

Evaluation of the Use of Gamification in Language Learning for Students in Indonesia

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ABSTRACT

Background. With the development of technology and students' preferences for digital interactions, gamification offers an attractive alternative in increasing the effectiveness of language learning. However, understanding the influence of gamification, especially on students in Indonesia, is something that has not been fully explored.

Purpose. This research aims to evaluate the use of gamification in language learning for students in Indonesia. Research focus includes increasing motivation, engagement levels, and language learning outcomes. In addition, this research is intended to provide a solid foundation for the development of more innovative and effective learning strategies at the tertiary level in Indonesia.

Method. This research adopts a quantitative approach with survey methods. A total of 40 Arabic student respondents from various universities in Indonesia were selected purposively. The sampling method involved distributing questionnaires via Arabic student WhatsApp groups. Data collection was carried out through a special questionnaire designed with Google Form. Data analysis refers to the Miles Huberman approach, including descriptive and inferential data processing.

Results. The research results show variations in the level of student knowledge about gamification, with the majority giving positive responses. Although most students experience additional motivation, there are concerns regarding an overemphasis on the end result rather than the learning process.

Conclusion. Gamification in language learning makes a positive contribution to student motivation, engagement, and enjoyment. However, the main challenge is the risk of overemphasis on the bottom line. The implementation of gamification needs to be adapted to the characteristics and needs of students, maintaining a balance between the game aspect and the essence of language learning. In conclusion, this research provides an in-depth understanding of the impact of gamification on Arabic language students in Indonesia, with the potential to provide guidance for the development of more effective language learning practices in higher education

KEYWORDS

Gamification, Language Learning, Students

INTRODUCTION

Evaluation of the Use of Gamification in Language Learning for Students in Indonesia is an important focus in facing dynamic changes in the field of higher education (Behl et al., 2022). Education in Indonesia, as an integral part of national development, is experiencing a significant transformation to meet the demands of global development (Suharno et al., 2020).

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Evaluation of the Use of Gamification in Language Learning for Students in Indonesia is an important focus in facing dynamic changes in the field of higher education (Behl et al., 2022). Education in Indonesia, as an integral part of national development, is experiencing a significant transformation to meet the demands of global development (Suharno et al., 2020). In integrating technology and innovation into the learning process, evaluation becomes a key aspect in ensuring the effectiveness of the implementation of various methods, including gamification, in improving the quality of education (Yuniati & Wilujeng, 2023).

The importance of evaluation in the Indonesian higher education context not only includes improving the quality of learning, but also measuring its impact on outcomes student learning (Tere - et al., 2020). Evaluation is not just a tool to assess the extent to which educational goals are achieved, but also to ensure that each component of the curriculum, including the use of gamification, makes a positive contribution to the development of students' language skills (Maki, 2023).

Evaluation as an integral part of the curriculum is a strategic step to ensure alignment and relevance between the learning approach applied and students' needs in mastering language skills (Archambault et al., 2022). In this context, evaluation provides a clear view of the effectiveness of gamification in achieving language learning goals (Azzouz Boudadi & Gutiérrez-Colón, 2020). Therefore, evaluative research is important to identify the extent to which the use of game elements in language learning makes a positive contribution to student understanding, engagement and learning outcomes.

Gamification in language learning can be defined as the use of game elements, such as challenges, competitions, and rewards, in the learning context to increase student motivation and engagement (Pujolà & Appel, 2020). This concept brings a new feel to the classroom, creating a more dynamic and interactive environment. Gamification utilizes game psychology to increase students' intrinsic motivation, which in turn is expected to have a positive impact on language learning outcomes (John et al., 2023).

However, to understand the concept of gamification, it is important to differentiate it from gamification (Krath et al., 2021). Gamification is giving value or rewards without any actual game elements. In the context of language learning, gamification involves the use of true game elements, such as missions, points, and levels, whereas gamification may simply involve awarding points or rewards without including deep game elements (Krishnan et al., 2021). Therefore, evaluating the use of gamification in language learning should not only measure its impact, but also differentiate between gamification and gamification approaches to ensure their effective application in the context of language learning in Indonesia.

A systematic review examined the impact of digital gamification on Learning English as a Second Language (LESL). Analyzing 22 publications from 2008 to 2019, the study found positive effects on learners' experiences and outcomes. However, none specified gamification elements linked to these effects. Positive experiences included enjoyment, engagement, motivation, and fun, while outcomes focused on content language learning, engagement, motivation, and satisfaction. The review suggests a need for more detailed investigations into gamification components influencing LESL experiences and outcomes, providing valuable insights for designing effective digital gamification strategies (Dehghanzadeh et al., 2021).

In addressing the challenges faced by English learners in Indonesia, particularly their reluctance to acquire new vocabulary and dissatisfaction with conventional teaching methods, a solution has been sought through a gamified English learning system. Recognizing the importance of English proficiency in global communication, this system employs gamification concepts such as

point collection, achievements, and rankings, incorporated into English learning materials. Accessible through a website, the learning system provides flexibility, allowing learners to study English autonomously without time and location constraints. The development process follows the 'Waterfall' software development model, encompassing needs analysis, design, implementation, and system testing. Validation tests using Black box methodology indicate that the functional system operates as intended, achieving 100% validity based on test results. Additionally, a questionnaire-based assessment reveals that gamification elements contribute to increased student motivation. This preliminary study lays the groundwork for further exploration into the effectiveness of gamified English learning systems in enhancing motivation and addressing challenges faced by learners in Indonesia (Ni Luh Kadek et al., 2023).

The emergence of gamification as a prominent learning trend in the 21st century, leveraging technological advancements and game elements to influence behavior and enhance learning outcomes, has garnered attention. Despite its prevalence, there is a paucity of comprehensive research assessing the overall impact of gamification. This preliminary study aims to bridge this gap by conducting a systematic review of forty articles from reputable publisher databases, including ScienceDirect, Taylor and Francis, Springer, Wiley, and SAGE, covering the period 2016–2021. Employing NVivo 12 Plus software and utilizing Hierarchy Chart and Mind Map methods for data analysis, the study reveals positive implications of gamification on student behavior and diverse learning outcomes, encompassing affective, cognitive, behavioral, and performance aspects. The findings underscore the need for continued exploration into the sustained impact of gamification on learning outcomes and behavior. Moreover, the study suggests that successful implementation hinges on considerations such as interface design and the cognitive abilities of educators. This research serves as a foundational exploration into the broader implications of gamification in the realm of education (Yuniati & Wilujeng, 2023).

From a review of three previous studies, gamification in language learning, especially in the context of Indonesian students, shows positive potential in increasing motivation, engagement and learning outcomes. Previous studies include the application of web-based technology with the Waterfall software development model, providing autonomy and flexibility support for learners. Gamification has also been proven to have a positive impact on student behavior and overall learning outcomes, emphasizing affective, cognitive, behavioral and performance aspects. Therefore, the aim of the next research is to comprehensively evaluate the use of gamification in language learning among students in Indonesia, with a focus on increasing motivation, engagement and language learning outcomes. This research is aimed at providing in-depth insight into the impact of gamification on language learning, exploring its effects on students' perceptions and experiences. Through a quantitative and survey approach, this research aims to provide a basis for developing innovative and effective language learning strategies at the tertiary level in Indonesia.

Gamification in improving language learning in Indonesian higher education (Panmei & Waluyo, 2022). Effective language learning is the main foundation for students' communication skills, which are essential in their preparation to face the challenges of the global world of work. Therefore, the lack of information about the concrete impact of gamification in language learning is a problem that needs to be addressed.

The importance of this research is reinforced by the fact that the world of education continues to develop, and innovative strategies are needed to motivate and engage students. Rapid changes in technology and sophistication of devices create opportunities to develop more engaging and relevant learning methods. Therefore, this research will discuss the extent to which the use of

gamification can solve the problem of lack of understanding of its impact on language learning in Indonesia.

In overcoming this problem, this research will propose a quantitative approach with a survey method, using a questionnaire distributed via Google Form to 40 students at various universities in Indonesia. This approach is considered relevant for collecting data that includes students' perceptions and experiences regarding the use of gamification in language learning.

This research is expected to provide an important contribution in filling the knowledge gap regarding the effectiveness of using gamification in language learning in Indonesia. It is hoped that the results of this research will provide a deeper understanding of the extent to which student motivation, engagement and learning outcomes can be improved through the application of game elements in language learning.

In addition, this research will help better understand how gamification can be integrated into the learning curriculum language to create a more engaging and effective learning experience. This can pave the way for the development of innovative learning strategies in the future that suit the needs of students in this digital era. The main innovation in this research is the application of gamification in the context of language learning in Indonesia, with a focus on university students. This includes an exploration of the impact of gamification on learning motivation, engagement, and language learning outcomes. This research aims to evaluate the use of gamification in language learning among students in Indonesia, with a focus on increasing motivation, engagement and language learning outcomes. Furthermore, it is hoped that this research can provide a solid foundation for further development

RESEARCH METHODOLOGY

This research was designed to adopt a quantitative approach using survey methods to evaluate the use of gamification in the context of language learning among students in Indonesia, with a special focus on Arabic language students (Shortt et al., 2023). The population of this study consisted of Arabic language students at various universities in Indonesia, reflecting the diversity of backgrounds and learning contexts. The research sample of 40 respondents will be selected purposively by considering variables such as higher education institutions, semester level, and characteristics of Arabic language students. The sampling method will be carried out by distributing questionnaires via WhatsApp (WA) groups consisting of Arabic students in various regions in Indonesia.

Data collection will be carried out through specially designed questionnaires using Google Form. This questionnaire will include structured questions designed to evaluate students' perceptions and experiences regarding the use of gamification in language learning. The process of distributing the questionnaire will be carried out through the Arabic student WhatsApp group, where participants are expected to provide honest and in-depth responses according to their experience in learning Arabic.

The data analysis method used in this research refers to the Miles Huberman approach, which involves processing descriptive and inferential data (Hitchcock & Onwuegbuzie, 2020). Descriptive analysis will provide a comprehensive picture of students' perceptions and experiences of gamification in language learning (Tao & Zou, 2023). Meanwhile, inferential analysis will be used to identify patterns, trends and statistical significance in the survey results, as well as to explore potential relationships between the variables studied.

This research takes concrete steps to ensure the representativeness and diversity of the sample, as well as the accuracy of collection and analysis data. By using quantitative statistical

analysis techniques (Mishra et al., 2019), this research is expected to provide a deeper understanding of the impact of using gamification in language learning for Arabic language students in Indonesia. It is hoped that the results of this research can provide a valuable contribution to developing more innovative and effective language learning practices at the higher education level in Indonesia.

RESULT AND DISCUSSION

Perceptions of Gamification in Language Learning

Perceptions of gamification in language learning are an important aspect in understanding how students respond to and experience the use of game elements in learning contexts (Almusharraf, 2023). In general, students who have been exposed to gamification concepts tend to have a better understanding of the benefits and challenges that arise from this approach (Huang et al., 2019). Students' awareness of gamification, as revealed in this research, can play a key role in shaping their perceptions of its effectiveness in increasing motivation and engagement in language learning.

Positive perceptions of gamification tend to emerge when students perceive it as an interesting and enjoyable approach (Denden et al., 2021). Students who like challenges and competition in learning tend to have a more positive perception of gamification (Wingo et al., 2019). On the other hand, students who are less interested in game elements may have a more neutral or even negative perception of the use of gamification in language learning.

In this context, it is important to understand that perceptions of gamification are not only related to the fun and entertainment aspects. Students who realize that gamification can improve the quality of learning and language learning outcomes also tend to have positive perceptions (Dehghanzadeh et al., 2021). Factors such as increased intrinsic motivation, active engagement, and better understanding of language concepts can be elements that shape this positive perception.

While there are positive aspects, there are also students who may perceive gamification as an approach that is not serious enough or too game in nature (Garcia-Iruela & Hijon-Neira, 2020). Therefore, understanding variations in student perceptions of gamification provides valuable insight for developing learning strategies that are more contextual and in line with student preferences (Yan et al., 2022).

After distributing a questionnaire to 40 language students regarding perceptions of gamification in language learning, with the first question As far Where Do You Know the Concept of Gamification in Language Learning? With answer options: Very, Don't Know, Don't Know, Don't Know, Know and Very Know. With the following results:

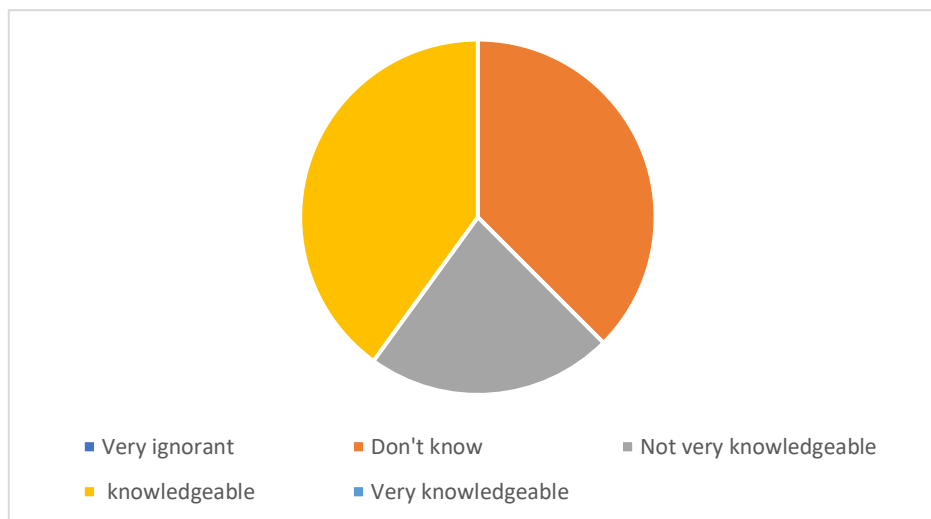


Figure 1. Where Do You Know the Concept of Gamification in Language Learning?

The results of the questionnaire showed variations in the level of student knowledge regarding the concept of gamification in language learning. A total of six respondents stated that they 'Don't Know,' indicating that some students may not be familiar with the concept. Meanwhile, 15 respondents stated 'Not very knowledgeable,' indicating that the majority of respondents had a limited level of knowledge about gamification.

Nevertheless, the results showing that 16 respondents stated that they 'Know' and three respondents stated that they 'Very Know' indicate that a number of Students already have sufficient knowledge about the concept of gamification. This could be due to their exploration of the literature or their experience in language learning contexts that have implemented gamification elements.

The importance of this initial knowledge can be the basis for designing more appropriate gamification implementation strategies. For students who are not yet familiar, an initial educational approach to introduce the concept of gamification can be considered an effective first step. On the other hand, for students who are already familiar, focus can be shifted to more in-depth aspects of implementation, such as task design or incentive mechanisms that can further increase engagement.

Next question Have you ever experienced the use of gamification in language learning? With the choices Yes and No, with the following answer results:

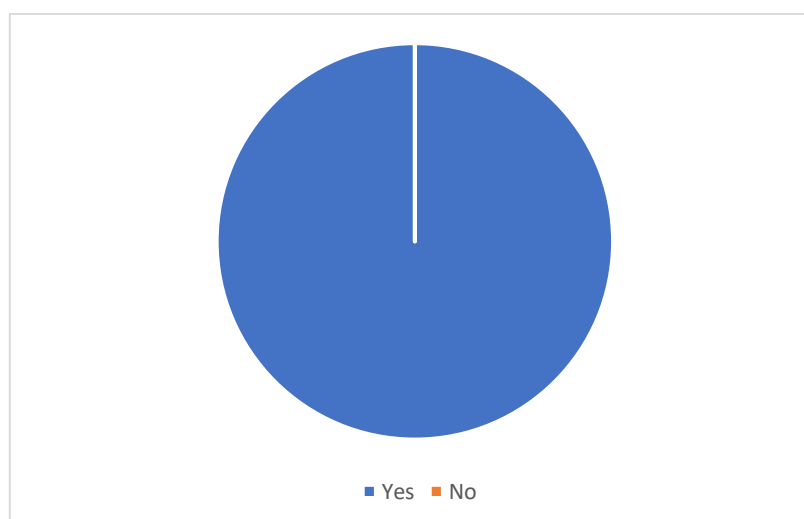


Figure 2. Have you ever experienced the use of gamification in language learning?

The results of the answers to the second question, 'Have you ever experienced the use of gamification in language learning?' showed that all respondents (40 students) stated that they had experienced the use of gamification games in language learning. Nevertheless, it was highlighted that most of them (40 respondents) stated that they did not know the concept of gamification itself. These results reflect an interesting reality, where even though students have been involved in gamification experiences, they may not yet fully understand or realize that the learning approach uses gamification concepts. This can be caused by a lack of comprehensive counseling or information about the concept before or during the application of gamification in learning.

In this context, it needs to be emphasized that understanding the concept of gamification can enrich students' learning experiences. Therefore, a holistic approach could involve initial educational efforts about the concept of gamification before or simultaneously with its implementation in language learning. By gaining a deeper understanding of the basics of gamification, students can be more active and critical in involving themselves in game elements presented in language learning contexts.

Next question, What is your response to the use of gamification in language learning? (If you have experienced it) with answer options Very Positive, Positive, Neutral, Negative and Very Negative. With the following answer results:

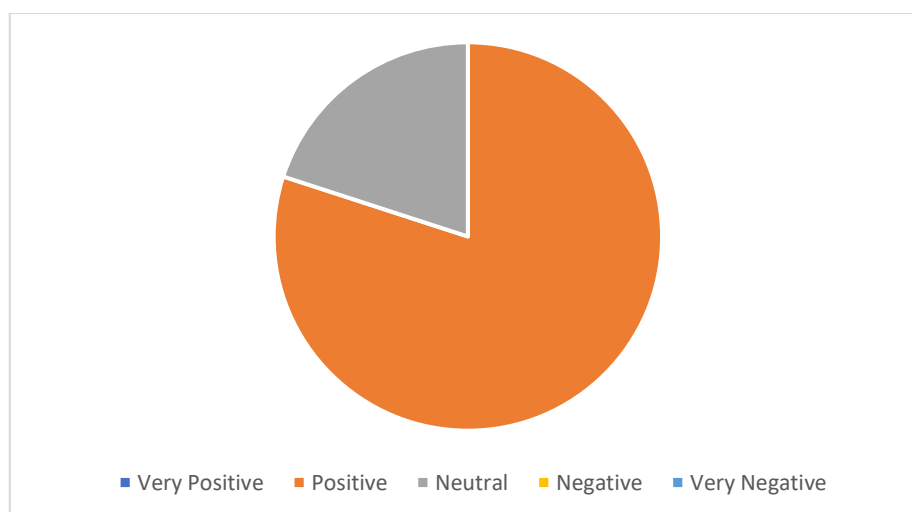


Figure 3. What is your response to the use of gamification in language learning? (If you have experienced it)

The results of responses to the use of gamification in language learning show that the majority of students (32 respondents) have a positive view of this approach, while 8 respondents stated that their responses were neutral. The very positive views of the majority of respondents reflect that gamification in language learning is well received and considered an effective method in increasing student motivation and engagement. Some possible reasons behind these positive responses include positive experiences during implementation of gamification, increased intrinsic motivation to learn the language, or the perception that gamification adds an element of fun and challenge that makes learning more interesting.

However, the number of respondents who expressed neutral responses indicates a variation in opinion among students. This may be due to individual preferences, different learning styles, or varying experiences with gamification concepts. Therefore, it is important for educators to identify the factors underlying such neutral responses and engage students in further discussions to

understand their perspectives. Further analysis of the factors that support positive and neutral responses could provide valuable insights for improving the implementation of gamification in language learning contexts. By understanding students' varying views and preferences, educators can customize learning approaches to better suit their needs and expectations.

Personal Experience with Gamification

Students who have engaged with gamification in language learning often reflect excitement and enthusiasm in their experience (Zainuddin et al., 2020). In direct observation, some students may feel excited by the challenge and competition introduced by the game elements. As a result, intrinsic motivation to learn a language may increase, encouraging active participation in the learning process (Namaziandost et al., 2019).

However, personal experiences also reflect variations in students' responses to gamification (Rodrigues et al., 2021). Some may find that this approach provides a more dynamic and interactive classroom atmosphere, strengthening their understanding of the language. Meanwhile, others may feel less comfortable with game elements and view them as distracting or less serious in a learning context.

The importance of listening to and understanding students' personal experiences with gamification is key to assessing the extent to which this approach meets their needs and preferences. They (Hariadi et al., 2021). This information provides an in-depth look at what is working and what may need to be adapted in implementing gamification in language learning. By taking into account these variations, educators can adjust learning strategies to be more effective and support each student's development in achieving language learning goals (Gacs et al., 2020).

After distributing a questionnaire to 40 respondents regarding personal experiences with gamification, the first question is: Do you feel that gamification increases your learning motivation in learning? Language? With answer options; Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. With the following answer results:

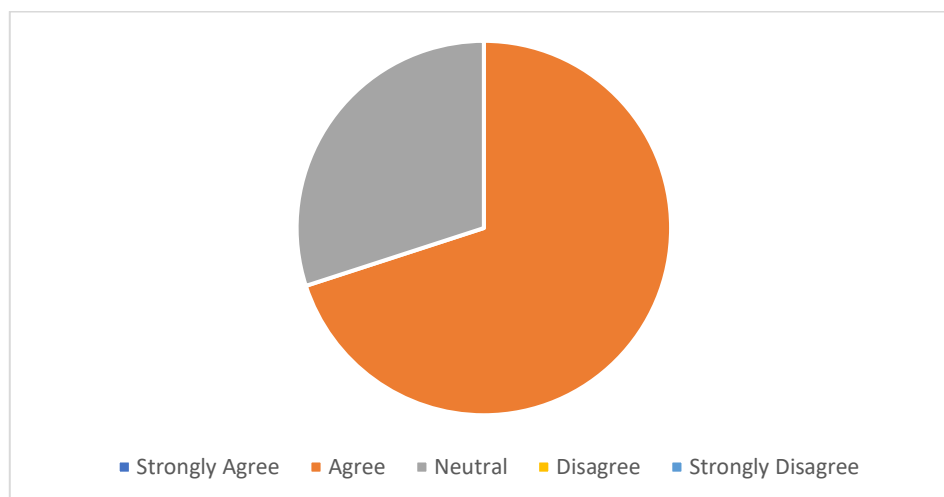


Figure 4. Do you feel that gamification increases your learning motivation in learning? Language?

From the results of the answers to the question regarding whether respondents feel that gamification increases learning motivation in language learning, it can be concluded that the majority of respondents, namely 28 people, agreed, while 12 people responded with neutral answers. The positive view of the majority of respondents who agreed shows that gamification is considered a factor that can increase their learning motivation in the context of language learning. It is possible that factors such as prizes, competitions, or challenges introduced through gamification

can provide additional incentives and excitement in the learning process, motivating students to engage more actively.

However, there was also a group of respondents who stated they were neutral, indicating variations in their perceptions of the impact gamification of learning motivation. Factors such as individual preference, preference for a particular learning method, or previous experience with gamification may play a role in these neutral responses. Further analysis of the neutral responses may provide deeper insight into elements that may need to be improved or adjusted in the implementation of gamification. By listening to and further understanding student perceptions, educators can adapt gamification strategies to better suit students' needs and expectations in increasing language learning motivation.

Next question, Do you feel Gamification increases your involvement in language learning? With answer options: Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. With the following answer results:

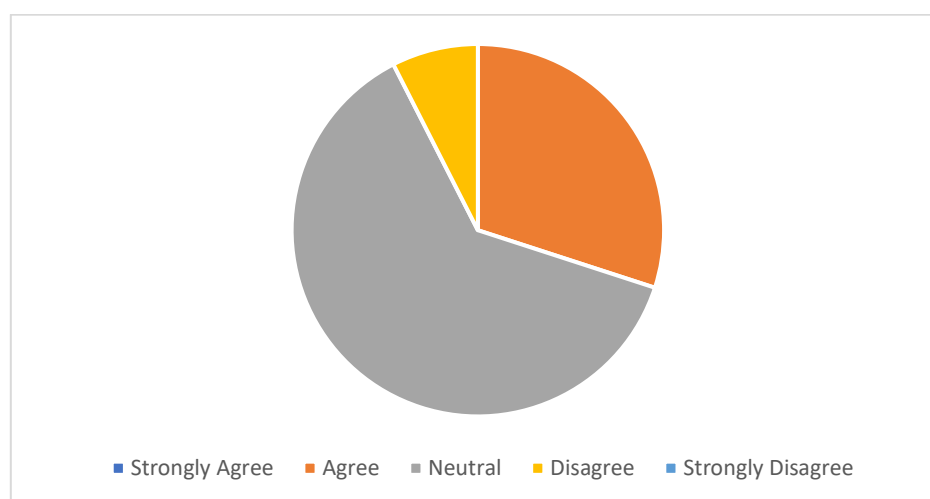


Figure 5. Do you feel Gamification increases your involvement in language learning?

From the results of the answers to the question regarding whether respondents felt gamification increased their involvement in language learning, it was seen that 12 respondents agreed, 25 respondents responded with neutral answers, and 3 respondents said they disagreed. Although there were a number of respondents who agreed, the majority of respondents showed a neutral response to increasing engagement through the use of gamification. This may indicate that although gamification may provide some excitement or game elements in learning, its impact on students' active engagement still requires further consideration.

The number of respondents who disagreed indicates that there are different views among students regarding the effectiveness of gamification in increasing engagement. Potentially, some students may find that game elements introduced through gamification do not always suit their preferences or learning styles. Further analysis of the neutral and disagree responses could provide deeper insight into the factors that may influence students' perceptions of engagement in language learning contexts. Educators can use this information to adjust the implementation of gamification to be more effective in increasing student engagement, creating a more dynamic and relevant learning environment.

The final next question is, What do you think are the advantages of using gamification in language learning? With answer options: Increasing Motivation, Increasing Engagement, Fun, and Motivating Competition. With the following answer results:

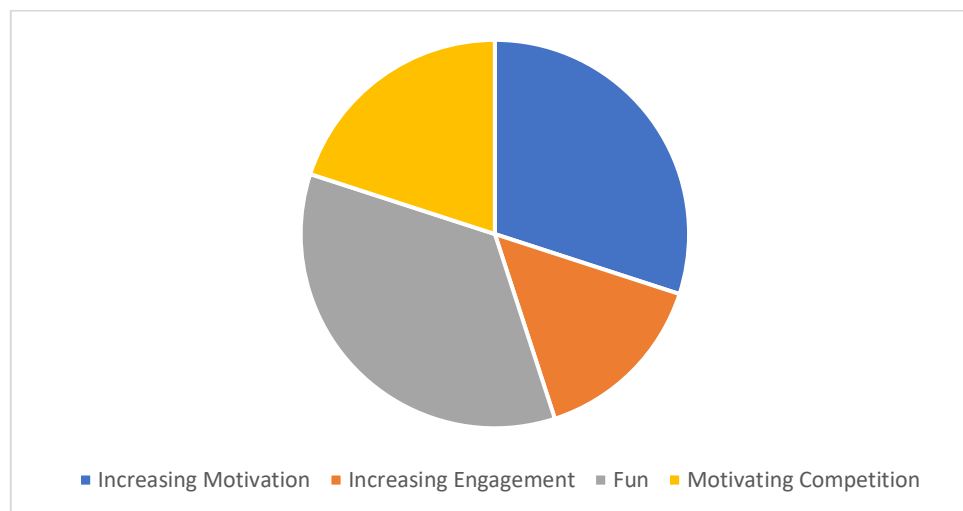


Figure 6. What do you think are the advantages of using gamification in language learning?

The results of the final answers from respondents highlight various views regarding the advantages of using gamification in language learning. A total of 12 people stated that gamification has advantages in increasing learning motivation, emphasizing that game elements can be an additional incentive for students to be more enthusiastic about participating in language learning. Although only a few, four respondents felt that gamification could increase their involvement in the learning process, indicating that game elements can create a more interesting and interactive learning experience.

Most of the respondents, namely 14 people, considered the main advantage of gamification to be the fun it brings to learning Language. They believe that game elements make the learning process more enjoyable, opening up space for more positive learning experiences. Apart from that, ten respondents stated that gamification was able to motivate through elements of competition. The existence of an element of competition is considered to create higher enthusiasm among students, encouraging them to achieve better results in language learning.

Thus, these results illustrate that gamification in language learning not only has concrete benefits such as increased motivation and engagement, but also provides a more fun and motivating learning experience through the element of competition. A holistic approach that takes into account these various advantages can be the basis for designing more diverse gamification strategies that suit student preferences in language learning contexts.

Final question, What do you think are the disadvantages or challenges of using gamification in language learning? With answer options Not Serious, Too Complicated, Irrelevant, and Emphasizing Results rather than Process. With the following answer results:

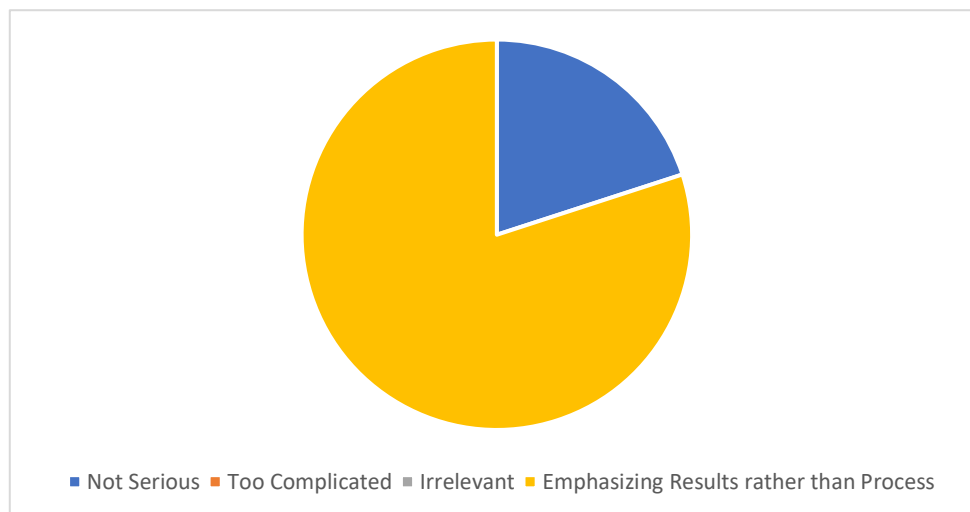


Figure 7. What do you think are the disadvantages or challenges of using gamification in language learning?

From the results of the answers to the last question regarding the shortcomings or challenges of using gamification in language learning, the majority of respondents, namely 32 people, stated that one of the main weaknesses was the emphasis placed more on results than on the learning process. They feel that gamification may tend to encourage an excessive focus on achieving the end goal rather than on the actual learning experience and process. On the other hand, there were a number of respondents, although the number was smaller, namely 8 people, who identified shortcomings in terms of a lack of seriousness in the gamification approach. They may feel that the game elements introduced can dampen the seriousness of language learning or create the perception that learning is less formal.

These results provide valuable insight into some of the students' concerns regarding the use of gamification. The main challenge identified was the risk of excessive focus on the end result and perhaps a loss of seriousness in learning. Further analysis of these concerns may help educators to design more balanced gamification strategies, integrating game elements without sacrificing the essence and depth of language learning. By understanding this view, educators can take steps to create more purposeful and meaningful gamification experiences for students.

CONCLUSION

Overall, the results and discussion highlight the importance of students' perceptions of gamification in language learning. Although most respondents had experienced gamification, their level of initial knowledge of the concept varied. This shows the need for initial counseling to introduce the concept of gamification to students. Although the majority of students gave positive responses to the use of gamification, there were also neutral responses and some concerns regarding the lack of seriousness in this approach.

From personal experience, the results show that gamification in language learning can provide additional motivation for the majority of students. However, challenges arise in placing too much emphasis on the end result rather than on the learning process. This concern reflects the broadening of students' perceptions of the impact of gamification, not only limited to fun and enjoyment, but also on substantially achieving learning goals.

By evaluating the advantages and disadvantages of gamification, it was found that game elements were able to increase motivation, involvement and fun for students. However, the main

challenge is the risk of over-emphasis on the end result, requiring a balance between the game aspect and the essence of language learning. In conclusion, the implementation of gamification needs to be adapted to the characteristics and needs of students, ensuring that game elements support learning objectives optimally.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

REFERENCES

- Almusharraf, N. (2023). Incorporation of a game-based approach into the EFL online classrooms: Students' perceptions. *Interactive Learning Environments*, 31(7), 4440–4453. <https://doi.org/10.1080/10494820.2021.1969953>
- Archambault, L., Leary, H., & Rice, K. (2022). Pillars of online pedagogy: A framework for teaching in online learning environments. *Educational Psychologist*, 57(3), 178–191. <https://doi.org/10.1080/00461520.2022.2051513>
- Azzouz Boudadi, N., & Gutiérrez-Colón, M. (2020). Effect of Gamification on students' motivation and learning achievement in Second Language Acquisition within higher education: A literature review 2011-2019. *The EuroCALL Review*, 28(1), 40. <https://doi.org/10.4995/eurocall.2020.12974>
- Behl, A., Jayawardena, N., Pereira, V., Islam, N., Giudice, M. D., & Choudrie, J. (2022). Gamification and e-learning for young learners: A systematic literature review, bibliometric analysis, and future research agenda. *Technological Forecasting and Social Change*, 176, 121445. <https://doi.org/10.1016/j.techfore.2021.121445>
- Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talaei, E., & Noroozi, O. (2021). Using gamification to support learning English as a second language: A systematic review. *Computer Assisted Language Learning*, 34(7), 934–957. <https://doi.org/10.1080/09588221.2019.1648298>
- Denden, M., Tlili, A., Essalmi, F., Jemni, M., Chen, N.-S., & Burgos, D. (2021). Effects of gender and personality differences on students' perception of game design elements in educational gamification. *International Journal of Human-Computer Studies*, 154, 102674. <https://doi.org/10.1016/j.ijhcs.2021.102674>
- Gacs, A., Goertler, S., & Spasova, S. (2020). Planned online language education versus crisis-prompted online language teaching: Lessons for the future. *Foreign Language Annals*, 53(2), 380–392. <https://doi.org/10.1111/flan.12460>
- Garcia-Iruela, M., & Hijon-Neira, R. (2020). What Perception Do Students Have About the Gamification Elements? *IEEE Access*, 8, 134386–134392. <https://doi.org/10.1109/ACCESS.2020.3011222>
- Hariadi, M. F., Kuswandi, D., & Wedi, A. (2021). *Development of Gamification Based Supplementary Listening Materials to Improve Students' High Order Thinking Skills*: International Conference on Information Technology and Education (ICITE 2021), Malang, Indonesia. <https://doi.org/10.2991/assehr.k.211210.021>
- Hitchcock, J. H., & Onwuegbuzie, A. J. (2020). Developing Mixed Methods Crossover Analysis Approaches. *Journal of Mixed Methods Research*, 14(1), 63–83. <https://doi.org/10.1177/1558689819841782>
- Huang, B., Hew, K. F., & Lo, C. K. (2019). Investigating the effects of gamification-enhanced flipped learning on undergraduate students' behavioral and cognitive engagement. *Interactive Learning Environments*, 27(8), 1106–1126. <https://doi.org/10.1080/10494820.2018.1495653>
- John, D., Hussin, N., Zaini, M. K., Ametefe, D. S., Aliu, A. A., & Caliskan, A. (2023). Gamification Equilibrium: The Fulcrum for Balanced Intrinsic Motivation and Extrinsic Rewards in Learning Systems: Immersive Gamification in Muhammad Khairulnizam

- ZainiLearning System. *International Journal of Serious Games*, 10(3), 83–116. <https://doi.org/10.17083/ijsg.v10i3.633>
- Krath, J., Schürmann, L., & Von Korfflesch, H. F. O. (2021). Revealing the theoretical basis of gamification: A systematic review and analysis of theory in research on gamification, serious games and game-based learning. *Computers in Human Behavior*, 125, 106963. <https://doi.org/10.1016/j.chb.2021.106963>
- Krishnan, S. D., Norman, H., & Md Yunus, M. (2021). Online Gamified Learning to Enhance Teachers' Competencies Using Classcraft. *Sustainability*, 13(19), 10817. <https://doi.org/10.3390/su131910817>
- Maki, P. L. (2023). *Assessing for Learning: Building a Sustainable Commitment Across the Institution* (2nd ed.). Routledge. <https://doi.org/10.4324/9781003443056>
- Mishra, P., Pandey, C., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, 22(1), 67. https://doi.org/10.4103/aca.ACA_157_18
- Namaziandost, E., Neisi, L., Kheryadi, & Nasri, M. (2019). Enhancing oral proficiency through cooperative learning among intermediate EFL learners: English learning motivation in focus. *Cogent Education*, 6(1), 1683933. <https://doi.org/10.1080/2331186X.2019.1683933>
- Ni Luh Kadek, E. W., Nitiasih, P. K., & Budiarta, L. Gd. R. (2023). Game Website-Based English Learning Developed for Elementary School Students in Fourth Grade. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 10(3), 257–264. <https://doi.org/10.23887/jpbi.v10i3.58117>
- Panmei, B., & Waluyo, B. (2022). The Pedagogical Use of Gamification in English Vocabulary Training and Learning in Higher Education. *Education Sciences*, 13(1), 24. <https://doi.org/10.3390/educsci13010024>
- Pujolà, J.-T., & Appel, C. (2020). Gamification for Technology-Enhanced Language Teaching and Learning: In M. Kruk & M. Peterson (Eds.), *Advances in Educational Technologies and Instructional Design* (pp. 93–111). IGI Global. <https://doi.org/10.4018/978-1-7998-2591-3.ch005>
- Rodrigues, L., Palomino, P. T., Toda, A. M., Klock, A. C. T., Oliveira, W., Avila-Santos, A. P., Gasparini, I., & Isotani, S. (2021). Personalization Improves Gamification: Evidence from a Mixed-methods Study. *Proceedings of the ACM on Human-Computer Interaction*, 5(CHI PLAY), 1–25. <https://doi.org/10.1145/3474714>
- Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., & Akinkuolie, B. (2023). Gamification in mobile-assisted language learning: A systematic review of Duolingo literature from public release of 2012 to early 2020. *Computer Assisted Language Learning*, 36(3), 517–554. <https://doi.org/10.1080/09588221.2021.1933540>
- Suharno, Pambudi, N. A., & Harjanto, B. (2020). Vocational education in Indonesia: History, development, opportunities, and challenges. *Children and Youth Services Review*, 115, 105092. <https://doi.org/10.1016/j.childyouth.2020.105092>
- Tao, Y., & Zou, B. (2023). Students' perceptions of the use of Kahoot! In English as a foreign language classroom learning context. *Computer Assisted Language Learning*, 36(8), 1668–1687. <https://doi.org/10.1080/09588221.2021.2011323>
- Tere -, T., Bayu Seta, H., Nizar Hidayanto, A., & Abidin, Z. (2020). Variables Affecting E-Learning Services Quality in Indonesian Higher Education: Students' Perspectives. *Journal of Information Technology Education: Research*, 19, 259–286. <https://doi.org/10.28945/4489>
- Wingo, N. P., Roche, C. C., Baker, N., Dunn, D., Jennings, M., Pair, L., Somerall, D., Somerall, W. E., White, T., & Willig, J. H. (2019). "Playing for Bragging Rights": A Qualitative Study of Students' Perceptions of Gamification. *Journal of Nursing Education*, 58(2), 79–85. <https://doi.org/10.3928/01484834-20190122-04>
- Yan, H., Zhang, H., Su, S., Lam, J. F. I., & Wei, X. (2022). Exploring the Online Gamified Learning Intentions of College Students: A Technology-Learning Behavior Acceptance Model. *Applied Sciences*, 12(24), 12966. <https://doi.org/10.3390/app122412966>

- Yuniati, Y., & Wilujeng, L. L. (2023). Analysis of students' perceptions on the Freedom of Learning—Independent Campus (MBKM) program at Chemistry study program of Ma Chung University. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 27(1), 63–75. <https://doi.org/10.21831/pep.v27i1.52961>
- Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system. *Computers & Education*, 145, 103729. <https://doi.org/10.1016/j.compedu.2019.103729>

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