The Effect of Using Classcraft on EFL Students' Reading Comprehension

Muhamad Laudy Armanda[1]*, Lilia Indriani[2]
Universitas Tidar[1,2]
Jalan Kapten Suparman No.39, Magelang, Indonesia
laudy787@gmail.com[1]*;
indriani@untidar.ac.id[2]
* corresponding author

Abstract

Students nowadays are considered as the generation who have never known the world without video games, cell phones, and the internet. Hence, gamification has become a solution. It is a method that can boost the students' mood during lectures, so they feel enjoy during the learning process. In short, this study aims to examine whether using Classcraft has a significant effect on the reading comprehension of EFL students. This study was classified as a pre-experimental study (N=37), followed by assessing their reading comprehension. Two-session treatment began, which included teaching reading comprehension using Classcraft. At the end of the course, a reading post-test was administered. The findings propose a statistically significant difference in the pre-test and post-test scores for the treatment group. By implementing Classcraft's features allows EFL students to be more competent in English reading comprehension, especially in making inferences and encouraging them through gamified learning. The current study offered empirical evidence of how reading instruction using Classcraft promoted EFL students' reading comprehension.

Keywords: Classcraft, Gamification, Reading Comprehension, EFL Students

Introduction

Thereabout nearly two years since the education system in Indonesia was disrupted due to the Covid-19 pandemic in 2020. Educators are still trying to find efficient pedagogical practices to encourage learning interest (Zhang et al., 2021). Before the spread of coronavirus diseases, face-to-face learning could be conducted in all educational institutions. Many variations of the learning models established on their academic needs have replaced this classical lecture. Since then, online education has become a vital and inevitable part of higher education in many countries (Keshavarz, 2020). There are so many educational challenges that educators have faced in online learning during the pandemic era. The difficulty of online learning begins with educators who have struggled to discover innovative teaching ideas that ought to adapt to online learning. During the pandemic, the shift to online learning followed a positive impact potentially used in the future (Tartavulea et al., 2020). Online learning is effective when challenges during the post-pandemic are properly

investigated and transformed into opportunities (Adedoyin & Soykan, 2020). Again, online learning could not produce the expected learning outcome (Bestiantono et al., 2020), and face-to-face mode is more favorable than online (Nambiar, 2020). This situation certainly fosters educators to be more creative and innovative in providing engaging digital learning media that can improve student learning outcomes in the post-pandemic period. Currently, many options for digital learning media or a platform can be used by educators. Students in the 21st century could be considered a generation that has certainly known in a world of video games, mobile phones, and the internet (Maloney, 2019). Thus, educators need to be aware of suitable learning tools for this time, engaging students while online learning in the post-pandemic period or the future.

Moreover, it follows practical problem that confronts the educators to adopt several technologies to increase attention among students nowadays. One way to raise the class's mood is by involving gamification in the learning process (Witari et al., 2021). Its active method has expanded in current years by making a new educational approach to handle issues related to social behavior and learner motivation (Ferriz-Valero et al., 2020). Deterding et al. (2011) define gamification as "the use of game design elements in a non-game context". The gamification trend has gained popularity in education (Ferriz-Valero et al., 2020). It is possible to make the learning environment more digital through existing technological advances. Gamification has become an innovative answer enlightened by using gamified elements in non-game contexts (Zhang et al., 2021). Armanda and Indriani (2022) remarked that in educational gamification, student behavior is determined by game rules and playing experiences. Similarly, this term is integrated into educational contexts since these game elements and experiences have become part of the design and planning of the educational approach (Rivera-Trigueros & Sánchez-Pérez, 2020). Ferriz-Valero et al. (2020) added that the elements that make up the educational context must be real to students, such as avatars, points, levels, achievements, badges, etc. Moreover, every educator should create a sense of action and progress in rules, competition, cooperation, challenges, feedback, and so forth. In addition, they must regulate the group's socio-emotional competencies (motivation, emotions, social relations, obligations, etc.) and, hence, modulate educational performance (González & Navarro, 2017). Accordingly, gamification can be considered an interesting and effective method to be used by educators in the classroom to increase students' motivation and engagement and improve their academic performance (Redjeki & Muhajir, 2020). Simple examples are Simpler, Duolingo, Socrative, Kahoot!, Classcraft, Vocabulary.com, and many more. Classcraft was chosen for this study because its features can create interesting learning, especially in a language classroom (Kleiber, 2020).

In terms of gamification, Classcraft is an Engagement Management System (EMS) and a classroom management platform that is described as "a role-playing game that was developed for classroom management" (Rivera-Trigueros & Sánchez-Pérez, 2020). In the same way, Ying & Surat (2021) defined Classcraft as a game-based technology application and is a game that helps students form positive behavior, increase knowledge and develop their communication and collaboration skills. They also added that through Classcraft, students who were usually bored in the classroom would become an exciting game. Krishnan et al.

48

(2021) stated that the initial version of Classcraft was developed for personal use exclusively, but after three years, the rules were modified so that educators could operate it. Since Classcraft works in a browser connected to the internet, it does not need installation (Witari et al., 2021). They also stated that Classcraft had been used successfully in elementary schools, high schools, and even some universities courses. Nowadays, students as digital natives spend their time on digital games, which have become popular in our society. Therefore, it is not surprising that digital games developer has targeted many educators who use them as digital learning environments. At its core, it offers a fictional fantasy world, including beautiful maps, various game mechanics, and various creator tools to add insightful educational content (Kleiber, 2020). Students will learn as if they completed a mission or quest created by the educator.

Figure 1. The Game Characters Class in Classcraft

Within the world of Classcraft, each student as a player is represented by an avatar (Krishnan et al., 2021). The players can decide which game avatar or character class they want to use, such as a guardian, a healer, and a mage. Each character class has unique powers and diverse rewards for supporting their team (Witari et al., 2021). Here students who play with their characters have four simpler point systems such as Experience Points are used for leveling up; Health represents the player's energy life; Crystals are used for powers that grant them special privileges in class; Gold Pieces are used for the players to purchase in-game gear which is customizing their characters. Classcraft is a gamification learning platform that provides many features as a media role-playing game. Further, Classcraft highlights players' behaviors to their engagement, rule-based and entertaining RPG adventures, and a balance between self-improvement and competition (Zhang et al., 2021).

Figure 2. The Quests Map

All players must be finished their quest, boss battle, or other tasks. The educator can utilize every feature to gamify their lesson by using "Class Tools" features such as Random Picker; Random Events; Volume Meter; Formative Review; Kudos; Timer; and Stopwatch. Besides these features, it enables educators to foster students' progress and activities as well as social activities by introducing a game-like environment (Schatten & Schatten, 2019). Holman et al. (2015) reported another advantage of Classcraft, which is purposefully designed to manage courses, support students' presence, and concern students' participation in the digital learning environment.

A well-known problem with reading comprehension is that it considers the last result of Indonesia's PISA (Program for International Student Assessment) score in 2018, which clearly demonstrates that the results are in a very worrying position (Ciptadi, 2021). Regarding reading, Indonesian students obtain a score of 371 is in position 74 with other PISA countries. In addition, the following PISA will be carried out in 2025, which includes a new foreign languages assessment and an innovative domain of learning in the digital world. It measures students' ability to engage in self-regulated learning using digital tools. Therefore, all education sectors need to concern with reading performance, not only in primary school but also in the higher education institutions.

As was pointed out heretofore, the importance of foreign language learning has been widely discussed, especially in the Teaching English as Foreign Language (TEFL) area. Teaching English as a Foreign Language refers to teaching the English language to students whose English is not their first language. English as a Foreign Language (EFL) students must master basic skills in language learning. Brown and Abeywickrama (2018) stated that "the most essential skill for success in all educational contexts is reading," which is paramount in assessing general language ability. Reading at an appropriate level is one of the best ways for students to get comprehensible input, for instance, language that they can understand. The more comprehensible the output they receive, the better their English will be (Harmer, 2012). Thereby, it can be concluded that reading comprehension is the most fundamental skill in learning English as a Foreign Language (EFL). Then, EFL educators must also know about suitable teaching techniques when teaching reading comprehension.

50

The reading assessment can imply details about EFL students' skill levels and accomplishments in reading comprehension. The attainment of comprehension might be significant in several contexts to evaluate one or more detailed reading strategies. Mantra et al. (2020) exclaimed that students should be able to operate reading strategies to understand the reading text automatically. Brown and Lee (2015) suggested several principal strategies for reading comprehension, such as identifying the purpose of reading a text, using spelling rules and conventions for bottom-up decoding, skimming the text for the gist/main ideas, scanning the text for particular details (names, dates, keywords), and so forth. According to Brown and Abeywickrama (2018), there are five types of reading for language classroom performance: perceptive reading, interactive reading, selective reading, interactive reading, and extensive reading. This study is intended for interactive reading since it is designed to develop EFL students' skills in literal reading (i.e., knowing and comprehending), emphasizing the use of suitable reading strategies to identify the meaning and use of unfamiliar lexical items, as well as skim and scan specific information in a text. A good rubric to keep in mind for teaching reading is the following three-part framework: pre-reading, which might be focused on vocabulary, while reading would be guessing word meanings from context, followed by post-reading can be exercised on inference, note-taking, and discussion.

For this reason, the researchers want to choose reading comprehension as a language skill to be mastered by EFL students because it has very practical benefits for language trainees to enrich their deeper understanding of the text. Through Classcraft, the EFL students are expected to understand a text in the form of an interesting digital story. Digital storytelling allows engagement in learning, which may be experienced by students in the expansion of reading comprehension (Bakar, 2019). In addition, this tool allows interaction between team members in an online setting. Poy and Garcia (2019) found that Classcraft has aesthetics and creativity in its elements, enhancing students to boost interactive skills in the learning experience. Kleiber (2020) denoted that interaction in the Classcraft, collaboration, and rivalry in and between the team created coherence despite the asynchronous and distant nature of the course.

Regarding other available gamification technologies, some experimental studies have shown the potential of Classcraft to boost student engagement and motivation. Ceballos and Parody (2018) conducted experiential learning lasting two semesters. They found that students obtained higher mean grades in the second semester than in the first through Classcraft and improved their critical thinking, communication, collaboration, and creativity. Then, Freire and Carvalho (2019) revealed that Classcraft could enhance students' academic achievement by engaging them in a playful learning environment. In a similar vein, Ferriz-Valero et al. (2020) found that gamification using Classcraft benefits academic performance, but students' intrinsic motivation did not increase. Furthermore, bulk studies revealed gamification in Classcraft has an impact on achievements by EFL students, which suggested that English educators implement gamification in their classrooms employing Classcraft (Marquez & Torralbo, 2019; Witari et al., 2020; Rivera-Trigueros & Sánchez-Pérez, 2020). Although many studies have been conducted on the effectiveness of using Classcraft for EFL students, but there are still limited

attempts to implement it in teaching reading comprehension. Gamification is an innovative educational method that primarily explores experiential learning by increasing variables such as motivation. Pursuing this further, this study is intended to examine whether the use of Classcraft significantly affected the students' reading comprehension. The views of various studies are highlighted with several experiences and good practices in online teaching and the significant challenges that the literature review has shown about online learning using Classcraft in English language teaching. Above all, previous experimenters have validated the execution of gamification in Classcraft, but there are still limited attempts to investigate the effect of Classcraft, which focuses on students' reading comprehension. Following this, EFL students are selected deliberately in the post-pandemic period, notably higher education context. Therefore, experimental research fills the gap on using Classcraft had a significant effect for EFL students in reading comprehension and presents the state-of-the-art that this study tries to address.

Method

This study applied a quantitative method to attain a greater understanding of situations that affect the sample. Thus, it aimed to examine whether using Classcraft had a significant effect on EFL students' reading comprehension. The population of this study was EFL students, particularly first-year students in the academic year 2021/2022 of the English Education Department at Universitas Tidar. The sample of this study belongs to a group of non-probability sampling with a purposive sampling technique, in which the EFL students are selected deliberately who enrolled in a reading course that is in line with the researchers' needs as the sample. A total of 37 EFL students (32 Females and 5 Males) participated in this study. This study adopted a pre-experimental research design with a one-group pretest-posttest design model. The materials for the treatment were compiled from book references in the reading course, which focuses on constructing inferences materials. Based on the explanation above, below is the clear procedure of the study.

Table 1. Procedure of study

Activity	Description
Pre-test (Y1)	Administering a pre-test before applying Classcraft with the purpose of measuring EFL students' reading comprehension in terms of making inferences.
Treatment (X)	Applying the experimental treatment in teaching reading by using Classcraft to the subject in the first-year EFL students. The treatment was held twice to teach making inference material with 100 minutes in each meeting. At the end of each meeting, EFL students would do activities about the materials taught.
Post-test (Y2)	Administering a post-test after applying Classcraft with the purpose of measuring the EFL

52

students' reading comprehension in terms of making inferences.

To clarify, a single group of participants was investigated after a treatment presumed to cause an effect. As demonstrated above, the instrument used by the researchers was a test. The numbers of test given were 15 questions. At first, the exam grids of the questions are designed. Then, the researchers designed a test based on the exam grids, which follows the objectives of the reading course syllabus for the academic year 2021/2022. Prior to the grid being used as a guideline in designing the questions, it is first checked and validated by the expert. Moreover, the questions test of the instrument had content validity because the items were taken from sources for EFL students in the reading course at Universitas Tidar. Following this, inter-rater reliability is applied to the extent to which different assessed in the assessment decisions. The researchers divided the preparation into three steps before conducting the treatment. First, the researchers developed instructions adjusted to Classcraft's features: quests and formative review (boss battle). In preparing the material, the researchers designed the inference material in the form of digital storytelling.
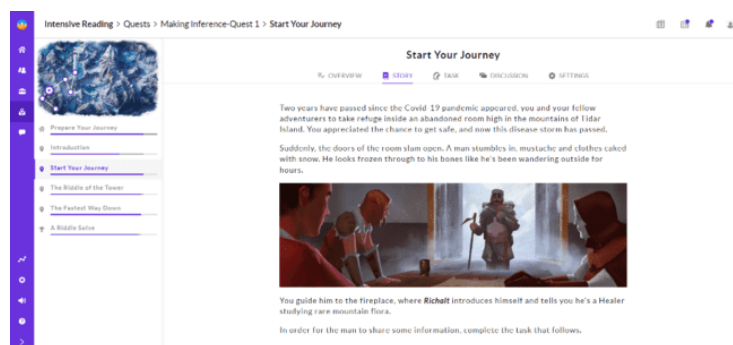

Figure 3. Quests Dashboard

It was considered a crucial point for EFL students to understand the material by constructing interactive and attractive learning experiences. Next, the researchers design the lesson plan for two meetings. And last, constructing the exam outline and questions for both pre-test and post-test. In the treatment group, EFL students did the exercises by using quests and formative review features as a means of online remote learning. This quests feature was used to explain the material in the form of digital storytelling and as tasks. All of the EFL students were given the same series of tasks, which had to be solved by them in order to open to the next task and improve their level.
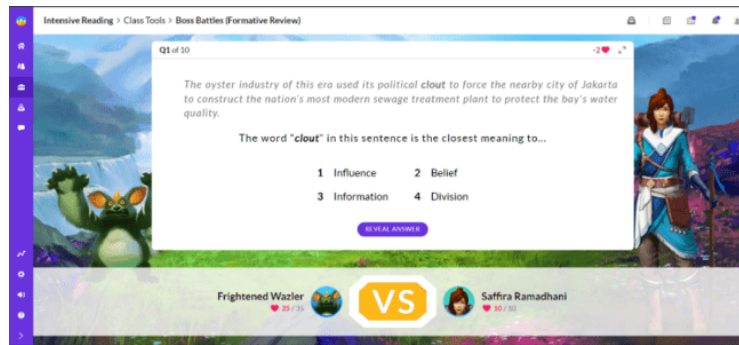
Figure 4. Display of Boss Battle Activity

While formative review (boss battle) feature was used to exercise and review after explaining the materials. Since the boss battle activity's goal was to defeat the boss. As it happens, this feature could drive review exercises enjoyable and exciting. Likewise, taking part in the boss battle gained the researchers opportunity to monitor the EFL students' cooperation and engagement.

Regarding the data analysis, this quantitative data of the study is numeric and can be formulated using statistical methods, which were proceeded using the SPSS program. Initially, the researchers analyzed the data by using descriptive statistics to present a brief overview to describe the data, including minimum, maximum, mean, and standard deviation. Before moving to the inferential statistic, the researchers analyzed the normality test result to decide on the inferential analysis. Once the data is considered normal, the paired-sample t-test is used to find out which one is more effective before the EFL students are taught using Classcraft and after they have been taught using Classcraft in teaching reading comprehension to the first-year EFL students in the academic year 2021/2022.

Findings and Discussions

Turning now to the experimental evidence on investigating whether the treatments had significantly affected the EFL students' reading comprehension, which was conducted in the post-pandemic period. As mentioned in the previous section, the researchers used a pre-experimental design with a one-group pretest-posttest model. Then, the test results were analyzed through several data testing processes using SPSS version 25. The analysis of EFL students' reading comprehension results was classified into one treatment group. Below are the results of the descriptive statistics of EFL students' pre-test and post-test scores in the treatment group.

Table 2. The Descriptive Statistics of Reading Comprehension Results in Treatment Group

	N	Minimum	Maximum	Mean	St. Deviation
Pre-Test	37	35	90	68.92	14.48
Post-Test	37	40	95	81.76	10.87

The table above shows that the data has differences in EFL students' reading comprehension scores, with the mean values of 68.92 for the pre-test and 81.76 for the post-test score. Thus, it was indicated that there was an improvement in EFL students' reading comprehension led to using Classcraft. Foremost, it can be

54

highlighted that the treatment also affects improving EFL students' reading comprehension. This is the most relevant finding and perhaps the most significant based on the problem explained in the introduction section. As illustrated in the table above, the treatment group's standard deviation values were 14.48 for the pre-test and 10.87 for the post-test, it was indicated that standard deviation values were lower than the means scores. Thus, it was shown that the population came from the same variety.

Otherwise, in the pre-test maximum value, there is a 90 value, which reveals that an EFL student had already obtained a great result before the treatment. Likewise, it was found that there is a 40 value in the post-test minimum value, which implies that the EFL student has already still received a bad result after conducting the treatment. Instead of this result, truthfully, just one student obtains those results. Another reason for this evidence is that the EFL student could receive a bad result after joining the treatment because the features were complicated and not enjoyable like the usual game. Since the data is considered normal, a paired sample t-test was applied to decide whether there was a statistically significant difference between pre-test and post-test mean scores. Below are the results of the paired sample t-test of EFL students' pre-test and post-test scores in the treatment group.

Table 3. The Paired-Sample T-Test Results

	t	df	Sig. (2-tailed)
Treatment Group: Pre-test – Post-test	-7.082	36	0.000

Table 2 illustrates the results of paired sample t-test, which uncovers that the Significance value 2-tailed of the treatment group is 0.000, which means it is lower than α 0.05. Hence, it was implied that there was a significant difference between the pre-test and post-test in the treatment group. This signified that the t-test result, EFL students got significantly higher scores in the post-test after joining the treatment.

This study set out with the aim of investigating whether the use of Classcraft had a significant effect on the EFL students' reading comprehension or not. The results confirmed that using a gamification tool in English language learning improved reading comprehension. Additionally, when conducting treatment implementing Classcraft in the teaching and learning process, the researchers apply gamification elements such as rewards, points, quests, levels, avatars, etc. All of these elements serve specific functions and may be used in virtually any educational setting, which was the agreed-upon feature to be included in the design and execution of online gamified learning (Figueroa-Flores, 2016; Krishnan et al., 2021). The derivation of game elements will induce a positive effect when applied to a learning environment.

Moreover, it has been suggested that the advantages of gamification elements cannot be neglected in the learning environment because the main goal is to increase students' engagement, motivation, and understanding using a fun and enjoyable environment (Khaleel, 2016). The researchers also had to set the Classcraft's features; in this study, researchers focused on utilizing formative review (boss battle) and quest features. In the boss battle exercise, EFL students compete against

one another to study course material. And then, the quests feature is used to implement the course curriculum as personalized learning adventures for the students (Rivera-Trigueros & Sánchez-Pérez, 2020). When the EFL students do the quests correctly, they will be rewarded with gold pieces and experience points. Better reading comprehension in this study may be related to the fact that EFL students learn significantly from the quests feature built by the researchers using digital storytelling as the content. This is in line with Classcraft, which can transform the pedagogical practices into a role-playing scenario where students have various skills and bear corresponding responsibilities (Torres et al., 2019; RiveraTrigueros & Sánchez-Pérez, 2020; Zhang et al., 2021). Following this, gamification elements could be motivated EFL students since they can oversee their learning progress. It was regarded as the benefit of applying the gamification tool in an educational setting. Classcraft led to controlling EFL students' engagement with those gamification features, which could also motivate them to better their reading comprehension ability. Those elements positively impacted learning for specific reasons that can fulfill EFL students' recognition needs. Witari et al. (2020) stated that recognition provides a feeling of pride and guides to continued participation and enhanced learning. Implementing Classcraft in the language classroom boosted motivation, involvement, and excitement to improve reading comprehension.

It is worth discussing these exciting facts revealed by the pre-survey in the reading course, which showed that EFL students did not have extensive experience with games in educational or academic settings; therefore, it was essential to allow them to experience games and gamified environments. Further, most EFL students have little experience using games as a subject for academic inquiry- even those who study language and literature rarely conduct systematically analyzed games regarding their learning content. However, the key to properly employing gamification in teaching and learning is a meta-understanding of them (Kleiber, 2020). Inevitably, educators who want to unlock the potential of games should explore more. Due to this, many parts of the course were gamified utilizing techniques typical in educational settings. As concerns, the agreed-upon proposals were considered in light of the needs of and appropriateness of the EFL students who already used online gamified learning utilizing Classcraft to improve their reading comprehension. In short, as this study is based on the success of English language teaching in enhancing students' competencies by mastering the knowledge and skills mentioned earlier, the online gamified instruction designed and developed on Classcraft eventually helped students spontaneously and enjoyably participate in the activities.

Conclusion

The present study was designed to determine whether the use of Classcraft had a significant effect on the reading comprehension of EFL students. The evidence from this study suggests that the data has a significant difference in the score in the treatment group for pre-test (M=68.92) and post-test (M=81.79). Foremost, based on the results of paired sample t-test, the p-value was $0.000 < 0.05$. Taken together, these results suggest a statistical significance between the pre-test and post-test for the treatment group. The most prominent finding to emerge from this study is that

56

using Classcraft's features as media in the language classroom could improve the EFL students' reading comprehension, allowing them to be more capable in English reading skill, specifically in making inferences, by encouraging them to engage through gamification elements. Educators should help students make the learning atmosphere more pleasing, like games that produce a better learning environment. The educator is still the manager who controls the elements of the features for gamification and utilizes those features for the most profitable of their performance.

Regardless of what learning platform or media the educator would use and how the class is organized, the learning process must adequately attract students. Furthermore, several issues regarding the use of Classcraft in language classes need to be addressed. Further research should be conducted to combine different gamification media in the language classroom for various learning activities to support students' engagement through its elements. Greater efforts are needed to ensure the duration to know the effect of the implementation gamification method. The short time conducting the treatment can conceivably make students less engaged and motivated because its newness aspect. As gamification is a unique learning method for them, they must spend their time to develop practical in their new learning environment. Therefore, there is a definite need for future research to determine the effect of gamification across proficiency levels.

References

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 1-13. DOI:10.1080/10494820.2020.1813180

Armanda, M. L., & Indriani, L. (2022). Is learning English Boring with Gamification?. *English Language Teaching and Research Journal (ELTR), 6*(1), 52-62. https://doi.org/10.37147/eltr.v6i1.129

Bakar, R. A. (2019). Digital Storytelling: An influential reading comprehension and creativity tool for the 21st Century literacy skills. *Journal of English Language Teaching Innovations and Materials, 1*(2), 49, DOI:10.26418/jeltim.v1i2.34362

Bestiantono, D. S., Agustina, P. Z., & Cheng, T. (2020). How students' perspectives about online learning amid the COVID-19 pandemic?. *Studies in Learning and Teaching, 1*(3), 133-139, DOI:10.46627/silet.v1i3.46

Brown, H. D., & Abeywickrama, P. (2018). *Assessing Reading: In Language Assessment (Ed.), Principles and Classroom Practices (3rd ed., pp. 195–224).* New York: Pearson Education.

Brown, H. D., & Lee, H. (2015). *Teaching Reading: In Teaching by Principles (Ed.), An Interactive Approach to Language Pedagogy (4th ed., pp. 389-423).* Australia: Pearson Education.

Ceballos, M., & Parody, L. (2018). Gamification influence: a case study of a mathematics course at the Universidad Loyola Andalucia. In L. G. Chova, A. L. Martinez, and I. C. Torres, (Eds.), *Proceedings of the 11th International Conference of Education,* (pp. 6120–6127). Research and Innovation (ICERI). DOI:10.21125/iceri.2018.0244

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification using game-design elements in non-gaming contexts. *In Proceedings of the*

2011 Annual Conference Extended Abstracts on Human Factors in Computing Systems - CHI EA '11, DOI:10.1145/1979742.1979575

Ferriz-Valero, A., Østerlie, O., García Martínez, S., & García-Jaén, M. (2020). Gamification in physical education: Evaluation of impact on motivation and academic performance within Higher Education. *International Journal of Environmental Research and Public Health, 17*(12), 4465, DOI:10.3390/ijerph17124465

Figueroa-Flores, J. F. (2016). Gamification and game-based learning: Two strategies for the 21st Century learner. *World Journal of Educational Research, 3*(2), 507. https://doi.org/10.22158/wjer.v3n2p507

Freire, D. S., & Carvalho, A. A. (2019). Classcraft: A aprendizagem que se transforma num Desafio Permanente!. *REVISTA INTERSABERES, 14*(31), 58-74. https://doi.org/10.22169/revint.v14i31.1527

González, C.S.G., & Navarro, V. A. (2017). Gamification and Active Games for Physical Exercise: A Review of Literature. *In Proceedings of the 1st International Workshop on Gamification and Games for Learning*, 1-7. Retrieved from http://riull.ull.es/xmlui/handle/915/4785

Harmer, J. (2012). *Essential Teacher Knowledge.* Pearson Education: London, UK.

Holman, C., Aguilar, S. J., Levick, A., Ster, J., Plummer, B., & Fishman, B. Planning for success: How students use a grade prediction tool to win their classes. *In LAK '15: Proceedings of the Fifth International Conference on Learning Analytics And Knowledge,* 16-20. DOI: 10.1145/2723576.2723632

Keshavarz, M. H. (2020). A proposed model for post-pandemic higher education. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal,* 3(3), 1384–1391, DOI:10.33258/birle.v3i3.1193

Khaleel, F. L., Sahari@Ashaari, N., Tengku Wook, T. S., & Ismail, A. (2016). Gamification elements for learning applications. *International Journal on Advanced Science, Engineering and Information Technology, 6*(6), 868. https://doi.org/10.18517/ijaseit.6.6.1379

Kleiber, I. (2020). (VIDEO) GAMES IN THE LANGUAGE CLASSROOM: A Gamified Distance Learning Course on Gamification and Game-Based Learning for (Pre-Service) Language Teachers. *Heidelberg Inspirations for Innovative Teaching, 1*(1), 45-59, DOI:10.11588/hint.2020.1.77690

Krishnan, S. D., Norman, H., & Md Yunus, M. (2021). Online gamified learning to enhance teachers' competencies using Classcraft. *Sustainability, 13*(19), 10817. DOI:10.3390/su131910817

Maloney, S. (2019, July 2). *Gamification in English language teaching: More than child's play.* English for ASIA. Retrieved from https://hongkongtesol.com/blog/2019/07/gamification-english-language-teaching-more-childs-play

Mantra, I. B. N., Widiastuti, I. A. M. S., & Pramawati, A. A. I. Y. (2020). Micro and Macro Skills of Reading Comprehension Acquired by EFL Students. *International Journal of Linguistics and Discourse Analytics, 1*(2), 10-17, DOI:10.52232/ijolida.v1i2.15

Márquez, M. M., & Torralbo, J. C. (2019). Classcraft: English and role play in the Primary School Classroom. *Apertura, 11*(1), 56–73. https://doi.org/10.32870/ap.v11n1.1433

58

Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology, 8*(2), 783-793, DOI:10.25215/0802.094

Poy. R., & Garcia, M. (2019). Wizards, elves and orcs going to high school: how role-playing video games can improve academic performance through visual learning techniques. *Education for Information, 35*(3), 305–318, DOI:10.3233/EFI-190285

Redjeki, I. S., & Muhajir, R. (2020). Gamification for Grammar Learning in Higher Education. *In Proceedings of the iTELL (Indonesia Technology-Enhanced Language Learning) Conference 2020*, 277–279. Retrieved from https://itell.or.id/conference/index.php/itell/itell20/paper/view/118

Rivera-Trigueros, I., & Sánchez-Pérez, M. M. (2022). Classcraft as a resource to implement gamification in English-medium instruction. *Research Anthology on Developments in Gamification and Game-Based Learning*, 1033–1049, DOI:10.4018/978-1-6684-3710-0.ch047

Schatten, M., & Schatten, M. (2020). A comparative study of gamification in programming education in a Croatian high school. *2020 43rd International Convention on Information, Communication and Electronic Technology (MIPRO)*, 700–704. https://doi.org/10.23919/mipro48935.2020.9245237

Tartavulea, C. V., Albu, C. N., Albu, N., Dieaconescu, R. I., & Petre, S. (2020). Online teaching practices and the effectiveness of the educational process in the wake of the covid-19 pandemic. *Amfiteatru Economic, 22*(55), 17–25, DOI:10.24818/ea/2020/55/920

Torres, D. H., Duran, N. G., & Paredes, C. A. (2019). THE MAZE: Gamifying the concept of identity. *Revista Electrónica Interuniversitaria de Formación del Profesorado, 22*(2), 31-42. http://dx.doi.org/10.6018/reifop.22.2.370351

Witari, I., Anwar, K., & Arifani, Y. (2021). The effect of classcraft on enhancing grammar performance of Adult Learners. *In Proceedings of the 1st UMGESHIC International Seminar on Health, Social Science and Humanities (UMGESHIC-ISHSSH 2020)*, 585, 108-121, DOI:10.2991/assehr.k.211020.019

Ying, S. C., & Surat, S. (2021). The Effectiveness of Classcraft Mobile Game on The Motivation and Academic Achievement of Alpha Generation in Learning. *International Journal of Advanced Research in Islamic Studies and Education, 1*(4), 58-79. Retrieved from https://myedujournal.com/index.php/arise/article/view/70/71

Zhang, Q., Yu, L., & Yu, Z. (2021). A content analysis and meta-analysis on the effects of classcraft on gamification learning experiences in terms of learning achievement and motivation. *Education Research International*, 1–21, DOI:10.1155/2021/9429112