. B. (2015). *Technology and education: A quantitative study of the acceptance of gaming as a teaching tool using the Unified Theory of Acceptance and Use of Technology (UTAUT)*. Capella University.

Stemler, S. (2000). An overview of content analysis. *Practical Assessment, Research, and Evaluation*, *7*(1), 17.

Teo, T., Zhou, M., Fan, A. C. W., & Huang, F. (2019). Factors that influence university students' intention to use Moodle: A study in Macau. *Educational Technology Research and Development*, *67*(3), 749-766. https://doi.org/10.1007/s11423-019-09650-x

TürkDilKurumu, 2017–TürkDilKurumu (2017). Oyun. Retrieved March 20, 2017, from http://www.tdk.gov.tr

Ucus, S. (2015). Elementary school teachers' views on game-based learning as a teaching method. *Procedia-Social and Behavioral Sciences*, *186*, 401-409. https://doi.org/10.1016/j.sbspro.2015.04.216

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478. https://doi.org/10.2307/30036540

Wright, A., Betteridge, D., & Buckby, M. (1984). *Games for Language Learning.*Cambridge University Press.

Yang, J. C., Quadir, B., & Chen, N. S. (2016). Effects of the badge mechanism on self-efficacy and learning performance in a game-based English learning environment. *Journal of Educational Computing Research*, *54*(3),

371-394. https://doi.org/10.1177/0735633115620433

Yoo, C., Kwon, S., Na, H., & Chang, B. (2017). Factors affecting the adoption of gamified smart tourism applications: An integrative approach. *Sustainability*, *9*(12), 2162. https://doi.org/10.3390/su9122162

Yüksel, M., & Durmaz, A. (2016). The Effect of Perceived Socially Motivated Gamification on Purchase Intention: Does It Really Work? *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *2*(3), 15-25.

Zain, M., Rose, R. C., Abdullah, I., & Masrom, M. (2005). The relationship between information technology acceptance and organizational agility in Malaysia. *Information & Management*, *42*(6), 829-839. https://doi.org/10.1016/j.im.2004.09.001

Zarzycka-Piskorz, E. (2016). Kahoot it or not? Can games be motivating in learning grammar? *Teaching English with Technology*, *16*(3), 17-36.