

## Gamification on Netboard: The Students' Perceptions of its Practice in ESP Classroom

Fauzul Etfita<sup>1</sup>, Sri Wahyuni<sup>2</sup>, Estika Satriani<sup>3</sup>, Asnawi<sup>4</sup>, Fermita Yuliasma<sup>5</sup>

<sup>1</sup> Universitas Islam Riau, Pekanbaru, Indonesia; fauzuletfita@edu.uir.ac.id

<sup>2</sup> Universitas Islam Riau, Pekanbaru, Indonesia; wahyunis@edu.uir.ac.id

<sup>3</sup> Universitas Islam Riau, Pekanbaru, Indonesia; estikasatriani@edu.uir.ac.id

<sup>4</sup> Universitas Islam Riau, Pekanbaru, Indonesia; asnawi@edu.uir.ac.id

<sup>5</sup> Universitas Islam Riau, Pekanbaru, Indonesia; fermitayuliasma@student.uir.ac.id

---

### ARTICLE INFO

#### Keywords:

Netboard;  
Gamification;  
ESP

---

#### Article history:

Received 2023-01-16

Revised 2023-11-11

Accepted 2023-12-26

---

### ABSTRACT

Gamification is a learning approach that uses element from games to motivate students in the learning process and enhance feelings of enjoyment and engagement with the learning process. This research aimed to investigate the students' perception toward gamification applied in English Language Education. This research was conducted at a private University in Riau, and the sample was 47 students of the sixth semester. This research used a descriptive quantitative approach, and the instrument is a questionnaire. The questionnaire consists of 35 questions, divided into 7 indicators. The results of this study were processed quantitatively using the Likert scale formula. The result of this research indicates that students were dominant and agreed with the 35 statements of 7 indicators about gamification. The research found that the 1<sup>st</sup> indicator was agreed with index 68.65%, 2<sup>nd</sup> indicator was agreed with index 71.47%, 3<sup>rd</sup> indicator agreed with the index 68.65%, 4<sup>th</sup> indicator was agreed with the index 67.16%, 5<sup>th</sup> indicator was agreed with index 71.1%, 6<sup>th</sup> indicator was agreed with index 71.7%, and 7<sup>th</sup> indicator was agreed with index 70.8%. Therefore, Gamification is a platform that suitable for teachers and students in the learning process, especially in learning English for Specific Purposes.

*This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.*



---

### Corresponding Author:

Fauzul Etfita

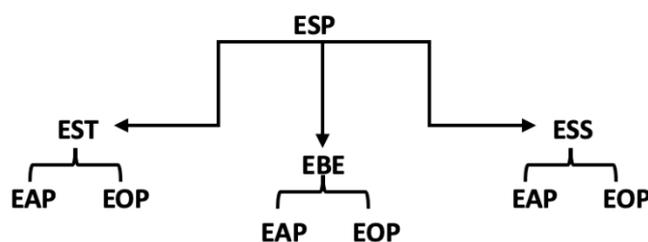
Universitas Islam Riau, Pekanbaru, Indonesia; fauzuletfita@edu.uir.ac.id

---

## 1. INTRODUCTION

English for specific purposes, well known as ESP, has been introduced since the 1960s. It is a subset of English as a second or foreign language that refers to teaching English to students or employees with special needs (Rahman, 2015). ESP was offered to focus on the use of English as a medium of communication in a specific field of study or profession. Among many categories of ESP, Hutchinson and Walters are the most recognized (Wang et al., 2020). They classified ESP into English for Science and Technology (EST), English for Business and Economics (EBE), and English for Social

Sciences (ESS). Then, it was divided into two main types according to the purpose the learners require English, those are English for Academic Purposes (EAP) and English for Occupational Purposes (EOP) (Nimasari, 2018). The illustration can be seen as follows:



**Figure 1.** ESP Classification based on Hutchinson and Walter

To add, during the last few decades, ESP has grown greatly as a result of pressing worldwide demands (Etfita & Wahyuni, 2020) for fast-paced language training in education, occupational, and professional settings (Salmani-Nodoushan, 2020). Previously, ESP was only learned by non-English Department students yet at this age also experienced by English Department students. This is demonstrated by the fact that English Department students are also assigned to enroll in particular names of ESP subjects since English Department graduates are expected to obtain not only a graduation certificate but also particular competences.

One example of ESP implementation is in English Language Education at a private University in Riau, where the students are introduced to several ESP subjects. Journalism is one of the ESP subjects that is taught in their second year. This course assists the students in studying the area of journalistic on how journalists collect, prepare, and distribute the news, as well as related feature and commentary materials, through such print and electronic media. Then, the students learn to put events, ideas, pieces of information, and controversies into context.

In teaching ESP courses at the University, the lecturers need to be equipped with teaching materials, techniques, and learning media. There are many learning media that can be used, not only using the book but technology can also be integrated as a learning medium (Solanki, D., Shyamlee1, 2012). Since technology has always contributed a lot to the teaching and learning process, it become an important aspect of the teaching profession that lecturers can use to facilitate learning (Asmali, 2021; Giannikas, 2019). Therefore, technology has become part of the learning and teaching process, in this case helping improve students' learning process and teachers' teaching experience.

In addition to significantly influencing students' and teacher's experiences in the learning process, technology plays a significant role in motivating students to engage in activities. For instance, in a traditional classroom approach, the teacher would stand in front of the class and give lectures, explanations, and instructions using a whiteboard. This approach can be changed as technology develops. For that reason, the researchers implemented a platform called Netboard to create a digital wall and gamification as the assessment medium. Students can find information on lessons and learning materials they are currently discussing using Netboard. In some forms of gamification, they can view and do assessments for the entire semester.

Gamification is a learning approach that uses elements from games to motivate students in the learning process and enhance feelings of enjoyment and engagement with the learning process. This type of media can also be utilized to record things that students are interested in and motivate them to keep learning (Jusuf, 2016). Glover (2013) claims that gamification gives additional motivation for student to finish all of their learning activities. gamification raises student engagement, retention, knowledge, cooperation levels Hakulinen & Auvinen (2014), stimulate, and encourage users (Hussain et al., 2014).

In addition, Gamification gives teacher new techniques to push their pupils to learn the target language in the most effective way (Garland, 2015). Similarly, Filippou et al. (2018) argue that

gamification is a term used to describe an educational movement that aims to make learning setting more enjoyment. Gamification's major goal is to encourage students and stimulate their interest (Kiili et al., 2014), offer engaging experiences for players (Schell, 2014), improve learning and problem solving (McGrath & Bayerlein, 2013), and increase competency at each level. Gamification, allow players to restart or replay, as well as make mistakes that may be addressed, help players overcome their fear of failure and improve their attachment to the game

Furthermore, gamification in education has a significant impact on the learning process. Gamification is commonly being used as an assessment tool since it is simple to use, enjoyable, and the types are vary. There are several gamification platforms implemented in this course, they are Kahoot!, Quizizz (Zhao, F, 2019), Socratives (Dwi, 2020), Duolingo (Bende, 2017), Mentimeter (Gokbulut, 2020), VivoMiles, Yutopia, Uboost, Cdedly, OpenBadges.me, ClassDojo and ClassBadges (Rajšp et al., 2017). Besides, the students got positive perceptions of the implementation of gamification (Ma. Elma D. Cuario et al, 2021; Acosta-Medina et al, 2021). Based on their collective assessment and perceived advantages, they found that gamification has a positive effect on respondents' motivation.

Those challenges in education gave the idea to implement a digital pedagogical strategy based on gamification, which boosts interest, quickens the learning process. Interacting in the target language presents new difficulties for teachers and students of English as a foreign language in English for Specific Purposes classrooms. For example, there is an urgent need to close the gap between the language proficiency of the learners and the real-world application of English. In order to address the essential components and current challenges of gamification, a new experience was created that focuses on material design, appropriate communication techniques, and learner-centered game experiences. As a result, through experiential learning, students were able to design their own games through practical projects and activities that supported the development of methodological practical skills. In order to understand how students feel about the gamification of the teaching and learning process, this study was carried out to investigate students' feeling on the use of gamification on Netboard in journalism classrooms.

## 2. METHODS

This research employed a quantitative descriptive design. Suryani & Hendryadi (2015) mentioned that quantitative research is research that uses numerical data analysis. Basically, the variable in this research is measured by using numerical terms. This study conducted in a privat university in Riau. The participants were forty-seven (47) students who were enrolled in a journalism class at 2022/2023 academic year. The instrument used in this research was a set of questionnaires which were adapted from Acosta-Medina et al (2021). The questionnaire had seven sections of The unified theory of acceptance and use of technology (UTAUT) model including perceived utility, knowledge, engagement, enjoyment, motivation, ease of use, and use preference.

Furthermore, the students were given a questionnaire through a Google form in which participants were supposed to indicate their level of agreement. They need to tick the level of agreement they think is appropriate. It was using a five-point Likert scale, with a range of strongly agree to strongly disagree. The data achieved through questionnaire then analysed by describing students' perception toward gamification on Netboard applied in Journalism class. After the researchers gathered the data, the researchers observed questionnaire to see the percentage of the statements. The researchers calculated the students' individual score from the questionnaire use the following formula of Likert scale:

$$T \times P_n$$

Description:

T: The total number of respondents who voted

P<sub>n</sub>: Likert scale score numbers selection

In addition, to categorize each items of questionnaire the researcher use formulation as follows:

Total score: the sum of the result of each TxPn

Maximum score: number of respondents x highest Likert score

Minimum score: number of respondents x lowest Likert score

Indeks (%): (Total score/ Maximum score) x 100

After calculating the data by using Likert scale formula, the researcher used the scale formula to interpret the finding:

**Table 1. Interval Scale of Likert Scale**

Option	Percentage
Strongly Disagree	0%-19.99%
Disagree	20%-39.99%
Neutral	40%-59.99%
Agree	60%-79.99%
Strongly Agree	80%-100%

Table 1 (Pranatawijaya & Priskila, 2019) shows the interval score of the Likert scale. If the statement gets 0%-19.99%, it means that the statement categorized as strongly disagree, 20%-39.99% is categorized as disagree, 40%-59.99% is categorized as neutral, 60%-79.99% is categorized as agree, and if the statement gets 80%-100% it means that the statement categorized as strongly agree.

### 3. FINDINGS AND DISCUSSION

The findings display the descriptive statistics for each item that describe the preference of the students toward the use of gamification on Netboard. The results show positive perceptions toward the use of gamification tools in Netboard among students in journalism class. The seven areas of inquiry were the perceived utility of incorporating gamification in Netboard digital wall, the perceived effect of gamification in Nedboard on students' knowledge, engagement, enjoyment, and motivation, the perceived ease of use of gamification in Netboard, and the last the perceived preference. Details interpretation of each indicator is elaborated in the following:

**Table 2. Survey statements and received responses of Perceived Utility**

No	Statement	Total Score	Percentage	Rating Interval
1	Using gamification on Netboard increases my performance in journalism class	163	69.3%	Agree
2	Gamification would help me to get a better result in learning journalism through Netboard	167	71%	Agree
3	Gamification on Netboard is more effective compared to other teaching and learning strategies	162	68%	Agree
4	I think gamification is a useful tool on Netboard	170	72.3%	Agree
	MEAN	165.5	70.15%	Agree

Table 2 was generated based on the questionnaire result from the students in terms of utility of gamification on Netboard. It showed an agreement among the students in journalism class who experienced gamification on the digital wall Netboard. 69.3% agreed that gamification on Netboard could increase students' performances. Then, the result for the second statement showed a 71% total

percentage of agreement that gamification would help them to achieve a good result in learning journalism through Netboard. Furthermore, 68% total percentage of agreement among students to the third statement revealed that gamification was effective compared to other learning strategies. Not only that, but they also argued that gamification on Netboard is a useful tool for learning journalism. To conclude, the students in journalism class showed an agreement with a 70.15% mean score of the perceived utility of integrating gamification into the Netboard.

**Table 3.** Survey statements and received responses of Knowledge

No	Statement	Total Score	Percentage	Rating Interval
1	Gamification on Netboard increases my knowledge in learning competencies	172	73%	Agree
2	I use my previous knowledge and competences when I play gamification on Netboard	165	70%	Agree
3	I am interested in any topics of journalism on Netboard with gamification	173	73.6%	Agree
4	I am motivated to use the acquired knowledge of gamification competences in daily life	163	69.3%	Agree
	MEAN	168.25	71.47%	Agree

The highest percentage score in Table 3 corresponds to the third item which states the students' interest in learning any topics of journalism on Netboard through gamification. It presented an 73.6% total percentage of agreement among students in journalism class. After that, 73% total percentage of agreement among students to the first statement agreed that gamification on Netboard improved their knowledge in learning journalism. Moreover, the result for the second statement showed a 70% total percentage of agreement that the students use their knowledge and competences while playing gamification on Netboard. Besides, the students feel motivated to use the acquired knowledge of gamification competencies in their daily life. It was noticed from 69.3% percentage of students' responses. In conclusion, 71.47% of the mean score indicated the students' agreement through the knowledge expansion after experiencing gamification on Netboard in journalism class.

**Table 4.** Survey statements and received responses of Engagement

No	Statement	Total Score	Percentage	Rating Interval
1	The activities that I can do in gamification on Netboard keep me interested all the time	158	67%	Agree
2	Gamification activities on Netboard encourage me to use the tool more frequently	164	69.7%	Agree
3	When I played gamification on Nedboard, I was talking in a loud voice	155	65%	Agree
4	I am curious to play all types of gamification on Netboard	161	68.5%	Agree
5	I am not sure what I can find in the next level of gamification on Netboard and that causes more interest	162	68.9%	Agree
6	I feel time passes quickly when using gamification on Netboard	171	72.8%	Agree
	MEAN	161.8	68.65%	Agree

The responses of students' engagement in journalism class presented in Table 4 displayed the highest percentage score of the sixth item. The statement mentioned the students' encouragement through time spent using gamification on Netboard. Moreover, the result for the second statement showed a 69.7% total percentage of agreement that the gamification activities on Netboard encourage students to use the games. 68.9.6% total percentage of agreement among students in journalism class

showed the students' interest in the next level of gamification on Netboard. After that, 68.5% total percentage of the fourth statement implied the curiosity of students about the types of gamification applied on Netboard. Next, the students feel engaged in doing the activities in gamification so they were talking in a loud voice. In short, 68.65% of the mean score demonstrated the students' positive engagement toward gamification on Netboard in journalism class.

**Table 5.** Survey statements and received responses of Enjoyment

No	Statement	Total Score	Percentage	Rating Interval
1	I feel happy when used gamification on Netboard	184	78.2%	Agree
2	I feel bored when using gamification on Netboard	107	45.5%	Neutral
3	I feel tired when I was finished using gamification on Netboard	139	59%	Neutral
4	I find experience of using gamification on Netboard very pleasant	173	73.6%	Agree
5	I find the experience of using gamification on Netboard very interesting	187	79.5%	Agree
	MEAN	158	67.16%	Agree

Table 5 presented questionnaire results of students' enjoyment in learning gamification through Netboard in journalism. The result displayed some positive responses and neutral agreement among the students. 78.2% agreed that gamification on Netboard could influence the students' happiness. Then, the result for the fourth statement showed a 73.6% total percentage of agreement that they had a pleasant time using gamification through Netboard. Moreover, 79.5% total percentage of agreement among students to the fifth statement indicated that gamification in journalism class was interesting. In the other two statements, the students claimed that they did not feel bored and tired while doing gamification activities on netboard. In conclusion, the students who used gamification on Netboard in journalism class showed an agreement with a 67.16% mean score of enjoyment.

**Table 6.** Survey statements and received responses of Motivation

No	Statement	Total Score	Percentage	Rating Interval
1	I am motivated to complete all the levels of gamification on Netboard	173	73.6%	Agree
2	Gamification on Netboard makes me feel enthusiastic	178	75%	Agree
3	When I get badges in gamification, I feel good	169	71.9%	Agree
4	The activities of gamification on Netboard called out my attention	159	67.6%	Agree
5	The problem situations of gamification on Netboard called out my attention	160	68%	Agree
6	Gamification on Netboard completely got my attention	174	74%	Agree
7	I feel curious about the learning test question from gamification on Netboard	165	70%	Agree
	MEAN	168.2	71.1%	Agree

The response of students' motivation presented in Table 6 showed an agreement with 71.1% of the mean score. From the statements, it can be implied that the students were motivated to complete all the topics of journalism and the types of gamification given. It was proven by a 73.6% total percentage. The students mentioned their high enthusiasm through the activity and the badges they

earn in gamification. They agreed that the activities of gamification and the problem solution on Netboard gathered their attention. Then, the result for the last statement showed a 70% total percentage of agreement that they feel curious to keep learning from gamification on Netboard. Overall, the students got motivated during the learning process which implemented a kind of gamification.

**Table 7.** Survey statements and received responses of Ease of Use

No	Statement	Total Score	Percentage	Rating Interval
1	It is easy to understand how gamification works on Netboard	171	72.7%	Agree
2	Gamification on Netboard did not demand a greater mental effort to understand how it works	162	68.9%	Agree
3	The interaction with gamification on Netboard is clear and understandable	177	75.3%	Agree
4	I consider it easy to level up in gamification on Netboard	157	66.8%	Agree
5	I find it easy to interaction with gamification on Netboard	172	73%	Agree
6	I consider gamification on Netboard is easy to use	174	74%	Agree
	MEAN	168.8	71.7%	Agree

Table 7 explained the questionnaire results of ease of use gamification on Netboard in journalism class. The result showed positive responses among the students. 72.7% agreed that gamification on Netboard is easy to use and understandable. Then, the result for the second statement showed a 68.9% total percentage of agreement that gamification did not appeal to a big effort to be played. In addition, 75.3% total percentage of agreement among students to the third statement supported that gamification in journalism class was clear and understandable. Moreover, 66.8% of the students claimed that they were easy to level up and 73% interact with the gamification on Netboard. Besides, 74% of them consider gamification on Netboard to be easy to operate. In conclusion, the students who used gamification on Netboard in journalism class showed an agreement with a 71.7% mean score of ease of use.

**Table 8.** Survey statements and received responses of Use Preference

No	Statement	Total Score	Percentage	Rating Interval
1	If I could choose, I would choose a course where gamification and Netboard were used	163	69.3%	Agree
2	If I had to vote, I would suggest to use gamification and Netboard in learning	166	70.6%	Agree
3	I am enthusiastic about using gamification and Netboard in another courses	171	72.7%	Agree
	MEAN	166.6	70.8%	Agree

The responses of students' preferences in journalism class that presented in Table 8 showed the highest percentage score of the third item. The statement proved 72.7% of the students' enthusiasm through gamification on Netboard. They would prefer to choose this strategy to be applied in other subjects. The result for the second statement showed a 70.6% total percentage of agreement that the gamification activities on Netboard can be suggested in any kind of learning subject. After that, 69.3% total percentage of the first statement implied the students' choice of subject and learning strategies. They were willing to take other subjects that apply gamification and Netboard. To conclude, 70.8 % of the mean score represented the students' positive preferences toward gamification on Netboard in journalism class.

## Discussion

The result drawn from the students' opinions of Netboard's gamification integration was favorable, as evidenced by nearly all of the agreed statements. This data confirms earlier research on the perceptions of gamification implementation (Alabbasi, 2017; Asiri, 2019; Reed et al., 2020; Vathanalaoha, 2022). In detail, the students' responses to gamification utility in Netboard show a positive perception. 70.15% of them agreed that gamification on Netboard is a useful tool that could improve their performances in journalism class, and they got better results. Besides, they mentioned gamification was more effective compared to other types of learning strategies. This is in line with Umamah & Saukah (2022) who revealed that students' opinions on learning through online games helped them to learn. They may have formed this favorable opinion because of the engaging and lively learning environment they encountered during digital game-based activities. Students' motivation will then increase in such an environment for learning.

In terms of knowledge, the students believed that gamification on Netboard caught their interest in journalism class, which led to the development of knowledge. They were motivated to use the acquired knowledge of gamification competencies in daily life and use their previous knowledge and competencies when playing gamification on Netboard. When playing gamification on Netboard, they were encouraged to apply their prior knowledge and competencies as well as the gamification competencies they had learned in their daily lives. Alharthi (2020) previously mentioned that it has been proven that gamification of English language instruction increases students' language proficiency, including their ability to acquire vocabulary. The use of gamification to supplement classroom instruction has led to a rise in language proficiency acquisition. The students said it helped them remember what they had learned as well as acquire new information. Gamification of learning facilitates students' retention of information and keeps them interested in the materials they are studying. It can be inferred that gamification contains a number of components that encourage learning and knowledge retention in pupils.

Furthermore, there has been positive feedback regarding the gamification engagement in journalism on Netboard. The students asserted that Netboard's gamification keeps them engaged and encourages frequent use. After finishing it, they are curious to see what the next stage of gamification has in store for them and the learning process went by quickly. It happened because students will receive coins rewards for completing each task, and it fosters goal-oriented learning. Students can use the reward system as a graded milestone after finishing each assignment. On the other hand, it helps teachers keep track of the student's academic progress and assess each student's individual learning rate. To alert all students to finish the lesson within a certain amount of time, teachers can send out a message. As a result, at this stage, teachers must make sure that all students are learning at the same rate and determine whether they require any academic or technical support from the teacher's assistant system (Vathanalaoha, 2022).

Another positive response was the students' enjoyment of learning journalism through gamification on Netboard. The students are pleased and discover new ways to use gamification. It was enjoyable and interesting. Because of gamification, they were not bored or tired while learning journalism. Turan et al. (2022) state that perceived enjoyment can be considered an independent factor independent of behavioral intention. It was found that participants experienced no anxiety while using Web 2.0 gamification tools. Lin (2022) adds gamification instruction could change students' learning attitudes. In terms of enjoyment, curricula that include game and competition elements anticipate students enjoying the learning environment and obtaining knowledge comfortably in classroom teaching in order to improve students' learning attitudes. The results appear to be consistent with previous research. It demonstrated that enjoyment has a positive and significant impact on learning behavior and attitude.

Along with those previously mentioned, the study found that motivation had a significant impact on their learning process. Mee Mee et al. (2021) explain there are two types of motivation recognized in gamification implementation, those are intrinsic motivation and extrinsic motivation. Intrinsic

motivation is the internal motivation that drives people to behave in certain ways for the sake of the behavior and the internal reward it provides. Extrinsic motivation, on the other hand, is the pursuit of behavior for another extrinsic reason. According to the behavior's conduct, some gamification elements directly influence extrinsic motivation, primarily through the use of stimuli and extrinsic rewards. Reward-based gamification solely relies on the external provision of rewards to influence behavior. This is consistent with the students' responses, which stated that they were motivated to complete all levels of gamification and felt good and enthusiastic when they received badges. As a result, gamification can be utilized as a motivating application for classroom learning (Yacob et al., 2022).

In the responses of ease of use, the students who used gamification on Netboard in journalism class agreed with a 71.7% mean score. They agreed that gamification on Netboard does not require much effort to understand how it works, and it is simple to level up and use. Besides, the interaction with gamification on Netboard is straightforward and intuitive. Zainuddin (2023) state that the two gamification platforms that were implemented in his class were user-friendly and convenient. However, they may have required technical knowledge to gain access to the platforms. It is simple to use and allows users to receive immediate responses and feedback from their target audience. Another feature that has been included is the ease of comprehension and management. Furthermore, his students mentioned that responding to an inquiry was as simple as selecting the appropriate option and that the interface needed to be more visible. They could access the two platforms in a smartphone, eliminating the need for them to bring a laptop to class. They only needed to enter the password to be taken directly to the quiz questions.

At last, the survey of gamification as a learning reference for students generated a positive response. The students' enthusiasm for the gamification class leads them to recommend it to another student. In the future, they would prefer to take a class that incorporates gamification. Acosta-Medina et al. (2021) elaborate the indirect impact of each factor on preference for use was calculated by multiplying the statistically significant coefficients of the other indicators. According to the findings, perceived utility, generated enjoyment, and knowledge improvement, in that order of importance, were critical factors in students' preference for using the gamified tool in the classroom. As a result, it is recommended that those who design and develop tools or gamified experiences focus on reinforcing these factors by demonstrating the utility of the tool, generating pleasure for students through their interaction with it, and facilitating knowledge acquisition.

#### 4. CONCLUSION

The learners demonstrated agreement based on their reactions to the perceptions of gamification used on Netboard in journalism class. Most of the questions were categorized as agree. It means that the students acknowledge the statement in the questionnaire. Furthermore, the gamification applied in this private university brings several advantages to learning English, such as the students felt motivated to learn Journalism on Netboard, gamification increases their performance in classroom competencies, and helps them to get better results in the learning test, It is clear that gamification on Netboard encourages good study habits, which help students reach their learning objectives.

In addition, the findings of this study identify gamification as one of the learning strategies to enhance students' performance. Students prefer a gamified learning system that is flexible and simple to use. However, it is important to comprehend the detrimental effects of game elements on academic performance even though the findings indicate that students do not perceive gamification to have a negative impact on them. Since gamification combines play with learning for enjoyment, an improper gamified approach may lead to forced play, which is discouraging and demotivating. In summary, it is suggested that teachers or lecturers could implement gamification since students prefer gamified learning systems that are flexible and easy to navigate.

## REFERENCES

- Acosta-Medina, J. K., Torres-Barreto, M. L., & Cárdenas-Parga, A. F. (2021). Students' preference for the use of gamification in virtual learning environments. *Australasian Journal of Educational Technology*, 37(4), 145–158. <https://doi.org/10.14742/ajet.6512>
- Alabbasi, D. (2017). Exploring Graduate Students' Perspectives toward Using Gamification Techniques in Online Learning. *Turkish Online Journal of Distance Education*, 18(3), 180–196.
- Alharthi, S. (2020). Assessing Kahoot's Impact on EFL Students' Learning Outcomes. *2020 TESOL International Journal*, 15(5), 31–64.
- 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>
- Asmali, M. (2021). Integrating Technology into ESP Classes: Use of Student Response System in English for Specific Purposes Instruction. *Teaching English with Technology*, 18(3), 86–104. <http://www.tewtjournal.org>
- Bende, L. (2017). Encouraging high school students to become autonomous EFL learners. *EduLingua*, 3(1), 53–65. <https://doi.org/10.14232/edulingua.2017.1.4>
- Dwi, M. (2020). Pemanfaatan Teknologi Pendidikan Di Masa Pandemi Covid-19: Penggunaan Fitur Gamifikasi Daring Di Universitas Muhammadiyah Pringsewu Lampung. *Al-Jahiz: Journal of Biology Education Research*, 1(1), 14.
- Etfita, F., & Wahyuni, S. (2020). Developing english learning materials for mechanical engineering students using padlet. *International Journal of Interactive Mobile Technologies*, 14(4), 166–181. <https://doi.org/10.3991/IJIM.V14I04.12759>
- Filippou, J., Cheong, C., & Cheong, F. (2018). A model to investigate preference for use of gamification in a learning activity. *Australasian Journal of Information Systems*, 22, 1–23.
- Garland, C. M. (2015). *Gamification and Implications for Second Language Education : A Meta Analysis*.
- Giannikas, C. N. (2019). Technology-enhanced Curriculum Development in the ESP Tertiary Context. In *ESP teaching and teacher education: current theories and practices* (pp. 95–110). Research-publishing.net. <https://doi.org/10.14705/rpnet.2019.33.928>
- Gokbulut, B. (2020). The effect of mentimeter and Kahoot applications on university students' E-learning. *World Journal on Educational Technology: Current Issues*, 12(2), 107–116. <https://doi.org/10.18844/wjet.v12i2.4814>
- Hussain, S. Y. S., Tan, W. H., & Idris, M. Z. (2014). Digital game-based learning for remedial mathematics students: A new teaching and learning approach In Malaysia. *International Journal of Multimedia Ubiquitous Engineering*, 9(11).
- Jusuf, H. (2016). Penggunaan Gamifikasi dalam Proses Pembelajaran. *Jurnal TICOM*, 5(1), 1–6.
- Kiili, K., Ketamo, H., & Kickmeier-rush, M. D. (2014). *Eye tracking in game-based learning research and game design*.

- Lin, J. (2022). The Effects of Gamification Instruction on the Roles of Perceived Ease of Learning, Enjoyment, and Useful Knowledge toward Learning Attitude. In *TOJET: The Turkish Online Journal of Educational Technology* (Vol. 21, Issue 2). <https://orcid.org/0000-0003-2712-6554>
- McGrath, N., & Bayerlein, L. (2013). Engaging online students through the gamification of learning materials: The present and the future. *30th Annual Conference on Australian Society for Computers in Learning in Tertiary Education, ASCILITE 2013*, 573–577.
- Mee Mee, R. W., Pek, L. S., Yee Von, W., Abd Ghani, K., Tengku Shahdan, T. S., Ismail, M. R., & Subba Rao, Y. (2021). A conceptual model of analogue gamification to enhance learners' motivation and attitude. *International Journal of Language Education*, 5(2), 40–50. <https://doi.org/10.26858/ijole.v5i2.18229>
- Nimasari, E. P. (2018). An ESP Needs Analysis: Addressing the Needs of English for Informatics Engineering. *JEES (Journal of English Educators Society)*, 3(1), 23–40. <https://doi.org/10.21070/jees.v3i1.1085>
- Pranatawijaya, V. H., & Priskila, R. (2019). Pengembangan Aplikasi Kuesioner Survey Berbasis Web Menggunakan Skala Likert dan Guttman. *Jurnal Sains Dan Informatika*, 5(2), 128–137. <https://doi.org/10.34128/jsi.v5i2.185>
- Rahman, M. (2015). English for Specific Purposes (ESP): A Holistic Review. *Universal Journal of Educational Research*, 3(1), 24–31. <https://doi.org/10.13189/ujer.2015.030104>
- Rajšp, A., Beranič, T., Heričko, M., & Horng-jyh, P. W. (2017). *Students' Perception of Gamification in Higher Education Courses*. 69–75.
- Reed, D. K., Martin, E., Hazeltine, E., & McMurray, B. (2020). Students' Perceptions of a Gamified Reading Assessment. *Journal of Special Education Technology*, 35(4), 191–203. <https://doi.org/10.1177/0162643419856272>
- Salmani-Nodoushan, M. A. (2020). English for Specific Purposes: Traditions, Trends, Directions. *Studies in English Language and Education*, 7(1), 247–268. <https://doi.org/10.24815/siele.v7i1.16342>
- Schell, J. (2014). *The Art of Game Design: A Book of Lenses, Second Edition (2nd ed.)*. A K Peters/CRC Press. <https://doi.org/10.1201/b17723>
- Solanki, D., Shyamlee1, M. P. (2012). Use of technology in English language teaching and learning: An analysis. *International Conference on Language, Medias and Culture*, 33, 150–156.
- Suryani, & Hendryadi. (2015). *Metode Riset Kuantitatif Teori dan Aplikasi pada Penelitian Bidang Manajemen dan Ekonomi Islam* (Suwito, Ed.; 1st ed.). Prenadamedia Group.
- Turan, Z., Kucuk, S., & Karabey, S. C. (2022). Investigating Pre-Service Teachers' Behavioral Intentions to Use Web 2.0 Gamification Tools. *Participatory Educational Research*, 9(4), 172–189. <https://doi.org/10.17275/per.22.85.9.4>
- Umamah, A., & Saukah, A. (2022). Digital Game-Based Learning (DGBL): The Voice of EFL University Students and Teachers. *PASAA Journal*, 63, 279–314.
- Vathanaalooha, K. (2022). Effects of Gamification in English Language Learning: The Implementation of Winner English in Secondary Education in Thailand. *LEARN Journal: Language Education and Acquisition Research Network*, 15(2), 830–857. <https://so04.tci-thaijo.org/index.php/LEARN/index>

- Wang, C., Wang, H., & Luan, X. (2020). Construction of Modular-Based Curriculum Framework for Medical English Teaching in China. *English Language Teaching*, 13(12), 37. <https://doi.org/10.5539/elt.v13n12p37>
- Yacob, N. S., Abd. Rahman, S. F., Azlan Mohamad, S. N., Abdul Rahim, A. A., Khalilah Abdul Rashid, K., Mohammed Abdulwahab Aldaba, A., Md Yunus, M., & Hashim, H. (2022). Gamifying ESL Classrooms through Gamified Teaching and Learning. *Arab World English Journal*, 8, 177–191. <https://doi.org/10.24093/awej/call8.12>
- Zainuddin, Z. (2023). Integrating ease of use and affordable gamification-based instruction into a remote learning environment. *Asia Pacific Education Review*. <https://doi.org/10.1007/s12564-023-09832-6>