

EAL Instructors’ Attitudes towards Game-based Learning Adoption in Education: An Exploration of Obstacles

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1. Introduction

In 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” (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). An in-depth definition of GBL will be provided in the following chapter.

After exploring the literature on education and GBL, various factors related to the use of GBL by teachers emerged. These include factors such as 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, 2017; 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 that 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. However, Vukovac et al. (2018) reported that teachers were not aware of the significance of GBL in education. Further details on these studies will be presented in the Literature Review.

There are very few studies on teachers’ perspectives of GBL, particularly in the language learning context. Sánchez-Mena et al. (2017), for example, in a previous study on language learning and GBL, 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 and challenges 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.

This project focuses on teachers’ attitudes towards GBL and deepens our understanding and provides insights into opportunities and obstacles of GBL in education, particularly in EAL contexts – consequently aiding in supporting the use of GBL while at the same time addressing the barriers. It opens conversations on the use of a new approach to language learning. Furthermore, the study may ameliorate the issues of GBL and foster integration of GBL into language learning. However, a great amount of literature review in this study refers to gamification. This is because initially the current study focused on gamification use in EAL language teaching and learning context, nevertheless, it turned out that most of the study participants were highlighting the term GBL and a great bulk of obtained data was representing use of GBL. Consequently, this study uses gamifying as an umbrella term covering both GBL and gamification.

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.

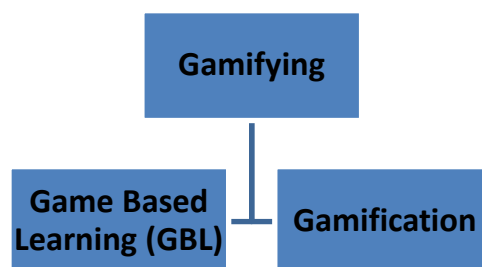


Figure 1. *Gamifying: gamification and game-based learning*

2.1 Defining Gamification

A wide array of definitions for gamification has been proposed. Deterding et al. (2011) defined 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). Mena et al. (2017) define 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 &Bae, 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 (AIMarshedi 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 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.

2.5 Opportunities

2.5.1 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.

2.5.2 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). However, there are several obstacles to the use of gamification.

2.6 Obstacles

Although gamification represents new opportunities in education, including language teaching, and learning, it also poses challenges to teachers. Teachers must decide whether to implement gamification or not in the view of expected challenges (Sánchez-Mena et al., 2017). There are some obstacles to the use of gamification such as time for preparation and implementation of new materials, finding new equipment, lack of resources, and students' preferences. According to Sánchez-Mena et al. (2017), "Despite increasing academic research exploring the use of gamification in education, little is known about teachers' main drivers and barriers to using gamification in their courses" (p.434). This means that there might be different barriers to the adoption and implementation of gamification. In the following sections, three obstacles of using gamification are discussed: resources, time, and preferences.

2.6.1 Resources

Suitable resources are needed for problem-based language learning through gamification (Cornillie et al., 2012). Sánchez-Mena et al. (2017) adopted a phenomenological approach in their study and interviewed 16 university teachers online to get their insights into the opportunities and obstacles of gamification. The findings of the interview data analysis showed that four factors such as attention-motivation, interactivity, entertainment, and ease were the driving forces for using gamification. However, lack of resources was one of several obstacles and barriers identified related to the implementation of gamification. Lack of resources in terms of training, classroom setting, time, and economic support were highlighted by respondents.

2.6.2 Time

Regarding the use of gamification by students, Sánchez-Mena et al. (2017) found that a lack of time and perceived wastage of time were the barriers to gamification use among university teachers. In a review study, Šćepanović et al. (2015) found that a lack of time causes pressure on students and consequently they will not be able to perform effectively. Garland (2015) found that gamification use should encourage students to spend extra time to have more interaction and better learning. However, spending more time on gamification from the perspective of the teachers might be an enormous challenge. This is because teachers need to plan, design, or select the right game, with the implementation of each stage possibly time consuming.

2.6.3 Teachers and learner preferences

Learning preferences refers to the learner's tendency and preference to use certain educational modalities over others. For example, some students are interested in gamification in education, while others are reluctant to use a gamification method. Fan et al. (2015) examined the relationship between learning styles, learning achievement, and meaningful learning involving 46 junior high school students using mobile games. The study indicated that students who had convergent styles mainly associated the well-designed curriculum to meaningful learning, while different learning styles indicated notable discrepancies in learning. It is believed that the effectiveness of gamification is associated with individual attributes.

In summary, several obstacles such as a lack of resources, a lack of time, and students' preferences may hinder gamification use among teachers. However, since there is a paucity of studies on the obstacles to gamification particularly in an EAL context, a study in this vein is in need. Given the importance of the determinant factors of adoption and usage of gamification, in the following sections, gamification use and the factors influencing its use are discussed.

3. 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 gamfying in terms of opportunities and obstacles and only a small amount of research has been concerned with factors contributing to obstacles and opportunities of gamifying. There is limited research demonstrating the teachers' attitudes towards gamifying adoption in EAL contexts.

4. Research Question

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

What are the obstacles for using GBL in EAL classrooms?

5. Method

5.1 Design

The goal of the research was to investigate the obstacles 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 obstacles of using GBL by teachers in the context of classroom teaching.

5.2 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 'why not' (obstacles) 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 and obstacles 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. Furthermore, the survey data does not indicate the obstacles of 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 and barriers to GBL use. The respondents were encouraged to share their opinions and experiences freely concerning the benefits of using GBL as well as hindrances. As a result, the qualitative component of the study added more factors to the opportunities of GBL and helped some factors connected to the obstacles of GBL emerge which was not feasible to understand through the survey alone. Therefore, a combination of data obtained from both modes of study helped to build a clear picture of opportunities and obstacles 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 and obstacles of using GBL. The interview data offers more qualitative details providing deeper insights into opportunities and obstacles 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 4). 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 discussed in the following section.

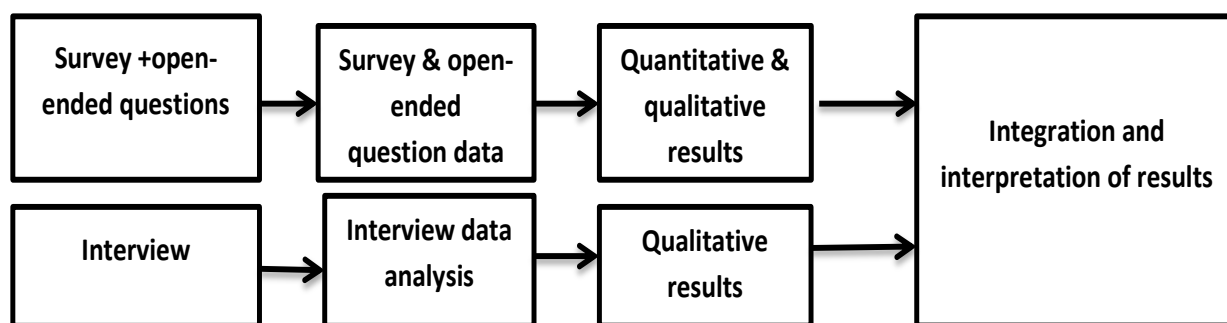


Figure 4. Research Design

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.

5.3 Data Collection Methods

Prior to data collection, the university research ethics board granted the study approval (see Appendix F). As highlighted earlier, the research design included a combination of survey and interview methods to explore the obstacles of GBL use from EAL teachers' perspectives. The survey and all of the interviews were conducted by the principal investigator (PI).

5.4 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 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 (Abbasi, 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 and obstacles 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). See Appendix B for a copy of the survey.

5.5 Interview

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

The interviewer (PI) utilized a list of questions (See Appendix E) and a guided approach to begin each interview topic and the interviewees were encouraged to express their views freely (Gall et al., 2007). I also asked for elaboration, when necessary, to gain in-depth responses. The interviews were recorded digitally to capture the complete information during interviews with consent of the participants, and subsequently were transcribed verbatim for analysis using transcription symbols adapted from the symbols developed by Jefferson (Atkinson & Heritage, 1984; see Appendix D) with changes to particular symbols as the interviews are one-on-one conversations without meaningful surrounding sounds.

5.6 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 me 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 (See Appendix B & D).

5.7 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.

6. Results and Discussion

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.

6.1 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 in the following chapter 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.

6.2 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 trail, 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, 2001).
- 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, I 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.

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

6.3 Obstacles of Using GBL

There are some obstacles which hinder the use of GBL by teachers. The interview data has resulted in themes that were not explicitly covered in the survey data but served as barriers to using GBL, namely: lack of time, lack of resources, and student preferences.

6.4 Lack of Time

The interviews highlight that the ‘lack of time’ for GBL is an issue and for the teachers which could be a hindrance to the use of GBL in teaching language. This is consistent with data from the literature (Šćepanović et al., 2015; Sánchez-Mena et al., 2017; Ucus, 2015), that found that time was a big barrier to the use of GBL. Considering games which are appropriate for the given lesson and target student demographics could take a significant amount of time. Additional challenges that are associated with time include types of courses, time for lesson plan, professional development, teaching workload, marking, and online teaching. James acknowledges “It takes a lot more planning and effort to set up before the actual class time”. Different aspects of GBL such as thinking about games, planning, preparation, incorporation, teacher professional development, and learning GBL technology could be time-consuming. It takes a lot of time not to just think about the game, but to create the tools that the students need to play.

To sum up, it was found that figuring out the right games for the right students in the right context, types of lesson, teacher workload, planning, preparation, incorporation, teacher professional development, and learning GBL technology could take a lot of time, which is regarded as barriers to the implementation of GBL thus discouraging the use of GBL.

6.5 Lack of Resources

Another obstacle of using GBL which was not explicitly covered in the survey data is lack of resources. This finding is consistent with the findings of the literature (Lifanova et al., 2016; Sánchez-Mena et al., 2017). The findings of the interview data and qualitative comments from the survey indicate that teachers find it difficult to explore, plan, create, adapt, and prepare relevant content and materials for GBL as they already have a heavy workload of marking, personal commitments, and administrative duties. As a result, if teachers do not have access to ready-made resources for GBL, the activities often take much longer. James explains “It takes a lot more planning and effort to set up before the actual class time”. Teachers may not be aware of the resources that are available which is supported by River’s comments “I’m not up to speed on a wide variety of tools that are easy to use and would make my job easier while providing better tools for student learning”. Susan admits “I have to explore, create and administer the ‘game’”. James complains that creating the original GBL of an activity “takes longer to create than a traditional lecture”, which is supported by Rose’s comments, “Because it takes longer to prepare and plan lessons that include games”, as games are often more labor intensive to prepare. Taylor indicates that adaption of resources to different classes is an issue “Once I have created these, they still need to be adapted for each different class.” James explains “using them is preferable, but not always realistic when I consider my classroom preparation, marking load and personal commitments”.

There can be a lot of the hurdles regarding “professional development and having access to these resources” according to Susan. Teachers may need to search for resources to reach classroom aims by using GBL. Susan says, “in a book or a kind of a paper resource, then I would be looking for one that meets more of the content”.

Therefore, there are issues related to a lack of resources and professional development related to using GBL that include exploring, planning, creating, finding, adapting, administering, and implementing GBL materials and technology.

6.6 Student Preference

The interview and qualitative comments from the survey highlight another barrier to the use of GBL which was not explicitly covered in the survey data student preference. Studies show that students have different preferences for learning which could impact their participation in some class activities such as GBL (Buckley and Doyle, 2017; Fan et al., 2015; Kiryakova et al., 2014). Some GBL activities require fast decision-making skills which may not be compatible with slow learners. Some students are introverted and appreciate learning by themselves more efficiently, effectively (Fan et al., 2015).

The findings of the interview data and qualitative comments from the survey indicate that the teachers underlined some issues attributed to student reluctance to use GBL such as lack of clear purpose, point of view, culture, ego, competition, and noise level. Furthermore, some students behold conventional and traditional views to GBL and believe that games are solely for the purpose of entertainment, and consequently they do not take them seriously as an approach to teaching and learning the language. In terms of purpose, some students believe that GBL is not relevant to classroom activity for language learning and they prefer the traditional classroom context. Glitchy agrees that “most students enjoy participating in games”, but here is the odd student who does not like GBL “because he doesn't see the purpose of having them in class”. She explains “these are the students who prefer more traditional class settings, or they just don't enjoy games”. Glitchy concludes that “...all students are different types of learners and all learners learn differently”. Consequently, games may not help them to remember or review materials or prefer not to continue using it (Fan et al., 2015). According to Susan, some learners do not want competition in a class. They do not want a class to be loud and rambunctious. Therefore, it would be challenging to “provide games that are quieter, more reflective, a little bit more silence in a classroom”.

Overall, it was found that some factors such as lack of clear purpose for GBL, point of view, culture, student ego, competition, different learning styles and preferences, and the noisy nature of games are the challenging issues associated with students' lack of participation in GBL.

7. Conclusion

Overall, teachers accepted that GBL is a trending methodology with impressive results, 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. This unsatisfactory usage of GBL might be rooted in obstacles such as lack of time, lack of resources, and student preferences. In terms of time, it was found that figuring out the right games for the right students in the right context, planning, preparation, incorporation, teacher professional development, and learning GBL technology could take a lot of time, which is regarded as barriers to the implementation of GBL, thus discouraging the use of GBL.

Regarding resources, the issues of GBL are exploration, planning, effort, creation, finding relevant materials, adaption, administration, and implementation of GBL technology. Concerning preferences, it was found that some factors such as lack of clear purpose for GBL, point of view, culture, ego, and competition are the challenging issues associated with students' lack of participation in GBL. Some students are more traditional, and they might think that games are irrelevant and do not belong in the classroom (Galbis-Córdoba et al., 2017). Hence, a lack of understanding the purpose of GBL, and traditional viewpoints to GBL might make students reluctant to participate in GBL for language learning.

To conclude, this study was an attempt to address many of the drawbacks and limitations in the other empirical studies, 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.
- 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]. *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.
- 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.

- 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.
- 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.
- Bernard, H. R. (2002). *Research Methods in Anthropology. 3rd edition*. 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>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- 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.
- 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.
- 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.
- 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_10
- 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.
- 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. wei, & 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.
- 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.

- 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.
- 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*.
- 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.
- 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.
- 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.
- 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.
- Sánchez-Mena, A. A., & Martí-arreño, J. (2017). Drivers and barriers to adopting gamification: Teachers' perspectives. *The Electronic Journal of e-Learning*, 15 (5), pp434-443.
- 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.
- 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.
- 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.
- Sobocinski, M. (2018). *Necessary definitions for understanding gamification in education a short guide for teachers and educators*. Working paper. <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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Zarzycka-Piskorz, E. (2016). Kahoot it or not? Can games be motivating in learning grammar? *Teaching English with Technology*, 16(3), 17–36